

# Socla Product Guide

Components and systems



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# Chapter 1

## Protection Systems

BA AND CA  
BACKFLOW PREVENTERS

EA ANTIPOLLUTION  
NON-RETURN VALVES

EB ANTIPOLLUTION  
NON-RETURN VALVES

EC AND ED  
DOUBLE CHECK VALVES

## Chapter 1.1

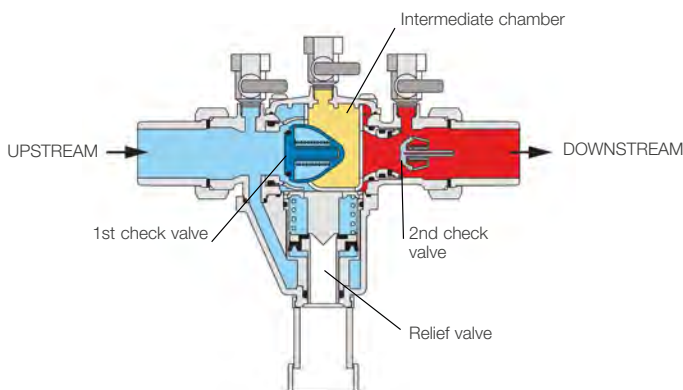
# BA and CA BACKFLOW PREVENTERS

Agriculture, chemical or agricultural industries, collective or individual housing, workshop or business, all kinds of user are served by and linked to the same network : the risks of cross contamination multiply. As the network becomes more and more complex, an incident is more and more likely to occur in the water distribution system. Incidents may occur of various degrees of seriousness when pumping a polluted liquid, siphoning a tank of chemical product, disposing of a dangerous product or rejecting waste water.

Backflow preventers protect the drinking water network by interrupting the continuity of the supply, emptying and evacuating to waste in case of danger of water being turned back into the main pipeline.

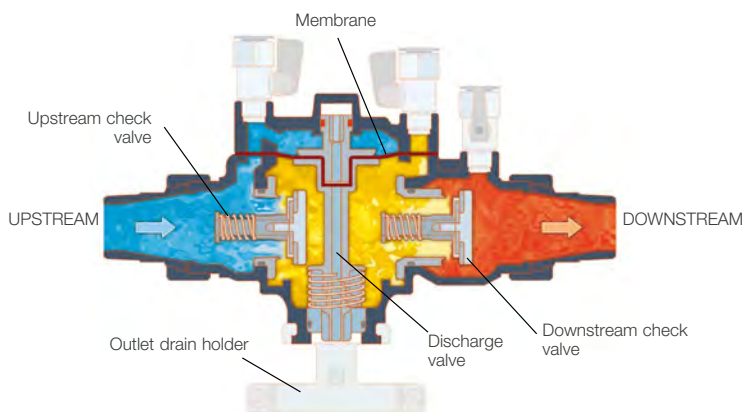
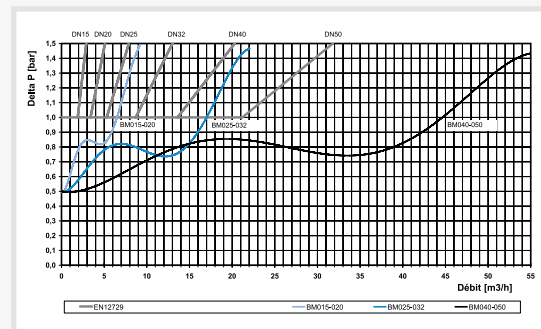
### BA BACKFLOW PREVENTER

with verifiable reduced pressure zone



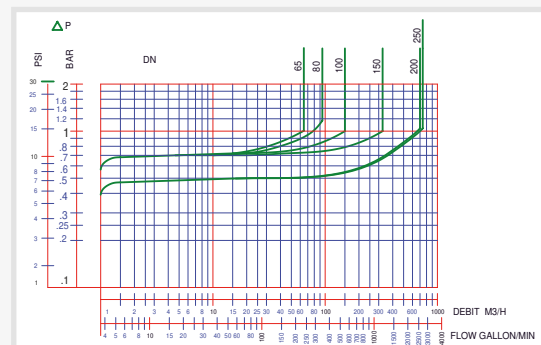
HEADLOSS CHART

BABM



HEADLOSS CHART

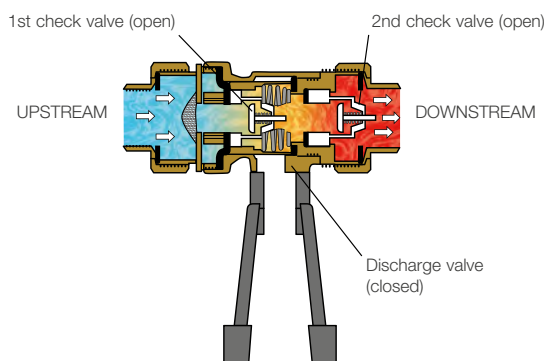
BA4760



For systems liable to bring serious pollution risks : industrial surface treatment plants, hospitals, chemicals, plant protection, industrial and «commercial» heating etc. Backflow preventers demonstrate effective protection acknowledged by most European authorities.

## CA BACKFLOW PREVENTER

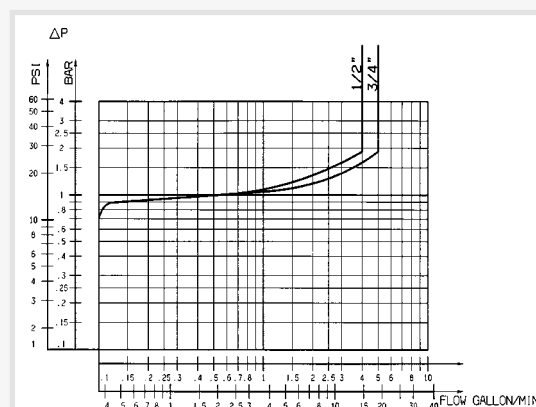
with non-verifiable reduced pressure zone



To protect low risk or intermittent risk installations which nevertheless require a backflow prevention system : domestic heating units < 70 kw, vending machines, certain laboratory equipment.

## HEADLOSS CHART

CA 2096



## PROTECTION OF DRINKING WATER NETWORKS

### BABM - male/male

EN 12729

PRESSURE PFA 10 bar  $\theta$  65°

Backflow preventer with verifiable reduced pressure zone with funnel attached  
Piston technology system, without membrane, total accessibility for the maintenance of the modular parts:

CASING : Brass

RELIEF VALVE : Polymer PA

CHECK VALVES : Polymer POM

APPROVALS :



Other approval available :



| Legacy Part No. | Part Number | DN mm | DN "  | UV |
|-----------------|-------------|-------|-------|----|
| 149B 70000      | 10061191    | 15    | 1/2   | 1  |
| 149B 70001      | 10061192    | 20    | 3/4   | 1  |
| 149B 70002      | 10061193    | 25    | 1     | 1  |
| 149B 70003      | 10061194    | 32    | 1 1/4 | 1  |
| 149B 70004      | 10061195    | 40    | 1 1/2 | 1  |
| 149B 70005      | 10061196    | 50    | 2     | 1  |

Dimensions at the end of the section.

### BA4760 - with PN10 flanges

EN 12729

PRESSURE PFA 10 bar  $\theta$  65°

Backflow preventer with verifiable reduced pressure zone with funnel attached

CASING : cast iron with epoxy coating

VALVES : BA4760 : valve head in DZR brass or bronze and valve seat in PPO or bronze

SEALS : EPDM/Silicone

SPRING : stainless steel

APPROVALS :



Note: Horizontal installation

| Legacy Part No. | Part Number | DN mm | DN "  | UV |
|-----------------|-------------|-------|-------|----|
| 149B 3486       | 10060472    | 65    | 2 1/4 | 1  |
| 149B 3097       | 10060347    | 80    | 3     | 1  |
| 149B 3098       | 10048938    | 100   | 4     | 1  |
| 149B 3400       | 10060454    | 150   | 6     | 1  |
| 149B 3401       | 10060455    | 200   | 8     | 1  |
| 149B 3402       | 10060456    | 250   | 10    | 1  |

Dimensions at the end of the section.



## HEATING INSTALLATIONS WITH LESS THAN 70 KW

### CA 2096 - female/female

PRESSURE PFA 10 bar Ø 65°

Backflow preventer with non-verifiable reduced pressure zone with funnel attached

CASING : brass

VALVES : POM (polyacetal) and brass

MEMBRANE AND SEALS : NBR (nitrile) and EPDM

SPRING : stainless steel

Female threaded union nuts and drain holder

APPROVALS :    

OPTIONS : threaded male/male version and male/male or female/female nickel-plated versions available on request



| Legacy Part No. | Part Number | DN mm | UV |
|-----------------|-------------|-------|----|
| 149B 3781       | 10060526    | 15    | 1  |
| 149B 3782       | 10060527    | 20    | 1  |

Dimensions at the end of the section.

## ACCESSORIES - PROTECTION OF PUMPS, VALVES, PRESSURE REDUCING VALVES, BACKFLOW PREVENTERS

### Y333P - with PN10 flanges

PRESSURE PFA/PS en bar Ø 100°

FILTER : GJL cast iron epoxy coated internal/external (DN40 to 50) GJS ductile iron epoxy coated internal/external (DN65 to 400)

STRAINER : stainless steel

DRAIN COCK : brass 1/2"

APPROVALS :    PED 97/23/CE

MESH Ø :

DN 1"1/2 and 2" : 500 microns

DN 3" to 8" : 1250 microns

DN 2"1/2 : 800 microns

DN 10" to 16" : 1600 microns



| Legacy Part No. | Part Number | DN                |     | PFA   |    | PS |    |    |     | Cat | UV |
|-----------------|-------------|-------------------|-----|-------|----|----|----|----|-----|-----|----|
|                 |             | «                 | mm  | water | L1 | L2 | G1 | G2 |     |     |    |
| 149B 3280       | 10060427    | 1 <sup>1/2</sup>  | 40  | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3281       | 10028787    | 2                 | 50  | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3282       | 10048941    | 2 <sup>1/2*</sup> | 65  | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3283       | 10048942    | 3**               | 80  | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3284       | 10070326    | 4                 | 100 | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3285       | 10060428    | 5                 | 125 | 16    | 16 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3286       | 10060429    | 6                 | 150 | 16    | 13 | 16 | x  | x  | 3.3 | 1   |    |
| 149B 3287       | 10060430    | 8                 | 200 | 10    | 10 | 10 | x  | x  | 3.3 | 1   |    |
| 149B 3288       | 10060431    | 10                | 250 | 10    | 10 | 10 | x  | x  | 1   | 1   |    |
| 149B 3289       | 10060432    | 12                | 300 | 10    | 10 | 10 | x  | x  | 1   | 1   |    |
| 149B 3788       | 10060528    | 14                | 350 | 10    | 10 | 10 | x  | x  | 1   | 1   |    |
| 149B 3791       | 10060529    | 16                | 400 | 10    | 10 | 10 | x  | x  | 1   | 1   |    |

\*Double drilling DN65 / DN60 - \*\*Double drilling : 4 and 8 holes

Dimensions at the end of the section.

**Y222P - female/female**PRESSURE PFA 25 bar  $\theta$  110°

FILTER : brass

STRAINER : stainless steel

DRAIN COCK : brass 1/4" (except DN 1/2" : 1/8")

APPROVALS :

ACS



MESH Ø :

500 microns (except DN 1/2" : 300 microns)



| Legacy Part No. | Part Number | DN mm | UV |
|-----------------|-------------|-------|----|
| 149B 5950       | 10048629    | 1/2   | 1  |
| 149B 5160       | 10060571    | 3/4   | 1  |
| 149B 5161       | 10060572    | 1     | 1  |
| 149B 5191       | 10048632    | 1 1/4 | 1  |
| 149B 5162       | 10048633    | 1 1/2 | 1  |
| 149B 5163       | 10048634    | 2     | 1  |

Dimensions at the end of the section.

**SPARE PARTS FOR BACKFLOW PREVENTER****Kit for backflow preventer BABM**Components : 1 upstream valve, 1 downstream valve, 1 discharge valve,  
+ 1 draining valve set for BA4760

Packing : 1 kit by box

(For any order, please give the serial number of the product).



| Legacy Part No. | Part Number | For BABM   | UV |
|-----------------|-------------|------------|----|
| 149B 1391       | 10060063    | 149B 70000 | 1  |
| 149B 1391       | 10060063    | 149B 70001 | 1  |
| 149B 1393       | 10060064    | 149B 70002 | 1  |
| 149B 1393       | 10060064    | 149B 70003 | 1  |
| 149B 1395       | 10060065    | 149B 70004 | 1  |
| 149B 1395       | 10060065    | 149B 70005 | 1  |

**SPARE PARTS FOR BACKFLOW PREVENTER****Kit for Backflow preventer BA4760**

For backflow preventers type BA2660/4660 : please consult us precising the serial number

| Legacy Part No. | Part Number | For BA4760 | UV |
|-----------------|-------------|------------|----|
| 149B 19         | 10060002    | 3486       | 1  |
| 149B 20         | 10060003    | 3097       | 1  |
| 149B 21         | 10060004    | 3098       | 1  |
| 149F 017922     | 10060005    | 3400       | 1  |
| 149B 25         | 10060006    | 3401       | 1  |
| 149B 25         | 10060006    | 3402       | 1  |



## FOR TESTING AND SERVICING BACKFLOW PREVENTERS ON SITE

### Testing Kit

Come in a shockproof case with manual, calibration certificate of the electronic gauge and maintenance procedure.

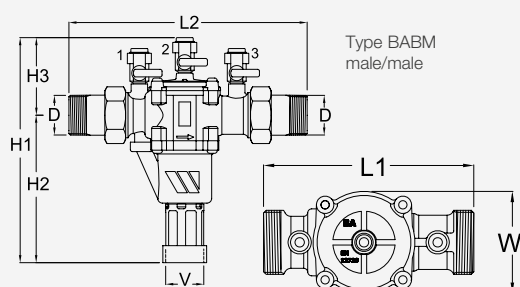
For Backflow preventers type BA : ø 15mm to 250 mm 



| Legacy Part No. | Part Number | UV |
|-----------------|-------------|----|
| 149B053592      | 10065351    | 1  |

## OVERALL DIMENSIONS

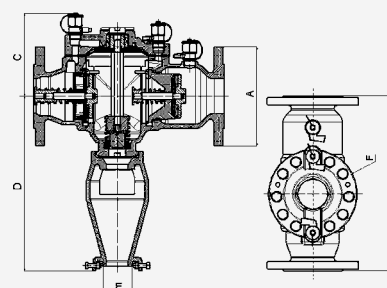
### BABM



Type BABM  
male/male

| DN | D     | V  | L1  | L2  | H1    | H2    | H3   | W   | Kg  |
|----|-------|----|-----|-----|-------|-------|------|-----|-----|
| mm | "     | mm | mm  | mm  | mm    | mm    | mm   | mm  |     |
| 15 | 1/2   | 32 | 122 | 201 | 168,5 | 103   | 65,5 | 53  | 1,2 |
| 20 | 3/4   | 32 | 122 | 201 | 168,5 | 103   | 65,5 | 53  | 1,2 |
| 25 | 1     | 40 | 157 | 252 | 238   | 156   | 82   | 76  | 2,7 |
| 32 | 1 1/4 | 40 | 157 | 252 | 238   | 156   | 82   | 76  | 2,7 |
| 40 | 1 1/2 | 50 | 220 | 336 | 303,5 | 202,5 | 101  | 115 | 6,5 |
| 50 | 2     | 50 | 220 | 336 | 303,5 | 202,5 | 101  | 115 | 6,5 |

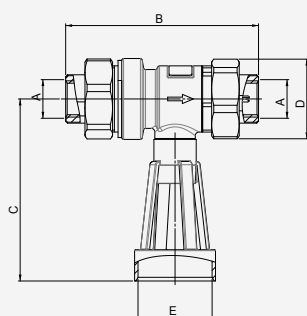
### BA4760



Type BA4760 flanged

| DN  | Ø A | B   | C   | D   | Ø E | Ø F | Kg     |
|-----|-----|-----|-----|-----|-----|-----|--------|
| mm  | mm  | mm  | mm  | mm  | mm  | mm  |        |
| 65  | 185 | 356 | 155 | 326 | 63  | 180 | 26,25  |
| 80  | 200 | 440 | 173 | 337 | 63  | 200 | 33,00  |
| 100 | 220 | 530 | 201 | 434 | 80  | 255 | 65,00  |
| 150 | 285 | 630 | 230 | 456 | 80  | 310 | 92,00  |
| 200 | 340 | 763 | 272 | 499 | 80  | 390 | 150,00 |
| 250 | 395 | 763 | 272 | 499 | 80  | 390 | 161,00 |

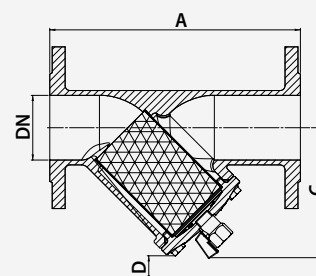
### CA 2096



Type CA 2096  
female/female

| DN | A   | B   | C  | D  | E  | Kg  |
|----|-----|-----|----|----|----|-----|
| mm | "   | mm  | mm | mm | mm |     |
| 15 | 1/2 | 105 | 59 | 44 | 40 | 0,6 |
| 20 | 3/4 | 105 | 59 | 44 | 40 | 0,6 |

### Y333P

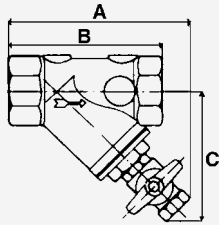


Type Y333P  
flanged

| Ø mm | A mm | C mm | D mm | Mesh mm | Kg   | KV m³/H | ζ    |
|------|------|------|------|---------|------|---------|------|
| 40   | 200  | 130  | 35   | 0,50    | 6,5  | 42,7    | 2,20 |
| 50   | 230  | 145  | 50   | 0,50    | 8,5  | 66,7    | 2,20 |
| 65   | 290  | 137  | 65   | 0,80    | 9,8  | 89      | 3,50 |
| 80   | 310  | 159  | 75   | 1,25    | 13,5 | 127     | 4,00 |
| 100  | 350  | 187  | 90   | 1,25    | 18   | 200     | 3,90 |
| 125  | 400  | 249  | 125  | 1,25    | 27,5 | 364     | 2,60 |
| 200  | 600  | 403  | 220  | 1,25    | 83   | 937     | 2,90 |
| 250  | 730  | 472  | 200  | 1,60    | 112  | 1137    | 4,80 |
| 300  | 850  | 508  | 250  | 1,60    | 160  | 1844    | 3,80 |
| 350  | 980  | 587  | 315  | 1,60    | 297  | 1844    | 7,10 |
| 400  | 1100 | 658  | 370  | 1,60    | 406  | 2172    | 8,80 |

## OVERALL DIMENSIONS

## Y222P



Type Y222P threaded

| Ø     | A   | B   | C   | Mesh | Kg   | KV   | ζ     |
|-------|-----|-----|-----|------|------|------|-------|
| mm    | mm  | mm  | mm  | mm   |      | m3/H |       |
| 15/21 | 63  | 60  | 40  | 0,5  | 0,18 | 2,7  | 10,33 |
| 20/27 | 96  | 69  | 69  | 0,5  | 0,41 | 5,1  | 9,50  |
| 26/34 | 101 | 87  | 73  | 0,5  | 0,57 | 11,3 | 4,70  |
| 33/42 | 125 | 106 | 84  | 0,5  | 0,86 | 17,2 | 5,50  |
| 40/49 | 129 | 117 | 91  | 0,5  | 1,18 | 23   | 7,50  |
| 50/60 | 145 | 147 | 103 | 0,5  | 1,81 | 46,8 | 4,50  |

## Chapter 1.2

## EA ANTIPOLLUTION NON-RETURN VALVES

## HOUSING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

## EA271 - Threaded male/male

PRESSURE PFA/PS in bar Ø 80°

CASING : brass, 2 drilled bosses 1/4" with POM (polyacetal) plugs

GUIDING + CLOSING SYSTEM : POM (polyacetal) or PA

SEAL : NBR (nitrile) lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other approvals available: **kiwa**

SPECIAL : with sockets and nuts

01 SYSTEM



| Legacy<br>Part No. | Part<br>Number | DN<br>« | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|--------------------|----------------|---------|--------------|----|----------|----|----|-----|----|
| 149B 2300          | 10060166       | 1/2     | 10           | 10 | 10       | 10 | 10 | 3.3 | 10 |
| 149B 2201K         | 10061889       | 3/4     | 10           | 10 | 10       | 10 | 10 | 3.3 | 10 |
| 149B 2202K         | 10061890       | 1       | 10           | 10 | 10       | 10 | 10 | 3.3 | 10 |
| 149B 2203K         | 10061891       | 1 1/4   | 10           | 10 | 10       | x  | 10 | 3.3 | 10 |
| 149B 2204K         | 10061892       | 1 1/2   | 10           | 10 | 10       | x  | 10 | 3.3 | 6  |
| 149B 2205K         | 10061893       | 2       | 10           | 10 | 10       | x  | 10 | 3.3 | 5  |

Dimensions at the end of the section.

## EA253 - Threaded female/female

PRESSURE PFA/PS in bar Ø 100°

CASING : Ductile iron with epoxy coating, Drilled BOSSES

CLOSING SYSTEM + STEM : DZR brass

SEAT + SPRING : Stainless steel

PLUGS : Brass

APPROVALS :   ACS  PED 97/23/CE

03 SYSTEM



| Legacy<br>Part No. | Part<br>Number | DN              | PFA              | PS |    |    |    | Cat | UV |    |
|--------------------|----------------|-----------------|------------------|----|----|----|----|-----|----|----|
|                    |                | «<br>F/F<br>com | water            | L1 | L2 | G1 | G2 |     |    |    |
| 149B 3810          | 10060533       | 50              | 2 <sup>1/2</sup> | 16 | 16 | 16 | 15 | 16  | 1  | 10 |
| 149B 3811          | 10060534       | 65              | 3                | 16 | 16 | 16 | 12 | 16  | 1  | 10 |

Dimensions at the end of the section.

**FOR DRINKING WATER PROTECTION, CLEAR LIQUIDS, WATER, GAS****EA291NF - female/female**PRESSURE PFA/PS in bar  $\theta$  80°

CASING : brass 2 drilled bosses 1/4" with POM (polyacetal) plugs

GUIDING + CLOSING SYSTEM : POM

SEAL : NBR

SPRING : stainless steel

APPROVALS :    ACS

01 SYSTEM



| Legacy Part No. | Part Number | DN<br>«          | PFA<br>water | PS |    |    |    | Cat | UV |
|-----------------|-------------|------------------|--------------|----|----|----|----|-----|----|
|                 |             |                  |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2220       | 10060146    | 1/2              | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2212       | 10060141    | 3/4              | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2222       | 10060147    | 1                | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2213       | 10060142    | 1 1/4            | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 2214       | 10060143    | 1 1/2            | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 2215       | 10060144    | 2                | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 2216       | 10060145    | 2 conn.<br>2 1/2 | 10           | 10 | 10 | x  | 10 | 3.3 | 2  |

Dimensions at the end of the section.

**FOR DRINKING WATER PROTECTION AND WATER PROTECTION****EA453 - PN10/16**PRESSURE PFA/PS in bar  $\theta$  100°

CASING : ductile iron with external/internal epoxy coating

CLOSING SYSTEM + SHAFT : DZR brass

VALVES + PLUG : Brass

SEAT + SPRING : Stainless steel

APPROVALS :     PED 97/23/CE 

03 SYSTEM



| Legacy Part No | Part Number | DN<br>« | PFA<br>water | PS |    |     |    | Cat | UV |
|----------------|-------------|---------|--------------|----|----|-----|----|-----|----|
|                |             |         |              | L1 | L2 | G1  | G2 |     |    |
| 149B3831W      | 10062437    | 40/50   | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B3832W      | 10062439    | 60/65   | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B3833W      | 10062440    | 80      | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B3834W      | 10062441    | 100     | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B3836W      | 10078764    | 150     | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B24871W     | 10078766    | 200     | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B99957      | 10078765    | 250     | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

## BUILDING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

### EA223 - male/male

PRESSURE PFA/PS in bar T°C 80°

CASING : brass with threaded male / male connections for mounting with nuts and nipples

2 drilled bosses 1/4" brass plug

GUIDE / CLOSING SYSTEM : brass

GUIDE STEM in DZR brass

SEAL : EPDM / SPRING : stainless steel

APPROVALS :    ACS Other approvals available: **kiwa** 



03 SYSTEM

| Legacy<br>Part No. | Part<br>Number | DN |       | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|----|-------|--------------|----|----|----|----|-----|----|
|                    |                | mm | «     |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2890          | 10060320       | 15 | 1/2   | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2891          | 10060321       | 20 | 3/4   | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2892          | 10060322       | 25 | 1     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2893          | 10060323       | 32 | 1 1/4 | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |
| 149B 2894          | 10060324       | 40 | 1 1/2 | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |
| 149B 2895          | 10060325       | 50 | 2     | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |

Dimensions at the end of the section.

### EA223D - male/male

PRESSURE PFA/PS in bar 0 80°

CASING : brass with nuts and nipples connection 2 drilled bosses 1/4" with brass plug

GUIDE STEM in DZR brass

GUIDE / CLOSING SYSTEM : brass

SEAL : EPDM

SPRING : stainless steel

SPECIAL : particularly adapted to pressure water systems

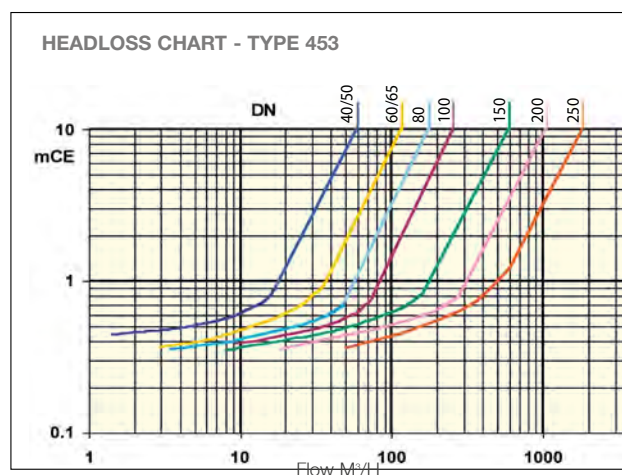
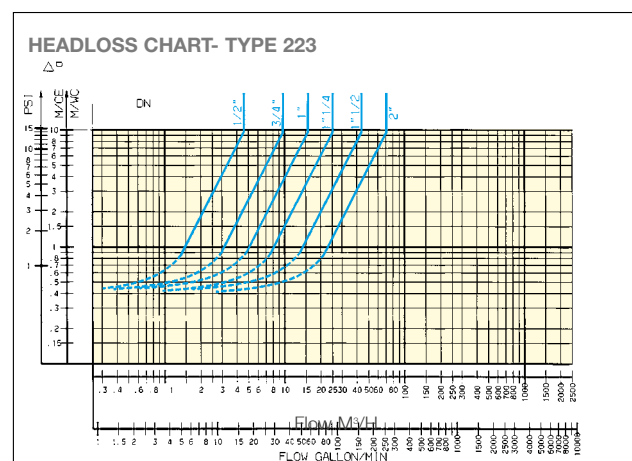
APPROVALS :    ACS Other approvals available: **kiwa**



03 SYSTEM

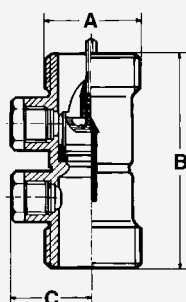
| Legacy<br>Part No. | Part<br>Number | DN |       | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|----|-------|--------------|----|----|----|----|-----|----|
|                    |                | mm | «     |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2890 D        | 10061994       | 15 | 1/2   | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2891 D        | 10061995       | 20 | 3/4   | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2892 D        | 10061996       | 25 | 1     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2893 D        | 10061997       | 32 | 1 1/4 | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |
| 149B 2894 D        | 10061998       | 40 | 1 1/2 | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |
| 149B 2895 D        | 10061999       | 50 | 2     | 16           | 16 | 16 | x  | 16 | 3.3 | 1  |

Dimensions at the end of the section.



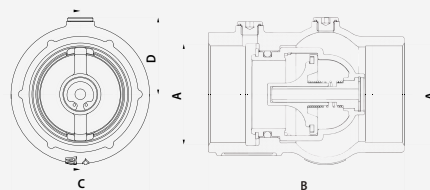
## OVERALL DIMENSIONS

## EA271

Type EA271  
male/male

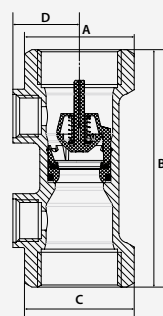
| DN    | A     |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-------|-------|---------|---------|------|------------|------|
|       | "     | mm    |         |         |      |            |      |
| 1/2   | 3/4   | 20/27 | 65      | 20      | 0,24 | 5,05       | 3,10 |
| 3/4   | 1     | 26/34 | 75      | 30      | 0,18 | 9,20       | 2,96 |
| 1     | 1 1/4 | 33/42 | 90      | 34      | 0,34 | 14,50      | 2,75 |
| 1 1/4 | 1 1/2 | 40/49 | 110     | 38      | 0,52 | 25,50      | 2,50 |
| 1 1/2 | 2     | 50/60 | 120     | 41      | 0,73 | 35,00      | 3,30 |
| 2     | 2 1/2 | 66/76 | 150     | 49      | 1,33 | 56,50      | 3,06 |

## EA253

Type EA253  
female/female

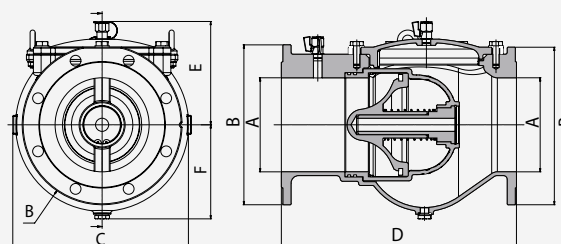
| A  |           | B<br>mm | C<br>mm | D<br>mm | KG  |
|----|-----------|---------|---------|---------|-----|
| "  | F/F conn. |         |         |         |     |
| 50 | 2 1/2     | 147     | 104     | 58      | 2,6 |
| 65 | 3         | 199     | 146     | 94,5    | 4,8 |

## EA291NF

Type EA291NF  
female/female

| A     |       | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|---------|------|------------|-----|
| "     | mm    |         |         |         |      |            |     |
| 1/2   | 15/21 | 65      | 26      | 23      | 0,13 | 4,2        | 4,5 |
| 3/4   | 20/27 | 75      | 30      | 28      | 0,19 | 13,8       | 1,3 |
| 1     | 26/34 | 90      | 38      | 28      | 0,29 | 18,0       | 1,6 |
| 1 1/4 | 33/42 | 110     | 47      | 36      | 0,57 | 28,0       | 2,1 |
| 1 1/2 | 40/49 | 120     | 54      | 38      | 0,74 | 41,0       | 2,4 |
| 2     | 50/60 | 150     | 66      | 46      | 1,22 | 55,8       | 3,1 |
| 2 1/2 | 66/76 | 150     | 84      | 46      | 2,00 | 59,9       | 8,1 |

## EA453

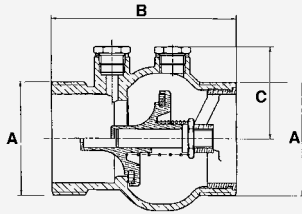
Type EA453  
with flanges

| A<br>mm | B<br>mm | C<br>mm | D<br>mm | E<br>mm | F<br>mm | Kg    |
|---------|---------|---------|---------|---------|---------|-------|
| 40/50   | 165     | -       | 200     | 113     | 80      | 7,65  |
| 60/65   | 185     | -       | 240     | 118     | 93      | 11,45 |
| 80      | 200     | -       | 260     | 131     | 98      | 14,36 |
| 100     | 222     | -       | 300     | 141     | 115     | 20,20 |
| 150     | 285     | -       | 400     | 197     | 144     | 42,00 |
| 200     | 340     | 380     | 500     | 220     | 200     | 65,00 |
| 250     | 400     | 438     | 600     | 256     | 235     | 94,00 |

OVERALL DIMENSIONS

EA223

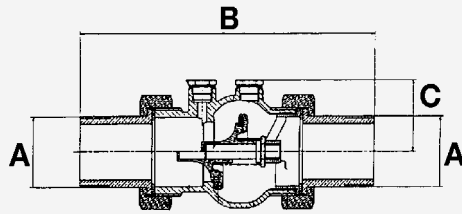
Type EA 223  
male/male



| DN<br>" | A<br>mm | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|---------|---------|---------|---------|------|------------|------|
| 1/2     | 3/4     | 67,0    | 28      | 0,20 | 4,25       | 4,39 |
| 3/4     | 1       | 74,0    | 35      | 0,30 | 9,00       | 3,09 |
| 1       | 1 1/4   | 80,5    | 39      | 0,47 | 14,53      | 2,90 |
| 1 1/4   | 1 1/2   | 88,5    | 44      | 0,64 | 23,30      | 3,00 |
| 1 1/2   | 2       | 95,0    | 48      | 0,85 | 40,47      | 2,45 |
| 2       | 2 1/2   | 115,0   | 56      | 1,75 | 65,27      | 2,30 |

EA223D

Type EA 223 D  
male/male



| DN |       | A<br>mm | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|----|-------|---------|---------|---------|------|------------|------|
| "  | mm    |         |         |         |      |            |      |
| 15 | 1/2   | 1/2     | 132     | 28      | 0,22 | 4,25       | 4,39 |
| 20 | 3/4   | 3/4     | 148     | 35      | 0,55 | 9,00       | 3,09 |
| 25 | 1     | 1       | 166     | 39      | 0,88 | 14,53      | 2,90 |
| 32 | 1 1/4 | 1 1/4   | 184     | 44      | 1,23 | 23,30      | 3,00 |
| 40 | 1 1/2 | 1 1/2   | 194     | 48      | 1,94 | 40,47      | 2,45 |
| 50 | 2     | 2       | 231     | 56      | 3,22 | 65,27      | 2,30 |

## Chapter 1.3

# EB ANTIPOLLUTION NON-RETURN VALVES

### HOUSING, WATER DISTRIBUTION

#### EB241 - Threaded male/male

PRESSURE PFA/PS in bar  $\theta$  80°

CASING : brass

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : NBR (nitrile) or EPDM lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 

01 SYSTEM



| Legacy Part No. | Part Number | DN « | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-----------|----|-------|----|----|-----|----|
| 149B 2014       | 10060086    | 1/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 2015       | 10060087    | 3/8  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 2008       | 10060084    | 1/2  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 94105*     | on request  | 3/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |

\* with NBR Seal

Dimensions at the end of the section.

### HOUSING, WATER DISTRIBUTION, INDUSTRY

#### EB261 - Threaded female/male

PRESSURE PFA/PS 10 bar  $\theta$  80°

CASING : brass 1 downstream boss drilled 1/4"

POM (polyacetal) plug

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : NBR (nitrile) or EPDM lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 

01 SYSTEM



| Legacy Part No. | Part Number | DN « | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-----------|----|-------|----|----|-----|----|
| 149B 2210       | on request  | 1/2  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 2011       | 10060085    | 3/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |

Dimensions at the end of the section.

## HOUSING, WATER DISTRIBUTION, HEATING

### EB231 - Threaded female/female

PRESSURE PFA/PS in bar Ø 80°

CASING : DZR brass

GUIDING + CLOSING SYSTEM : POM (polyacetal) or PPO (Polyphenylene oxyd) or PA

SEAL : NBR (nitrile) or EPDM lip-ring or FKM\*

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available 

01 SYSTEM (Except ref. 2089 and 2090)



| Legacy<br>Part No. | Part<br>Number | DN<br>« | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2069          | 10060097       | 3/8     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2089*         | on request     | 3/8     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2070          | 10060098       | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2090*         | on request     | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2091          | 10060100       | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2092          | 10060101       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2093          | 10060102       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 2094          | 10060103       | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 2095          | 10060104       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

## HOUSING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS

### EB281 - Threaded male/female

PRESSURE PFA/PS in bar Ø 80°

CASING : brass

GUIDING + CLOSING SYSTEM : POM (polyacetal) or PPO (Polyphenylene oxyd)

SEAL : EPDM or NBR (nitrile) lip-ring

SPRING : stainless steel

APPROVALS :   ACS Other Approvals Available  

01 SYSTEM



| Legacy<br>Part No. | Part<br>Number | DN  |     | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|-----|-----|--------------|----|----|----|----|-----|----|
|                    |                | M   | F   |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2518          | 10060229       | 1/2 | 3/8 | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2519          | 10060230       | 1/2 | 1/2 | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2520          | 10060231       | 3/4 | 3/4 | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2521          | 10060232       | 1   | 1   | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |

Dimensions at the end of the section.

**EB281C - Threaded male/female**

PRESSURE PFA/PS in bar @ 80°

CASING : chrome plated brass

GUIDING + CLOSING SYSTEM : POM (polyacetal)

SEAL : EPDM or NBR (nitrile) lip-ring

SPRING : stainless steel

APPROVALS :



ACS



BELGAQUA

Other Approvals Available



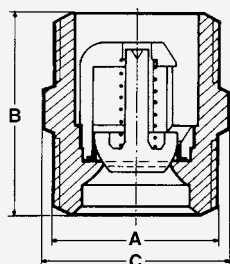
01 SYSTEM

| Legacy<br>Part No. | Part<br>Number | DN  |     | PFA<br>water | L1 | PS |    | G2 | Cat | UV |
|--------------------|----------------|-----|-----|--------------|----|----|----|----|-----|----|
|                    |                | M   | F   |              |    | L2 | G1 |    |     |    |
| 149B 2065          | 10060096       | 1/2 | 1/2 | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2514*         | 10060228       | 3/4 | 3/4 | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

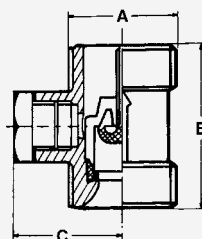
### EB241



Type EB241  
male/male

| A   |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ     |
|-----|-------|---------|---------|------|------------|-------|
| "   | mm    |         |         |      |            |       |
| 1/4 | 8/13  | 39,0    | 20      | 0,05 | 0,8        | 10,03 |
| 3/8 | 12/17 | 40,5    | 20      | 0,06 | 1,7        | 5,43  |
| 1/2 | 15/21 | 26,0    | 24      | 0,04 | 3,4        | 6,90  |
| 3/4 | 20/27 | 50,0    | 30      | 0,11 | 9,6        | 2,70  |

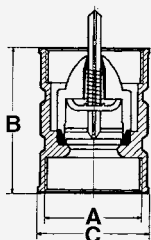
### EB261



Type EB261  
male/male

| DN  | A   |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ   |
|-----|-----|-------|---------|---------|------|------------|-----|
|     | "   | mm    |         |         |      |            |     |
| 1/2 | 3/4 | 20/27 | 39      | 27,0    | 0,14 | 5          | 3,1 |
| 3/4 | 1   | 26/34 | 47      | 30,5    | 0,11 | 9          | 3,0 |

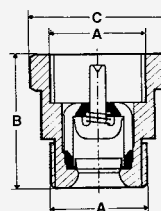
### EB231



Type EB 231  
female/female

| A     |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|------|------------|------|
| "     | mm    |         |         |      |            |      |
| 3/8   | 12/17 | 39      | 25,0    | 0,06 | 3,2        | 1,63 |
| 1/2   | 15/21 | 41      | 30,0    | 0,10 | 4,4        | 4,10 |
| 3/4   | 20/27 | 50      | 32,5    | 0,20 | 7,3        | 4,70 |
| 1     | 26/34 | 54      | 39,0    | 0,17 | 12,4       | 4,00 |
| 1 1/4 | 33/42 | 64      | 48,0    | 0,24 | 22,0       | 3,40 |
| 1 1/2 | 40/49 | 78      | 55,0    | 0,36 | 29,0       | 4,80 |
| 2     | 50/60 | 89      | 67,0    | 0,60 | 46,5       | 4,50 |

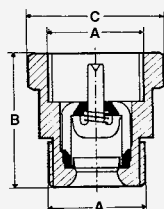
### EB281



Type EB 281  
male/female

| A   |     | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ   |
|-----|-----|---------|---------|------|------------|-----|
| M " | F " |         |         |      |            |     |
| 1/2 | 3/8 | 30      | 22      | 0,05 | 3,2        | 7,7 |
| 1/2 | 1/2 | 30      | 26      | 0,07 | 3,9        | 5,2 |
| 3/4 | 3/4 | 38      | 30      | 0,08 | 10,6       | 2,2 |
| 1   | 1   | 41      | 38      | 0,17 | 15,9       | 2,4 |

### EB281C



Type EB281C  
male/female

| A   |     | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ   |
|-----|-----|---------|---------|------|------------|-----|
| M " | F " |         |         |      |            |     |
| 1/2 | 1/2 | 30      | 26      | 0,06 | 3,9        | 5,2 |
| 3/4 | 3/4 | 38      | 30      | 0,08 | 10,6       | 2,2 |

## Chapter 1.4

## EC AND ED DOUBLE CHECK VALVES

## PROTECTION OF DRINKING WATER NETWORKS

## EC453/453 - PN10/16

PRESSURE PFA in bar Ø 65°

Double check valves made with 2 check valves type 453(\*) coupled together.  
03 SYSTEM

| Legacy<br>Part No. | Part<br>Number | DN    |       | PFA<br>water | UV |
|--------------------|----------------|-------|-------|--------------|----|
|                    |                | “     | mm    |              |    |
| 149B99917          | 10070351       | 1 1/2 | 40/50 | 16           | 1  |
| 149B99918          | 10078868       | 2 1/2 | 60/65 | 16           | 1  |
| 149F049398         | 10078729       | 3     | 80    | 16           | 1  |
| 149F049399         | 10078560       | 4     | 100   | 16           | 1  |
| 149F049400         | 10078867       | 6     | 150   | 16           | 1  |
| 149F049610         | 10078866       | 8     | 200   | 10           | 1  |
| 149B99959          | 10078865       | 10    | 250   | 10           | 1  |

Dimensions at the end of the section.

## PROTECTION OF DRINKING WATER NETWORKS, BUILDING

## ED2231 - Drilled flanges female/female

PRESSURE PFA/PS in bar Ø 80°

CASING : DZR brass, Drilled boss 1/4", POM (polyacetal) plug

CLOSING SYSTEM : double check valve POM (polyacetal)

GUIDE : POM (polyacetal) / SEAL : NBR (nitrile) or EPDM lip-ring

APPROVALS :  ACS

01 SYSTEM



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2790          | 10060300       | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2791          | 10060301       | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2792          | 10060302       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 2637          | 10060259       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 2638          | 10060260       | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 2639          | 10060261       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

## FOR DRINKING WATER PROTECTION, CLEAR LIQUIDS, WATER, GAS

### ED2211 - Compression fitting

PRESSURE PFA/PS in bar  $\theta$  80°

CASING : DZR brass, Drilled boss 1/4", POM (polyacetal) plug

CLOSING SYSTEM : double check valve POM (polyacetal)

GUIDE : POM (polyacetal) / SEAL : NBR (nitrile) or EPDM lip-ring

APPROVALS : 



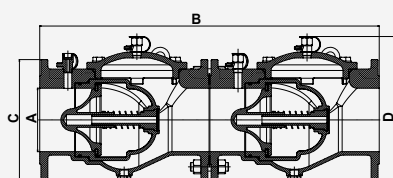
SPECIAL : MM 1/2" or fitting and screws, copper pipe 15mm

| Legacy Part No. | Part Number | DN<br>" | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|---------|--------------|----|----------|----|----|-----|----|
| 149B98433       | 10080718    | 1/2     | 10           | 10 | 10       | 10 | 10 | 3.3 | 10 |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

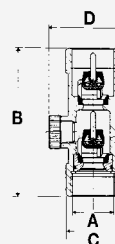
### EC453/453



Types  
EC 453/453  
flanges

| A     |       | B<br>mm | C<br>mm | D<br>mm | Kg  |
|-------|-------|---------|---------|---------|-----|
| "     | mm    |         |         |         |     |
| 1 1/2 | 40-50 | 402     | 165     | 193     | 17  |
| 2 1/2 | 60-65 | 482     | 185     | 211     | 25  |
| 3     | 80    | 522     | 200     | 229     | 31  |
| 4     | 100   | 602     | 222     | 256     | 43  |
| 6     | 150   | 802     | 285     | 341     | 86  |
| 8     | 200   | 1002    | 340     | 420     | 132 |
| 10    | 250   | 1202    | 400     | 491     | 190 |

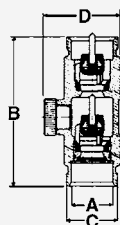
### ED2231



Type ED2231  
female/female

| A     |       | B<br>mm | C<br>mm | D<br>mm | Kg    | KV<br>m³/H | ζ     |
|-------|-------|---------|---------|---------|-------|------------|-------|
| "     | mm    |         |         |         |       |            |       |
| 1/2   | 15/21 | 59      | 26      | 38      | 0,130 | 2,4        | 13,80 |
| 3/4   | 20/27 | 90      | 32      | 43      | 0,280 | 5,0        | 10,03 |
| 1     | 26/34 | 105     | 40      | 49      | 0,500 | 9,3        | 7,4   |
| 1 1/4 | 33/42 | 146     | 48      | 57      | 0,700 | 19,0       | 4,55  |
| 1 1/2 | 40/49 | 175     | 55      | 62      | 1,010 | 25,0       | 6,42  |
| 2     | 50/60 | 196     | 67      | 77      | 1,560 | 36,8       | 7,23  |

### ED2211



Type ED2211  
compression fitting

| A   |    | B<br>mm | C<br>mm | D<br>mm | Kg    | KV<br>m³/H | ζ    |
|-----|----|---------|---------|---------|-------|------------|------|
| "   | mm |         |         |         |       |            |      |
| 1/2 | 15 | 73      | 24      | 36      | 0,112 | 2,5        | 13,0 |

## Chapter 2

### Non-Return Systems

01 SYSTEM

02 SYSTEM

03 HP SYSTEM

05 HP SYSTEM

B SYSTEM

M & MI SYSTEM

TJ SYSTEM & TJO + FL + 04  
SYSTEMS

W SYSTEMS

## Chapter 2.1

## 01 SYSTEM

## HOUSING, WATER DISTRIBUTION, HEATING, INDUSTRY

**601 - threaded female/female**

PRESSURE PFA/PS in bar T°C 80°

CASING : brass

CLOSING SYSTEM : POM (polyacetal)

GUIDE : POM (polyacetal)

SPRING : stainless steel

SEAL : NBR

APPROVALS :  ACS

| Legacy Part No. | Part Number | DN “  | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|-------|-----------|----|-------|----|----|-----|----|
| 149B 2503       | 10060221    | 3/8   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2504       | 10060222    | 1/2   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2505       | 10060223    | 3/4   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2506       | 10060224    | 1     | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2507       | 10060225    | 1 1/4 | 10        | 10 | 10    | x  | 10 | 3.3 | 8  |
| 149B 2508       | 10060226    | 1 1/2 | 10        | 10 | 10    | x  | 10 | 3.3 | 6  |
| 149B 2509       | 10060227    | 2     | 10        | 10 | 10    | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

## HEATING, CIRCULATING PUMPS, HYDROCARBONS PUMPING, INDUSTRY

**601V - threaded female/female**

PRESSURE PFA/PS in bar T°C 80°

CASING : brass

CLOSING SYSTEM : POM (polyacetal) or PPO (polyphenylen oxide)

GUIDE : POM (polyacetal)/PA

SPRING : stainless steel

SEAL : FKM

APPROVAL : 

| Legacy Part No. | Part Number | DN “  | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|-------|-----------|----|-------|----|----|-----|----|
| 149B 2447       | 10060208    | 3/8   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2448       | 10060209    | 1/2   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2450       | 10060211    | 1     | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2452       | 10060212    | 1 1/2 | 10        | 10 | 10    | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

**HOUSING, WATER DISTRIBUTION, PUMPING****601P - threaded female/female to be stuck**

PRESSURE PFA/PS in bar T°C 60°

CASING : PVC

CLOSING SYSTEM : POM (polyacetal)

SPRING : stainless steel

SEAL : NBR (nitrile) lip-ring

GUIDE : PPO (polyphenylene oxide)



| Legacy Part No. | Part Number | DN “  | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|-------|-----------|----|-------|----|----|-----|----|
| 149B 2044       | 10060090    | 1/2   | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 2045       | 10060091    | 1     | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 2046       | 10060092    | 1 1/4 | 10        | 10 | 10    | x  | 10 | 3.3 | 1  |

Dimensions at the end of the section.

**HOUSING, WATER DISTRIBUTION, PROTECTION OF DRINKING WATER NETWORKS (AFTER WATERMETER)****EA251 threaded female/male**

PRESSURE PFA/PS in bar T°C 80°

CASING : brass with union nut 2 drilled bosses 1/4” PPA Plugs,

CLOSING SYSTEM + GUIDE : POM (polyacetal)

SPRING : stainless steel

SEAL : NBR (nitrile) lip-ring

APPROVALS :



kiwa ACS



| Legacy Part No. | Part Number | DN C | “     | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-------|-----------|----|-------|----|----|-----|----|
| 149B 2111       | 10060113    | 15   | 3/4   | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2112       | 10060114    | 20   | 1     | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2113       | 10060115    | 25   | 1 1/4 | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 2114       | 10060116    | 30   | 1 1/2 | 10        | 10 | 10    | x  | 10 | 3.3 | 6  |
| 149B 2115       | 10060117    | 40   | 2     | 10        | 10 | 10    | x  | 10 | 3.3 | 6  |

C = watermeter

Dimensions at the end of the section.

**HOUSING, WATER DISTRIBUTION, PUMPING****281P threaded male/female**

PRESSURE PFA 10 bar T°C 65°

CASING : POM (polyacetal)

CLOSING SYSTEM + GUIDE : POM (polyacetal)

SPRING : stainless steel

SEAL : NBR (nitrile) lip-ring

APPROVAL :



| Legacy Part No. | Part Number | DN “  | UV |
|-----------------|-------------|-------|----|
| 149B 2292       | 10060164    | 1 1/4 | 1  |

Dimensions at the end of the section.

**CLEAR LIQUIDS, WATER, GAS, PROTECTION OF DRINKING WATER NETWORKS, HEATING, INDUSTRY**

**211BL - with compression fittings**

PRESSURE PFA/PS in bar T°C 80°

CASING : DZR brass (brass with persistent zinc)

Equipped with nut connections and compression rings for copper tube

CLOSING SYSTEM + GUIDE : POM (polyacetal) or PPO

SPRING : stainless steel

SEAL : EPDM or NBR (nitrile) lip-ring

APPROVALS :



ACS

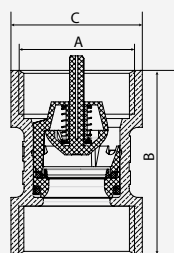


| Legacy<br>Part No. | Part<br>Number | A mm<br>external<br>Ø pipe | PFA<br>water | L1 | L2 | PS<br>G1 | G2 | Cat | UV |
|--------------------|----------------|----------------------------|--------------|----|----|----------|----|-----|----|
| 149B 3130          | on request     | 15                         | 10           | 10 | 10 | 10       | 10 | 3.3 | 10 |
| 149B 3131          | on request     | 22                         | 10           | 10 | 10 | 10       | 10 | 3.3 | 10 |

Dimensions at the end of the section.

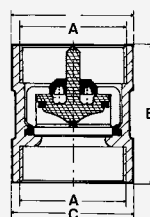
## OVERALL DIMENSIONS

## 601

Type 601  
female/female

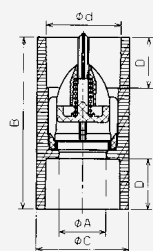
| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|-------|------------|------|
| "     | mm    |         |         |       |            |      |
| 3/8   | 12/17 | 38      | 22      | 0,060 | 3,2        | 1,63 |
| 1/2   | 15/21 | 41      | 26      | 0,090 | 4,4        | 4,10 |
| 3/4   | 20/27 | 42      | 30      | 0,100 | 6,7        | 5,60 |
| 1     | 26/34 | 47      | 37      | 0,150 | 11,9       | 4,30 |
| 1 1/4 | 33/42 | 55      | 47      | 0,275 | 17,4       | 5,40 |
| 1 1/2 | 40/49 | 78      | 55      | 0,315 | 29,0       | 4,80 |
| 2     | 50/60 | 89      | 67      | 0,490 | 46,5       | 4,50 |

## 601V

Type 601V  
female/female

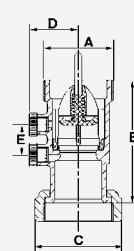
| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|-------|------------|------|
| "     | mm    |         |         |       |            |      |
| 3/8   | 12/17 | 38      | 22      | 0,060 | 3,2        | 1,63 |
| 1/2   | 15/21 | 41      | 26      | 0,090 | 4,4        | 4,10 |
| 1     | 26/34 | 47      | 37      | 0,150 | 11,9       | 4,30 |
| 1 1/2 | 40/49 | 78      | 55      | 0,315 | 29,0       | 4,80 |

## 601P

Type 601P  
female/female

| A<br>mm | d<br>mm | B<br>mm | C<br>mm | D<br>mm | Kg    |
|---------|---------|---------|---------|---------|-------|
| 1/2     | 20      | 57      | 25      | 16      | 0,050 |
| 1       | 32      | 75      | 40      | 22      | 0,075 |
| 1 1/4   | 40      | 94      | 50      | 26      | 0,095 |

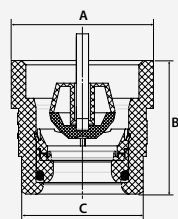
## EA251

Type EA251  
female/male

| DN |       | A<br>mm | B<br>mm | C<br>mm | D<br>mm | E<br>mm | Kg   | KV<br>m³/H | ζ   |
|----|-------|---------|---------|---------|---------|---------|------|------------|-----|
| C  | R "   |         |         |         |         |         |      |            |     |
| 15 | 3/4   | 20/27   | 78      | 30      | 22      | 26      | 0,18 | 7,0        | 1,6 |
| 20 | 1     | 26/34   | 81      | 37      | 27      | 26      | 0,30 | 11,8       | 1,8 |
| 25 | 1 1/4 | 33/42   | 89      | 46      | 31      | 30      | 0,50 | 15,4       | 2,6 |
| 30 | 1 1/2 | 40/49   | 99      | 55      | 31      | 30      | 0,67 | 25,1       | 2,6 |
| 40 | 2     | 50/60   | 105     | 65      | 36      | 32      | 1,10 | 34,9       | 3,3 |

C = watermeter

## 281P

Type 281P  
male/female

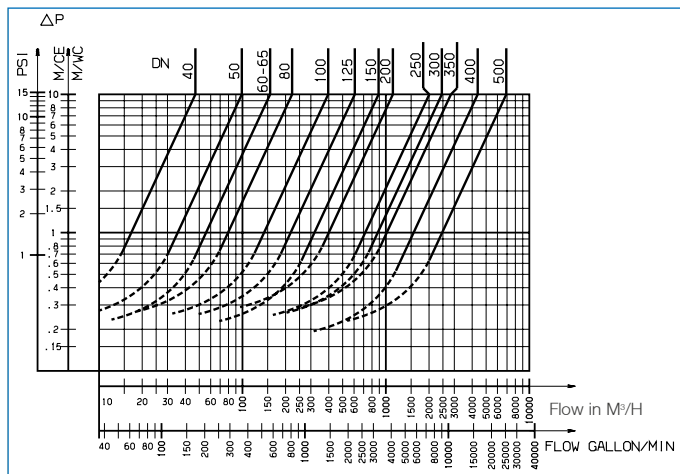
| A      |          | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|--------|----------|---------|---------|-------|------------|-----|
| Male " | Female " |         |         |       |            |     |
| 1 1/4  | 1 1/4    | 46      | 49      | 0,048 | 16,7       | 5,9 |

## Chapter 2.2

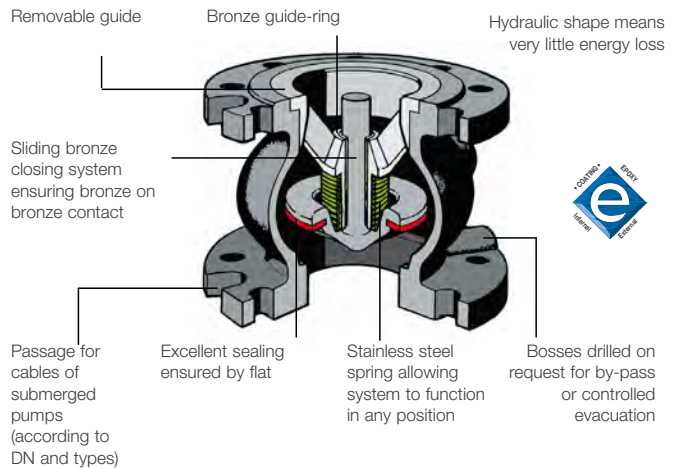
## 02 SYSTEM

- Valve with very wide range of applications
- Prevents water hammering
- Noiseless operation
- A quality, value for money choice

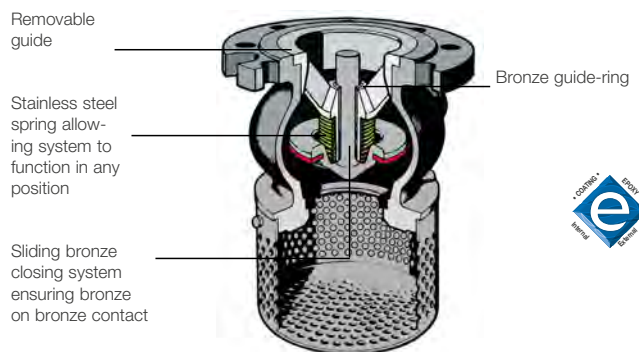
### HEADLOSS CHART TYPE 402



### NON-RETURN VALVE



### FOOT VALVES



| Type              | Cast Iron + Epoxy | Cast Iron + Teflon | Cast Iron + Bronze + Epoxy | Cast Iron + Polyamide | Bronze | Stainless Steel | Threaded               | With Flanges        | Non Return Valve | Foot Valve |
|-------------------|-------------------|--------------------|----------------------------|-----------------------|--------|-----------------|------------------------|---------------------|------------------|------------|
| 462               | •                 |                    |                            |                       |        |                 |                        | 462 50 - 200 mm     | •                |            |
| 402/202           | •                 |                    |                            |                       |        |                 | 202 F/F - 2 1/2 - 4"   | 402 40 - 500 mm     | •                |            |
| 302/102           | •                 |                    |                            |                       |        |                 | 102 F - 2 1/4 - 8"     | 302 50 - 500 mm     |                  | •          |
| 402 V / 202 V     | •                 |                    |                            |                       |        |                 | 202 V F/F - 2 1/2 - 4" | 402 V 40 - 250 mm   | •                |            |
| 302 V             | •                 |                    |                            |                       |        |                 |                        | 302 V 50 - 250 mm   |                  | •          |
| 302 PV / 102 PV   | •                 |                    |                            |                       |        |                 | 102 PV F - 2 1/4 - 4"  | 302 PV 50 - 100 mm  |                  | •          |
| 402 TTP / 202 TTP |                   | •                  |                            |                       |        |                 | 202 TTP F - 2 1/2 - 4" | 402 TTP 50 - 400 mm | •                |            |
| 412 / 212         | •                 |                    |                            |                       |        |                 | 212 - 2 1/2 - 8"       | 412 125 - 300 mm    | •                |            |
| 312               | •                 |                    |                            |                       |        |                 |                        | 312 125 - 400 mm    |                  | •          |
| 412 S / 212 S     | •                 |                    |                            |                       |        |                 | 212 S - 2 1/2 - 8"     | 412 S 125 - 300 mm  | •                |            |
| 422               |                   |                    | •                          |                       |        |                 |                        | 50 - 400 mm         | •                |            |
| 322               |                   |                    | •                          |                       |        |                 |                        | 50 - 400 mm         |                  | •          |
| 402 B             | •                 |                    |                            |                       |        |                 |                        | 40 - 500 mm         | •                |            |
| 402 RR            |                   |                    |                            | •                     |        |                 |                        | 40 - 500 mm         | •                |            |
| 402 Z             |                   |                    |                            |                       | •      |                 |                        | 40 - 400 mm         | •                |            |
| 302 Z             |                   |                    |                            |                       | •      |                 |                        | 50 - 100 mm         |                  | •          |
| 402 S             | •                 |                    |                            |                       |        |                 |                        | 40 - 500 mm         | •                |            |
| 402 X             |                   |                    |                            |                       |        | •               |                        | 40 - 400 mm         | •                |            |
| 302 X             |                   |                    |                            |                       |        | •               |                        | 50 - 400 mm         |                  | •          |
| 882               | •                 |                    |                            |                       |        | •               |                        | 65 - 250 mm         | •                |            |
| 892               | •                 |                    |                            |                       |        |                 |                        | 80 - 500 mm         | •                |            |

## WATER SUPPLY, WATER DISTRIBUTION, PUMPING, INDUSTRY

## 462 with PN 10 flanges

PRESSURE PFA/PS in bar  $\theta$  100°

BODY WITH INTEGRATED ONE-ARM GUIDE : GJL cast iron, epoxy coated

Face to face dimensions according to EN558-1 series 14

SEAL : EPDM

CLOSING SYSTEM : Brass

RING + STEM : Bronze - SPRING : Stainless steel

APPROVALS :  PED 97/23/CE  

| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 3751       | 10060514    | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | I  |
| 149B 3752       | 10060515    | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | I  |
| 149B 3753       | 10060516    | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | I  |
| 149B 3754       | 10060517    | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | I  |
| 149B 3755       | 10060518    | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | I  |
| 149B 3756       | 10060519    | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | I  |
| 149B 3757       | 10060520    | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | I  |

Dimensions at the end of the section.

## 402 with PN 10 flanges

PRESSURE PFA/PS in bar  $\theta$  100°

CASING : GJL cast iron, epoxy coated - 2 undrilled bosses

SEAL : EPDM - SPRING : stainless steel (type 202)

CLOSING SYSTEM DN 40 brass, DN 50 and 65 bronze, other DN : cast iron with bronze stem

GUIDING : DN 50 bronze, other DN : cast iron with bronze ring

APPROVALS :    PED 97/23/CE  Other Approvals available: 

WRAS Approved as a Non-return device only, not suitable for Backflow Prevention

| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | m   |           | L1 | L2 | G1  | G2 |     |    |
| 149B2281        | 10060160    | 1 1/2 | 40  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B2282        | 10070354    | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B2283        | 10048929    | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B2284        | 10048930    | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | 1  |
| 149B2285        | 10070355    | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | 1  |
| 149B2226        | 10060148    | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B2227        | 10048928    | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B2229        | 10060149    | 8     | 200 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B002849*     | 10061902    | 8     | 200 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B2230        | 10060150    | 10    | 250 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B002851*     | 10061905    | 10    | 250 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B2231        | 10060151    | 12    | 300 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B002853*     | 10061908    | 12    | 300 | 10        | 10 | 10 | 10  | 10 | II  | 1  |
| 149B2232        | 10060152    | 14    | 350 | 10        | 10 | 10 | 0,5 | 10 | II  | 1  |
| 149B2233        | 10060153    | 16    | 400 | 10        | 10 | 10 | 0,5 | 10 | II  | 1  |
| 149B2235        | on request  | 20    | 500 | 10        | 10 | 10 | 0,5 | 10 | II  | 1  |

\* Special PN16 drilled variant, still 10 bar rated

Dimensions at the end of the section.

## BUILDING INDUSTRY, WATER SUPPLY, PROTECTION OF DRINKING WATER NETWORKS

### 402B/402 with PN10 flanges

PRESSURE PFA/PS in bar 0 100°

A double check valve composed of 2 standard range single non return valve type 402 coupled together.

APPROVALS :     
02 SYSTEM



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | UV |
|--------------------|----------------|-------|-----|--------------|----|
|                    |                | “     | m   |              |    |
| 149B 16023         | 10061084       | 2     | 50  | 16           | 1  |
| 149B 16024         | 10061085       | 2 1/2 | 65  | 16           | 1  |
| 149B 16025         | 10048925       | 3     | 80  | 16           | 1  |
| 149B 16026         | 10061086       | 4     | 100 | 16           | 1  |
| 149F 020400        | 10061087       | 5     | 125 | 16           | 1  |
| 149B 16028         | 10061088       | 6     | 150 | 16           | 1  |
| 149B 96175         | 10061224       | 8     | 200 | 10           | 1  |
| 149B 97019         | on request     | 10    | 250 | 10           | 1  |
| 149B 97020         | on request     | 12    | 300 | 10           | 1  |
| 149B 97021         | 10084440       | 14    | 350 | 10           | 1  |
| 149B 97022         | on request     | 16    | 400 | 10           | 1  |

Dimensions at the end of the section.

## WATER SUPPLY, WATER DISTRIBUTION, PUMPING, INDUSTRY

### 202 female/female

PRESSURE PFA/PS in bar 0 100°

CASING : GJL cast iron, epoxy coated - 2 undrilled bosses

SEAL : EPDM - SPRING : stainless steel (type 202)

CLOSING SYSTEM : DN 2” 1/2 & 3” bronze, DN4” cast iron with bronze stem

GUIDING : DN2” 1/2 bronze, other DN cast iron with bronze ring

APPROVALS :    PED 97/23/CE Other Approvals available: 



OPTIONS : 202B two drilled and plugged bosses  
202Z all bronze  
202RR rilsan coated

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|----|----|-----|----|
|                    |                | “     | m   |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2286          | 10060161       | 2 1/2 | 65  | 16           | 16 | 16 | 15 | 16 | I   | 1  |
| 149B 2287          | 10060162       | 3     | 80  | 16           | 16 | 16 | 12 | 16 | I   | 1  |
| 149B 2288          | 10060163       | 4     | 100 | 16           | 16 | 16 | 10 | 16 | I   | 1  |

Dimensions at the end of the section.

## BUILDING INDUSTRY, WATER SUPPLY, PROTECTION OF DRINKING WATER NETWORKS

## 202B/212 female/female

PRESSURE PFA/PS in bar Ø 100°

A double check valve composed of 1 standard range single NRV type 202 and single NRV type 212 coupled together with screwed BSP end connections.

APPROVALS :



## 02 SYSTEM

| Legacy Part No. | Part Number | DN<br>“ | m   | PFA water | UV |
|-----------------|-------------|---------|-----|-----------|----|
| 149B 96171      | 10048944    | 2 1/2   | 65  | 16        | 1  |
| 149B 96172      | 10061223    | 3       | 80  | 16        | 1  |
| 149B 96173      | 10078383    | 4       | 100 | 16        | 1  |

Dimensions at the end of the section.

## BOOSTING UNITS PUMPING, WATER DISTRIBUTION, INDUSTRY

## 882 between flanges PN10-16-25-40-ASA 150

PRESSURE PFA 40 bar / PS in bar Ø 100°

CASING : GJS ductile iron epoxy coated

SEAL : EPDM

CLOSING SYSTEM : DN 65 bronze, other DN cast iron

GUIDING SYSTEM : cast iron, bronze guiding ring

APPROVALS :



PED 97/23/CE

ACS



SPECIAL : PN for Ø 200 and 250 (see technical information)

\*PN 10-16 ASA 150 - \*\*PN 25 - \*\*\*PN 40 - \*\*\*\*PN 10-16-40 ASA 150

| Legacy Part No. | Part Number | DN<br>“ | mm  | PFA water | L1 | PS<br>L2 | G1  | G2 | Cat | UV |
|-----------------|-------------|---------|-----|-----------|----|----------|-----|----|-----|----|
| 149B 3040       | 10060340    | 2 1/2   | 65  | 40        | 30 | 40       | 15  | 40 | I   | 1  |
| 149B 3040C2     | on request  | 2 1/2   | 65  | 40        | 40 | 40       | 40  | 40 | II  | 1  |
| 149B 3041       | 10060341    | 3       | 80  | 40        | 25 | 40       | 12  | 40 | I   | 1  |
| 149B 3041C2     | on request  | 3       | 80  | 40        | 40 | 40       | 40  | 40 | II  | 1  |
| 149B 3042       | 10060342    | 4       | 100 | 40        | 20 | 40       | 10  | 40 | I   | 1  |
| 149B 3042C2     | on request  | 4       | 100 | 40        | 40 | 40       | 40  | 40 | II  | 1  |
| 149B 3043       | 10060343    | 5       | 125 | 40        | 16 | 40       | 0,5 | 28 | I   | 1  |
| 149B 3043C2     | on request  | 5       | 125 | 40        | 40 | 40       | 28  | 40 | II  | 1  |
| 149B 3044       | 10060344    | 6       | 150 | 40        | 13 | 40       | 0,5 | 23 | I   | 1  |
| 149B 3044C2     | 10062072    | 6       | 150 | 40        | 40 | 40       | 23  | 33 | II  | 1  |
| 149B 3045*      | 10060345    | 8       | 200 | 16        | 16 | 16       | 16  | 16 | II  | 1  |
| 149B 007936**   | 10062073    | 8       | 200 | 25        | 25 | 25       | 17  | 25 | II  | 1  |
| 149B 007937***  | 10062074    | 8       | 200 | 40        | 40 | 40       | 17  | 25 | II  | 1  |
| 149B 3046****   | 10060346    | 10      | 250 | 40        | 40 | 40       | 14  | 20 | II  | 1  |
| 149B 007938**   | 10062075    | 10      | 250 | 25        | 25 | 25       | 14  | 20 | II  | 1  |

Dimensions at the end of the section.

## 892 between flanges PN10-16-25-40-ASA 150

PRESSURE PFA/PS in bar 0 100°

CASING + SEAT : GJS ductile iron epoxy coated

SEAL : EPDM - GUIDE : Bronze

CLOSING SYSTEM : Stainless steel

NUTS + SPRING : Stainless steel

LIFTING EYES : Galvanised steel. Reduces the water hammers

APPROVALS :  ACS  PED 97/23/CE



| Legacy Part No. | Part Number | DN |     | PFA water | L1 | PS |     |    | Cat | UV |
|-----------------|-------------|----|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "  | mm  |           |    | L2 | G1  | G2 |     |    |
| 149B 2731       | 10082418    | 3  | 80  | 40        | 25 | 40 | 12  | 40 | I   | 1  |
| 149B 2732       | 10060276    | 4  | 100 | 40        | 20 | 40 | 10  | 35 | I   | 1  |
| 149B 2734       | 10060277    | 6  | 150 | 25        | 13 | 25 | 0,5 | 23 | I   | 1  |
| 149B 2735       | on request  | 6  | 150 | 40        | 13 | 40 | 0,5 | 23 | I   | 1  |
| 149B 2467       | on request  | 8  | 200 | 16        | 10 | 16 | 0,5 | 16 | I   | 1  |
| 149B 032459     | on request  | 8  | 200 | 40        | 10 | 40 | 0,5 | 17 | I   | 1  |
| 149B 2468       | 10060220    | 10 | 250 | 25        | 10 | 25 | 0,5 | 14 | I   | 1  |
| 149B 032460     | on request  | 10 | 250 | 40        | 10 | 40 | 0,5 | 14 | I   | 1  |
| 149B 2460       | 10060217    | 12 | 300 | 25        | 10 | 25 | 0,5 | 11 | I   | 1  |
| 149B 2461       | 10060218    | 14 | 350 | 16        | 10 | 16 | 0,5 | 10 | I   | 1  |
| 149B 032461     | on request  | 14 | 350 | 25        | 10 | 25 | 0,5 | 10 | I   | 1  |
| 149B 2462       | 10060219    | 16 | 400 | 25        | 10 | 25 | 0,5 | 8  | I   | 1  |
| 149B 2463       | on request  | 20 | 500 | 25        | 10 | 25 | 0,5 | 7  | I   | 1  |

Dimensions at the end of the section.

## PROTECTION OF DRINKING WATER NETWORKS, WATER DISTRIBUTION, INDUSTRY

### 402B with PN10 flanges

PRESSURE PFA/PS in bar 0 100°

CASING : GJL cast iron epoxy coated. Two threaded and plugged bosses 1/2"

CLOSING SYSTEM + GUIDING SYSTEM + SEAL : the same as valve type 402

APPROVALS :   PED 97/23/CE ACS Other approval available: 



| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | mm  |           |    | L2 | G1  | G2 |     |    |
| 149B 2281 B     | 10061916    | 1 1/2 | 40  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2351       | 10060175    | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2352       | on request  | 2 1/4 | 60  | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2353       | 10060176    | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2354       | 10048935    | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2355       | 10060177    | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2226 B     | 10061894    | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2227 B     | 10061897    | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2229 B     | 10061900    | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2230 B     | 10061903    | 10    | 250 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2231 B     | 10061906    | 12    | 300 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2232 B     | on request  | 14    | 350 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2233 B     | on request  | 16    | 400 | 10        | 10 | 10 | 0,5 | 8  | I   | 1  |
| 149B 2235 B     | on request  | 20*   | 500 | 10        | 10 | 10 | 0,5 | 7  | I   | 1  |

\*Casing : GJS ductile iron epoxy coated

Dimensions at the end of the section.

## FOOD INDUSTRY, WATER DISTRIBUTION AND INDUSTRY

**402RR with PN10 flanges**PRESSURE PFA/PS in bar  $\theta$  80°

CASING : GJL cast iron PA (polyamid) coating

CLOSING SYSTEM : 304 Stainless steel

SEAL : EPDM

GUIDING SYSTEM : DN 2" in bronze, other DN in cast iron with stainless steel ring

APPROVALS :   PED 97/23/CE Other Approval Available : **kiwa**

| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2281 RR    | on request  | 11/2  | 40  | 16        | 16 | 16 | 16  | 16 | I   | I  |
| 149B 2282 RR    | on request  | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | I  |
| 149B 2283 RR    | on request  | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | I  |
| 149B 2284 RR    | on request  | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | I  |
| 149B 2285 RR    | on request  | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | I  |
| 149B 2226 RR    | on request  | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | I  |
| 149B 2227 RR    | on request  | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | I  |
| 149B 2229 RR    | on request  | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | I  |
| 149B 2230 RR    | on request  | 10    | 250 | 10        | 10 | 10 | 0,5 | 10 | I   | I  |
| 149B 2231 RR    | on request  | 12    | 300 | 10        | 10 | 10 | 0,5 | 10 | I   | I  |
| 149B 2232 RR    | on request  | 14    | 350 | 10        | 10 | 10 | 0,5 | 10 | I   | I  |
| 149B 2233 RR    | on request  | 16    | 400 | 10        | 10 | 10 | 0,5 | 8  | I   | I  |
| 149B 2235 RR    | on request  | 20    | 500 | 10        | 10 | 10 | 0,5 | 7  | I   | I  |

Dimensions at the end of the section.

## HIGH PRESSURE, PUMPING, WATER DISTRIBUTION, INDUSTRY

**402S with PN25-40 flanges**PRESSURE PFA/PS in bar  $\theta$  100°

Up to 150 mm : PN 25-40

From 200 to 500 mm : PN 25

CASING : GJS ductile iron epoxy coated. Two undrilled bosses

CLOSING SYSTEM : DN40 brass, DN50 to 250 bronze, DN350 to 500 GJS ductile iron

GUIDE + SEAL the same as valve type 402

APPROVALS :   PED 97/23/CE 

| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2281GS     | 10061917    | 11/2  | 40  | 40        | 40 | 40 | 25  | 40 | I   | 1  |
| 149B 018804     | on request  | 11/2  | 40  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2282GS     | 10061918    | 2     | 50  | 40        | 40 | 40 | 20  | 40 | I   | 1  |
| 149B 018805     | 10061919    | 2     | 50  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2283GS     | 10061920    | 2 1/2 | 65  | 40        | 30 | 40 | 15  | 40 | I   | 1  |
| 149B 018806     | on request  | 2 1/2 | 65  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2284GS     | 10061922    | 3     | 80  | 40        | 25 | 40 | 12  | 40 | I   | 1  |
| 149B 018810     | on request  | 3     | 80  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2285GS     | 10061923    | 4     | 100 | 40        | 20 | 40 | 10  | 40 | I   | 1  |
| 149B 018811     | 10078835    | 4     | 100 | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2226GS     | 10061895    | 5     | 125 | 40        | 16 | 40 | 0,5 | 28 | I   | 1  |
| 149B 018812     | on request  | 5     | 125 | 40        | 40 | 40 | 28  | 40 | II  | 1  |
| 149B 2227GS     | 10061898    | 6     | 150 | 40        | 13 | 40 | 0,5 | 23 | I   | 1  |
| 149B 018813     | on request  | 6     | 150 | 40        | 40 | 40 | 23  | 33 | II  | 1  |
| 149B 2229GS     | 10061901    | 8     | 200 | 25        | 25 | 25 | 17  | 25 | II  | 1  |
| 149B 2230GS     | 10061904    | 10    | 250 | 25        | 25 | 25 | 14  | 20 | II  | 1  |
| 149B 2231GS     | 10061907    | 12    | 300 | 25        | 25 | 25 | 11  | 16 | II  | 1  |
| 149B 2232GS     | on request  | 14    | 350 | 25        | 25 | 25 | 10  | 14 | II  | 1  |
| 149B 2233GS     | 10061910    | 16    | 400 | 25        | 25 | 25 | 0,5 | 12 | II  | 1  |
| 149B 24822      | on request  | 18    | 450 | 25        | 10 | 25 | 0,5 | 7  | I   | 1  |
| 149B 2235GS     | on request  | 20    | 500 | 25        | 25 | 25 | 0,5 | 10 | II  | 1  |

Dimensions at the end of the section.

## CORROSIVE ENVIRONMENTAL OR CORROSIVE PRODUCTS

### 402Z with PN10 flanges

PRESSURE PFA/PS in bar  $\theta$  100°

CASING : bronze UE2, On request, bronze UA10. Two undrilled bosses

SEAL : EPDM

CLOSING SYSTEM + GUIDING SYSTEM : bronze

APPROVALS :   PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 2337          | on request     | 1 1/2 | 40  | 25           | 25 | 25 | 25 25  | I   | 1  |
| 149B 2342          | 10060169       | 2     | 50  | 25           | 25 | 25 | 20 25  | I   | 1  |
| 149B 2343          | on request     | 2 1/2 | 65  | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 2344          | on request     | 3     | 80  | 16           | 16 | 16 | 12 16  | I   | 1  |
| 149B 2345          | 10060170       | 4     | 100 | 16           | 16 | 16 | 10 16  | I   | 1  |
| 149B 15280         | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 15364         | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 15365         | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 10 | I   | 1  |
| 149B 15719         | on request     | 10    | 250 | 10           | 10 | 10 | 0,5 10 | I   | 1  |
| Special            | 10045408       | 12    | 300 | 10           | 10 | 10 | 0,5 10 | I   | 1  |
| Special            | 10045408       | 14    | 350 | 10           | 10 | 10 | 0,5 10 | I   | 1  |
| 149B 24862         | on request     | 16    | 400 | 10           | 10 | 10 | 0,5 8  | I   | 1  |

Dimensions at the end of the section.

## CHEMISTRY, CORROSIVE PRODUCTS, HYDROCARBONS, INDUSTRY

### 402X with PN10 flanges

PRESSURE PFA/PS in bar  $\theta$  140°

CASING : stainless steel. Other materials, consult us. Two undrilled bosses

CLOSING SYSTEM + GUIDING SYSTEM : 304 stainless steel

SEAL : FKM

APPROVALS :   PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149F 016092        | 10061240       | 1 1/2 | 40  | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 95002         | on request     | 2     | 50  | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 97270         | 10061241       | 2 1/2 | 65  | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 94084         | 10081490       | 3     | 80  | 16           | 16 | 16 | 16 16  | II  | 1  |
| 149F 016328        | on request     | 4     | 100 | 16           | 16 | 16 | 16 16  | II  | 1  |
| 149B 14977         | 10088590       | 5     | 125 | 16           | 16 | 16 | 16 16  | II  | 1  |
| 149F 017723        | 10061242       | 6     | 150 | 16           | 16 | 16 | 16 16  | II  | 1  |
| 149B 24101         | on request     | 8     | 200 | 10           | 10 | 10 | 10 10  | II  | 1  |
| 149F 020389        | on request     | 10    | 250 | 10           | 10 | 10 | 10 10  | II  | 1  |
| 149B 24682         | on request     | 12    | 300 | 10           | 10 | 10 | 10 10  | II  | 1  |
| 149B 97276         | on request     | 14    | 350 | 10           | 10 | 10 | 10 10  | II  | 1  |
| 149B 97277         | on request     | 16    | 400 | 10           | 10 | 10 | 0,5 10 | II  | 1  |

Dimensions at the end of the section.

**CORROSION RESISTANT, PUMPING, WATER DISTRIBUTION, INDUSTRY****422 with PN10 flanges**

PRESSURE PFA/PS in bar 0 100°

CASING : GJL cast iron + epoxy

SEAL : EPDM

CLOSING SYSTEM and seat : bronze

GUIDING SYSTEM : DN50 bronze other DN in cast iron epoxy coated

APPROVALS :   PED 97/23/CE ACS

| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |  | G1  | G2 | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|--|-----|----|-----|----|
|                 |             | “     | mm  |           |    | L2 |  |     |    |     |    |
| 149B 2679       | on request  | 2     | 50  | 16        | 16 | 16 |  | 16  | 16 | I   | 1  |
| 149B 2680       | on request  | 2 1/2 | 65  | 16        | 16 | 16 |  | 15  | 16 | I   | 1  |
| 149B 2681       | on request  | 3     | 80  | 16        | 16 | 16 |  | 12  | 16 | I   | 1  |
| 149B 2682       | 10060262    | 4     | 100 | 16        | 16 | 16 |  | 10  | 16 | I   | 1  |
| 149B 2683       | on request  | 5     | 125 | 16        | 16 | 16 |  | 0,5 | 16 | I   | 1  |
| 149B 2684       | 10060263    | 6     | 150 | 16        | 13 | 16 |  | 0,5 | 16 | I   | 1  |
| 149B 2685       | on request  | 8     | 200 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2686       | on request  | 10    | 250 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2687       | on request  | 12    | 300 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2688       | on request  | 14    | 350 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2689       | on request  | 16    | 400 | 10        | 10 | 10 |  | 0,5 | 8  | I   | 1  |

Dimensions at the end of the section.

**INDUSTRIAL SERVICES, INDUSTRY**

PRESSURE PFA/PS in bar 0 100°

CASING : GJL cast iron inside and outside PTFE coated. Two threaded bosses 1/4" sealed with plugs

SEAL : EPDM

CLOSING SYSTEM + GUIDING SYSTEM : GJL cast iron PTFE coated

APPROVALS :   PED 97/23/CE Other approvals available : **kiwa****402TTP with PN10 flanges**

| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |  | G1  | G2 | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|--|-----|----|-----|----|
|                 |             | “     | mm  |           |    | L2 |  |     |    |     |    |
| 149B 2853       | on request  | 2     | 50  | 16        | 16 | 16 |  | 16  | 16 | I   | 1  |
| 149B 2854       | on request  | 2 1/2 | 65  | 16        | 16 | 16 |  | 15  | 16 | I   | 1  |
| 149B 2855       | on request  | 3     | 80  | 16        | 16 | 16 |  | 12  | 16 | I   | 1  |
| 149B 2856       | on request  | 4     | 100 | 16        | 16 | 16 |  | 10  | 16 | I   | 1  |
| 149B 2857       | on request  | 5     | 125 | 16        | 16 | 16 |  | 0,5 | 16 | I   | 1  |
| 149B 2858       | on request  | 6     | 150 | 16        | 13 | 16 |  | 0,5 | 16 | I   | 1  |
| 149B 2859       | on request  | 8     | 200 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2860       | on request  | 10    | 250 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2861       | on request  | 12    | 300 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2862       | on request  | 14    | 350 | 10        | 10 | 10 |  | 0,5 | 10 | I   | 1  |
| 149B 2863       | on request  | 16    | 400 | 10        | 10 | 10 |  | 0,5 | 8  | I   | 1  |

Dimensions at the end of the section.

**202TTP female/female**

| Legacy Part No. | Part Number | DN “  | PFA water |    | L1 | PS |  | G1 | G2 | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|----|--|----|----|-----|----|
|                 |             |       |           |    |    | L2 |  |    |    |     |    |
| 149B 2850       | on request  | 2 1/2 |           | 16 | 16 |    |  | 15 | 16 | 1   | I  |
| 149B 2851       | on request  | 3     |           | 16 | 16 |    |  | 12 | 16 | 1   | I  |
| 149B 2852       | on request  | 4     |           | 16 | 16 |    |  | 10 | 16 | 1   | I  |



## INDUSTRIAL SERVICES, HYDROCARBONS AND INDUSTRY

PRESSURE PFA/PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated. Two undrilled bosses

SEAL : FKM

CLOSING SYSTEM + GUIDING SYSTEM : same as valves type 402 and 202

APPROVALS :   PED 97/23/CE



### 402V with PN10 flanges

| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | “     | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2281 V     | on request  | 1 1/2 | 40  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2346       | 10060171    | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2347       | 10060172    | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2348       | 10060173    | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2349       | 10060174    | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2226 V     | 10061896    | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2227 V     | 10061899    | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2229 V     | on request  | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2230 V     | on request  | 10    | 250 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2231 V     | on request  | 12    | 300 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |

### 202V female/female

| Legacy Part No. | Part Number | DN “  | PFA water | PS |    |    |    | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|----|----|-----|----|
|                 |             |       |           | L1 | L2 | G1 | G2 |     |    |
| 149B 2356       | 10060178    | 2 1/2 | 16        | 16 | 16 | 15 | 16 | I   | I  |
| 149B 2357       | 10060179    | 3     | 16        | 16 | 16 | 12 | 16 | I   | I  |
| 149B 2358       | 10060180    | 4     | 16        | 16 | 16 | 10 | 16 | I   | I  |



Dimensions at the end of the section.

## FOR SUBMERSIBLE PUMPS, WATER DISTRIBUTION

PRESSURE PFA/PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated. With two cable passage notches (412)

SEAL : EPDM

CLOSING SYSTEM + GUIDING SYSTEM :

412 : bronze stem valve, cast iron guiding and closing system. 212 : same as valve type 202

APPROVALS :    PED 97/23/CE ACS



### 412 with PN16 flanges

| Legacy Part No. | Part Number | DN |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|----|-----|-----------|----|----|-----|----|-----|----|
|                 |             | “  | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2254       | 10060155    | 5  | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2255       | 10060156    | 6  | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2256       | 10060157    | 8  | 200 | 16        | 10 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2277       | 10060159    | 10 | 250 | 16        | 10 | 16 | 0,5 | 14 | I   | 1  |
| 149B 2278       | on request  | 12 | 300 | 16        | 10 | 16 | 0,5 | 11 | I   | 1  |

### 212 male/female

| Legacy Part No. | Part Number | DN “  | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|-----|----|-----|----|
|                 |             |       |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2454       | 10060214    | 2 1/2 | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2455       | 10060215    | 3     | 16        | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2456       | 10060216    | 4     | 16        | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2257       | 10060158    | 5     | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2258       | 10080318    | 6     | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2259       | on request  | 8     | 16        | 10 | 16 | 0,5 | 16 | I   | 1  |



Dimensions at the end of the section.

**FOR SUBMERSIBLE PUMPS, WATER DISTRIBUTION, HIGH PRESSURE**PRESSURE PFA 40 bar / PS in bar  $\theta$  100°

CASING : GJS ductile iron epoxy coated. With two cable passage notches (412S)

SEAL : EPDM

CLOSING SYSTEM : bronze

GUIDING SYSTEM : DN 2" 1/2 bronze, DN &gt; cast iron with bronze ring

APPROVALS :



PED 97/23/CE

ACS

**412S with PN40 flanges**

| Legacy<br>Part No. | Part<br>Number | DN |     | PFA<br>water | L1 | PS |  | G1  | G2 | Cat | UV |
|--------------------|----------------|----|-----|--------------|----|----|--|-----|----|-----|----|
|                    |                | "  | mm  |              |    | L2 |  |     |    |     |    |
| 149B 2254 GS       | on request     | 5  | 125 | 40           | 16 | 40 |  | 0,5 | 28 | I   | 1  |
| 149B 2255 GS       | 10061911       | 6  | 150 | 40           | 13 | 40 |  | 0,5 | 23 | I   | 1  |
| 149F 017096        | 10061912       | 8  | 200 | 40           | 10 | 40 |  | 0,5 | 17 | I   | 1  |
| 149B 2277 GS       | on request     | 10 | 250 | 40           | 10 | 40 |  | 0,5 | 14 | I   | 1  |
| 149B 2278 GS       | 10061915       | 12 | 300 | 40           | 10 | 40 |  | 0,5 | 11 | I   | 1  |

Dimensions at the end of the section.

**212S male/female**

| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | PS |  | G1  | G2 | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|--|-----|----|-----|----|
|                    |                |         |              |    | L2 |  |     |    |     |    |
| 149B 2454 GS       | on request     | 2 1/2   | 40           | 30 | 40 |  | 15  | 40 | I   | 1  |
| 149B 2455 GS       | on request     | 3       | 40           | 25 | 40 |  | 12  | 40 | I   | 1  |
| 149B 2456 GS       | on request     | 4       | 40           | 20 | 40 |  | 10  | 35 | I   | 1  |
| 149B 2257 GS       | on request     | 5       | 40           | 16 | 40 |  | 0,5 | 28 | I   | 1  |
| 149B 2258 GS       | on request     | 6       | 40           | 13 | 40 |  | 0,5 | 23 | I   | 1  |
| 149B 2259 GS       | on request     | 8       | 40           | 10 | 40 |  | 0,5 | 17 | I   | 1  |

**FOOT VALVES - PUMPING, CLEAR WATER****302 with PN10 flanges**PRESSURE PFA / PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM : DN 50 and 65 in bronze, other DN in cast iron with stem in bronze

GUIDING SYSTEM : DN 50 in bronze, other DN in cast iron with bronze ring

SEAL : EPDM

STRAINER : galvanised steel

APPROVALS :



PED 97/23/CE

ACS



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--|----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 |  |    |    |     |    |
| 149B 2754          | 10060284       | 2     | 50  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2755          | 10060285       | 2 1/2 | 65  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2756          | 10060286       | 3     | 80  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2757          | 10060287       | 4     | 100 | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2701          | 10060266       | 5     | 125 | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2702          | 10060267       | 6     | 150 | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2703          | 10060268       | 8     | 200 | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2704          | 10060269       | 10    | 250 | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149B 2705          | 10060270       | 12    | 300 | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149B 2706          | 10060271       | 14    | 350 | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149B 2707          | on request     | 16    | 400 | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149B 23135         | on request     | 20    | 500 | 10           | 10 | 10 |  | x  | x  | I   | 1  |

Dimensions at the end of the section.

### 302 with PN10 flanges - Stainless Steel version

PRESSURE PFA / PS in bar 0 100°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM : DN 50 and 65 in bronze, other DN in cast iron with stem in bronze

GUIDING SYSTEM : DN 50 in bronze, other DN in cast iron with bronze ring

SEAL : EPDM

STRAINER : Stainless Steel 304L

OPTIONS : Also available on special request for strainer in stainless steel AISI 316L

APPROVALS :



PED 97/23/CE

ACS



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|----|----|-----|----|
|                    |                | "     | mm  |              | L1 | L2 | G1 | G2 |     |    |
| 149B 15094         | 10061066       | 2     | 50  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 15001         | 10061060       | 2 1/2 | 65  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14999         | 10061059       | 3     | 80  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 15428         | 10061074       | 4     | 100 | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 15002         | 10061061       | 5     | 125 | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 15424         | 10061073       | 6     | 150 | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 15036         | 10061062       | 8     | 200 | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 14906         | 10061057       | 10    | 250 | 10           | 10 | 10 | x  | x  | I   | 1  |
| 149B 15505         | 10061075       | 12    | 300 | 10           | 10 | 10 | x  | x  | I   | 1  |
| 149B 97244         | on request     | 14    | 350 | 10           | 10 | 10 | x  | x  | I   | 1  |
| 149B 15737         | on request     | 16    | 400 | 10           | 10 | 10 | x  | x  | I   | 1  |

Dimensions at the end of the section.

### 102 female

PRESSURE PFA / PS in bar 0 100°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM : 2" to 3" in bronze, other DN in cast iron with stem in bronze

GUIDE : 2"1/4 to 2"1/2 in bronze, other DN in cast iron with bronze ring

SPRING : stainless steel - SEAL : EPDM

STRAINER : galvanised steel

APPROVAL :



ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2766          | 10060294       | 2 1/4   | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2767          | 10060295       | 2 1/2   | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2768          | 10060296       | 3       | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2769          | 10060297       | 4       | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 1162          | on request     | 5       | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 1163          | 10060055       | 6       | 16           | 13 | 16 | x  | x  | 3.3 | 1  |
| 149B 1164          | on request     | 7       | 16           | 10 | 16 | x  | x  | 3.3 | 1  |
| 149B 1165          | on request     | 8       | 16           | 10 | 16 | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**302P with PN10 flange**

PRESSURE PFA / PS in bar 0 80°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM : same as valves type 302-102

GUIDING SYSTEM : same as valves type 302-102

SPRING : stainless steel

SEAL : EPDM - STRAINER : PP (polypropylene)

APPROVAL :



ACS



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--|----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 |  |    |    |     |    |
| 149B 2746          | 10060278       | 2     | 50  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2747          | 10060279       | 2 1/2 | 65  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2748          | 10026584       | 3     | 80  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2749          | 10026585       | 4     | 100 | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**102P female**

| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | L2 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|--|----|----|-----|----|
|                    |                |         |              |    |    |    |  |    |    |     |    |
| 149B 2758          | 10060288       | 2 1/4   | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2759          | 10060289       | 2 1/2   | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2760          | 10060290       | 3       | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2761          | 10060291       | 4       | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**FOOT VALVES - PUMPING, HYDROCARBONS****302PV with PN10 flange**

PRESSURE PFA / PS in bar 0 80°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM + GUIDING SYSTEM same as valves type 302-102

SPRING : stainless steel

SEAL : FKM

STRAINER : PP (polypropylene)

APPROVAL :



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--|----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 |  |    |    |     |    |
| 149B 2750          | 10060280       | 2     | 50  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2751          | 10060281       | 2 1/2 | 65  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2752          | 10060282       | 3     | 80  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B 2753          | 10060283       | 4     | 100 | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**102PV female**

| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | L2 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|--|----|----|-----|----|
|                    |                |         |              |    |    |    |  |    |    |     |    |
| 149B 2762          | on request     | 2 1/4   | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2763          | 10060292       | 2 1/2   | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2764          | 10060293       | 3       | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |
| 149B 2765          | on request     | 4       | 16           | 16 | 16 |    |  | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.



## 302V with PN10 flange

PRESSURE PFA / PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM + GUIDING SYSTEM : same as valves type 302-102

SPRING : stainless steel

SEAL : FKM

STRAINER : galvanised steel

APPROVAL :  PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |   | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|---|----|----|-----|----|
|                    |                | “     | mm  |              |    | L2 |   |    |    |     |    |
| 149B 14677         | 10061044       | 2     | 50  | 16           | 16 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 14496         | 10061039       | 2 1/2 | 65  | 16           | 16 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 14678         | 10061045       | 3     | 80  | 16           | 16 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 14879         | 10061056       | 4     | 100 | 16           | 16 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 14767         | 10061051       | 5     | 125 | 10           | 10 | 10 | x | x  | x  | 3.3 | 1  |
| 149B 14506         | 10061041       | 6     | 150 | 10           | 10 | 10 | x | x  | x  | 3.3 | 1  |
| 149B 14515         | 10061042       | 8     | 200 | 10           | 10 | 10 | x | x  | x  | 3.3 | 1  |
| 149B 23078         | 10061111       | 10    | 250 | 10           | 10 | 10 | x | x  | x  | 1   | 1  |
| 149B 15238         | 10061068       | 12    | 300 | 10           | 10 | 10 | x | x  | x  | 1   | 1  |
| 149B 22178         | on request     | 14    | 350 | 10           | 10 | 10 | x | x  | x  | 1   | 1  |

Dimensions at the end of the section.

## CLEAR WATER PUMPING

### 312 with PN16 flange

PRESSURE PFA / PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated

CLOSING SYSTEM + GUIDING SYSTEM : same as valve type 302

SPRING : stainless steel

STEAL : EPDM

STRAINER : galvanised steel

APPROVALS :   PED 97/23/CE  
ACS



| Legacy<br>Part No. | Part<br>Number | DN |     | PFA<br>water | L1 | PS |   | G1 | G2 | Cat | UV |
|--------------------|----------------|----|-----|--------------|----|----|---|----|----|-----|----|
|                    |                | “  | mm  |              |    | L2 |   |    |    |     |    |
| 149B 2720          | on request     | 5  | 125 | 16           | 16 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 2721          | on request     | 6  | 150 | 16           | 13 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 2722          | 10060272       | 8  | 200 | 16           | 10 | 16 | x | x  | x  | 3.3 | 1  |
| 149B 2723          | 10060273       | 10 | 250 | 16           | 10 | 16 | x | x  | x  | 1   | 1  |
| 149B 2724          | 10060274       | 12 | 300 | 16           | 10 | 16 | x | x  | x  | 1   | 1  |
| 149B 2725          | 10060275       | 14 | 350 | 16           | 10 | 16 | x | x  | x  | 1   | 1  |
| 149B 2726          | 10086637       | 16 | 400 | 16           | 10 | 16 | x | x  | x  | 1   | 1  |

Dimensions at the end of the section.

## FOOT VALVES - CLEAR AND AGRESSIVE WATER PUMPING

### 322 with PN10 flange

PRESSURE PFA / PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated

GUIDING SYSTEM : DN 50 in bronze, other DN in cast iron with bronze stem

SPRING : stainless steel

SEAL : EPDM

STRAINER : galvanised steel

APPROVALS :   PED 97/23/CE  
ACS



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|----|----|-----|----|
|                    |                | "     | mm  |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2616          | 10086873       | 2     | 50  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2617          | 10060257       | 2 1/2 | 65  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2618          | on request     | 3     | 80  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2619          | on request     | 4     | 100 | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2620          | 10060258       | 5     | 125 | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 2621          | on request     | 6     | 150 | 16           | 13 | 16 | x  | x  | 3.3 | 1  |
| 149B 2622          | on request     | 8     | 200 | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 2623          | on request     | 10    | 250 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| 149B 2624          | on request     | 12    | 300 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| 149B 2625          | on request     | 14    | 350 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| 149B 2626          | on request     | 16    | 400 | 10           | 10 | 10 | x  | x  | 1   | 1  |

Dimensions at the end of the section.

## FOOT VALVES - PUMPING OF CORROSIVE MEDIUM INDUSTRIAL PROCESS, HYDROCARBONS

### 302X with PN10 flange

PRESSURE PFA / PS in bar  $\theta$  140°

CASING : stainless steel (304)

CLOSING SYSTEM + GUIDING SYSTEM : stainless steel (304)

SPRING : stainless steel

SEAL : FKM

STRAINER : stainless steel (304)

APPROVALS :   PED 97/23/CE



OPTIONS : Also available on special request in stainless steel AISI 304L, 316 L, Super Duplex

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|----|----|-----|----|
|                    |                | "     | mm  |              | L1 | L2 | G1 | G2 |     |    |
| 149B 14714         | 10061046       | 2     | 50  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14715         | 10061047       | 2 1/2 | 65  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14716         | 10061048       | 3     | 80  | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14717         | 10061049       | 4     | 100 | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14718         | on request     | 5     | 125 | 16           | 16 | 16 | x  | x  | 3.3 | 1  |
| 149B 14434         | 10061038       | 6     | 150 | 16           | 13 | 16 | x  | x  | 3.3 | 1  |
| 149B 14719         | on request     | 8     | 200 | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 14720         | on request     | 10    | 250 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| Special            | 10045408       | 12    | 300 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| Special            | 10045408       | 14    | 350 | 10           | 10 | 10 | x  | x  | 1   | 1  |
| Special            | 10045408       | 16    | 400 | 10           | 10 | 10 | x  | x  | 1   | 1  |

Dimensions at the end of the section.

# FOOT VALVES - AGRESSIVE MEDIUMS PUMPING, SALTED SOLUTIONS, SEA WATER

## 302Z with PN10 flange

PRESSURE PFA / PS in bar θ 80°

CASING : bronze UE2. On request, bronze UA10

CLOSING SYSTEM : bronze

SPRING : stainless steel

SEAL : EPDM

STRAINER : DN50-100 in PP

DN125-400 in Stainless steel 316L

APPROVALS :  ACS



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |       | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2 |     |    |
| 149B 2776          | on request     | 2     | 50  | 25           | 25 | 25 | x x   | 3.3 | 1  |
| 149B 2777          | 10060298       | 2 1/2 | 65  | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 2778          | 10060299       | 3     | 80  | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 2779          | on request     | 4     | 100 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 14925         | 10061058       | 5     | 125 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 15032         | on request     | 6     | 150 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 15917         | 10082901       | 8     | 200 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 24322         | on request     | 10    | 250 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| Special            | 10045408       | 12    | 300 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 24545         | on request     | 14    | 350 | 16           | 16 | 16 | x x   | 3.3 | 1  |
| 149B 24521         | on request     | 16    | 400 | 16           | 16 | 16 | x x   | 3.3 | 1  |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

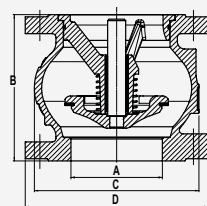
### Types

402 - 402B - 402V

402RR - 402S\* - 402Z

402TTP - 422

with flanges

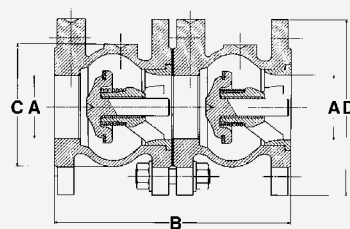


| A     |     | B<br>mm | C<br>mm | D mm | D<br>402S | Kg   | KV<br>m³/H | ζ    |
|-------|-----|---------|---------|------|-----------|------|------------|------|
| "     | mm  |         |         |      |           |      |            |      |
| 11/2  | 40  | 85      | 80      | 150  | 150       | 4,2  | 47         | 1,80 |
| 2     | 50  | 100     | 97      | 165  | 165       | 5,8  | 99         | 1,00 |
| 2 1/4 | 60  | 120     | 125     | 185  | 185       | 8,1  | 159        | 1,10 |
| 2 1/2 | 65  | 120     | 125     | 185  | 185       | 8,1  | 159        | 1,10 |
| 3     | 80  | 140     | 150     | 200  | 200       | 10,2 | 222        | 1,30 |
| 4     | 100 | 170     | 187     | 220  | 235       | 14,5 | 396        | 1,00 |
| 5     | 125 | 200     | 220     | 250  | 270       | 24   | 619        | 1,00 |
| 6     | 150 | 230     | 250     | 285  | 300       | 32   | 890        | 1,00 |
| 8     | 200 | 289     | 340     | 340  | 360       | 53   | 1120       | 2,00 |
| 10    | 250 | 354     | 420     | 405  | 425       | 94   | 2010       | 1,50 |
| 12    | 300 | 396     | 490     | 460  | 485       | 140  | 2459       | 2,10 |
| 14    | 350 | 473     | 586     | 533  | 555       | 225  | 2843       | 2,90 |
| 16    | 400 | 560     | 680     | 597  | 620       | 312  | 4370       | 2,10 |
| 18*   | 450 | 560     | 684     | -    | 670       | 342  | 4370       | 2,10 |
| 20    | 500 | 750     | 880     | 670  | 670       | 540  | 6914       | 2,05 |

\* only for type 402S

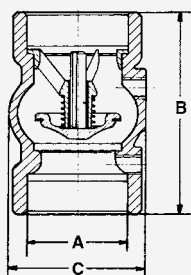
### Type 402B/402 flanges

with flanges



| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   |
|-------|-----|---------|---------|---------|------|
| "     | mm  |         |         |         |      |
| 2     | 50  | 202     | 97      | 165     | 11,6 |
| 2 1/2 | 65  | 242     | 125     | 185     | 16,2 |
| 3     | 80  | 282     | 150     | 200     | 20,4 |
| 4     | 100 | 342     | 187     | 220     | 29   |
| 5     | 125 | 402     | 220     | 250     | 48   |
| 6     | 150 | 462     | 260     | 285     | 64   |
| 8     | 200 | 578     | 340     | 340     | 106  |
| 10    | 250 | 704     | 420     | 405     | 188  |
| 12    | 300 | 792     | 490     | 485     | 280  |
| 14    | 350 | 946     | 586     | 555     | 450  |
| 16    | 400 | 1122    | 680     | 620     | 624  |

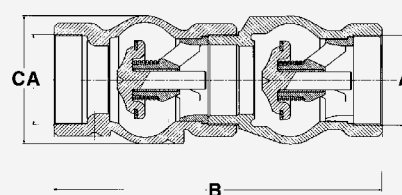
### Types 202 - 202 TTP - 202V



female/female

| A    |     | B<br>mm | C<br>mm | Kg  | KV<br>m³/H | ζ   |
|------|-----|---------|---------|-----|------------|-----|
| "    | mm  |         |         |     |            |     |
| 21/2 | 65  | 148     | 97      | 3,2 | 81         | 4,2 |
| 3    | 80  | 174     | 125     | 5,8 | 123        | 4,2 |
| 4    | 100 | 203     | 150     | 9,2 | 203        | 3,8 |

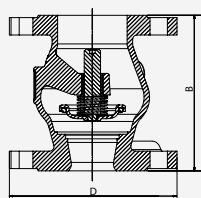
### Type 202B/212



female/female

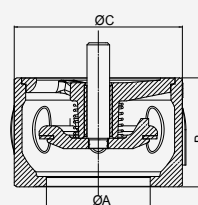
| A    |     | B<br>mm | C<br>mm | Kg   |
|------|-----|---------|---------|------|
| "    | mm  |         |         |      |
| 21/2 | 65  | 263     | 97      | 5,9  |
| 3    | 80  | 312     | 125     | 11,1 |
| 4    | 100 | 365     | 150     | 17,9 |

### 462

Type 462  
with flanges

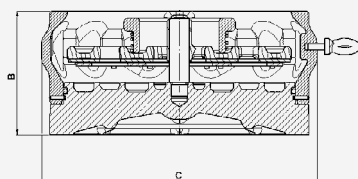
| DN    |     | B<br>mm | D<br>mm | Kg    | KV<br>m³/H | ζ    |
|-------|-----|---------|---------|-------|------------|------|
| "     | mm  |         |         |       |            |      |
| 2     | 50  | 150     | 165     | 6,70  | 69         | 2,10 |
| 2 1/2 | 65  | 170     | 185     | 9,30  | 125        | 1,80 |
| 3     | 80  | 180     | 200     | 10,90 | 157        | 2,65 |
| 4     | 100 | 190     | 220     | 14,30 | 350        | 1,30 |
| 5     | 125 | 200     | 250     | 20,90 | 582        | 1,15 |
| 6     | 150 | 210     | 285     | 27,70 | 710        | 1,60 |
| 8     | 200 | 230     | 340     | 40,70 | 1031       | 2,40 |

### 882

Type 882  
between flanges

| A<br>" | B<br>mm | C        |       |       |         | Kg  |
|--------|---------|----------|-------|-------|---------|-----|
|        |         | PN 10/16 | PN 25 | PN 40 | ASA 150 |     |
| 65     | 75      | 126      | 126   | 126   | 121     | 2,7 |
| 80     | 85      | 142      | 142   | 142   | -       | 4   |
| 100    | 105     | 162      | 170   | 170   | 170     | 6   |
| 125    | 90      | 194      | 194   | 194   | 194     | 7   |
| 150    | 106     | 218      | 222   | 222   | 222     | 11  |
| 200    | 140     | 273      | -     | -     | 273     | 22  |
| 200    | 140     | -        | 285   | -     | -       | 22  |
| 200    | 140     | -        | -     | 289   | -       | 22  |
| 250    | 200     | -        | 339   | -     | -       | 47  |
| 250    | 200     | 328      | -     | 352   | 328     | 47  |

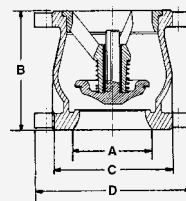
## 892



Type 892  
between flanges

| A  |     | B<br>mm | C    |      |       |      |        | Kg    |
|----|-----|---------|------|------|-------|------|--------|-------|
| "  | mm  |         | PN10 | PN16 | PN 25 | PN40 | ASA150 |       |
| 3  | 80  | 80      | 142  | 142  | 142   | 142  | 142    | 3,3   |
| 4  | 100 | 100     | 162  | 162  | 170   | 170  | 170    | 5,0   |
| 6  | 150 | 150     | 218  | 218  | 225   | 225  | 218    | 13,0  |
| 8  | 200 | 129     | 273  | 273  | -     | -    | 273    | 23,5  |
| 8  | 200 | 129     | -    | -    | 285   | 285  | -      | 24,0  |
| 10 | 250 | 140     | 328  | 328  | 339   | -    | 328    | 33,0  |
| 10 | 250 | 140     | -    | -    | -     | 355  | -      | 33,5  |
| 12 | 300 | 181     | 381  | 381  | 405   | -    | 405    | 59,0  |
| 14 | 350 | 222     | 440  | 440  | -     | -    | 440    | 103,0 |
| 14 | 350 | 222     | -    | -    | 460   | -    | -      | 103,0 |
| 16 | 400 | 232     | 493  | 493  | 513   | -    | 513    | 124,0 |
| 20 | 500 | 292     | 596  | 623  | 623   | -    | 596    | 237,0 |

## 412



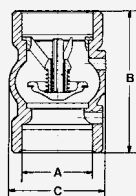
Types  
412- 412 S  
with flanges

| A  |     | B<br>mm | C<br>mm | D<br>mm | Kg    | KV<br>m <sup>2</sup> /H | ζ   |
|----|-----|---------|---------|---------|-------|-------------------------|-----|
| "  | mm  |         |         |         |       |                         |     |
| 5  | 125 | 201     | 190     | 250     | 20,0  | 357                     | 3,0 |
| 6  | 150 | 220     | 212     | 285     | 27,5  | 476                     | 3,5 |
| 8  | 200 | 280     | 266     | 340     | 49,2  | 607                     | 6,8 |
| 10 | 250 | 345     | 324     | 405     | 90,0  | 1000                    | 6,1 |
| 12 | 300 | 365     | 420     | 460     | 120,0 | 1452                    | 6,0 |

## 412 S

| A  |     | B<br>mm | C<br>mm | D<br>mm | Kg    | KV<br>m <sup>2</sup> /H | ζ   |
|----|-----|---------|---------|---------|-------|-------------------------|-----|
| "  | mm  |         |         |         |       |                         |     |
| 5  | 125 | 201     | 190     | 270     | 20,0  | 357                     | 3,0 |
| 6  | 150 | 220     | 212     | 300     | 27,5  | 476                     | 3,5 |
| 8  | 200 | 280     | 266     | 375     | 49,2  | 607                     | 6,8 |
| 10 | 250 | 345     | 324     | 450     | 95,0  | 1000                    | 6,1 |
| 12 | 300 | 365     | 420     | 515     | 130,0 | 1452                    | 6,0 |

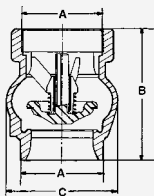
## 202 - 202 TTP 202V



female/female

| A     |     | B<br>mm | C<br>mm | Kg  | KV<br>m <sup>2</sup> /H | ζ   |
|-------|-----|---------|---------|-----|-------------------------|-----|
| "     | mm  |         |         |     |                         |     |
| 2 1/2 | 65  | 148     | 97      | 3,2 | 81                      | 4,2 |
| 3     | 80  | 174     | 125     | 5,8 | 123                     | 4,2 |
| 4     | 100 | 203     | 150     | 9,2 | 203                     | 3,8 |

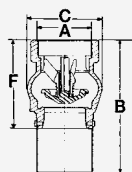
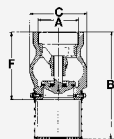
## 212 - 212 S



male/female

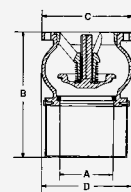
| A     |     | B<br>mm | C<br>mm | Kg   | KV<br>m <sup>2</sup> /H | ζ   |
|-------|-----|---------|---------|------|-------------------------|-----|
| "     | mm  |         |         |      |                         |     |
| 2 1/2 | 65  | 139     | 97      | 2,7  | 88                      | 3,6 |
| 3     | 80  | 165     | 125     | 5,3  | 132                     | 3,7 |
| 4     | 100 | 195     | 150     | 8,7  | 205                     | 3,7 |
| 5     | 125 | 230     | 188     | 14,0 | 316                     | 3,8 |
| 6     | 150 | 275     | 223     | 21,2 | 533                     | 2,8 |
| 8     | 200 | 333     | 266     | 41,8 | 640                     | 6,1 |

## 102

Type  
102  
femaleTypes  
102P  
102PV  
female

| A     |         | B mm |     | C   | F   | Kg    |     | KV   | ζ   |
|-------|---------|------|-----|-----|-----|-------|-----|------|-----|
| “     | mm      | (1)  | (2) | mm  | mm  | (1)   | (2) | m³/H |     |
| 2 1/4 | 60/70   | 167  | 195 | 97  | 123 | 3,10  | 3   | 82   | 3,0 |
| 2 1/2 | 66/76   | 167  | 195 | 97  | 123 | 3,10  | 3   | 82   | 4,2 |
| 3     | 80/90   | 212  | 241 | 125 | 123 | 5,20  | 5   | 120  | 4,4 |
| 4     | 102/114 | 251  | 290 | 150 | 123 | 8,30  | 8   | 188  | 4,4 |
| 5     | 125     | 345  | -   | 188 | 123 | 14,70 | -   | 291  | 4,5 |
| 6     | 150     | 430  | -   | 223 | 123 | 22    | -   | 490  | 3,3 |
| 7     | 175     | 508  | -   | 266 | 123 | 44    | -   | 594  | 4,1 |
| 8     | 200     | 508  | -   | 266 | 123 | 43,50 | -   | 594  | 7,1 |

Types 302 - 302P\*  
302PV\* - 302V- 302X  
302Z\* - 312 - 322

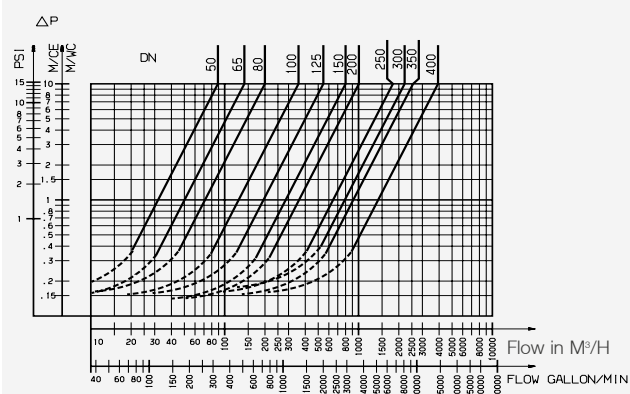


with flange

| A mm | B mm | B* mm | C mm | D mm | Kg 302 | KV M <sup>3</sup> /H | $\zeta$ |
|------|------|-------|------|------|--------|----------------------|---------|
| 50   | 143  | 171,0 | 165  | 97   | 4,3    | 89                   | 1,23    |
| 65   | 185  | 212,0 | 185  | 125  | 6,4    | 143                  | 1,36    |
| 80   | 218  | 257,0 | 200  | 150  | 9,3    | 199                  | 1,60    |
| 100  | 265  | 312,5 | 220  | 181  | 13,6   | 356                  | 1,20    |
| 125  | 333  | -     | 254  | 217  | 19,0   | 557                  | 1,20    |
| 150  | 373  | -     | 285  | 256  | 28,0   | 801                  | 1,20    |
| 200  | 483  | -     | 343  | 336  | 48,0   | 1008                 | 2,46    |
| 250  | 572  | -     | 406  | 416  | 90,0   | 1818                 | 1,85    |
| 300  | 652  | -     | 482  | 486  | 133,0  | 2210                 | 2,60    |
| 350  | 771  | -     | 533  | 580  | 226,0  | 2560                 | 3,60    |
| 400  | 876  | -     | 597  | 676  | 343,0  | 3930                 | 2,60    |
| 500  | 1094 | -     | 670  | 880  | 560,0  | 6914                 | 2,05    |

## HEADLOSS CHART

## TYPE 302



## Chapter 2.3

## 03 HP SYSTEM

- High mechanical and hydraulic performances
- Adapted materials
- Various industrial applications

## HIGH PRESSURE FLUIDS, WATER, HYDROCARBONS, GAS, GENERAL INDUSTRIAL APPLICATIONS

**233 female/female**

PRESSURE PFA/PS in bar Ø 100°

CASING : high pressure check valve in carbon steel

CLOSING SYSTEM : stainless steel

SPRING : stainless steel

SEALS : NBR (nitrile)

Opening pressure 0,5 bar



| Legacy<br>Part No. | Part<br>Number | DN    |    | PFA<br>water | PS  |     |     |     | Cat | UV |
|--------------------|----------------|-------|----|--------------|-----|-----|-----|-----|-----|----|
|                    |                | "     | mm |              | L1  | L2  | G1  | G2  |     |    |
| 149B 3240          | on request     | 1/4   | 8  | 400          | 400 | 400 | 400 | 400 | 3.3 | 1  |
| 149B 3241          | on request     | 3/8   | 10 | 350          | 350 | 350 | 350 | 350 | 3.3 | 1  |
| 149B 3242          | 10060405       | 1/2   | 15 | 300          | 300 | 300 | 300 | 300 | 3.3 | 1  |
| 149B 3243          | 10060406       | 3/4   | 20 | 250          | 250 | 250 | 250 | 250 | 3.3 | 1  |
| 149B 3244          | on request     | 1     | 25 | 200          | 200 | 200 | 200 | 200 | 3.3 | 1  |
| 149B 3245          | 10060407       | 1 1/4 | 32 | 150          | 62  | 150 | 0,5 | 150 | 3.3 | 1  |
| 149B 3246          | 10060408       | 1 1/2 | 40 | 100          | 50  | 100 | 0,5 | 25  | 3.3 | 1  |
| 149B 3247          | 10077390       | 2     | 50 | 100          | 40  | 100 | 0,5 | 20  | 3.3 | 1  |

Dimensions at the end of the section.

**233X female/female**

PRESSURE PFA/PS in bar Ø 230°

CASING : high pressure check valve in stainless steel AISI 304

CLOSING SYSTEM : stainless steel

SPRING : stainless steel

SEALS : PTFE and FKM

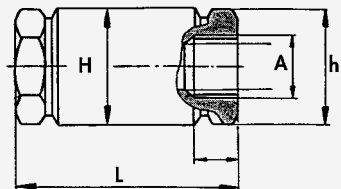
Opening pressure 0,5 bar



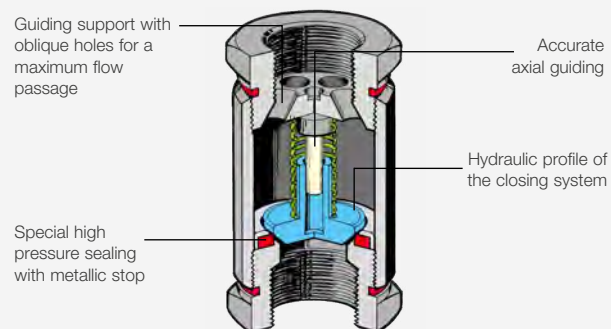
| Legacy<br>Part No. | Part<br>Number | DN    |    | PFA<br>water | PS  |     |     |     | Cat | UV |
|--------------------|----------------|-------|----|--------------|-----|-----|-----|-----|-----|----|
|                    |                | "     | mm |              | L1  | L2  | G1  | G2  |     |    |
| 149B 3240 X        | 10062106       | 1/4   | 8  | 160          | 160 | 160 | 160 | 160 | 3.3 | 1  |
| 149B 3241 X        | on request     | 3/8   | 10 | 160          | 160 | 160 | 160 | 160 | 3.3 | 1  |
| 149B 3242 X        | on request     | 1/2   | 15 | 160          | 160 | 160 | 160 | 160 | 3.3 | 1  |
| 149B 3243 X        | 10062107       | 3/4   | 20 | 160          | 160 | 160 | 160 | 160 | 3.3 | 1  |
| 149B 3244 X        | 10062108       | 1     | 25 | 160          | 160 | 160 | 160 | 160 | 3.3 | 1  |
| 149B 3245 X        | on request     | 1 1/4 | 32 | 100          | 62  | 100 | 0,5 | 100 | 3.3 | 1  |
| 149B 3246 X        | on request     | 1 1/2 | 40 | 100          | 50  | 100 | 0,5 | 25  | 3.3 | 1  |
| 149B 3247 X        | on request     | 2     | 50 | 100          | 40  | 100 | 0,5 | 20  | 3.3 | 1  |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

Types  
233 - 233X

| A     |    | L<br>mm | H<br>mm | h mm | Kg   |
|-------|----|---------|---------|------|------|
| "     | mm |         |         |      |      |
| 1/4   | 8  | 73      | 24      | 22   | 0,17 |
| 3/8   | 10 | 76      | 30      | 27   | 0,28 |
| 1/2   | 15 | 77      | 38      | 32   | 0,41 |
| 3/4   | 20 | 92      | 48      | 41   | 0,78 |
| 1     | 25 | 109     | 57      | 50   | 1,26 |
| 1 1/4 | 32 | 123     | 70      | 65   | 2,12 |
| 1 1/2 | 40 | 141     | 80      | 70   | 3,07 |
| 2     | 50 | 164     | 100     | 90   | 5,54 |

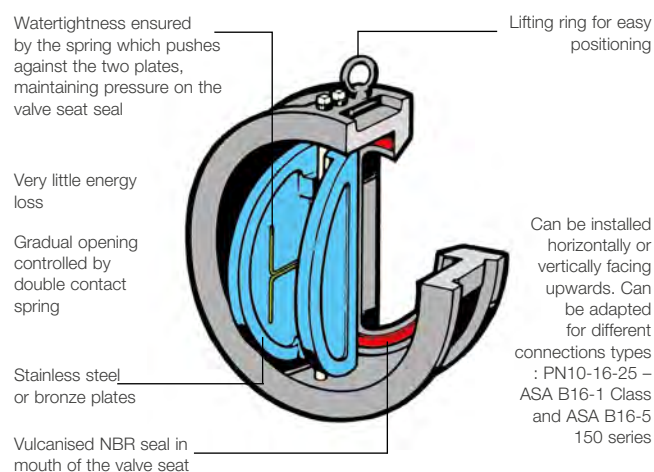


## Chapter 2.4

# 05 HP SYSTEM

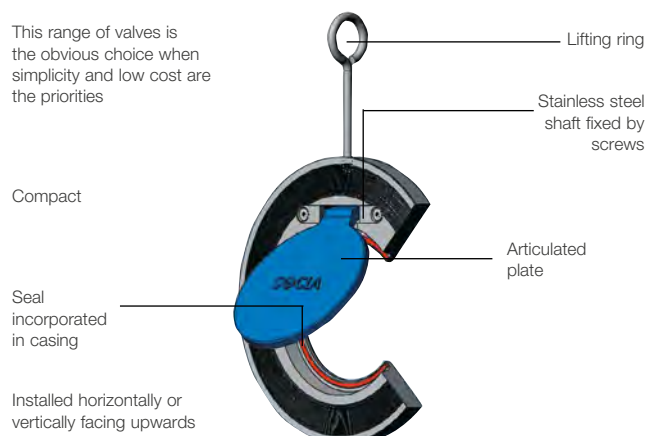
### DOUBLE PLATE BETWEEN FLANGES

- Mounting between flanges
- Excellent hydraulic performance
- Wide range : from 50 to 600 mm
- Compact



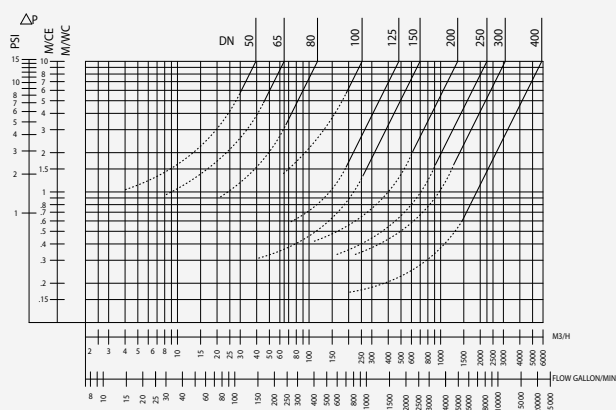
### SINGLE PLATE BETWEEN FLANGES

- Space-saving
- Simple and reliable
- Competitive price

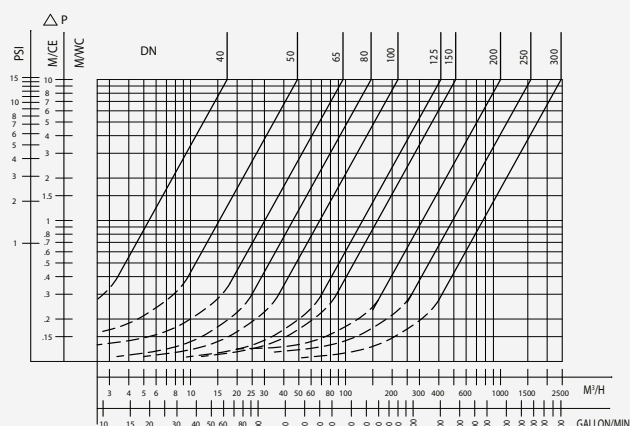


### HEADLOSS CHART

### TYPE 895



### HEADLOSS CHART



**DOUBLE PLATE****PUMPING, WATER DISTRIBUTION, GENERAL INDUSTRY****895 double plate between flanges PN10-16**

PRESSURE PFA/PS in bar 0 100°

BODY : GJL cast iron epoxy coated (DN50 to 150)

GJS ductile iron epoxy coated (DN200 to 400)

PLATES : stainless steel (304)

SEAL : EPDM

SPRING : stainless steel

APPROVALS :   PED 97/23/CE ACS

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 3000          | 10060329       | 2     | 50  | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 3001          | 10060330       | 2 1/2 | 65  | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 3002          | 10029157       | 3     | 80  | 16           | 16 | 16 | 12 16  | I   | 1  |
| 149B 3003          | 10029156       | 4     | 100 | 16           | 16 | 16 | 10 16  | I   | 1  |
| 149B 3004          | 10060333       | 5     | 125 | 16           | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 3005          | 10060334       | 6     | 150 | 16           | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 3006          | 10060335       | 8     | 200 | 16           | 10 | 16 | 0,5 16 | I   | 1  |
| 149B 3007          | 10060336       | 10    | 250 | 16           | 10 | 16 | 0,5 14 | I   | 1  |
| 149B 3008          | 10060337       | 12    | 300 | 16           | 10 | 16 | 0,5 11 | I   | 1  |
| 149B 3010          | 10060339       | 16    | 400 | 16           | 10 | 16 | x 8    | I   | 1  |

Dimensions at the end of the section.

**PUMPING, WATER DISTRIBUTION, GENERAL INDUSTRY, HYDROCARBONS****895V double plate between flanges PN10-16**

PRESSURE PFA/PS in bar 0 100°

BODY DN 50 to 150 :

GJL cast iron epoxy coated

BODY DN 200 to 400 :

GJS ductile iron epoxy coated

PLATES : stainless steel (304)

SEAL : FKM

SPRING : stainless steel

APPROVALS :   PED 97/23/CE

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 3000 V        | 10062033       | 2     | 50  | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 3001 V        | 10062035       | 2 1/2 | 65  | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 3002 V        | 10062040       | 3     | 80  | 16           | 16 | 16 | 12 16  | I   | 1  |
| 149B 3003 V        | 10062042       | 4     | 100 | 16           | 16 | 16 | 10 16  | I   | 1  |
| 149B 3004 V        | 10062043       | 5     | 125 | 16           | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 3005 V        | 10062044       | 6     | 150 | 16           | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 3006 V        | 10062045       | 8     | 200 | 16           | 10 | 16 | 0,5 16 | I   | 1  |
| 149B 3007 V        | 10062047       | 10    | 250 | 16           | 10 | 16 | 0,5 14 | I   | 1  |
| 149B 3008 V        | 10062048       | 12    | 300 | 16           | 10 | 16 | 0,5 11 | I   | 1  |
| 149B 3010 V        | on request     | 16    | 400 | 16           | 10 | 16 | x 8    | I   | 1  |

Dimensions at the end of the section.

## DOUBLE PLATE

### PUMPING, WATER DISTRIBUTION, GENERAL INDUSTRY

#### 815 double plate between flanges PN25

PRESSURE PFA 25 bar / PS in bar θ EPDM 100°C - NBR 80°C

BODY : GJS ductile iron epoxy coated

PLATES DN 50 to 300 + 400 : INOX DN 350 + 450 to 600 : ALU. BRONZE

SEAL DN 50 to 300 + 400 : EPDM DN 350 + 450 to 600 : NBR

SPRING : stainless steel

APPROVALS :   PED 97/23/CE  
ACS DN50 to 300 + DN400



SPECIAL : PN10-16 consult us

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              | L1 | L2 | G1  | G2 |     |    |
| 149B 3290          | 10060433       | 2     | 50  | 25           | 25 | 25 | 20  | 25 | I   | 1  |
| 149B 3291          | 10060434       | 2 1/2 | 65  | 25           | 25 | 25 | 15  | 25 | I   | 1  |
| 149B 3292          | 10060435       | 3     | 80  | 25           | 25 | 25 | 12  | 25 | I   | 1  |
| 149B 3293          | 10060436       | 4     | 100 | 25           | 20 | 25 | 10  | 25 | I   | 1  |
| 149B 3294          | 10060437       | 5     | 125 | 25           | 16 | 25 | 0,5 | 25 | I   | 1  |
| 149B 3295          | 10060438       | 6     | 150 | 25           | 13 | 25 | 0,5 | 23 | I   | 1  |
| 149B 3296          | 10060439       | 8     | 200 | 25           | 10 | 25 | 0,5 | 17 | I   | 1  |
| 149B 3297          | 10060440       | 10    | 250 | 25           | 10 | 25 | 0,5 | 14 | I   | 1  |
| 149B 3298          | 10079187       | 12    | 300 | 25           | 10 | 25 | 0,5 | 11 | I   | 1  |
| 149B 2650          | on request     | 14    | 350 | 25           | 10 | 25 | x   | 10 | I   | 1  |
| 149B 3340          | 10060449       | 16    | 400 | 25           | 10 | 25 | x   | 8  | I   | 1  |
| 149B 2652          | on request     | 18    | 450 | 25           | 10 | 25 | x   | 7  | I   | 1  |
| 149B 2653          | on request     | 20    | 500 | 25           | 10 | 25 | x   | 7  | I   | 1  |
| 149B 2654          | 10078633       | 24    | 600 | 25           | 10 | 25 | x   | 5  | I   | 1  |

Dimensions at the end of the section.

### PUMPING, WATER DISTRIBUTION, GENERAL INDUSTRY

#### 805 double plate between flanges PN10-16

PRESSURE PFA / PS in bar θ EPDM 100°C - NBR 80°C

BODY cast iron GJS epoxy coated (\*) except ductile iron GJS epoxy coated

PLATES : aluminium bronze

SEAL DN 50 to 300 + 400 : EPDM DN 350 + 450 to 600 : NBR

STEM DN 50 to 300 + 400 : S.Steel 316 DN 350 + 450 to 600 : S.Steel 304

SPRING : stainless steel

APPROVALS :   PED 97/23/CE  
ACS DN50 to 300 + DN400



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | PS |    |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              | L1 | L2 | G1  | G2 |     |    |
| 149B 3270          | 10026515       | 2     | 50  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 3271          | 10060421       | 2 1/2 | 65  | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 3272          | 10026518       | 3     | 80  | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 3273          | 10060422       | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 3274          | 10060423       | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 3275          | 10060424       | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 3276          | 10026517       | 8*    | 200 | 16           | 10 | 16 | 0,5 | 16 | I   | 1  |
| 149B 3277          | 10060425       | 10*   | 250 | 16           | 10 | 16 | 0,5 | 14 | I   | 1  |
| 149B 3278          | 10060426       | 12*   | 300 | 16           | 10 | 16 | 0,5 | 11 | I   | 1  |
| 149B 2590          | 10060253       | 14    | 350 | 16           | 10 | 16 | x   | 10 | I   | 1  |
| 149B 3330          | 10060448       | 16*   | 400 | 16           | 10 | 16 | x   | 8  | I   | 1  |
| 149B 2592          | 10060254       | 18    | 450 | 16           | 10 | 16 | x   | 7  | I   | 1  |
| 149B 2593          | 10060255       | 20    | 500 | 16           | 10 | 16 | x   | 7  | I   | 1  |
| 149B 2594          | 10060256       | 24    | 600 | 16           | 10 | 16 | x   | 5  | I   | 1  |

Dimensions at the end of the section.

**DOUBLE PLATE****INDUSTRIAL PROCESSES, HYDROCARBONS****825 double plate between flanges PN25**

PRESSURE PFA 25 bar / PS in bar Ø 130°C

BODY : stainless steel (316)

PLATES : stainless steel (316)

SEAL : FKM

SPRING : stainless steel

APPROVALS :   PED 97/23/CE

SPECIAL : PN10-16 consult us

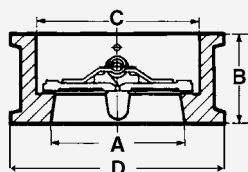


| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|----|-----|----|
|                    |                | “     | mm  |              |    | L2 |     |    |    |     |    |
| 149B 3170          | 10060377       | 2     | 50  | 25           | 25 | 25 | 20  | 25 | 25 | I   | 1  |
| 149B 3171          | 10060378       | 2 1/2 | 65  | 25           | 25 | 25 | 15  | 25 | 25 | I   | 1  |
| 149B 3172          | 10060379       | 3     | 80  | 25           | 25 | 25 | 12  | 25 | 25 | I   | 1  |
| 149B 3173          | 10060380       | 4     | 100 | 25           | 20 | 25 | 10  | 25 | 25 | I   | 1  |
| 149B 3174          | 10060381       | 5     | 125 | 25           | 16 | 25 | 0,5 | 25 | 25 | I   | 1  |
| 149B 3175          | 10060382       | 6     | 150 | 25           | 13 | 25 | 0,5 | 23 | 25 | I   | 1  |
| 149B 3176          | 10060383       | 8     | 200 | 25           | 10 | 25 | 0,5 | 17 | 25 | I   | 1  |
| 149F 020384        | 10060384       | 10    | 250 | 25           | 10 | 25 | 0,5 | 14 | 25 | I   | 1  |
| 149F 020386        | 10060385       | 12    | 300 | 25           | 10 | 25 | 0,5 | 11 | 25 | I   | 1  |
| 149B 2669          | on request     | 14    | 350 | 25           | 10 | 25 | x   | 10 | 25 | I   | 1  |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

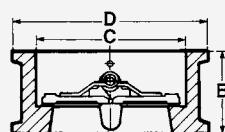
### 895 - 895V



Types 895 - 895V  
between flanges

| A     |     | B   | C   | D   | Kg   | KV                | ζ    |
|-------|-----|-----|-----|-----|------|-------------------|------|
| "     | mm  | mm  | mm  | mm  |      | m <sup>3</sup> /H |      |
| 2     | 50  | 54  | 60  | 109 | 1,2  | 35,7              | 7,81 |
| 2 1/2 | 65  | 54  | 73  | 129 | 1,8  | 64,7              | 6,81 |
| 3     | 80  | 57  | 89  | 144 | 2,9  | 116,1             | 4,86 |
| 4     | 100 | 64  | 114 | 164 | 3,9  | 253,3             | 2,49 |
| 5     | 125 | 70  | 141 | 194 | 5,8  | 481,8             | 1,68 |
| 6     | 150 | 76  | 168 | 220 | 8,0  | 698,4             | 1,66 |
| 8     | 200 | 95  | 219 | 275 | 14,0 | 1345,5            | 1,41 |
| 10    | 250 | 108 | 273 | 330 | 22,0 | 2249,5            | 1,23 |
| 12    | 300 | 143 | 324 | 380 | 34,0 | 3098,0            | 1,35 |
| 16    | 400 | 191 | 410 | 491 | 83,0 | 5867,0            | 1,20 |

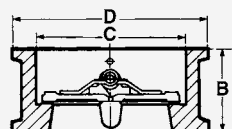
### 805



Type 805  
between flanges

| DN    |     | B   | C   | D   | Kg    | KV                | ζ    |
|-------|-----|-----|-----|-----|-------|-------------------|------|
| "     | mm  | mm  | mm  | mm  |       | m <sup>3</sup> /H |      |
| 2     | 50  | 54  | 60  | 109 | 1,2   | 39,4              | 6,3  |
| 2 1/2 | 65  | 54  | 73  | 129 | 1,8   | 83,0              | 4,1  |
| 3     | 80  | 57  | 89  | 144 | 2,9   | 138,0             | 3,4  |
| 4     | 100 | 64  | 114 | 164 | 3,9   | 250,0             | 2,5  |
| 5     | 125 | 70  | 141 | 194 | 5,8   | 505,0             | 1,45 |
| 6     | 150 | 76  | 168 | 220 | 8,0   | 891,0             | 1,0  |
| 8     | 200 | 95  | 219 | 275 | 14,0  | 1510,0            | 1,1  |
| 10    | 250 | 108 | 273 | 330 | 22,0  | 2746,0            | 1,1  |
| 12    | 300 | 143 | 324 | 380 | 34,0  | 3986,0            | 1,1  |
| 14    | 350 | 184 | 356 | 440 | 70,0  | 4254,0            | 1,30 |
| 16    | 400 | 191 | 410 | 491 | 85,0  | 5000,0            | 1,60 |
| 18    | 450 | 203 | 457 | 541 | 118,0 | 6547,0            | 1,50 |
| 20    | 500 | 213 | 508 | 596 | 180,0 | 7800,0            | 1,60 |
| 24    | 600 | 222 | 610 | 698 | 250,0 | 11269,0           | 1,60 |

### 815-825



Types 815-825  
between flanges

| DN    |     | B   | C   | D   | Kg    | KV                | ζ    |
|-------|-----|-----|-----|-----|-------|-------------------|------|
| "     | mm  | mm  | mm  | mm  |       | m <sup>3</sup> /H |      |
| 2     | 50  | 54  | 60  | 109 | 2,5   | 35,0              | 6,3  |
| 2 1/2 | 65  | 54  | 73  | 129 | 3,2   | 64,6              | 4,1  |
| 3     | 80  | 57  | 89  | 144 | 3,4   | 130,0             | 3,4  |
| 4     | 100 | 64  | 114 | 170 | 5,6   | 187,0             | 2,5  |
| 5     | 125 | 70  | 141 | 194 | 8,1   | 291,0             | 1,45 |
| 6     | 150 | 76  | 168 | 220 | 10,4  | 552,0             | 1,0  |
| 8     | 200 | 95  | 219 | 286 | 18,5  | 1065,0            | 1,1  |
| 10    | 250 | 108 | 273 | 340 | 29,5  | 2055,0            | 1,1  |
| 12    | 300 | 143 | 324 | 403 | 44,1  | 3253,0            | 1,1  |
| 14    | 350 | 184 | 356 | 460 | 78,0  | 4254,0            | 1,30 |
| 16    | 400 | 191 | 410 | 517 | 101,0 | 5000,0            | 1,60 |
| 18    | 450 | 203 | 457 | 567 | 146,9 | 6547,0            | 1,50 |
| 20    | 500 | 213 | 508 | 627 | 189,7 | 7800,0            | 1,60 |
| 24    | 600 | 222 | 610 | 734 | 290,0 | 11269             | 1,60 |

## SINGLE PLATE

## GENERAL INDUSTRY, HYDROCARBONS

## 635V single plate between flanges PN10

PRESSURE PFA / PS in bar  $\theta$  150°

BODY &amp; PLATE : Steel cataphoresis coated

SEAL : FKM

APPROVALS :  PED 97/23/CE 

| Legacy Part No. | Part Number | DN mm | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|-----|----|-----|----|
|                 |             |       |           | L1 | L2 | G1  | G2 |     |    |
| 149F021308      | 10062229    | 40    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021309      | 10062230    | 50    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021310      | 10062232    | 65    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021311      | 10062233    | 80    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021312      | 10062235    | 100   | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021313      | 10062239    | 125   | 16        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021314      | 10062241    | 150   | 16        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021315      | 10062242    | 200   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021316      | 10062244    | 250   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021317      | 10062245    | 300   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

## GENERAL WATER CIRCUITS, PUMPING, WATER DISTRIBUTION

## 635E single plate between flanges PN10

PRESSURE PFA / PS in bar  $\theta$  110°

BODY &amp; PLATE : Steel cataphoresis coated

SEAL : EPDM on seat

APPROVALS :  PED 97/23/CE 

| Legacy Part No. | Part Number | DN mm | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|-----|----|-----|----|
|                 |             |       |           | L1 | L2 | G1  | G2 |     |    |
| 149G3550        | 10060473    | 40    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149G3551        | 10060474    | 50    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149G3552        | 10060475    | 65    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021283      | 10060476    | 80    | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021284      | 10060477    | 100   | 16        | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021285      | 10060478    | 125   | 16        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021286      | 10060479    | 150   | 16        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021287      | 10060480    | 200   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021288      | 10060481    | 250   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021289      | 10060482    | 300   | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

## SINGLE PLATE

### SEA WATER, SALTED AND AGGRESSIVE SOLUTIONS, GENERAL INDUSTRIAL CIRCUITS

#### 696V single plate between flanges PN10

PRESSURE PFA / PS in bar  $\theta$  150°

BODY : wafer aluminium bronze

PLATE : aluminium copper

SEAL : FKM on seat

APPROVAL :  PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN<br>mm | PFA<br>water | PS |    |     |    | Cat | UV |
|--------------------|----------------|----------|--------------|----|----|-----|----|-----|----|
|                    |                |          |              | L1 | L2 | G1  | G2 |     |    |
| 149F021325         | 10083148       | 40       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021326         | 10083149       | 50       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021327         | on request     | 65       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021328         | on request     | 80       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021329         | 10062266       | 100      | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021330         | 10062268       | 125      | 16           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021331         | 10062269       | 150      | 16           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021332         | 10062270       | 200      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021333         | on request     | 250      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021334         | on request     | 300      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

### GENERAL WATER CIRCUITS, HYDRO-CARBONS, INDUSTRIAL PROCESSES

#### 627V single plate between flanges PN10

PRESSURE PFA / PS in bar  $\theta$  150°

BODY : wafer in stainless steel (316)

PLATE : stainless steel (316)

SEAL : FKM on seat

APPROVALS :  PED 97/23/CE 



| Legacy<br>Part No. | Part<br>Number | DN<br>mm | PFA<br>water | PS |    |     |    | Cat | UV |
|--------------------|----------------|----------|--------------|----|----|-----|----|-----|----|
|                    |                |          |              | L1 | L2 | G1  | G2 |     |    |
| 149F021226         | 10062246       | 40       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021227         | 10062247       | 50       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021228         | 10062253       | 65       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021318         | 10062254       | 80       | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021319         | 10062256       | 100      | 16           | 10 | 10 | 10  | 10 | I   | 1  |
| 149F021320         | 10062258       | 125      | 16           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021321         | 10062260       | 150      | 16           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021322         | 10062262       | 200      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021323         | 10062263       | 250      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149F021324         | 10062264       | 300      | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

## SINGLE PLATE

## GENERAL WATER CIRCUITS, PUMPING, INDUSTRIAL PROCESSES

## 627E single plate between flanges PN10

PRESSURE PFA / PS in bar 0 110°

BODY : wafer in stainless steel (316)

PLATE : stainless steel (316)

SEAL : EPDM on seat

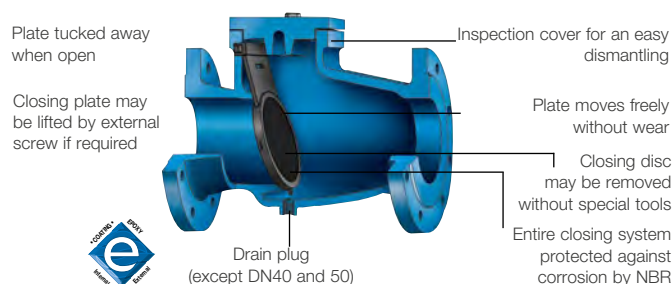
APPROVALS :  PED 97/23/CE 

| Legacy Part No. | Part Number | DN mm | PFA water | L1 | PS L2 | G1  | G2 | Cat | UV |
|-----------------|-------------|-------|-----------|----|-------|-----|----|-----|----|
| 149G3560        | 10060483    | 40    | 16        | 10 | 10    | 10  | 10 | I   | 1  |
| 149G3561        | 10060484    | 50    | 16        | 10 | 10    | 10  | 10 | I   | 1  |
| 149G3562        | 10060485    | 65    | 16        | 10 | 10    | 10  | 10 | I   | 1  |
| 149F021290      | 10060486    | 80    | 16        | 10 | 10    | 10  | 10 | I   | 1  |
| 149F021292      | 10060487    | 100   | 16        | 10 | 10    | 10  | 10 | I   | 1  |
| 149F021293      | 10060488    | 125   | 16        | 10 | 10    | 0,5 | 10 | I   | 1  |
| 149F021294      | 10060489    | 150   | 16        | 10 | 10    | 0,5 | 10 | I   | 1  |
| 149F021295      | 10060490    | 200   | 10        | 10 | 10    | 0,5 | 10 | I   | 1  |
| 149F021296      | 10060491    | 250   | 10        | 10 | 10    | 0,5 | 10 | I   | 1  |
| 149F021297      | 10060492    | 300   | 10        | 10 | 10    | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

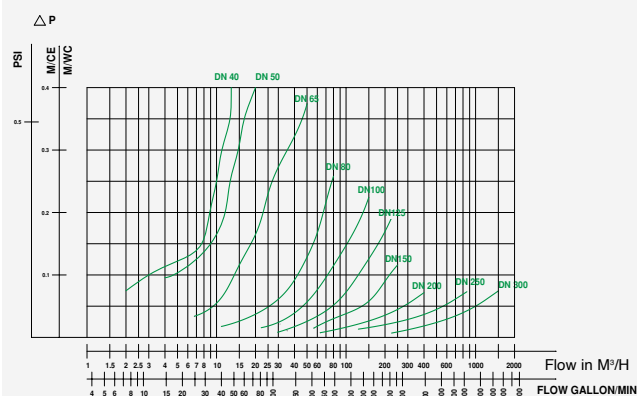
## SINGLE PLATE

- Simple, strong construction
- Wide range of applications for all kinds of liquids
- Effective, reliable operation



## HEADLOSS CHART

## TYPE 405 / 405L



## SINGLE PLATE

### CLEAR WATER, WASTE WATER, WATER DISTRIBUTION, WATER SUPPLY, PUMPING

#### 405 single plate PN16

PRESSURE PFA / PS in bar  $\theta$  70°

CASING : ductile iron GJS (DN65 to 300) epoxy coated inside / outside

PLATE : GJS ductile iron fully coated with NBR (nitrile)

OPTIONS : price on request for lifting system of the closing plate (DN65 to 300).

DN200 to 300 : PN16 version, price on request

APPROVALS :  PED 97/23/CE 



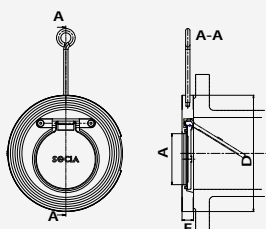
| Legacy Part No. | Part Number | DN mm | PFA water | L1 | PS |        | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|--------|-----|----|
|                 |             |       |           |    | L2 | G1 G2  |     |    |
| 149B 3461       | 10060464    | 65*   | 16        | 16 | 16 | 15 16  | I   | 1  |
| 149B 3462       | 10060465    | 80    | 16        | 16 | 16 | 12 16  | I   | 1  |
| 149B 3463       | 10060466    | 100   | 16        | 16 | 16 | 10 16  | I   | 1  |
| 149B 3464       | 10060467    | 125   | 16        | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 3465       | 10060468    | 150   | 16        | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 3466       | 10060469    | 200   | 10        | 10 | 10 | 0,5 10 | I   | 1  |
| 149B 3467       | 10060470    | 250   | 10        | 10 | 10 | 0,5 10 | I   | 1  |
| 149B 3468       | 10060471    | 300   | 10        | 10 | 10 | 0,5 10 | I   | 1  |

\* Threaded flanges 4 and 8 holes

Dimensions at the end of the section.

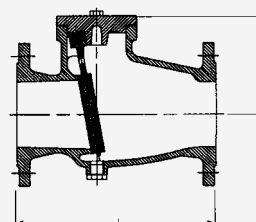
## OVERALL DIMENSIONS

#### Types 635V/635E/696V 627V/627E



| DN  | A mm | D mm | E mm |
|-----|------|------|------|
| 40  | 22   | 94   | 16   |
| 50  | 32   | 106  | 16   |
| 65  | 42   | 129  | 16   |
| 80  | 53   | 144  | 16   |
| 100 | 71   | 162  | 16   |
| 125 | 94   | 194  | 16   |
| 150 | 114  | 220  | 19   |
| 200 | 164  | 275  | 28   |
| 250 | 199  | 331  | 32   |
| 300 | 240  | 380  | 38   |

#### 405



Type 405  
between flanges

| DN  | L mm | H mm | Kg  |
|-----|------|------|-----|
| 65  | 240  | 122  | 13  |
| 80  | 260  | 140  | 16  |
| 100 | 300  | 152  | 26  |
| 125 | 350  | 162  | 34  |
| 150 | 400  | 180  | 45  |
| 200 | 500  | 205  | 57  |
| 250 | 600  | 255  | 92  |
| 300 | 700  | 293  | 137 |



## WASTE WATER, VISCOUS AND LOADED LIQUIDS, PURIFICATION

### 418 and 408 with PN10/16 flanges

PRESSURE PFA / PS in bar 0 80°

CASING :

418 : GJS ductile iron epoxy coated

408 : GJS ductile iron epoxy coated

Face to face dimensions acc. to EN558-1 serie 48

Seal : NBR

BALL : Aluminium, NBR coated (DN50 to 100) Cast iron, NBR coated ( DN >)

APPROVALS :



| Legacy<br>Part No. | Part<br>Number | DN    |      | PFA<br>water | PS |    |     |    | Cat | UV |
|--------------------|----------------|-------|------|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm   |              | L1 | L2 | G1  | G2 |     |    |
| 149B 3140          | 10060356       | 2     | 50   | 10           | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3141          | 10060357       | 2 1/2 | 65   | 10           | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3142          | 10060358       | 3     | 80   | 10           | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3143          | 10060359       | 4     | 100  | 10           | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3144          | 10060360       | 5     | 125  | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 3145          | 10060361       | 6     | 150  | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 3146          | 10060362       | 8     | 200  | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2907          | 10060326       | 10    | 250* | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2908          | 10060327       | 12    | 300* | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 2909          | 10060328       | 14    | 350* | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

## WASTE WATER, VISCOUS AND LOADED LIQUIDS

### 508 female/female

PRESSURE PFA / PS in bar 0 80°

CASING : GJL cast iron external epoxy coated

BALL : resin

SEAL : NBR (nitrile)

APPROVALS :



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              |    | L2 | G1 | G2 |     |    |
| 149B 3202          | 10048939       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 3203          | 10060386       | 1 1/4   | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 3204          | 10060387       | 1 1/2   | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 3205          | 10060388       | 2       | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 3206          | 10060389       | 2 1/2   | 10           | 10 | 10 | 10 | 10 | I   | 1  |

Dimensions at the end of the section.

**WASTE WATER, VISCOUS LIQUIDS****208P female/female**PRESSURE PFA / PS in bar  $\theta$  60°

CASING : PVC

BALL : aluminium NBR (nitrile) coated except 1"1/4 : cast iron NBR coated

APPROVAL :   PED 97/23/CE  
CPR 305/2011/UE

| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 5221          | 10060585       | 1       | 6            | 6  | 6  | 6  | 6  | 3.3 | 1  |
| 149B 5222          | 10060586       | 1 1/4   | 6            | 6  | 6  | x  | 6  | 3.3 | 1  |
| 149B 3448          | 10060460       | 1 1/2   | 6            | 6  | 6  | x  | 6  | 3.3 | 1  |
| 149B 5224          | 10060587       | 2       | 6            | 6  | 6  | x  | 6  | 3.3 | 1  |
| 149B 5225          | 10060588       | 2 1/2   | 6            | 6  | 6  | x  | 6  | 3.3 | 1  |
| 149B 3456          | 10060461       | 3       | 6            | 6  | 6  | x  | 6  | 3.3 | 1  |

Dimensions at the end of the section.

**50 female/female**PRESSURE PFA / PS in bar  $\theta$  80°

CASING : GJL cast iron epoxy coated

BALL : synthetic resin

SEAL : NR (natural rubber) or CR (polychloroprene)

APPROVALS :   PED 97/23/CE  
CPR 305/2011/UE

(1) except DN 3"



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2522          | 10060233       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 2523          | 10060234       | 1 1/4   | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 2524          | 10060235       | 1 1/2   | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 2525          | 10060236       | 2       | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 2527          | 10060237       | 2 1/2   | 10           | 10 | 10 | 10 | 10 | I   | 1  |
| 149B 2528          | 10060238       | 3       | 10           | 10 | 10 | 10 | 10 | I   | 1  |

Dimensions at the end of the section.

## FOR USE AS AN AIR VENT OR ANTI FLOODING VALVE

### 418F and 408F with PN10 flanges

PRESSURE PFA 10 bar  $\theta$  60°

CASING : same as type 418/408

BALL : floating, steel with NR (natural rubber) coated

SEAL : NBR (nitrile)

APPROVAL : 



| Legacy Part No. | Part Number | DN<br>“ | mm   | UV |
|-----------------|-------------|---------|------|----|
| 149B 3140 F     | 10062081    | 2       | 50   | 1  |
| 149B 3141 F     | 10062084    | 2 1/2   | 65   | 1  |
| 149B 3142 F     | 10062087    | 3       | 80   | 1  |
| 149B 3143 F     | 10062090    | 4       | 100  | 1  |
| 149B 3144 F     | on request  | 5       | 125  | 1  |
| 149B 3145 F     | 10062095    | 6       | 150  | 1  |
| 149B 3146 F     | 10087218    | 8       | 200  | 1  |
| 149B 2907 F     | on request  | 10      | 250* | 1  |
| 149B 2908 F     | on request  | 12      | 300* | 1  |
| 149B 2909 F     | on request  | 14      | 350* | 1  |

\* Type 408F

### 508F female/female

PRESSURE PFA 10 bar  $\theta$  80°

CASING : same as type 508

BALL : floating, epoxy resin coated SEAL : NBR (nitrile)

APPROVAL : 



| Legacy Part No. | Part Number | DN<br>mm | UV |
|-----------------|-------------|----------|----|
| 149B 3212       | 10029324    | 1        | 1  |
| 149B 3213       | 10060390    | 1 1/4    | 1  |
| 149B 3214       | 10060391    | 1 1/2    | 1  |
| 149B 3215       | 10060392    | 2        | 1  |
| 149B 3216       | 10077139    | 2 1/2    | 1  |

\* Type 408F

## WASTE WATER, VISCOUS AND LOADED LIQUIDS, PURIFICATION OF VERY AGGRESSIVE LIQUIDS

### 418V with PN10 flanges

PRESSURE PFA/PS in bar  $\theta$  100°

CASING : same as type 418

BALL : FKM coated SEAL : FKM

APPROVAL :   PSD 97/23/CE  
CPR 305/2011/UE



| Legacy Part No. | Part Number | DN<br>“ | PFA<br>water | L1 | L2 | PS<br>G1 | G2  | Cat | UV |
|-----------------|-------------|---------|--------------|----|----|----------|-----|-----|----|
| 149B 3140 V     | 10062082    | 2       | 50           | 10 | 10 | 10       | 10  | 10  | I  |
| 149B 3141 V     | 10062085    | 2 1/2   | 65           | 10 | 10 | 10       | 10  | 10  | I  |
| 149B 3142 V     | 10062088    | 3       | 80           | 10 | 10 | 10       | 10  | 10  | I  |
| 149B 3143 V     | 10062091    | 4       | 100          | 10 | 10 | 10       | 10  | 10  | I  |
| 149B 3144 V     | 10062093    | 5       | 125          | 10 | 10 | 10       | 0,5 | 10  | I  |
| 149B 3145 V     | 10062096    | 6       | 150          | 10 | 10 | 10       | 0,5 | 10  | I  |
| 149B 3146 V     | on request  | 8       | 200          | 10 | 10 | 10       | 0,5 | 10  | I  |

## AIR VALVE APPLICATION TO PREVENT WASTE WATER BACKFLOW

## 50F female/female

PRESSURE PFA 10 bar Ø 80°

CASING : same as type 50

BALL : floating, epoxy resin coated

SEAL : NR (natural rubber), except DN1½, CR (polychloroprene)

APPROVAL : 

| Legacy Part No. | Part Number | DN<br>“ | UV |
|-----------------|-------------|---------|----|
| 149B 2122       | 10048926    | 1       | 1  |
| 149B 2123       | 10048927    | 1 1/4   | 1  |
| 149B 2124       | 10060119    | 1 1/2   | 1  |
| 149B 2125       | 10060120    | 2       | 1  |
| 149B 2127       | on request  | 2 1/2   | 1  |
| 149B 14077      | on request  | 3       | 1  |

## DEGASIFICATION, WASTE WATER, LOADED LIQUIDS

## 418D with PN10 flanges

PRESSURE PFA in bar Ø 80°

CASING : complies with valve 418

BALL : same as type 418

SEAL : NBR (nitrile)

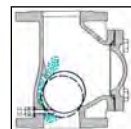
SPECIAL : equipped with a lifting device of the ball from outside

APPROVALS :   PED 97/23/CE  
CPR 305/2011/UE

## «Bleeding» valve

This device is used for lifting the ball for bleeding the plant without dismantling the valve.

 Position of the ball during complete shut-off

 Position of the ball during bleeding


| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | “     | mm  |           |    | L2 | G1  | G2 |     |    |
| 149B 3140 D     | 10062080    | 2     | 50  | 10        | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3141 D     | 10062083    | 2 1/2 | 65  | 10        | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3142 D     | 10062086    | 3     | 80  | 10        | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3143 D     | 10062089    | 4     | 100 | 10        | 10 | 10 | 10  | 10 | I   | 1  |
| 149B 3144 D     | 10062092    | 5     | 125 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 3145 D     | 10062094    | 6     | 150 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |
| 149B 3146 D     | 10062097    | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |

## LOADED AGGRESSIVE LIQUIDS INDUSTRIAL PROCESS

## 408X with PN10 flanges

PRESSURE PFA/PS in bar Ø 150°

CASING : stainless steel (304)

BALL : DN 50-100 : aluminium

DN &gt; cast iron FKM coating

BOLTS and NUTS : stainless steel (304)

SEAL : FKM

APPROVALS :   PED 97/23/CE  
CPR 305/2011/UE

| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | “     | mm  |           |    | L2 | G1  | G2 |     |    |
| 149B 15052      | 10061064    | 2     | 50  | 16        | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 15053      | on request  | 2 1/2 | 65  | 16        | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 15054      | 10061065    | 3     | 80  | 16        | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 15055      | on request  | 4     | 100 | 16        | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 15056      | on request  | 5     | 125 | 16        | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 15057      | on request  | 6     | 150 | 16        | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 15058      | on request  | 8     | 200 | 10        | 10 | 10 | 0,5 | 10 | I   | 1  |

## FOOT VALVES - VISCOUS, LOADED OR THICK LIQUIDS

### 318 and 308 drilled flange PN10

PRESSURE PFA / PS in bar  $\theta$  80°

CASING :

318 : GJS ductile iron epoxy coated

308 : GJS ductile iron epoxy coated

STRAINER : galvanised steel

SEAL : NBR

BALL :

Aluminium, NBR coated (DN50 to 100)

Cast iron, NBR coated ( DN >)

APPROVALS :



| Legacy<br>Part No. | Part<br>Number | DN    |      | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|------|--------------|----|----|--|----|----|-----|----|
|                    |                | "     | mm   |              |    | L2 |  |    |    |     |    |
| 149B 3150          | on request     | 2     | 50   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3151          | 10060363       | 2 1/2 | 65   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3152          | 10060364       | 3     | 80   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3153          | 10060365       | 4     | 100  | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3154          | 10060366       | 5     | 125  | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3155          | 10060367       | 6     | 150  | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 3156          | 10060368       | 8     | 200  | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149F 019180        | on request     | 10    | 250* | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149F 018860        | on request     | 12    | 300* | 10           | 10 | 10 |  | x  | x  | I   | 1  |
| 149B 3029          | on request     | 14    | 350* | 10           | 10 | 10 |  | x  | x  | I   | 1  |

\* Type 308 Dimensions at the end of the section.

## FOOT VALVES - SEWAGE SYSTEMS, WASTE WATER, SLURRIES

### 30 female

PRESSURE PFA / PS in bar  $\theta$  80°

CASING : cast iron with epoxy coating

BALL : synthetic resin

SEAL : NR (natural rubber) /

CR (polychloroprene)

APPROVAL :

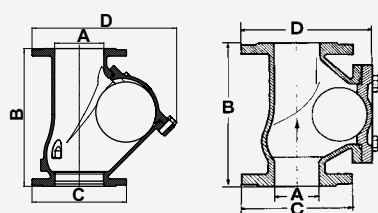


| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|--|----|----|-----|----|
|                    |                |         |              |    | L2 |  |    |    |     |    |
| 149B 2322          | 10079177       | 1       | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2323          | 10048931       | 1 1/4   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2324          | 10048932       | 1 1/2   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2325          | 10048933       | 2       | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2327          | 10048934       | 2 1/2   | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B 2368          | 10078693       | 3       | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

## 418 408



With flanges

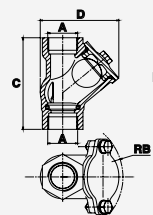
## Type 418-418F-418V-418D

| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-----|---------|---------|---------|------|------------|------|
| "     | mm  |         |         |         |      |            |      |
| 2     | 50  | 200     | 165     | 173     | 5,5  | 71,5       | 1,95 |
| 2 1/2 | 65  | 240     | 185     | 214     | 9,1  | 171,5      | 0,97 |
| 3     | 80  | 260     | 200     | 252     | 13,3 | 217,5      | 1,38 |
| 4     | 100 | 300     | 220     | 289     | 20,9 | 319        | 1,57 |
| 5     | 125 | 350     | 250     | 368     | 27,5 | 744,9      | 0,7  |
| 6     | 150 | 400     | 285     | 424     | 35,7 | 1133,7     | 0,63 |
| 8     | 200 | 500     | 340     | 509     | 63,7 | 2766       | 0,33 |

## Type 408-408F

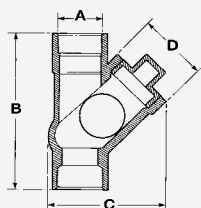
|    |     |     |     |     |       |      |      |
|----|-----|-----|-----|-----|-------|------|------|
| 10 | 250 | 600 | 400 | 582 | 128,9 | 3307 | 0,56 |
| 12 | 300 | 700 | 455 | 721 | 220,1 | 4115 | 0,75 |
| 14 | 350 | 875 | 505 | 820 | 345,6 | 4850 | 1,00 |

## 508

Types 508 - 508F  
female/female

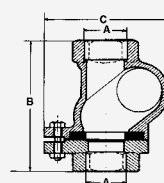
| A     |       | RB<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|-------|----------|---------|---------|------|------------|-----|
| "     | mm    |          |         |         |      |            |     |
| 1     | 26/34 | 76       | 114     | 95      | 1,30 | 19,6       | 1,6 |
| 1 1/4 | 33/42 | 85       | 132     | 110,5   | 1,90 | 29,4       | 1,9 |
| 1 1/2 | 40/49 | 93       | 145     | 121     | 2,45 | 57,8       | 1,2 |
| 2     | 50/60 | 107      | 173,5   | 144     | 3,50 | 78,3       | 1,6 |
| 2 1/2 | 66/76 | 127      | 200     | 174,5   | 5,90 | 110,4      | 2,3 |

## 208P

Type 208P  
female/female

| A     |       | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|---------|------|------------|-----|
| "     | mm    |         |         |         |      |            |     |
| 1     | 26/34 | 207     | 114     | 65,5    | 0,60 | 22,3       | 3,3 |
| 1 1/4 | 33/42 | 143     | 114     | 65,5    | 0,50 | 22,3       | 3,3 |
| 1 1/2 | 40/49 | 154     | 135     | 80,0    | 0,60 | 57,8       | 1,2 |
| 2     | 50/60 | 179     | 160     | 88,5    | 0,79 | 68,3       | 2,1 |
| 2 1/2 | 66/76 | 198     | 189     | 110     | 1,50 | 89,6       | 3,6 |
| 3     | 80/90 | 276     | 225     | 133     | 2,80 | -          | -   |

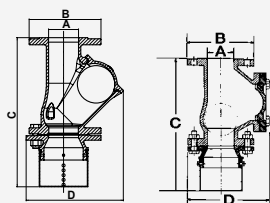
## 50

Type 50  
female/female

| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|-------|------------|-----|
| "     | mm    |         |         |       |            |     |
| 1     | 26/34 | 121     | 104     | 1,50  | 18,0       | 1,9 |
| 1 1/4 | 33/42 | 134     | 119     | 2,00  | 25,6       | 2,5 |
| 1 1/2 | 40/49 | 145     | 137     | 2,80  | 53,5       | 1,4 |
| 2     | 50/60 | 174     | 157     | 3,60  | 70,0       | 2,0 |
| 2 1/2 | 66/76 | 195     | 179     | 5,60  | 115,4      | 2,1 |
| 3     | 80/90 | 246     | 214     | 12,80 | 183,8      | 1,9 |

## OVERALL DIMENSIONS

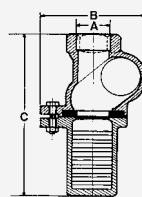
### 318-308



Types 318-308  
with flanges

| A<br>mm | B<br>mm | C<br>mm | D<br>mm | Kg    | KV<br>m³/H | ζ    |
|---------|---------|---------|---------|-------|------------|------|
| 50      | 165     | 280     | 173     | 8,0   | 64,35      | 2,41 |
| 65      | 185     | 324     | 214     | 12,5  | 154,35     | 1,20 |
| 80      | 200     | 396     | 252     | 17,0  | 195,75     | 1,70 |
| 100     | 220     | 467     | 289     | 22,5  | 287,1      | 1,94 |
| 125     | 250     | 401     | 368     | 35,0  | 671,4      | 0,87 |
| 150     | 285     | 649     | 424     | 48,0  | 1020,33    | 0,78 |
| 200     | 340     | 826     | 509     | 85,0  | 2489,4     | 0,41 |
| 250     | 400     | 966     | 582     | 157,9 | 2970       | 0,70 |
| 300     | 455     | 1112    | 721     | 261,4 | 3700       | 0,90 |
| 350     | 505     | 1317    | 820     | 421,3 | 4365       | 1,23 |

### 30

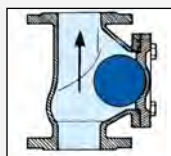


Type 30  
female

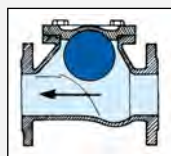
| A     |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|------|------------|------|
| "     | mm    |         |         |      |            |      |
| 1     | 26/34 | 104     | 183     | 1,9  | 16         | 2,40 |
| 1 1/4 | 33/42 | 119     | 198     | 2,4  | 23         | 3,10 |
| 1 1/2 | 40/49 | 137     | 215     | 3,2  | 40         | 2,50 |
| 2     | 50/60 | 157     | 256     | 4,1  | 63         | 2,50 |
| 2 1/2 | 66/76 | 179     | 292     | 6,5  | 103        | 2,60 |
| 3     | 80/90 | 214     | 303     | 12,9 | 165        | 2,35 |

## STANDARD FUNCTIONING APPLICATIONS

- Pumping of sewage.
  - Water purification plants
  - Sanitation plants
  - Mining works, public works
- Transfer of viscous or abrasive fluids, sludges and muds
  - Drainage of cellars



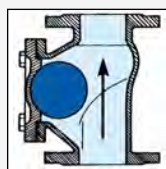
VERTICAL  
ASCENDING



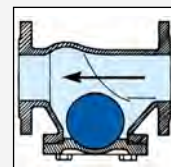
HORIZONTAL  
Lodging of the ball above the axis

## FUNCTIONING OF "THE FLOATING BALL" APPLICATIONS

TO AVOID OVERFLOW OF WATER RISING AND ALSO ALLOW GAS EVACUATION IN FILLING OF TANKS OR PIPES (AIR-VENT).



VERTICAL  
MOUNTING  
Seat up

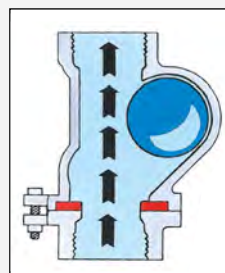


HORIZONTAL  
MOUNTING  
Lodging of the ball below the axis.  
The arrow shows the direction in which the liquid is rising.

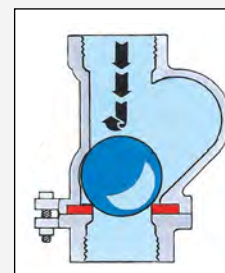


## APPLICATIONS

- Pumping of sewage
  - WATER PURIFICATION PLANTS
  - SANITATION PLANTS
  - MINING WORKS, PUBLIC WORKS
- Transfer of viscous or abrasive fluids, sludges and muds
- Drainage of cellars



SUCTION PHASE BALL IN SIDE CHAMBER



NO FLOW PHASE  
OPENING IS CLOSED

## Chapter 2.6

# M & MI SYSTEM

### M SYSTEM NON-RETURN CHECK VALVE

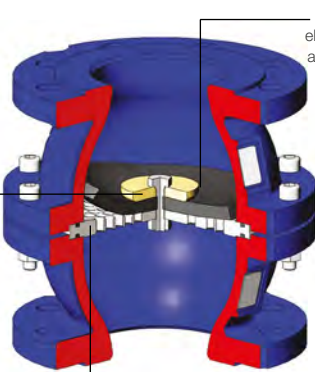
- Silent operation (in all positions)
- Protects against water hammering
- Very reliable
- Adapts to fluctuating flow rates

No moving mechanical part

Closing system, a flexible membrane which changes shape with the flow, held at its centre on a perforated steel seat

Water-tightness ensured by the automatic closure of the membrane

Valve seat, a steel polyamide coated grille allowing flow equivalent to the nominal cross-section



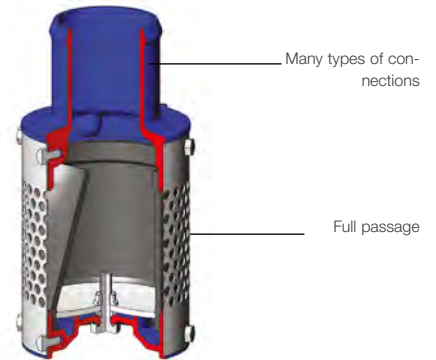
The thickness and the elasticity of the membrane allow progressive opening and closing, particularly suitable for variable flow pumps and pulsatory operation

Several concentric membranes are used for wide membrane diameters. A thin-membraned version is available for special applications eg gases, vacuums

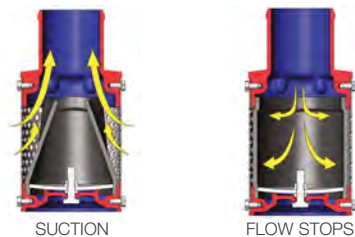
### MI SYSTEM FOOT VALVE

- Low headloss
- Simplicity - Reliability
- Functions in leaning position

Closing system EPDM seal

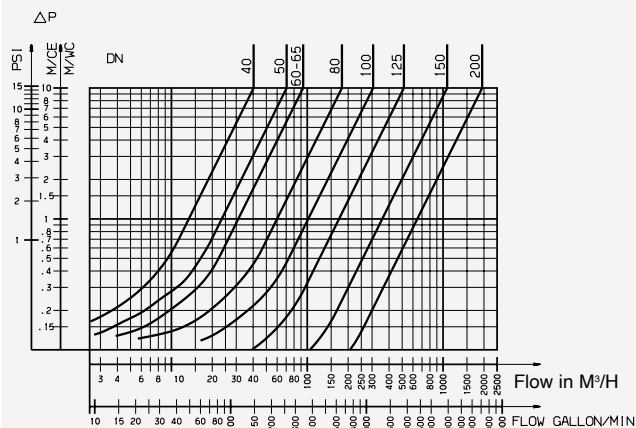


### WORKING PRINCIPLE OF THE "MI" SYSTEM



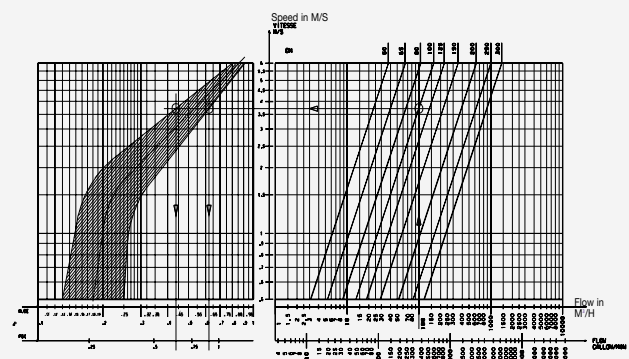
### HEADLOSS CHART

### TYPE 407



### HEADLOSS CHART

### TYPE MI



CALCULATION EXAMPLE :  
CHECK VALVE DN 100 FLOW 100M³/H  
HEADLOSS / BETWEEN 0.44 AND 0.62 M/WC

## BOOSTING UNITS, VACUUM PUMPS, COMPRESSED AIR...

### 407 with PN10 flanges

PRESSURE PFA / PS in bar  $\theta$  60°

CASING : GJL cast iron epoxy coated

SEAT : DN40 to 80 : Stainless Steel DN100 to 200 : PA (polyamid) coated steel

MEMBRANE : (natural rubber)

SEAL : EPDM

APPROVALS :  ACS\*  PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 2164          | 10060127       | 1 1/2 | 40* | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2165          | 10060128       | 2     | 50* | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2166          | 10060129       | 2 1/2 | 65* | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2167          | 10060130       | 3     | 80* | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2168          | 10060131       | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2169          | 10060132       | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2170          | 10060133       | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2237          | 10060154       | 8     | 200 | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

### 207 female/female

PRESSURE PFA / PS in bar  $\theta$  60°

CASING : GJL cast iron epoxy coated stainless steel seat

SEAL : EPDM

MEMBRANE : NR (natural rubber)

APPROVALS :  ACS (except DN3/8)  PED 97/23/CE



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              |    | L2 | G1 | G2 |     |    |
| 149B 2019          | 10060089       | 3/8*    | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2100          | 10060105       | 1/2     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2101          | 10060106       | 3/4     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2102          | 10060107       | 1       | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 2103          | 10060108       | 1 1/4   | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2104          | 10060109       | 1 1/2   | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2105          | 10060110       | 2       | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2106          | 10060111       | 2 1/2   | 16           | 16 | 16 | 15 | 16 | I   | 1  |
| 149B 2107          | 10060112       | 3       | 16           | 16 | 16 | 12 | 16 | I   | 1  |

\*Aluminium casing and seat

Dimensions at the end of the section.

**INDUSTRIAL SERVICES, COMPRESSED AIR, VACUUM PUMPS, HYDROCARBONS****447 with PN10 flanges**PRESSURE PFA / PS in bar  $\theta$  60°

CASING : GJL cast iron epoxy coated. Length according to EN 558-1 serie 48

SEAT : DN40 to 80 : Stainless Steel DN100 to 200 : PA (polyamid) coated steel

SEAL : EPDM

MEMBRANE : NR (natural rubber)

APPROVAL : ACS\*  PED 97/23/CE

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 2842          | 10060312       | 2 1/2 | 65* | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2843          | 10060313       | 3     | 80* | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2844          | 10060314       | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2845          | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2846          | 10060315       | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2847          | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

Dimensions at the end of the section.

**INDUSTRIAL SERVICES, COMPRESSED AIR, VACUUM PUMPS, HYDROCARBONS****407V with PN10 flanges & 207V female / female**PRESSURE PFA / PS in bar  $\theta$  100°

CASING : GJL cast iron epoxy coated

SEAT 407 V : DN40 to 80 : Stainless Steel, DN100 to 200 : Polyamid coated steel

SEAT 207 V : Stainless Steel

MEMBRANE and SEALS : FKM

APPROVALS :  PED 97/23/CE

(207V)

**407V with PN10 flanges**

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 1859          | on request     | 1 1/2 | 40  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 1523 9        | 10061069       | 2     | 50  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 1861          | on request     | 2 1/2 | 65  | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 1832          | 10084085       | 3     | 80  | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 1907          | 10060081       | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 1491 6        | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 1410 4        | 10061034       | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 1492 2        | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

**207V female / female**

| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              |    | L2 | G1 | G2 |     |    |
| 149B 1513 4        | on request     | 3/8*    | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 1407 6        | 10061033       | 1/2     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 1640          | 10060069       | 3/4     | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 1412 4        | 10061035       | 1       | 16           | 16 | 16 | 16 | 16 | 3.3 | 1  |
| 149B 1413 4        | 10061036       | 1 1/4   | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 1817          | 10060078       | 1 1/2   | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 1826          | 10060079       | 2       | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 1684          | on request     | 2 1/2   | 16           | 16 | 16 | 15 | 16 | I   | 1  |
| 149B 1529 6        | 10061071       | 3       | 16           | 16 | 16 | 12 | 16 | I   | 1  |

\*Aluminium casing and seat



## THERMAL WATER, AGGRESSIVE LIQUIDS

### 407RR with PN10 flanges & 447V with PN10 flanges

PRESSURE PFA / PS in bar @ 60°

CASING : GJL cast iron

447RR : length according to EN558-I serie 48

Inside and outside polyamid coating

SEAT : DN40 to 80 : Stainless Steel DN100 to 200 : Polyamid coated steel

SEALS : EPDM - MEMBRANE : NR (natural rubber)

APPROVALS :  PED 97/23/CE



(407RR)



#### 407RR with PN10 flanges

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 1720          | on request     | 1 1/2 | 40  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 1721          | on request     | 2     | 50  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 1533          | on request     | 2 1/2 | 65  | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 1722          | on request     | 3     | 80  | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 1723          | on request     | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 1977          | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 1972          | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 1512 7        | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |

#### 447RR with PN10 flanges

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 2842 RR       | on request     | 2 1/2 | 65  | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2843 RR       | 10061986       | 3     | 80  | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2844 RR       | on request     | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2845 RR       | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2846 RR       | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2847 RR       | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 | 10 | I   | 1  |



**BOOSTING UNITS, VACUUM PUMPS, COMPRESSED AIR...****407B with PN10 flanges & 447B with PN10 flanges**PRESSURE PFA / PS in bar  $\theta$  60°

CASING : GJL cast iron epoxy coated

447B : length according to EN558-I serie 48, 2 threaded bosses 1/2" with brass plug

SEAT : DN40 to 80 : Stainless Steel DN100 to 200 : Polyamid coated steel

SEALS : EPDM - MEMBRANE : NR (natural rubber)

APPROVALS :  PED 97/23/CE  ACS\*

(407B)

**407B with PN10 flanges**

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 1166          | on request     | 1 1/2 | 40* | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 1167          | 10060056       | 2     | 50* | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 2163          | on request     | 2 1/4 | 60* | 16           | 16 | 16 | 16 16  | I   | 1  |
| 149B 1168          | 10060057       | 2 1/2 | 65* | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 1169          | 10060058       | 3     | 80* | 16           | 16 | 16 | 12 16  | I   | 1  |
| 149B 1170          | 10060059       | 4     | 100 | 16           | 16 | 16 | 10 16  | I   | 1  |
| 149B 1171          | 10060060       | 5     | 125 | 16           | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 1172          | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 1173          | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 10 | I   | 1  |

**447B with PN10 flanges**

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 2842 B        | on request     | 2 1/2 | 65* | 16           | 16 | 16 | 15 16  | I   | 1  |
| 149B 2843 B        | 10061985       | 3     | 80* | 16           | 16 | 16 | 12 16  | I   | 1  |
| 149B 2844 B        | 10061987       | 4     | 100 | 16           | 16 | 16 | 10 16  | I   | 1  |
| 149B 2845 B        | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 2846 B        | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 2847 B        | on request     | 8     | 200 | 10           | 10 | 10 | 0,5 10 | I   | 1  |

**417 with PN25 flanges**PRESSURE PFA / PS in bar  $\theta$  60°

CASING : GJL cast iron

SEAT : DN40 to 80 : Stainless Steel DN100 to 200 : Polyamid coated steel

SEALS and MEMBRANE : EPDM

APPROVALS :  PED 97/23/CE  ACS\*BUREAU  
VERITAS

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |        | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--------|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1 G2  |     |    |
| 149B 2054          | on request     | 1 1/2 | 40  | 25           | 25 | 25 | 25 25  | I   | 1  |
| 149B 2055          | 10080476       | 2     | 50  | 25           | 25 | 25 | 20 25  | I   | 1  |
| 149B 2056          | 10060093       | 2 1/2 | 65  | 25           | 25 | 25 | 15 25  | I   | 1  |
| 149B 2058          | 10060094       | 3     | 80  | 25           | 25 | 25 | 12 25  | I   | 1  |
| 149B 2060          | 10060095       | 4     | 100 | 25           | 20 | 25 | 10 25  | I   | 1  |
| 149B 2061          | on request     | 5     | 125 | 25           | 16 | 25 | 0,5 25 | I   | 1  |
| 149B 2062          | on request     | 6     | 150 | 25           | 13 | 25 | 0,5 23 | I   | 1  |

## FOOT VALVES - IRRIGATION, LIMITED WORKING PRESSURE

### 317 nipple

PRESSURE PFA / PS in bar @ 60°

NIPPLE : GJL cast iron epoxy coated

STRAINER : galvanised steel

MEMBRANE : EPDM

OPTIONS : stainless steel (316L) strainer. Mounting with flexible hoses

APPROVAL : ACS\*



| Legacy<br>Part No.        | Part<br>Number | DN  |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|---------------------------|----------------|-----|-----|--------------|----|----|--|----|----|-----|----|
|                           |                | “   | mm  |              |    | L2 |  |    |    |     |    |
| 149B 2535                 | on request     | 40  | 30  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2537                 | 10060239       | 50  | 40  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2539                 | on request     | 60  | 50  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2541                 | on request     | 70  | 60  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2543                 | on request     | 80  | 70  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2544                 | 10060240       | 90  | 80  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2546                 | 10060241       | 100 | 90  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2547                 | on request     | 110 | 98  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2548                 | on request     | 120 | 108 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2550                 | on request     | 150 | 138 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2551                 | on request     | 200 | 180 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149F 013316               | on request     | 250 | 230 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2553                 | on request     | 300 | 276 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| Type with draining system |                |     |     |              |    |    |  |    |    |     |    |
| 149B 2551 D               | on request     | 200 | 180 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2552 D               | on request     | 250 | 230 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2553 D               | on request     | 300 | 276 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |

### 327 with flange PN10

PRESSURE PFA / PS in bar @ 60°

FLANGE : GJL cast iron epoxy coated

STRAINER : galvanised steel

MEMBRANE : EPDM

OPTIONS : stainless steel (316L) strainer

APPROVAL : ACS\*



| Legacy<br>Part No.        | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|---------------------------|----------------|-------|-----|--------------|----|----|--|----|----|-----|----|
|                           |                | “     | mm  |              |    | L2 |  |    |    |     |    |
| 149B 2555                 | 10060242       | 2     | 50  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2556                 | 10060243       | 2 1/2 | 65  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2558                 | 10060244       | 3     | 80  | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2560                 | 10060245       | 4     | 100 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2561                 | 10060246       | 5     | 125 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2562                 | 10060247       | 6     | 150 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2564                 | 10060248       | 8     | 200 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2565                 | on request     | 10    | 250 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2566                 | on request     | 12    | 300 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| Type with draining system |                |       |     |              |    |    |  |    |    |     |    |
| 149B 2564 D               | on request     | 8     | 200 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |
| 149B 2565 D               | on request     | 10    | 250 | 6            | 6  | 6  |  | x  | x  | 3.3 | 1  |

See draining kit for DN 60 to 150 mm

**337 female**PRESSURE PFA / PS in bar  $\theta$  60°

CONNECTION : GJL cast iron epoxy coated

STRAINER : galvanised steel

MEMBRANE : EPDM

OPTIONS : stainless steel (316L) strainer

APPROVAL : ACS\*



2

| Legacy Part No. | Part Number | DN<br>" | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|---------|--------------|----|----------|----|----|-----|----|
| 149B 2572       | 10060249    | 2       | 6            | 6  | 6        | x  | x  | 3.3 | 1  |
| 149B 2574       | 10060250    | 2 1/2   | 6            | 6  | 6        | x  | x  | 3.3 | 1  |
| 149B 2575       | 10060251    | 3       | 6            | 6  | 6        | x  | x  | 3.3 | 1  |
| 149B 2577       | 10060252    | 4       | 6            | 6  | 6        | x  | x  | 3.3 | 1  |

**Kit**

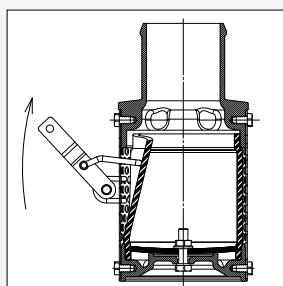
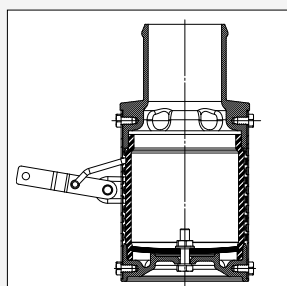
Optional draining system

For types 317, 327 and 337

For diameters over 150 mm, we realise all the mounting of the kit.

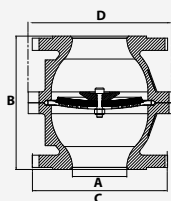


| Legacy Part No. | Part Number | DN<br>mm | UV |
|-----------------|-------------|----------|----|
| 149F 0084 29    | 10061182    | 65-110   | 1  |
| 149F 0084 49    | 10061183    | 120-150  | 1  |
| 149F 0084 52    | on request  | 200-300  | 1  |

**WORKING PRINCIPLE OF THE DRAINAGE SYSTEM (OPTIONAL)**

## OVERALL DIMENSIONS

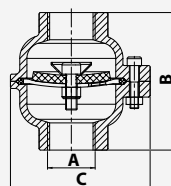
### 407



Types 407/407V  
407B/407RR  
with flanges

| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-----|---------|---------|---------|------|------------|------|
| "     | mm  |         |         |         |      |            |      |
| 1 1/2 | 40  | 148     | 150     | 140     | 6,9  | 40,3       | 2,50 |
| 2     | 50  | 158     | 164     | 159     | 8,9  | 70,5       | 1,97 |
| 2 1/2 | 65  | 176     | 183     | 169     | 11,9 | 93,3       | 3,21 |
| 3     | 80  | 196     | 200     | 212     | 15,9 | 180,0      | 1,98 |
| 4     | 100 | 213     | 220     | 234     | 19,5 | 305,5      | 1,68 |
| 5     | 125 | 228     | 250     | 250     | 25,4 | 515,0      | 1,44 |
| 6     | 150 | 266     | 285     | 324     | 39,5 | 1072,0     | 0,70 |
| 8     | 200 | 439     | 340     | 426     | 81,6 | 1940,0     | 0,60 |

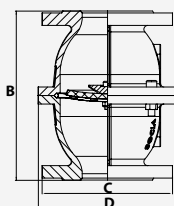
### 207



Type 207-207V  
female/female

| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|-------|------------|------|
| "     | mm    |         |         |       |            |      |
| 3/8   | 12/17 | 67,5    | 60,0    | 0,15  | 2,80       | 2,00 |
| 1/2   | 15/21 | 86,0    | 88,0    | 0,85  | 5,60       | 2,50 |
| 3/4   | 20/27 | 86,0    | 88,0    | 0,85  | 10,00      | 2,50 |
| 1     | 26/34 | 96,0    | 97,5    | 1,30  | 15,50      | 2,50 |
| 1 1/4 | 33/42 | 100,0   | 107,5   | 1,60  | 20,50      | 3,80 |
| 1 1/2 | 40/49 | 132,0   | 123,5   | 2,60  | 29,30      | 4,60 |
| 2     | 50/60 | 172,0   | 139,5   | 4,00  | 50,70      | 3,80 |
| 2 1/2 | 66/76 | 196,0   | 170,0   | 6,40  | 87,00      | 2,20 |
| 3     | 80/90 | 234,0   | 214,0   | 12,00 | 153,00     | 2,70 |

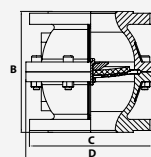
### 447



Types 447/447B  
447RR  
with flanges

| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-----|---------|---------|---------|------|------------|------|
| "     | mm  |         |         |         |      |            |      |
| 2 1/2 | 65  | 240     | 185     | 169     | 11,9 | 78,4       | 4,55 |
| 3     | 80  | 258     | 200     | 212     | 16,5 | 157,0      | 2,60 |
| 4     | 100 | 299     | 220     | 234     | 26,3 | 255,0      | 2,40 |
| 5     | 125 | 347     | 250     | 250     | 33,2 | 448,9      | 1,90 |
| 6     | 150 | 396     | 285     | 324     | 49,8 | 966,4      | 0,85 |
| 8     | 200 | 496     | 340     | 426     | 87,3 | 2044,8     | 0,60 |

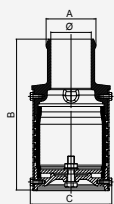
### 417



Type 417  
with flanges

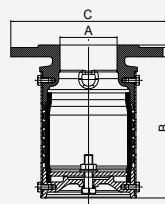
| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|-----|---------|---------|---------|------|------------|-----|
| "     | mm  |         |         |         |      |            |     |
| 1 1/2 | 40  | 148     | 150     | 140     | 7,2  | 25,5       | 6,1 |
| 2     | 50  | 158     | 165     | 160     | 9,1  | 43,5       | 5,2 |
| 2 1/2 | 65  | 176     | 185     | 170     | 10,8 | 55,4       | 9,1 |
| 3     | 80  | 196     | 200     | 212     | 16,0 | 111,1      | 5,2 |
| 4     | 100 | 331     | 235     | 245     | 25,0 | 181,0      | 4,8 |
| 5     | 125 | 329     | 270     | 274     | 30,0 | 317,0      | 3,8 |
| 6     | 150 | 395     | 300     | 341     | 44,0 | 683,0      | 1,7 |

## 317

Type 317  
nipple

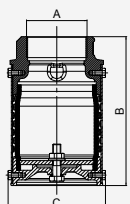
| Diam.<br>passage | A<br>mm | B<br>mm | C<br>mm | Kg    | KV<br>m <sup>3</sup> /H | ζ    |
|------------------|---------|---------|---------|-------|-------------------------|------|
| 30               | 43      | 172     | 92      | 1,78  | 72                      | 0,77 |
| 40               | 54      | 182     | 92      | 1,88  | 113                     | 0,77 |
| 50               | 64      | 192     | 92      | 1,94  | 191                     | 0,77 |
| 60               | 74      | 224     | 121     | 3,44  | 221                     | 0,77 |
| 70               | 84      | 250     | 137     | 4,40  | 289                     | 0,77 |
| 80               | 94      | 280     | 150     | 5,33  | 366                     | 0,77 |
| 90               | 104     | 290     | 150     | 5,47  | 451                     | 0,77 |
| 98               | 114     | 324     | 165     | 7,50  | 705                     | 0,77 |
| 108              | 124     | 334     | 165     | 7,51  | 705                     | 0,77 |
| 138              | 154     | 405     | 205     | 13,18 | 1015                    | 0,77 |
| 180              | 206     | 482     | 276     | 28,50 | 1805                    | 0,77 |
| 230              | 258     | 561     | 336     | 42,00 | 2820                    | 0,77 |
| 276              | 308     | 656     | 401     | 67,90 | 4061                    | 0,77 |

## 327

Type 327  
with flanges

| A     |     | B<br>mm | C<br>mm | Kg    | KV<br>m <sup>3</sup> /H | ζ    |
|-------|-----|---------|---------|-------|-------------------------|------|
| "     | mm  |         |         |       |                         |      |
| 2     | 50  | 151     | 165     | 3,15  | 113                     | 0,77 |
| 2 1/2 | 65  | 182     | 185     | 4,96  | 191                     | 0,77 |
| 3     | 80  | 205     | 200     | 6,22  | 221                     | 0,77 |
| 4     | 100 | 228     | 220     | 7,58  | 289                     | 0,77 |
| 5     | 125 | 258     | 250     | 10,37 | 366                     | 0,77 |
| 6     | 150 | 303     | 285     | 16,02 | 451                     | 0,77 |
| 8     | 200 | 385     | 340     | 31,60 | 705                     | 0,77 |
| 10    | 250 | 441     | 395     | 44,10 | 1015                    | 0,77 |
| 12    | 300 | 506     | 445     | 63,60 | 1205                    | 0,77 |

## 337

Type 337  
female

| A     |         | B<br>mm | C<br>mm | Kg   | KV<br>m <sup>3</sup> /H | ζ    |
|-------|---------|---------|---------|------|-------------------------|------|
| "     | mm      |         |         |      |                         |      |
| 2     | 50/60   | 153     | 92      | 1,88 | 113                     | 0,77 |
| 2 1/2 | 66/76   | 185     | 121     | 3,41 | 191                     | 0,77 |
| 3     | 80/90   | 205     | 137     | 4,38 | 221                     | 0,77 |
| 4     | 102/104 | 230     | 150     | 5,65 | 289                     | 0,77 |

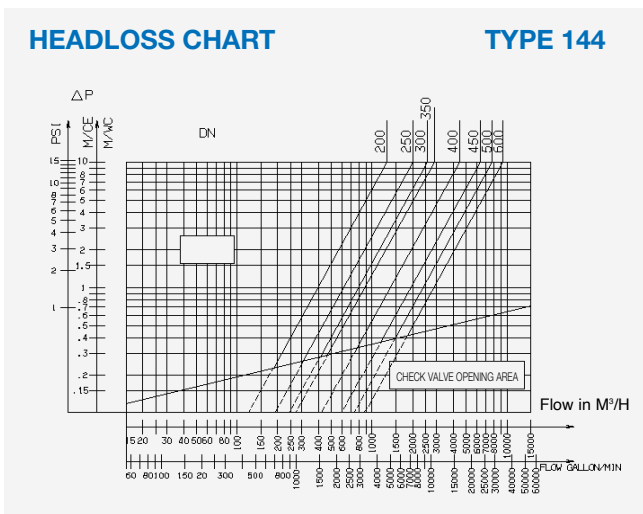
## Chapter 2.7

# TJ SYSTEM & TJO + FL + 04 SYSTEMS

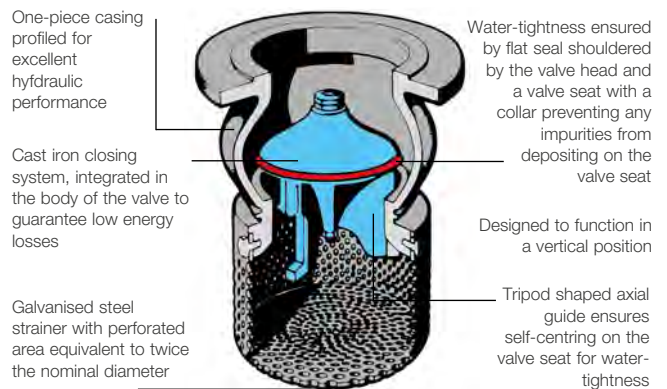
### TJ SYSTEM

- Excellent hydraulic performances
- For pumping systems with substantial flow
- Robust and reliable

For clear water pumping systems with substantial flow, requiring large valves for supply systems, irrigation and industry. Cast iron closing system with profiled entry face and tripod axial guiding.



### FOOT VALVE



### PUMPING, WATER DISTRIBUTION

#### 144 with PN10 flange

PRESSURE PFA / PS in bar θ 60°

CASING : GJL cast iron external epoxy coated

CLOSING SYSTEM + GUIDE : GJL cast iron

SEAL : EPDM

STRAINER : galvanised steel

APPROVALS :   PED 97/23/CE ACS



| Legacy Part No. | Part Number | DN mm | PFA water | L1 | PS |       | Cat | UV |
|-----------------|-------------|-------|-----------|----|----|-------|-----|----|
|                 |             |       |           |    | L2 | G1 G2 |     |    |
| 149B 3414       | on request  | 200   | 10        | 10 | 10 | x x   | 3.3 | 1  |
| 149B 3415       | on request  | 250   | 6         | 6  | 6  | x x   | 3.3 | 1  |
| 149B 3416       | 10060457    | 300   | 6         | 6  | 6  | x x   | 3.3 | 1  |
| 149B 3417       | 10060458    | 350   | 6         | 6  | 6  | x x   | 1   | 1  |
| 149B 3418       | 10060459    | 400   | 6         | 6  | 6  | x x   | 1   | 1  |
| 149B 3419       | 10079653    | 450   | 4         | 4  | 4  | x x   | 3.3 | 1  |
| 149B 3420       | on request  | 500   | 4         | 4  | 4  | x x   | 3.3 | 1  |
| 149B 3422       | on request  | 600   | 4         | 4  | 4  | x x   | 1   | 1  |

Dimensions at the end of the section.

**HOUSING, WATER DISTRIBUTION, PUMPING****290 female/female**PRESSURE PFA / PS in bar  $\theta$  80°

CASING : brass

CLOSING SYSTEM : DN1/4 to 1/2 PA (Polyamid), DN3/4 to 2" POM (Polyacetal)

SEALS : EPDM O'ring

SPRING : stainless steel

APPROVALS :



ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3118          | 10060348       | 1/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3119          | 10060349       | 3/8     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3120          | 10060350       | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3121          | 10060351       | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3122          | 10060352       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3123          | 10060353       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 3124          | 10060354       | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 3125          | 10060355       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

**HEATING, HYDROCARBONS PUMPING, CIRCULATING PUMPS****297 female/female**PRESSURE PFA / PS in bar  $\theta$  80°

CASING : brass

CLOSING SYSTEM : DN1/4 to 1/2, PA (Polyamid), DN3/4 to 2", POM (Polyacetal)

SEAL : FKM

SPRING : stainless steel

APPROVAL :



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3168          | 10060376       | 1/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3159          | 10060369       | 3/8     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3160          | 10060370       | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3161          | 10060371       | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3162          | 10060372       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3163          | 10060373       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 3164          | 10060374       | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 3165          | 10060375       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

## HOUSING, WATER DISTRIBUTION, PUMPING

### 290D female/female

PRESSURE PFA / PS in bar @ 80°

CASING : POM (polyacetal)

CLOSING SYSTEM : DN3/8 - 1/2, PA (Polyamid), DN3/4 - 1", POM (Polyacetal)

SEAL : EPDM O'ring

SPRING : stainless steel

APPROVALS :  ACS



| Legacy Part No. | Part Number | DN " | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-----------|----|-------|----|----|-----|----|
| 149B 3319       | 10060444    | 3/8  | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3320       | 10060445    | 1/2* | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3321       | 10060446    | 3/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3322       | 10060447    | 1    | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |

\*PA 11

Dimensions at the end of the section.

## HEATING, HYDROCARBONS PUMPING, CIRCULATING PUMPS

### 297D female/female

PRESSURE PFA / PS in bar @ 80°

CASING : POM (polyacetal)

CLOSING SYSTEM : DN3/8 - 1/2, PA (Polyamid), DN3/4 - 1", POM (Polyacetal)

SEAL : FKM O'ring

SPRING : stainless steel

APPROVAL : 



| Legacy Part No. | Part Number | DN " | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-----------|----|-------|----|----|-----|----|
| 149B 3359       | 10060450    | 3/8  | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3360       | 10060451    | 1/2  | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3361       | 10060452    | 3/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |
| 149B 3362       | 10060453    | 1    | 10        | 10 | 10    | 10 | 10 | 3.3 | 10 |

Dimensions at the end of the section.

## INDUSTRY, CHEMICAL AND FOOD INDUSTRIES

### 290P female/female

PRESSURE PFA / PS in bar @ 80°

CASING : PP (polypropylene)

CLOSING SYSTEM : PP (polypropylene)

SEAL : FKM O'ring

SPRING : stainless steel

APPROVAL : 



| Legacy Part No. | Part Number | DN " | PFA water | L1 | PS L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|------|-----------|----|-------|----|----|-----|----|
| 149B 1129       | 10060054    | 3/8  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 14066      | 10061032    | 1/2  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |
| 149B 1502       | 10029525    | 3/4  | 10        | 10 | 10    | 10 | 10 | 3.3 | 1  |

Dimensions at the end of the section.

## INDUSTRY, CHEMICAL AND FOOD INDUSTRIES

**290X female/female**PRESSURE PFA / PS in bar  $\theta$  80°

CASING : stainless steel (304)

CLOSING SYSTEM : idem Type 290

SEAL : FKM O'ring

SPRING : stainless steel

APPROVAL :



OPTIONS : can be delivered with PTFE closing system for corrosive fluids and high temperature (180°C)

| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 1109          | 10060043       | 1/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 1110          | 10060044       | 3/8     | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 1111          | 10060045       | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 1112          | 10060046       | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 1113          | 10060047       | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 1  |
| 149B 1114          | 10060048       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 1  |
| 149B 1115          | on request     | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 1  |
| 149B 1116          | 10060049       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 1  |

Dimensions at the end of the section.

## WATER DISTRIBUTION, BUILDING, HEATING

**209 female/female**PRESSURE PFA / PS in bar  $\theta$  80°

CASING : brass 2 tapped bosses, POM (polyacetal) plugs

CLOSING SYSTEM : DN1/2" : PA (polyamid) DN3/4" to 2" : POM (polyacetal)

SEAL : EPDM O'ring

SPRING : stainless steel

APPROVAL : ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3250          | on request     | 1/2     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3251          | on request     | 3/4     | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3252          | on request     | 1       | 10           | 10 | 10 | 10 | 10 | 3.3 | 10 |
| 149B 3253          | 10060409       | 1 1/4   | 10           | 10 | 10 | x  | 10 | 3.3 | 10 |
| 149B 3254          | 10060410       | 1 1/2   | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |
| 149B 3255          | 10060411       | 2       | 10           | 10 | 10 | x  | 10 | 3.3 | 6  |

Dimensions at the end of the section.

## FOOT VALVES - HOUSING, PUMPING

### 190 female

PRESSURE PFA / PS in bar θ 60°

CASING : brass

CLOSING SYSTEM : POM (polyacetal)

SEAL : EPDM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVALS :  ACS



OPTIONS : can be delivered with PTFE closing system for corrosive fluids and high temperature (180°C)

| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3924          | 10060545       | 1 1/2   | 10           | 10 | 10 | x  | x  | 3.3 | 6  |
| 149B 3925          | 10060546       | 2       | 10           | 10 | 10 | x  | x  | 3.3 | 6  |

Dimensions at the end of the section.

### 190D female

PRESSURE PFA / PS in bar θ 60°

CASING : POM (polyacetal)

CLOSING SYSTEM : DN3/8" to 1/2" : PA (polyamid) DN3/4" to 2" : POM (polyacetal)

SEAL : EPDM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVALS :  ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3719          | 10060501       | 3/8     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3720          | 10060502       | 1/2     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3721          | 10060503       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3722          | 10060504       | 1       | 10           | 10 | 10 | x  | x  | 3.3 | 6  |
| 149B 3723          | 10060505       | 1 1/4   | 10           | 10 | 10 | x  | x  | 3.3 | 6  |
| 149B 3724          | 10060506       | 1 1/2   | 10           | 10 | 10 | x  | x  | 3.3 | 6  |
| 149B 3725          | 10060507       | 2       | 10           | 10 | 10 | x  | x  | 3.3 | 6  |

Dimensions at the end of the section.

## FOOT VALVES - PUMPING OF SPECIAL FLUIDS (CHEMICAL AND HYDROCARBONS)

### 190P female

PRESSURE PFA / PS in bar θ 60°

CASING : PP (polypropylene)

CLOSING SYSTEM : PP (polypropylene)

SEAL : FKM

SPRING : stainless steel

STRAINER : PP (polypropylene)

APPROVAL : 



| Legacy<br>Part No. | Part<br>Number | DN<br>" | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2017          | 10060088       | 3/8     | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 14065         | 10061031       | 1/2     | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 1128          | 10060053       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**FOOT VALVES - INDUSTRY, CHEMICAL APPLICATIONS, HYDROCARBONS, PUMPING****190X female**

PRESSURE PFA / PS in bar @ 60°

CASING : 304L stainless steel

CLOSING SYSTEM : POM (polyacetal)

SEAL : FKM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVAL :



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 1118          | 10060050       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 1119          | 10060051       | 1       | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 1120          | 10060052       | 1 1/4   | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 1121          | on request     | 1 1/2   | 10           | 10 | 10 | x  | x  | 3.3 | 1  |
| 149B 1122          | on request     | 2       | 10           | 10 | 10 | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**FOOT VALVES - HOUSING, PUMPING, HYDROCARBONS...****193D female**

PRESSURE PFA / PS in bar @ 60°

CASING : POM (polyacetal)

CLOSING SYSTEM : DN3/8" to 1/2" : PA (polyamid) DN3/4" to 2" : POM (polyacetal)

SEAL : FKM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVAL :



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 3619          | 10060493       | 3/8     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3620          | 10060494       | 1/2     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3621          | 10060495       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3622          | 10060496       | 1       | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3623          | 10060497       | 1 1/4   | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 3624          | 10060498       | 1 1/2   | 10           | 10 | 10 | x  | x  | 3.3 | 6  |
| 149B 3625          | 10060499       | 2       | 10           | 10 | 10 | x  | x  | 3.3 | 6  |

Dimensions at the end of the section.

### 193/114 female

PRESSURE PFA / PS in bar Ø 65°

CASING : brass

CLOSING SYSTEM : DN3/8" to 1/2" : PA (polyamid) DN3/4" to 2" : POM (polyacetal)

SEAL : FKM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVAL :



| Legacy Part No. | Part Number | DN<br>" | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|---------|--------------|----|----------|----|----|-----|----|
| 149B 3819       | 10060535    | 3/8     | 10           | 10 | 10       | x  | x  | 3.3 | 10 |
| 149B 3820       | on request  | 1/2     | 10           | 10 | 10       | x  | x  | 3.3 | 10 |
| 149B 2371 V     | 10061928    | 3/4*    | 10           | 10 | 10       | x  | x  | 3.3 | 10 |
| 149B 2372 V     | 10061929    | 1*      | 10           | 10 | 10       | x  | x  | 3.3 | 10 |
| 149B 2373 V     | 10061930    | 1 1/4 * | 10           | 10 | 10       | x  | x  | 3.3 | 10 |
| 149B 3824       | on request  | 1 1/2   | 10           | 10 | 10       | x  | x  | 3.3 | 6  |
| 149B 3825       | 10060536    | 2       | 10           | 10 | 10       | x  | x  | 3.3 | 6  |

\* Type 114

Dimensions at the end of the section.

## DOMESTIC PUMPING, HOUSING

### 60S female

PRESSURE PFA / PS in bar Ø 80°

CASING : bronze

CLOSING SYSTEM + GUIDE : 3/4" to 2" : POM (polyacetal) bottom plate in PE (polyethylene)

2 1/2" to 4" : all in bronze

SEAL : NBR (nitrile)

SPRING : stainless steel

STRAINER and screws : stainless steel

APPROVAL :



| Legacy Part No. | Part Number | DN<br>" | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|-----------------|-------------|---------|--------------|----|----------|----|----|-----|----|
| 149B 4101 B     | 10062615    | 3/4     | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4102 B     | 10062616    | 1       | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4103 B     | 10062618    | 1 1/4   | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4104 B     | 10062619    | 1 1/2   | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4105 B     | 10062620    | 2       | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4106 B     | 10062622    | 2 1/2   | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4107 B     | 10062623    | 3       | 16           | 16 | 16       | x  | x  | 3.3 | 1  |
| 149B 4108 B     | on request  | 4       | 16           | 16 | 16       | x  | x  | 3.3 | 1  |

Dimensions at the end of the section.

**104 female**PRESSURE PFA / PS in bar  $\theta$  65°

CASING : brass

CLOSING SYSTEM : POM (polyacetal)

SEAL : EPDM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVALS



ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2371          | 10060184       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 2372          | 10060185       | 1       | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 2373          | 10060186       | 1 1/4   | 10           | 10 | 10 | x  | x  | 3.3 | 10 |

Dimensions at the end of the section.

**104P female**PRESSURE PFA / PS in bar  $\theta$  65°

CASING : PPO (polyphenylene oxide) Except for DN 1" : POM (polyacetal)

CLOSING SYSTEM : POM (polyacetal)

SEAL : EPDM

SPRING : stainless steel

STRAINER : PE (polyethylene)

APPROVALS :



ACS

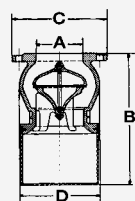


| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | PS |    |    |    | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|----|----|-----|----|
|                    |                |         |              | L1 | L2 | G1 | G2 |     |    |
| 149B 2361          | 10060181       | 3/4     | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 2362          | 10060182       | 1       | 10           | 10 | 10 | x  | x  | 3.3 | 10 |
| 149B 2363          | 10060183       | 1 1/4   | 10           | 10 | 10 | x  | x  | 3.3 | 10 |

Dimensions at the end of the section.

## OVERALL DIMENSIONS

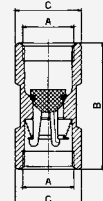
### 144



Type 144  
with flange

| A<br>mm | B<br>mm | C<br>mm | D<br>mm | Kg  | KV<br>m³/H | ζ   |
|---------|---------|---------|---------|-----|------------|-----|
| 200     | 525     | 340     | 320     | 50  | 1293       | 1,5 |
| 250     | 635     | 395     | 402     | 86  | 2020       | 1,5 |
| 300     | 735     | 445     | 480     | 125 | 2585       | 1,9 |
| 350     | 852     | 540     | 560     | 195 | 2898       | 2,8 |
| 400     | 978     | 597     | 635     | 293 | 4480       | 2,0 |
| 450     | 1095    | 635     | 715     | 415 | 6340       | 1,6 |
| 500     | 1170    | 699     | 790     | 545 | 7826       | 1,6 |
| 600     | 1265    | 780     | 965     | 790 | 9399       | 2,3 |

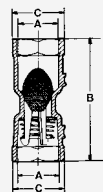
### 290X



Type 290X  
female/female

| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|-------|------------|-----|
| "     | mm    |         |         |       |            |     |
| 1/4   | 8/13  | 52,5    | 19      | 0,080 | 2,00       | 1,6 |
| 3/8   | 12/17 | 54,0    | 19      | 0,080 | 3,13       | 1,6 |
| 1/2   | 15/21 | 66,0    | 27      | 0,130 | 5,00       | 3,1 |
| 3/4   | 20/27 | 73,0    | 30      | 0,220 | 8,23       | 3,7 |
| 1     | 26/34 | 94,0    | 38      | 0,370 | 12,07      | 4,2 |
| 1 1/4 | 33/42 | 105,0   | 47      | 0,470 | 23,00      | 3,1 |
| 1 1/2 | 40/49 | 127,0   | 53      | 0,750 | 30,00      | 4,4 |
| 2     | 50/60 | 156,0   | 66      | 1,010 | 46,60      | 4,5 |

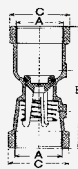
### 290 - 297



Types 290 - 297  
female/female

| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|-------|------------|-----|
| "     | mm    |         |         |       |            |     |
| 1/4   | 8/13  | 52,5    | 20      | 0,060 | 2,00       | 1,6 |
| 3/8   | 12/17 | 54,0    | 20      | 0,075 | 3,13       | 1,6 |
| 1/2   | 15/21 | 66,0    | 24      | 0,125 | 5,00       | 3,1 |
| 3/4   | 20/27 | 73,0    | 30      | 0,200 | 8,23       | 3,7 |
| 1     | 26/34 | 94,0    | 38      | 0,200 | 12,07      | 4,2 |
| 1 1/4 | 33/42 | 105,0   | 47      | 0,430 | 23,00      | 3,1 |
| 1 1/2 | 40/49 | 120,0   | 53      | 0,650 | 30,00      | 4,4 |
| 2     | 50/60 | 156,0   | 66      | 1,050 | 46,60      | 4,5 |

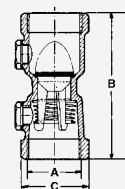
### 290D 290P - 297D



Types 290D 290P -  
297D  
female/female

| A   |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-----|-------|---------|---------|-------|------------|-----|
| "   | mm    |         |         |       |            |     |
| 3/8 | 12/17 | 54      | 23      | 0,018 | 3,13       | 1,6 |
| 1/2 | 15/21 | 66      | 28      | 0,030 | 5,00       | 3,1 |
| 3/4 | 20/27 | 80      | 34      | 0,043 | 8,23       | 3,7 |
| 1   | 26/34 | 100     | 44      | 0,075 | 12,07      | 4,2 |

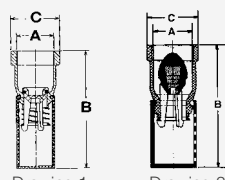
### 209



Type 209  
female/female

| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-------|-------|---------|---------|-------|------------|-----|
| "     | mm    |         |         |       |            |     |
| 1/2   | 15/21 | 66      | 26      | 0,160 | 5,00       | 3,1 |
| 3/4   | 20/27 | 73      | 30      | 0,185 | 8,23       | 3,7 |
| 1     | 26/34 | 94      | 38      | 0,295 | 12,07      | 4,2 |
| 1 1/4 | 33/42 | 105     | 47      | 0,420 | 23,00      | 3,1 |
| 1 1/2 | 40/49 | 127     | 53      | 0,590 | 30,00      | 4,4 |
| 2     | 50/60 | 156     | 66      | 1,090 | 46,60      | 4,5 |

### 190 / 190X

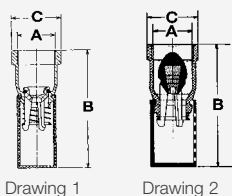


Types 190/190X  
female

Drawing 1\* : Ø 3/4 - 1  
1/4 - 1 1/2 - 2

Drawing 2 : Ø 3/8 -  
1/2 - 1

| A           |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ   |
|-------------|-------|---------|---------|-------|------------|-----|
| "           | mm    |         |         |       |            |     |
| <b>190</b>  |       |         |         |       |            |     |
| *1 1/2      | 40/49 | 148     | 53      | 0,320 | 30,6       | 4,3 |
| *2          | 50/60 | 179     | 66      | 0,820 | 48,5       | 4,1 |
| <b>190X</b> |       |         |         |       |            |     |
| *3/4        | 20/27 | 75      | 31      | 0,120 | 7,9        | 4,0 |
| 1           | 26/34 | 97      | 36      | 0,210 | 11,9       | 4,3 |
| *1 1/4      | 33/42 | 119     | 47      | 0,360 | 23,0       | 3,1 |
| *1 1/2      | 40/49 | 148     | 53      | 0,530 | 27         | 5,5 |
| *2          | 50/60 | 179     | 66      | 0,820 | 42         | 5,5 |

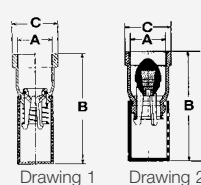
**190P / 190D**

Types 190P/190D  
female

Drawing 1\* : Ø 3/4 - 1  
1/4 - 1 1/2 - 2

Drawing 2 : Ø 3/8 -  
1/2 - 1

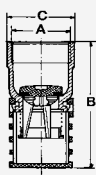
| A      |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ    |
|--------|-------|---------|---------|-------|------------|------|
| “      | mm    |         |         |       |            |      |
| 190P   |       |         |         |       |            |      |
| 3/8    | 12/17 | 56      | 23      | 0,015 | 2,8        | 2,0  |
| 1/2    | 15/21 | 56      | 27      | 0,020 | 2,8        | 10,8 |
| *3/4   | 20/27 | 75      | 31      | 0,044 | 7,4        | 4,6  |
| 190X   |       |         |         |       |            |      |
| 3/8    | 12/17 | 56      | 23      | 0,015 | 2,9        | 1,9  |
| 1/2    | 15/21 | 56      | 27      | 0,020 | 2,9        | 9,4  |
| *3/4   | 20/27 | 75      | 31      | 0,044 | 7,9        | 4,0  |
| 1      | 26/34 | 95      | 40      | 0,073 | 11,9       | 4,3  |
| *1 1/4 | 33/42 | 119     | 49      | 0,125 | 23,0       | 3,1  |
| *1 1/2 | 40/49 | 148     | 56      | 0,170 | 30,6       | 4,3  |
| *2     | 50/60 | 180     | 66      | 0,190 | 48,5       | 4,1  |

**193D**

Type 193D  
female

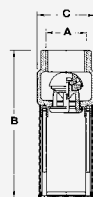
| A     |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ     |
|-------|-------|---------|---------|-------|------------|-------|
| "     | mm    |         |         |       |            |       |
| 3/8   | 12/17 | 59,0    | 23      | 0,060 | 2,5        | 2,50  |
| 1/2   | 15/21 | 59,0    | 24      | 0,050 | 2,5        | 12,70 |
| 3/4   | 20/27 | 64,5    | 30      | 0,085 | 8,0        | 3,90  |
| 1     | 26/34 | 78,5    | 37      | 0,115 | 11,9       | 4,30  |
| 1 1/4 | 33/42 | 97,0    | 47      | 0,240 | 20,0       | 4,11  |
| 1 1/2 | 40/49 | 148,0   | 53      | 0,530 | 24,0       | 7,00  |
| 2     | 50/60 | 179,0   | 66      | 0,820 | 37,3       | 7,00  |

Drawing 1 : Ø 3/4 - 1 1/4 - 1 1/2 - 2  
Drawing 2 : Ø 3/8 - 1/2 - 1

**114**

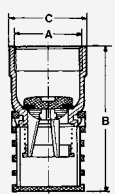
Type 114  
female

| A      |       | B<br>mm | C<br>mm | Kg    | KV<br>m³/H | ζ    |
|--------|-------|---------|---------|-------|------------|------|
| "      | mm    |         |         |       |            |      |
| 3/8    | 12/17 | 57      | 23      | 0,015 | 2,5        | 2,5  |
| 1/2    | 15/21 | 57      | 27      | 0,020 | 2,5        | 12,7 |
| *3/4   | 20/27 | 75      | 31      | 0,044 | 6,6        | 5,8  |
| *1     | 26/34 | 95      | 40      | 0,073 | 9,7        | 6,5  |
| *1 1/4 | 33/42 | 119     | 49      | 0,125 | 18,4       | 4,9  |
| 1 1/2  | 40/49 | 148     | 56      | 0,170 | 24,0       | 7,0  |
| 2      | 50/60 | 180     | 66      | 0,190 | 37,3       | 7,0  |

**60S**

Type 60S female

| A     |         | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|---------|---------|---------|------|------------|------|
| "     | mm      |         |         |      |            |      |
| 3/4   | 20/27   | 90      | 33      | 0,14 | 6,5        | 5,90 |
| 1     | 26/34   | 125     | 49      | 0,36 | 16,5       | 2,24 |
| 1 1/4 | 33/42   | 127     | 57      | 0,45 | 26,0       | 2,40 |
| 1 1/2 | 40/49   | 138     | 65      | 0,73 | 34,0       | 3,50 |
| 2     | 50/60   | 146     | 77      | 0,95 | 52,0       | 3,60 |
| 2 1/2 | 66/76   | 198     | 93      | 2,80 | 75,0       | 5,00 |
| 3     | 80/90   | 243     | 116     | 5,00 | 111,0      | 5,20 |
| 4     | 102/114 | 315     | 156     | 8,60 | 171,0      | 5,36 |

**104 - 104P**

Types 104 - 104P  
female

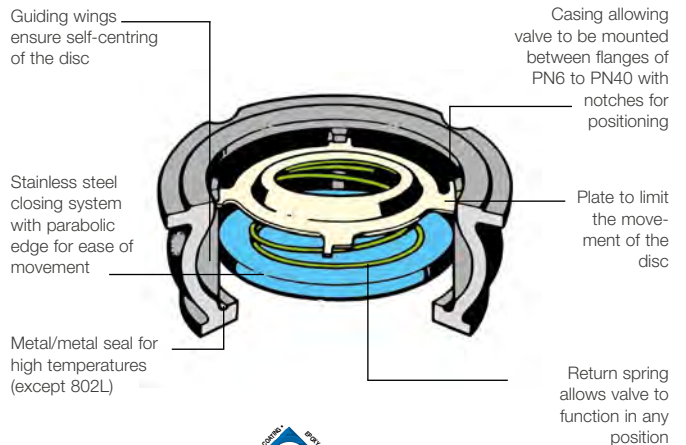
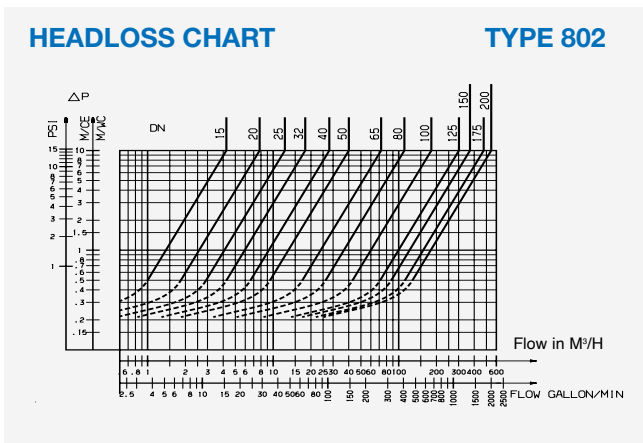
| A     |       | B<br>mm | C<br>mm | Kg   | KV<br>m³/H | ζ    |
|-------|-------|---------|---------|------|------------|------|
| "     | mm    |         |         |      |            |      |
| 3/4   | 20/27 | 64,5    | 34      | 0,03 | 8,0        | 3,90 |
| 1     | 26/34 | 78,5    | 40      | 0,04 | 11,9       | 4,30 |
| 1 1/4 | 33/42 | 97,0    | 49      | 0,07 | 20,0       | 4,11 |

## Chapter 2.8

# W SYSTEMS

### W SYSTEM

- Excellent performance at high pressure and temperature
- Easy to connect
- Space-saving



### HEATING, INDUSTRIAL PROCESS

#### 802 between flanges PN6-10-16-ASA150

PRESSURE PFA / PS in bar 0 200°, 65 to 200mm 0 100°

CASING : DN 32 to 50 : DZR brass,

DN 65 to 100 : cast iron GJL ext. epoxy coated

DN 125 to 200 : ductile iron GJS ext. epoxy coated

CLOSING SYSTEM: stainless steel (316L), DN 125 to 200 : all cast iron closing system

GUIDE : austenitic steel

SPRING : austenitic steel

APPROVALS :



PED 97/23/CE ACS



| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |        | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|--------|-----|----|
|                 |             | "     | mm  |           |    | L2 | G1 G2  |     |    |
| 149B 2413       | 10060187    | 1 1/4 | 32  | 16        | 16 | 16 | 16 16  | I   | 1  |
| 149B 2414       | 10060188    | 1 1/2 | 40  | 16        | 16 | 16 | 16 16  | I   | 1  |
| 149B 2415       | 10060189    | 2     | 50  | 16        | 16 | 16 | 16 16  | I   | 1  |
| 149B 2416       | 10060190    | 2 1/2 | 65  | 16        | 16 | 16 | 15 16  | I   | 1  |
| 149B 2417       | 10060191    | 3     | 80  | 16        | 16 | 16 | 12 16  | I   | 1  |
| 149B 2418       | 10060192    | 4     | 100 | 16        | 16 | 16 | 10 16  | I   | 1  |
| 149B 2439       | 10060205    | 5     | 125 | 16        | 16 | 16 | 0,5 16 | I   | 1  |
| 149B 2440       | 10060206    | 6     | 150 | 16        | 13 | 16 | 0,5 16 | I   | 1  |
| 149B 2441       | 10060207    | 8     | 200 | 16        | 10 | 16 | 0,5 16 | I   | 1  |

\*DN 125 to 200 : assembling PN 10/16

Dimensions at the end of the section.

**INDUSTRY, CORROSIVE FLUIDS, HIGH PRESSURE AND TEMPERATURE****812 between flanges PN6-10-16-25-40-ASA150-ASA300**

PRESSURE PFA 40 bar θ 350°

CASING : stainless steel (304) / DN80-100 (316L)

Mounting between two flanges with centering collar

CLOSING SYSTEM : stainless steel 316L for DN 15 to 100 / stainless steel 304 above

GUIDE : stainless steel

DN15 (316L) / DN20 to 100 (304L),

DN125 to 150 (316L) / DN175 to 200 (304)

SPRING : stainless steel

APPROVALS :



PED 97/23/CE

ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | mm  | PFA<br>water | L1 | PS |  | G1  | G2 | Cat | UV |
|--------------------|----------------|---------|-----|--------------|----|----|--|-----|----|-----|----|
|                    |                |         |     |              |    | L2 |  |     |    |     |    |
| 149B 2420          | 10060193       | 1/2     | 15  | 40           | 40 | 40 |  | 40  | 40 | 3.3 | 1  |
| 149B 2421          | 10060194       | 3/4     | 20  | 40           | 40 | 40 |  | 40  | 40 | 3.3 | 1  |
| 149B 2421C2*       | on request     | 3/4     | 20  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2422          | 10060195       | 1       | 25  | 40           | 40 | 40 |  | 40  | 40 | 3.3 | 1  |
| 149B 2422C2*       | 10061946       | 1       | 25  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2423          | 10060196       | 1 1/4   | 32  | 40           | 40 | 40 |  | 30  | 40 | I   | 1  |
| 149B 2423C2*       | on request     | 1 1/4   | 32  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2424          | 10060197       | 1 1/2   | 40  | 40           | 40 | 40 |  | 25  | 40 | I   | 1  |
| 149B 2424C2*       | 10061953       | 1 1/2   | 40  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2425          | 10060198       | 2       | 50  | 40           | 40 | 40 |  | 20  | 40 | I   | 1  |
| 149B 2425C2*       | 10061958       | 2       | 50  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2426          | 10060199       | 2 1/2   | 65  | 40           | 30 | 40 |  | 15  | 40 | I   | 1  |
| 149B 2426C2*       | 10061963       | 2 1/2   | 65  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2427          | 10060200       | 3       | 80  | 40           | 25 | 40 |  | 12  | 40 | I   | 1  |
| 149B 2427C2*       | 10061965       | 3       | 80  | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2428          | 10060201       | 4       | 100 | 40           | 20 | 40 |  | 10  | 40 | I   | 1  |
| 149B 2428C2*       | on request     | 4       | 100 | 40           | 40 | 40 |  | 40  | 40 | II  | 1  |
| 149B 2429          | 10060202       | 5       | 125 | 40           | 16 | 40 |  | 0,5 | 28 | I   | 1  |
| 149B 2429C2*       | on request     | 5       | 125 | 40           | 40 | 40 |  | 28  | 40 | II  | 1  |
| 149B 2430          | 10048936       | 6       | 150 | 40           | 13 | 40 |  | 0,5 | 23 | I   | 1  |
| 149B 2430C2*       | on request     | 6       | 150 | 40           | 40 | 40 |  | 23  | 33 | II  | 1  |
| 149B 2431*(1)      | on request     | 8       | 200 | 16           | 16 | 16 |  | 16  | 16 | II  | 1  |
| 149B 2432*(2)      | on request     | 8       | 200 | 40           | 40 | 40 |  | 17  | 25 | II  | 1  |

PN16-ASA150 - PN25/40-ASA300 \* Conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere)

## INDUSTRY, PROCESS LIQUIDS, HIGH PRES-SURE AND TEMPERATURE, STEAM SERVICE

### 812X between flanges PN6-10-16-25-40-ASA150-ASA300

PRESSURE PFA 40 bar θ 350°

All stainless steel (316L)

Between flanges

APPROVALS :



PED 97/23/CE

ACS



| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |     |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|-----|----|-----|----|
|                 |             | "     | mm  |           | L1 | L2 | G1  | G2 |     |    |
| 149B 2420X      | 10061940    | 1/2   | 15  | 40        | 40 | 40 | 40  | 40 | 3.3 | 1  |
| 149B 2421X      | 10061943    | 3/4   | 20  | 40        | 40 | 40 | 40  | 40 | 3.3 | 1  |
| 149B 027054*    | on request  | 3/4   | 20  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2422X      | 10061947    | 1     | 25  | 40        | 40 | 40 | 40  | 40 | 3.3 | 1  |
| 149B 027055*    | 10061948    | 1     | 25  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2423X      | 10061950    | 1 1/4 | 32  | 40        | 40 | 40 | 30  | 40 | I   | 1  |
| 149B 018819*    | on request  | 1 1/4 | 32  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2424X      | 10061954    | 1 1/2 | 40  | 40        | 40 | 40 | 25  | 40 | I   | 1  |
| 149B 018820*    | 10061955    | 1 1/2 | 40  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2425X      | 10061959    | 2     | 50  | 40        | 40 | 40 | 20  | 40 | I   | 1  |
| 149B 018821*    | 10061961    | 2     | 50  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2426X      | 10061964    | 2 1/2 | 65  | 40        | 30 | 40 | 15  | 40 | I   | 1  |
| 149B 018822*    | on request  | 2 1/2 | 65  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2427X      | 10061966    | 3     | 80  | 40        | 25 | 40 | 12  | 40 | I   | 1  |
| 149B 018823*    | 10061967    | 3     | 80  | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2428X      | 10061969    | 4     | 100 | 40        | 20 | 40 | 10  | 40 | I   | 1  |
| 149B 018824*    | on request  | 4     | 100 | 40        | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 2429X      | 10061971    | 5     | 125 | 40        | 16 | 40 | 0,5 | 28 | I   | 1  |
| 149B 018825*    | on request  | 5     | 125 | 40        | 40 | 40 | 28  | 40 | II  | 1  |
| 149B 2430X      | 10061972    | 6     | 150 | 40        | 13 | 40 | 0,5 | 23 | I   | 1  |
| 149B 018826*    | on request  | 6     | 150 | 40        | 40 | 40 | 23  | 33 | II  | 1  |
| 149B 2431X*(1)  | on request  | 8     | 200 | 16        | 16 | 16 | 16  | 16 | II  | 1  |
| 149B 2432X*(2)  | on request  | 8     | 200 | 40        | 40 | 40 | 17  | 25 | II  | 1  |

PN16-ASA150 - PN25/40-ASA300

\* Conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere)

## INDUSTRY, PROCESS LIQUIDS, HIGH PRES-SURE AND TEMPERATURE, STEAM SERVICE

### 802L between flanges PN6-10-16-ASA150

PRESSURE PFA/PS in bar θ 100°

CASING : Ø 32 to 50 mm : DZR brass, Ø 65 to 100 mm : cast iron GJL ext. epoxy coated

CLOSING SYSTEM : brass

GUIDE : austenitic steel

SPRING : austenitic steel

SEAL : EPDM

APPROVALS :



PED 97/23/CE

ACS

WRAS

approved materials



| Legacy Part No. | Part Number | DN    |     | PFA water | PS |    |    |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|----|----|-----|----|
|                 |             | "     | mm  |           | L1 | L2 | G1 | G2 |     |    |
| 149B 2413 L     | on request  | 1 1/4 | 32  | 16        | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2414 L     | 10061931    | 1 1/2 | 40  | 16        | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2415 L     | 10061933    | 2     | 50  | 16        | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2416 L     | 10061934    | 2 1/2 | 65  | 16        | 16 | 16 | 15 | 16 | I   | 1  |
| 149B 2417 L     | 10061936    | 3     | 80  | 16        | 16 | 16 | 12 | 16 | I   | 1  |
| 149B 2418 L     | 10061938    | 4     | 100 | 16        | 16 | 16 | 10 | 16 | I   | 1  |

**CORROSIVE FLUIDS, HIGH TEMPERATURE****802Z between flanges PN6-10-16-ASA150**

PRESSURE PFA/PS in bar 0 230°

CASING : bronze

CLOSING SYSTEM : 316L stainless steel or bronze

GUIDE : stainless steel or bronze

SPRING : stainless steel

APPROVALS :   PED 97/23/CE ACS

| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |     |    | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|-----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 | G1  | G2 |     |    |
| 149B 2413 Z        | on request     | 1 1/4 | 32  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2414 Z        | on request     | 1 1/2 | 40  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2415 Z        | on request     | 2     | 50  | 16           | 16 | 16 | 16  | 16 | I   | 1  |
| 149B 2416 Z        | 10061935       | 2 1/2 | 65  | 16           | 16 | 16 | 15  | 16 | I   | 1  |
| 149B 2417 Z        | 10061937       | 3     | 80  | 16           | 16 | 16 | 12  | 16 | I   | 1  |
| 149B 2418 Z        | 10061939       | 4     | 100 | 16           | 16 | 16 | 10  | 16 | I   | 1  |
| 149B 2439 Z        | on request     | 5     | 125 | 16           | 16 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2440 Z        | on request     | 6     | 150 | 16           | 13 | 16 | 0,5 | 16 | I   | 1  |
| 149B 2441 Z        | on request     | 8     | 200 | 16           | 10 | 16 | 0,5 | 16 | I   | 1  |

**HEATING, INDUSTRIAL APPLICATIONS****802T between flanges female/female**

PRESSURE PFA/PS in bar 0 200°

CASING : DZR brass with stainless steel (316) threaded connections, (3 pieces)

CLOSING SYSTEM : stainless steel (316L)

GUIDE : austenitic steel

SPRING : stainless steel

APPROVALS :   PED 97/23/CE ACS

| Legacy<br>Part No. | Part<br>Number | DN    |    | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|-------|----|--------------|----|----|----|----|-----|----|
|                    |                | "     | mm |              |    | L2 | G1 | G2 |     |    |
| 149B 2413 T        | on request     | 1 1/4 | 32 | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2414 T        | 10061932       | 1 1/2 | 40 | 16           | 16 | 16 | 16 | 16 | I   | 1  |
| 149B 2415 T        | on request     | 2     | 50 | 16           | 16 | 16 | 16 | 16 | I   | 1  |

Dimensions at the end of the section.

## INDUSTRY, PROCESS LIQUIDS, STEAM SERVICE

### 812XT between flanges female/female

PRESSURE PFA 40 bar/PS in bar θ 200°

All stainless steel (316L and 316)

3 piece – threaded ends

APPROVALS :



PED 97/23/CE

ACS



| Legacy<br>Part No. | Part<br>Number | DN    |    | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|-------|----|--------------|----|----|----|----|-----|----|
|                    |                | “     | mm |              |    | L2 | G1 | G2 |     |    |
| 149B 2420 XT       | 10061942       | 1/2   | 15 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027060*       | on request     | 1/2   | 15 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2421 XT       | 10061945       | 3/4   | 20 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027063*       | on request     | 3/4   | 20 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2422 XT       | 10061949       | 1     | 25 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027068*       | 10083752       | 1     | 25 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2423 XT       | 10061952       | 1 1/4 | 32 | 40           | 40 | 40 | 30 | 40 | I   | 1  |
| 149B 018837*       | on request     | 1 1/4 | 32 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2424 XT       | 10061957       | 1 1/2 | 40 | 40           | 40 | 40 | 25 | 40 | I   | 1  |
| 149B 018838*       | on request     | 1 1/2 | 40 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2425 XT       | on request     | 2     | 50 | 40           | 40 | 40 | 20 | 40 | I   | 1  |
| 149B 018839*       | on request     | 2     | 50 | 40           | 40 | 40 | 40 | 40 | II  | 1  |

\* Conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere)

Dimensions at the end of the section.

### 812XB between flanges butt welded

PRESSURE PFA 40 bar/PS in bar θ 200°

All stainless steel (316L and 316)

3 piece – butt welded

APPROVALS :



PED 97/23/CE

ACS



| Legacy<br>Part No. | Part<br>Number | DN    |    | PFA<br>water | L1 | PS |    |    | Cat | UV |
|--------------------|----------------|-------|----|--------------|----|----|----|----|-----|----|
|                    |                | “     | mm |              |    | L2 | G1 | G2 |     |    |
| 149B 2420 XB       | on request     | 1/2   | 15 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027058*       | on request     | 1/2   | 15 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2421 XB       | 10061944       | 3/4   | 20 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027061*       | on request     | 3/4   | 20 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2422 XB       | on request     | 1     | 25 | 40           | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027065*       | on request     | 1     | 25 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2423 XB       | on request     | 1 1/4 | 32 | 40           | 40 | 40 | 30 | 40 | I   | 1  |
| 149B 018831*       | on request     | 1 1/4 | 32 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2424 XB       | on request     | 1 1/2 | 40 | 40           | 40 | 40 | 25 | 40 | I   | 1  |
| 149B 018832*       | on request     | 1 1/2 | 40 | 40           | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2425 XB       | 10061960       | 2     | 50 | 40           | 40 | 40 | 20 | 40 | I   | 1  |
| 149B 018833*       | on request     | 2     | 50 | 40           | 40 | 40 | 40 | 40 | II  | 1  |

\* Conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere)

Dimensions at the end of the section.

## INDUSTRY, PROCESS LIQUIDS, STEAM SERVICE

**812XS between flanges socket welded**

PRESSURE PFA 40 bar/PS in bar 0 200°

All stainless steel (316L and 316)

3 piece – socket welded

APPROVALS :



PED 97/23/CE

ACS



| Legacy Part No. | Part Number | DN    |    | PFA water | L1 | PS |    |    | Cat | UV |
|-----------------|-------------|-------|----|-----------|----|----|----|----|-----|----|
|                 |             | "     | mm |           |    | L2 | G1 | G2 |     |    |
| 149B 2420 XS    | 10061941    | 1/2   | 15 | 40        | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027059*    | on request  | 1/2   | 15 | 40        | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2421 XS    | on request  | 3/4   | 20 | 40        | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027062*    | on request  | 3/4   | 20 | 40        | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2422 XS    | on request  | 1     | 25 | 40        | 40 | 40 | 40 | 40 | 3.3 | 1  |
| 149B 027067*    | on request  | 1     | 25 | 40        | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2423 XS    | on request  | 1 1/4 | 32 | 40        | 40 | 40 | 30 | 40 | I   | 1  |
| 149B 018834*    | on request  | 1 1/4 | 32 | 40        | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2424 XS    | on request  | 1 1/2 | 40 | 40        | 40 | 40 | 25 | 40 | I   | 1  |
| 149B 018835*    | on request  | 1 1/2 | 40 | 40        | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 2425 XS    | on request  | 2     | 50 | 40        | 40 | 40 | 20 | 40 | I   | 1  |
| 149B 018836*    | on request  | 2     | 50 | 40        | 40 | 40 | 40 | 40 | II  | 1  |

\* Conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere)

Dimensions at the end of the section.

## INDUSTRY, PROCESS LIQUIDS, HIGH PRES-SURE AND TEMPERATURE, STEAM SERVICE

**812XL between flanges PN6-10-16-25-40-ASA150-ASA300**

PRESSURE PFA 40 bar/PS in bar 0 350°

All stainless steel (316L)

SEAL : EPDM

APPROVALS :



PED 97/23/CE

ACS



| Legacy Part No. | Part Number | DN    |     | PFA water | L1 | PS |    |    | Cat | UV |
|-----------------|-------------|-------|-----|-----------|----|----|----|----|-----|----|
|                 |             | "     | mm  |           |    | L2 | G1 | G2 |     |    |
| 149B 2423 XL    | 10061951    | 1 1/4 | 32  | 40        | 40 | 40 | 30 | 40 | I   | 1  |
| 149B 2424 XL    | 10061956    | 1 1/2 | 40  | 40        | 40 | 40 | 25 | 40 | I   | 1  |
| 149B 2425 XL    | 10061962    | 2     | 50  | 40        | 40 | 40 | 20 | 40 | I   | 1  |
| 149B 2426 XL    | 10082191    | 2 1/2 | 65  | 40        | 30 | 40 | 15 | 40 | I   | 1  |
| 149B 2427 XL    | 10061968    | 3     | 80  | 40        | 25 | 40 | 12 | 40 | I   | 1  |
| 149B 2428 XL    | 10061970    | 4     | 100 | 40        | 20 | 40 | 10 | 40 | I   | 1  |

Dimensions at the end of the section.

## PROTECTION OF PUMPS, VALVES, PRESSURE REDUCING VALVE

### Y333 with PN16 flanges

PRESSURE PFA/PS in bar @ 100°

WATER FILTERS :

GJL cast iron epoxy coated int/ext. : DN40 to 50

GJS ductile iron epoxy coated int/ext. : DN65 to 400

STRAINER : stainless steel Internal / external epoxy coating

MESH Ø :

DN 40-50 : 500 microns - DN 65 : 800 microns

DN 80-200 : 1250 microns - DN 250-400 : 1600 microns

Delivered with plug G 1/2" (DN40 to 150) and G 3/4" (DN200 to 400)

APPROVALS :  PED 97/23/CE ACS 



| Legacy<br>Part No. | Part<br>Number | DN    |     | PFA<br>water | L1 | PS |  | G1 | G2 | Cat | UV |
|--------------------|----------------|-------|-----|--------------|----|----|--|----|----|-----|----|
|                    |                | "     | mm  |              |    | L2 |  |    |    |     |    |
| 149B3260           | 10060412       | 1 1/2 | 40  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3261           | 10060413       | 2     | 50  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3262           | 10048940       | 2 1/2 | 65  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3263           | 10060414       | 3     | 80  | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3264           | 10060415       | 4     | 100 | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3265           | 10060416       | 5     | 125 | 16           | 16 | 16 |  | x  | x  | 3.3 | 1  |
| 149B3266           | 10060417       | 6     | 150 | 16           | 13 | 16 |  | x  | x  | 3.3 | 1  |
| 149B23119          | 10061113       | 8     | 200 | 10           | 10 | 10 |  | x  | x  | 3.3 | 1  |
| 149B23121          | 10061115       | 10    | 250 | 10           | 10 | 10 |  | x  | x  | 1   | 1  |
| 149B23123          | 10061117       | 12    | 300 | 10           | 10 | 10 |  | x  | x  | 1   | 1  |
| 149B3794           | 10060530       | 14    | 350 | 10           | 10 | 10 |  | x  | x  | 1   | 1  |
| 149B3797           | 10079600       | 16    | 400 | 10           | 10 | 10 |  | x  | x  | 1   | 1  |

Sizes up to & including DN300 to suit PN16 flange drilling. DN350/DN400 PN10 drilling only.  
Dimensions at the end of the section.

### Y222 female/female

PRESSURE PFA 25 bar @ 110°

WATER FILTER : brass

STRAINER : stainless steel

mesh : 500 microns

FEATURE : cap delivered with plug (nylon 66) 1/4" G

APPROVAL : ACS



| Legacy<br>Part No. | Part<br>Number | DN<br>" | UV |
|--------------------|----------------|---------|----|
| 149B 6520          | 10060678       | 1/2     | 1  |
| 149B 1769          | 10060073       | 3/4     | 1  |
| 149B 1770          | 10060074       | 1       | 1  |
| 149B 1771          | 10060075       | 1 1/4   | 1  |
| 149B 1772          | 10060076       | 1 1/2   | 1  |
| 149B 1773          | 10060077       | 2       | 1  |

Dimensions at the end of the section.

**INDUSTRIAL PROCESS, CORROSIVE LIQUIDS, HIGH PRESSION, HIGH TEMPERATURE****Y666 female/female**PRESSURE PFA 40 bar/PS in bar  $\theta$  175°

FILTER : AISI 316 stainless steel. Threaded with purge plug

MESH : 600 microns



| Legacy<br>Part No. | Part<br>Number | DN<br>“ | PFA<br>water | L1 | PS |       | Cat | UV |
|--------------------|----------------|---------|--------------|----|----|-------|-----|----|
|                    |                |         |              |    | L2 | G1 G2 |     |    |
| 149B 5271          | on request     | 1/4     | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5272          | 10060589       | 3/8     | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5273          | 10060590       | 1/2     | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5274          | 10060591       | 3/4     | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5275          | 10060592       | 1       | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5276          | 10060593       | 1 1/4   | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5277          | 10060594       | 1 1/2   | 40           | 40 | 40 | x x   | 3.3 | 1  |
| 149B 5278          | 10060595       | 2       | 40           | 40 | 40 | x x   | 3.3 | 1  |

Dimensions at the end of the section.

**PUMPING****101 male** $\theta$  60°

Male CONNECTION : PA6 (polyamid)

STRAINER : AISI 304 stainless steel

MESH Ø : Ø 1,2

APPROVAL : 

| Legacy<br>Part No. | Part<br>Number | DN<br>“ | UV |
|--------------------|----------------|---------|----|
|                    |                |         |    |
| 149B 5361 P        | 10064747       | 3/8     | 10 |
| 149B 5362 P        | 10064748       | 1/2     | 10 |
| 149B 5363 P        | 10016104       | 3/4     | 10 |
| 149B 5364 P        | 10064749       | 1       | 10 |
| 149B 5365 P        | 10064750       | 1 1/4   | 10 |
| 149B 5366 P        | 10064751       | 1 1/2   | 6  |
| 149B 5367 P        | 10064752       | 2       | 6  |

Dimensions at the end of the section.

**191D female** $\theta$  60°

CASING : 3/8 to 2" : POM (polyacetal) except 3/4 and 1 1/4" : PPO (polyphenylene oxide)

STRAINER : 3/8 and 1/2 : POM (polyacetal) 3/4 to 2" : PE (polyethylene)

APPROVALS :  ACS

| Legacy<br>Part No. | Part<br>Number | DN<br>“ | UV |
|--------------------|----------------|---------|----|
|                    |                |         |    |
| 149B 3739          | 10060508       | 3/8     | 10 |
| 149B 3740          | 10060509       | 1/2     | 10 |
| 149B 3741          | 10060510       | 3/4     | 10 |
| 149B 3742          | 10060511       | 1       | 10 |
| 149B 3743          | on request     | 1 1/4   | 10 |
| 149B 3744          | 10060512       | 1 1/2   | 6  |
| 149B 3745          | 10060513       | 2       | 6  |

Dimensions at the end of the section.

## PUMPING, IRRIGATION

### 46 with PN10 flange

Ø 80°

FLANGE : cast iron epoxy coated

STRAINER : PP (polypropylene)

APPROVAL :  ACS



| Legacy<br>Part No. | Part<br>Number | DN    | mm  | UV |
|--------------------|----------------|-------|-----|----|
| 149B 2815          | 10060303       | 2     | 50  | 1  |
| 149B 2816          | 10060304       | 2 1/2 | 65  | 1  |
| 149B 2818          | 10060305       | 3     | 80  | 1  |
| 149B 2820          | 10060306       | 4     | 100 | 1  |

Dimensions at the end of the section.

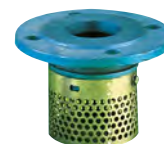
### 46G with PN10 flange

Ø 100°

FLANGE : cast iron epoxy coated

STRAINER : galvanised steel

APPROVAL :  ACS



| Legacy<br>Part No. | Part<br>Number | DN    | mm  | UV |
|--------------------|----------------|-------|-----|----|
| 149B 2139          | on request     | 2     | 50  | 1  |
| 149B 2140          | on request     | 2 1/2 | 65  | 1  |
| 149B 2141          | 10060123       | 3     | 80  | 1  |
| 149B 2142          | 10060124       | 4     | 100 | 1  |
| 149B 2821          | 10060307       | 5     | 125 | 1  |
| 149B 2822          | 10060308       | 6     | 150 | 1  |
| 149B 2823          | on request     | 7     | 175 | 1  |
| 149B 2824          | 10060309       | 8     | 200 | 1  |
| 149B 2825          | 10060310       | 10    | 250 | 1  |
| 149B 2826          | 10060311       | 12    | 300 | 1  |
| 149B 2827          | on request     | 14    | 350 | 1  |
| 149B 2828          | on request     | 16    | 400 | 1  |

Dimensions at the end of the section.

**PUMPING, PUMPING OF CORROSIVE MEDIUMS, SEA WATER... INDUSTRIAL PROCESS****46 X with PN10 flange**

Ø 350°

FLANGE : 304L stainless steel

STRAINER : 304L stainless steel

MESH : Ø 40 to Ø 300 : Ø 6 on 8,5 mm centres Ø 350 to Ø 1000 : Ø 10 on 13 mm centres

APPROVALS :  ACS

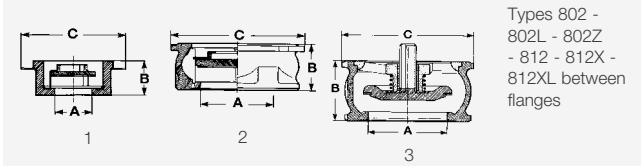
OPTIONS : special adaptations in 316L stainless steel on request

| Legacy<br>Part No. | Part<br>Number | DN    |      | UV |
|--------------------|----------------|-------|------|----|
|                    |                | “     | mm   |    |
| 149B 5846 A        | on request     | 1 1/2 | 40   | 1  |
| 149B 5847 A        | on request     | 2     | 50   | 1  |
| 149B 5848 A        | 10064758       | 2 1/2 | 65   | 1  |
| 149B 5849 A        | 10064759       | 3     | 80   | 1  |
| 149B 5850 A        | 10064760       | 4     | 100  | 1  |
| 149B 5851 A        | 10064761       | 5     | 125  | 1  |
| 149B 5852 A        | 10064762       | 6     | 150  | 1  |
| 149B 5853 A        | on request     | 7     | 175  | 1  |
| 149B 5854 A        | 10064763       | 8     | 200  | 1  |
| 149B 5855 A        | 10064764       | 10    | 250  | 1  |
| 149B 5856 A        | on request     | 12    | 300  | 1  |
| 149B 5857 A        | on request     | 14    | 350  | 1  |
| 149B 5858 A        | on request     | 16    | 400  | 1  |
| 149B 5859 A        | on request     | 18    | 450  | 1  |
| 149B 5860 A        | on request     | 20    | 500  | 1  |
| 149B 5861 A        | on request     | 24    | 600  | 1  |
| 149B 5862 A        | on request     | 28    | 700  | 1  |
| 149B 5863 A        | on request     | 32    | 800  | 1  |
| 149B 5864 A        | on request     | 36    | 900  | 1  |
| 149B 5865 A        | on request     | 42    | 1000 | 1  |

Dimensions at the end of the section.

OVERALL DIMENSIONS

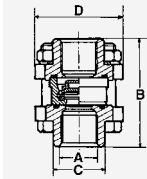
802 - 802L - 802Z - 812 - 812X - 812XL



Types 802 -  
802L - 802Z  
- 812 - 812X -  
812XL between  
flanges

|   | A     |     | B<br>mm | C<br>PN6<br>mm | C<br>PN10/16<br>mm | Kg    | KV<br>m³/H | ζ   |
|---|-------|-----|---------|----------------|--------------------|-------|------------|-----|
|   | "     | mm  |         |                |                    |       |            |     |
| 1 | 1/2   | 15  | 16,0    | 44             | 53                 | 0,10  | 4,24       | 4,4 |
|   | 3/4   | 20  | 19,0    | 54             | 63                 | 0,14  | 7,80       | 4,1 |
|   | 1     | 25  | 22,0    | 64             | 73                 | 0,23  | 12,40      | 4,0 |
|   | 1 1/4 | 32  | 28,0    | 78             | 84                 | 0,35  | 18,00      | 5,0 |
|   | 1 1/2 | 40  | 31,5    | 88             | 94                 | 0,52  | 28,00      | 5,1 |
| 2 | 2     | 50  | 40,0    | 98             | 109                | 0,73  | 40,10      | 6,1 |
|   | 2 1/2 | 65  | 46,0    | 118            | 129                | 1,52  | 72,50      | 5,3 |
|   | 3     | 80  | 50,0    | 134            | 144                | 2,17  | 111,00     | 5,2 |
|   | 4     | 100 | 60,0    | 154            | 162                | 3,35  | 182,00     | 4,7 |
|   | 5     | 125 | 90,0    |                | 192                | 8,55  | 302,00     | 4,2 |
| 3 | 6     | 150 | 106,0   |                | 218                | 12,70 | 370,00     | 5,8 |
|   | 8     | 200 | 140,0   |                | 273                | 23,40 | 546,00     | 8,4 |

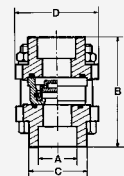
802T-812XT



Types  
802T-812XT  
female/female

| A     |    | B     |       | C    |       | D     |       | Kg  | KV<br>m³/H | ζ   |
|-------|----|-------|-------|------|-------|-------|-------|-----|------------|-----|
| “     | mm | 802T  | 812XT | 802T | 812XT | 802T  | 812XT |     |            |     |
| 1/2   | 15 | -     | 62,5  | -    | 29,5  | -     | 64,5  | 0,4 | 4,24       | 4,4 |
| 3/4   | 20 | -     | 68,5  | -    | 36,0  | -     | 81,0  | 0,6 | 7,80       | 4,1 |
| 1     | 25 | -     | 81,0  | -    | 43,0  | -     | 86,0  | 0,7 | 12,40      | 4,0 |
| 1 1/4 | 32 | 100,0 | 100,0 | 53,0 | 53,0  | 102,0 | 107,0 | 1,0 | 18,00      | 5,0 |
| 1 1/2 | 40 | 105,5 | 107,0 | 61,0 | 61,0  | 108,0 | 109,0 | 2,2 | 28,00      | 5,1 |
| 2     | 50 | 118,0 | 120,0 | 73,0 | 74,0  | 127,0 | 127,0 | 3,2 | 40,10      | 6,1 |
| 1/2   | 15 | -     | 62,5  | -    | 29,5  | -     | 64,5  | 0,4 | 4,24       | 4,4 |
| 3/4   | 20 | -     | 68,5  | -    | 36,0  | -     | 81,0  | 0,6 | 7,80       | 4,1 |
| 1     | 25 | -     | 81,0  | -    | 43,0  | -     | 86,0  | 0,7 | 12,40      | 4,0 |
| 1 1/4 | 32 | 100,0 | 100,0 | 53,0 | 53,0  | 102,0 | 107,0 | 1,0 | 18,00      | 5,0 |
| 1 1/2 | 40 | 105,5 | 107,0 | 61,0 | 61,0  | 108,0 | 109,0 | 2,2 | 28,00      | 5,1 |
| 2     | 50 | 118,0 | 120,0 | 73,0 | 74,0  | 127,0 | 127,0 | 3,2 | 40,10      | 6,1 |

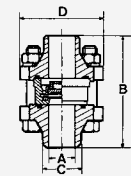
812XS



Type 812XS  
for socket  
welding

| A     |      | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|------|---------|---------|---------|------|------------|-----|
| “     | mm   |         |         |         |      |            |     |
| 1/2   | 21,6 | 64,5    | 33,2    | 64,5    | 0,43 | 4,24       | 4,4 |
| 3/4   | 27,2 | 72,5    | 42,0    | 81,0    | 0,75 | 7,80       | 4,1 |
| 1     | 34,0 | 80,0    | 48,0    | 86,0    | 1,03 | 12,40      | 4,0 |
| 1 1/4 | 42,8 | 96,0    | 57,0    | 107,0   | 1,60 | 18,00      | 5,0 |
| 1 1/2 | 48,7 | 107,5   | 70,0    | 109,0   | 2,60 | 28,00      | 5,1 |
| 2     | 60,8 | 120,0   | 81,0    | 127,0   | 3,70 | 40,10      | 6,1 |

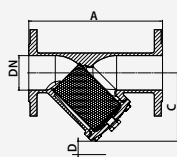
812XB



Type 812XB  
for butt welding

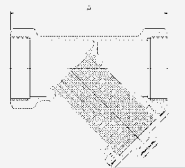
| A     |      | B<br>mm | C<br>mm | D<br>mm | Kg   | KV<br>m³/H | ζ   |
|-------|------|---------|---------|---------|------|------------|-----|
| “     | mm   |         |         |         |      |            |     |
| 1/2   | 16,0 | 67,5    | 23      | 64,5    | 0,43 | 4,24       | 4,0 |
| 3/4   | 20,4 | 71,5    | 28      | 81,0    | 0,61 | 7,80       | 4,1 |
| 1     | 26,8 | 84,0    | 35      | 86,0    | 0,90 | 12,40      | 4,0 |
| 1 1/4 | 34,9 | 88,0    | 44      | 107,0   | 1,33 | 18,00      | 5,0 |
| 1 1/2 | 40,8 | 98,5    | 52      | 109,0   | 2,10 | 28,00      | 5,1 |
| 2     | 52,3 | 113,0   | 63      | 127,0   | 3,15 | 40,10      | 6,1 |

## Y333

Type Y333  
with flanges

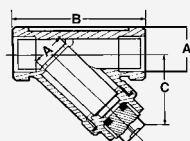
| Ø mm | A mm | C mm | D mm | Mesh mm | Kg   | KV m <sup>3</sup> /H | ζ    |
|------|------|------|------|---------|------|----------------------|------|
| 40   | 200  | 130  | 35   | 0,50    | 6,5  | 42,70                | 2,20 |
| 50   | 230  | 145  | 50   | 0,50    | 8,5  | 66,70                | 2,20 |
| 65   | 290  | 192  | 65   | 0,80    | 11   | 89,00                | 3,50 |
| 80   | 310  | 159  | 75   | 1,25    | 13,5 | 127,00               | 4,00 |
| 100  | 350  | 187  | 90   | 1,25    | 18   | 200,00               | 3,90 |
| 125  | 400  | 249  | 125  | 1,25    | 27,5 | 364,00               | 2,60 |
| 150  | 480  | 326  | 145  | 1,25    | 43   | 494,00               | 3,30 |
| 200  | 600  | 403  | 220  | 1,25    | 83   | 937,00               | 2,90 |
| 250  | 730  | 472  | 200  | 1,60    | 112  | 1137,00              | 4,80 |
| 300  | 850  | 508  | 250  | 1,60    | 160  | 1844,00              | 3,80 |
| 350  | 980  | 587  | 315  | 1,60    | 297  | 1137,00              | 4,80 |
| 400  | 1100 | 658  | 370  | 1,60    | 406  | 1844,00              | 3,80 |

## Y222

Type Y222  
female/female

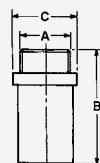
| DN "  | A mm  | B mm | Kg    |
|-------|-------|------|-------|
| 1/2   | 61,0  | 38   | 0,180 |
| 3/4   | 68,0  | 45   | 0,280 |
| 1     | 86,5  | 57   | 0,450 |
| 1 1/4 | 105,0 | 69   | 0,800 |
| 1 1/2 | 117,0 | 80   | 0,900 |
| 2     | 147,0 | 99   | 1,200 |

## Y666

Type Y666  
female/female

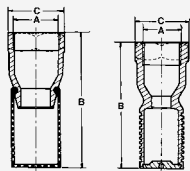
| A "   | B mm | C mm | Kg    | KV m <sup>3</sup> /H | ζ    |
|-------|------|------|-------|----------------------|------|
| 1/4   | 57   | 32   | 0,150 | 0,50                 | 1,00 |
| 3/8   | 57   | 32   | 0,150 | 0,65                 | 3,00 |
| 1/2   | 61   | 36   | 0,210 | 1,03                 | 3,80 |
| 3/4   | 70   | 41   | 0,280 | 5,30                 | 7,40 |
| 1     | 86   | 44   | 0,460 | 8,70                 | 8,70 |
| 1 1/4 | 100  | 51   | 0,680 | 13,30                | 9,00 |
| 1 1/2 | 111  | 59   | 0,920 | 19,34                | 8,80 |
| 2     | 138  | 72   | 1,450 | 30,21                | 11,5 |

## 101

Type 101  
male

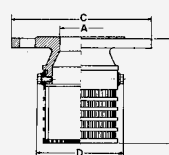
| A "   | B mm | C mm | Kg    |
|-------|------|------|-------|
| 3/8   | 42,0 | 26   | 0,030 |
| 1/2   | 47,5 | 30   | 0,040 |
| 3/4   | 58,0 | 32   | 0,055 |
| 1     | 70,0 | 40   | 0,080 |
| 1 1/4 | 75,5 | 48   | 0,120 |
| 1 1/2 | 83,0 | 54   | 0,180 |
| 2     | 99,0 | 65   | 0,185 |

## 191D

Type 191D  
female

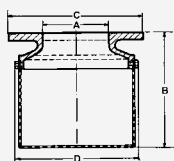
| A     |       | B<br>mm | C<br>mm | Kg    |
|-------|-------|---------|---------|-------|
| “     | mm    |         |         |       |
| 3/8   | 12/17 | 57,0    | 23      | 0,010 |
| 1/2   | 15/21 | 57,0    | 27      | 0,015 |
| 3/4   | 20/27 | 64,5    | 34      | 0,028 |
| 1     | 26/34 | 78,5    | 40      | 0,040 |
| 1 1/4 | 33/42 | 97,0    | 49      | 0,063 |
| 1 1/2 | 40/49 | 149,0   | 56      | 0,108 |
| 2     | 50/60 | 180,0   | 66      | 0,130 |

## 46

Type 46  
with flange

| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg   |
|-------|-----|---------|---------|---------|------|
| а     | mm  |         |         |         |      |
| 2     | 50  | 127     | 165     | 101     | 2,05 |
| 2 1/2 | 65  | 149     | 185     | 120     | 2,75 |
| 3     | 80  | 179     | 200     | 143     | 3,75 |
| 4     | 100 | 215     | 220     | 174     | 4,84 |

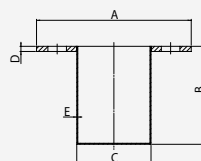
### 46G



Type 46G  
with flange

| A     |     | B<br>mm | C<br>mm | D<br>mm | Kg    |
|-------|-----|---------|---------|---------|-------|
| "     | mm  |         |         |         |       |
| 2     | 50  | 100     | 165     | 97      | 2,15  |
| 2 1/2 | 65  | 120     | 185     | 117     | 2,93  |
| 3     | 80  | 140     | 200     | 139     | 3,99  |
| 4     | 100 | 167     | 220     | 169     | 5,81  |
| 5     | 125 | 217     | 250     | 225     | 7,00  |
| 6     | 150 | 250     | 285     | 265     | 9,50  |
| 7     | 175 | 281     | 315     | 315     | 14,00 |
| 8     | 200 | 326     | 340     | 366     | 20,00 |
| 10    | 250 | 366     | 395     | 436     | 25,00 |
| 12    | 300 | 414     | 445     | 506     | 36,50 |
| 14    | 350 | 444     | 505     | 636     | 55,00 |
| 16    | 400 | 464     | 565     | 696     | 75,50 |

### 46X



Type 46X  
with flange

| DN   | A<br>mm | B<br>mm | C<br>mm | D<br>mm | E<br>mm | Kg     |
|------|---------|---------|---------|---------|---------|--------|
| 40   | 150     | 95      | 72      | 5       | 1       | 0,63   |
| 50   | 165     | 87      | 87      | 5       | 1       | 0,73   |
| 65   | 185     | 106     | 107     | 5       | 1       | 0,91   |
| 80   | 200     | 126     | 122     | 5       | 1       | 1,01   |
| 100  | 220     | 154     | 142     | 5       | 1       | 1,23   |
| 125  | 250     | 194     | 172     | 5       | 1,5     | 1,91   |
| 150  | 285     | 217     | 195     | 5       | 1,5     | 2,46   |
| 175  | 315     | 235     | 240     | 8       | 1,5     | 2,46   |
| 200  | 340     | 254     | 250     | 8       | 1,5     | 4,35   |
| 250  | 395     | 352     | 305     | 8       | 2       | 9,34   |
| 300  | 445     | 382     | 355     | 8       | 2       | 11,62  |
| 350  | 505     | 402     | 425     | 8       | 2       | 14,03  |
| 400  | 565     | 430     | 463     | 8       | 2       | 17,25  |
| 450  | 615     | 480     | 513     | 8       | 2       | 20,60  |
| 500  | 670     | 548     | 568     | 8       | 2       | 25,16  |
| 600  | 780     | 654     | 667     | 8       | 3       | 48,15  |
| 700  | 895     | 822     | 782     | 10      | 3       | 70,32  |
| 800  | 1015    | 918     | 892     | 10      | 3       | 89,63  |
| 900  | 1115    | 1044    | 992     | 10      | 3       | 110,42 |
| 1000 | 1230    | 1158    | 1092    | 10      | 3       | 135,05 |

# **Chapter 3**

## Regulation Systems

STABILISERS

PROTECTION

DESBORDES PRESSURE  
REDUCING VALVES

MISCELLANEOUS

SOLENOID VALVES

AIR VALVES

## Chapter 3.1

## Choosing a specific control system

## SELECTION PROCESS

Required to equalise, at different levels, the circulation of water in distribution systems, control valves fulfil multiple functions. The tables below allow you to make a preliminary selection in line with your specific needs.

## PRESSURE CONTROL

|                                                      | C 101 | C 101 C | C 101 DS | C 102 | C 104 | C 104 C | C 108 | C 108 C | C 301 | C 301 C | C 301 DS | C 306 | C 306 C | C 401 | C 401 C | C 1001 C |
|------------------------------------------------------|-------|---------|----------|-------|-------|---------|-------|---------|-------|---------|----------|-------|---------|-------|---------|----------|
| Modulating*                                          |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Downstream reducing and stabilizing                  |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Downstream reducing and stabilizing with 2 settings  |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Upstream sustaining                                  |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Holding a differential pressure                      |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Backflow prevention feature                          |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Backflow prevention on the discharge circuit         |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Double direction flow if upstream P. < downstream P. |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |
| Full opening at a preset upstream pressure           |       |         |          |       |       |         |       |         |       |         |          |       |         |       |         |          |

## FAVOUR FUNCTION

|                                              | C 801 | C 802 |
|----------------------------------------------|-------|-------|
| Fully closed or fully open* (non modulating) |       |       |
| Adjustable opening or closing                |       |       |
| Normally closed when switched off            |       |       |
| Normally open when switched off              |       |       |
| Electrically operated                        |       |       |

\*A "modulating" valve holds a certain level of opening allowing to maintaining the preset function parameters.

## FLOW AND LEVEL CONTROL

|                                               | C 901 | C 901 C | C 902 | C 902 C | C 903 | C 903 C | C 904 | C 904 C | C 907 | C 907 C |
|-----------------------------------------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| Modulating*                                   |       |         |       |         |       |         |       |         |       |         |
| Maintaining a maximum flow                    |       |         |       |         |       |         |       |         |       |         |
| Reducing and stabilizing flow downstream      |       |         |       |         |       |         |       |         |       |         |
| With upstream pressure sustaining in addition |       |         |       |         |       |         |       |         |       |         |
| Holding a differential pressure               |       |         |       |         |       |         |       |         |       |         |
| Controlling the upper level                   |       |         |       |         |       |         |       |         |       |         |
| Backflow prevention feature                   |       |         |       |         |       |         |       |         |       |         |

## PROTECTION AND CONTROL

|                                               | C 501 | C 502 | C 503 | C 601 | C 906 | AB 900 |
|-----------------------------------------------|-------|-------|-------|-------|-------|--------|
| Against water hammer                          |       |       |       |       |       |        |
| Against electrical failures                   |       |       |       |       |       |        |
| Pump protection                               |       |       |       |       |       |        |
| Slow opening and closing                      |       |       |       |       |       |        |
| Electrically operated (3 ways solenoid valve) |       |       |       |       |       |        |
| Against "overspeed flow"                      |       |       |       |       |       |        |
| Against downstream pipe breakage              |       |       |       |       |       |        |

RESERVOIR CONTROL

|                                                  | C 201 | C 201 C | C 201 DS | C 221 | C 701 | C 702 | C 707 | C 707 C | C 727 | C 717 | C 737 |
|--------------------------------------------------|-------|---------|----------|-------|-------|-------|-------|---------|-------|-------|-------|
| Modulating*                                      |       |         |          |       |       |       |       |         |       |       |       |
| Non modulating<br>(fully open or fully closed)   |       |         |          |       |       |       |       |         |       |       |       |
| Controlling the upper level                      |       |         |          |       |       |       |       |         |       |       |       |
| Opens at low level -<br>Closes at upper level    |       |         |          |       |       |       |       |         |       |       |       |
| With upstream sustaining                         |       |         |          |       |       |       |       |         |       |       |       |
| With backflow prevention<br>feature              |       |         |          |       |       |       |       |         |       |       |       |
| Upstream double direction<br>flow if P< Tank P.  |       |         |          |       |       |       |       |         |       |       |       |
| Levels set by floats or sensors                  |       |         |          |       |       |       |       |         |       |       |       |
| Float operated                                   |       |         |          |       |       |       |       |         |       |       |       |
| Mechanically operated                            |       |         |          |       |       |       |       |         |       |       |       |
| Electrically operated (2 ways<br>solenoid valve) |       |         |          |       |       |       |       |         |       |       |       |

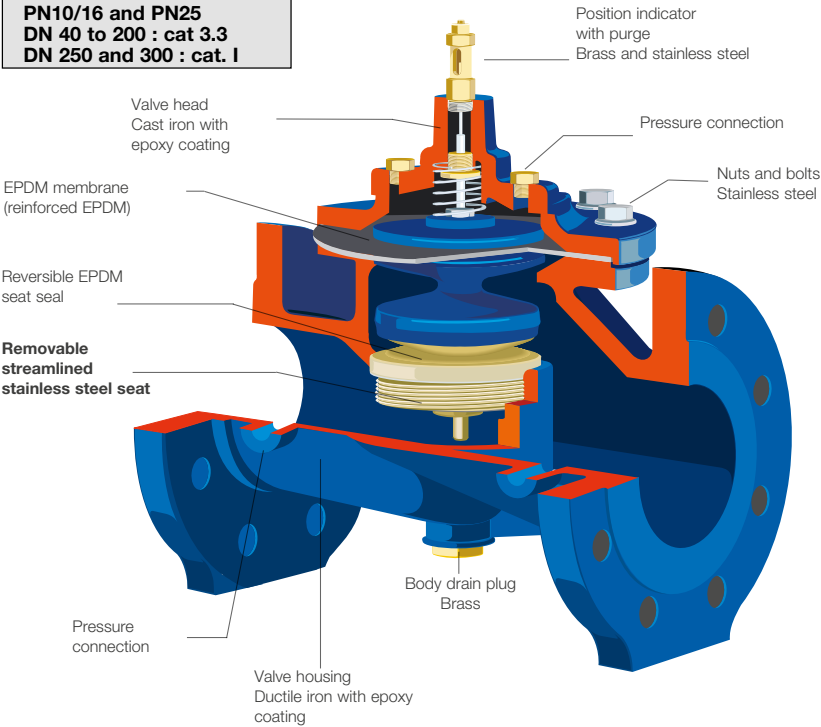
AIR CONTROL

|                              | VE 120 | VE 320 | VE 330 |
|------------------------------|--------|--------|--------|
| Clear water                  |        |        |        |
| Releasing air under pressure |        |        |        |
| Fast release of air          |        |        |        |
| Fast influx of air           |        |        |        |
| Waste water                  |        |        |        |
| Releasing air under pressure |        |        |        |
| Fast influx of air           |        |        |        |

MAIN VALVE

**CE** PED 97/23/CE  
for all control valves  
PN10/16 and PN25  
DN 40 to 200 : cat 3.3  
DN 250 and 300 : cat. I

PN according to EN 1092-2



PRESSURE TABLE  
FOR CONTROL VALVES

| DN<br>" mm |                 | PN    | PFA<br>bar | PS |    |    |    | Cat |
|------------|-----------------|-------|------------|----|----|----|----|-----|
|            |                 |       |            | L1 | L2 | G1 | G2 |     |
| 1<br>1/2"  |                 | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 40<br>and<br>50 | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 65              | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 80              | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 100             | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 125             | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 150             | 10/16 | 16         | 16 | 16 | x  | x  | 3.3 |
|            | 200             | 10    | 10         | 10 | 10 | x  | x  | 3.3 |
|            | 250             | 10    | 10         | 10 | 10 | x  | x  | I   |
|            | 300             | 10    | 10         | 10 | 10 | x  | x  | I   |
|            |                 |       |            |    |    |    |    |     |
|            | 200             | 16    | 16         | 10 | 16 | x  | x  | 3.3 |
|            | 250             | 16    | 16         | 10 | 16 | x  | x  | I   |
|            | 300             | 16    | 16         | 10 | 16 | x  | x  | I   |
|            |                 |       |            |    |    |    |    |     |
| 1<br>1/2"  |                 | 25    | 25         | 25 | 25 | x  | x  | 3.3 |
|            | 40<br>and<br>50 | 25    | 25         | 25 | 25 | x  | x  | 3.3 |
|            | 65              | 25    | 25         | 25 | 25 | x  | x  | 3.3 |
|            | 80              | 25    | 25         | 25 | 25 | x  | x  | 3.3 |
|            | 100             | 25    | 25         | 20 | 25 | x  | x  | 3.3 |
|            | 125             | 25    | 25         | 16 | 25 | x  | x  | 3.3 |
|            | 150             | 25    | 25         | 13 | 25 | x  | x  | 3.3 |
|            | 200             | 25    | 25         | 10 | 25 | x  | x  | 3.3 |
|            | 250             | 25    | 25         | 10 | 25 | x  | x  | I   |
|            | 300             | 25    | 25         | 10 | 25 | x  | x  | I   |

### INSTALLATION EXAMPLE TYPE C101 - C102 - C104 - C108



Butterfly valve  
SOCLA  
page 152



Filter Y333P  
SOCLA  
page 8



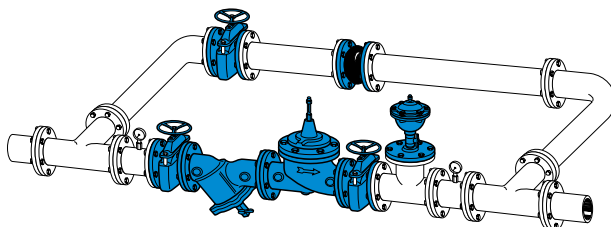
Rubber expansion joint  
SOCLA  
page 146



Pressure gauge  
page 132



Air valve VE120  
SOCLA  
page 141



### REGULATION MAINTENANCE

We recommend a maintenance control each 6 or 12 months according to the quality of the water.

Checking and cleaning filters of the pilot circuit and main piping system.

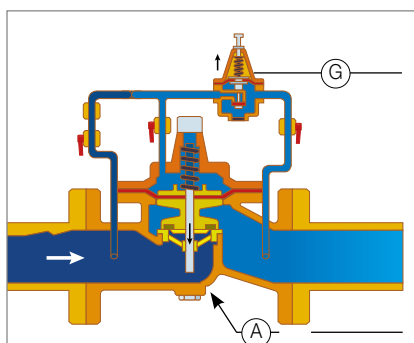
Purging the upper chamber by means of the visual position indicator.

Flushing the valves not frequently used.

Every 5 years, a general maintenance is advisable.

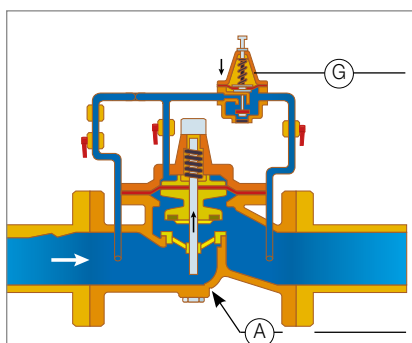
### WORKING PRINCIPLE (PRESSURE REDUCING VALVE TYPE C101)

#### CLOSING



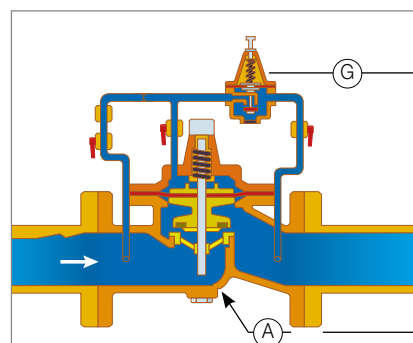
When the downstream pressure rises, the pilot valve G closes. Pressure in the upper chamber rises also and forces the membrane to close the main valve A which reproduces the movement of the pilot.

#### OPENING



When the downstream pressure is too low, no pressure is acting on the membrane and the pilot G opens. Pressure in the upper chamber is released and the valve A opens reproducing the movement of the pilot.

#### CONTROLLING



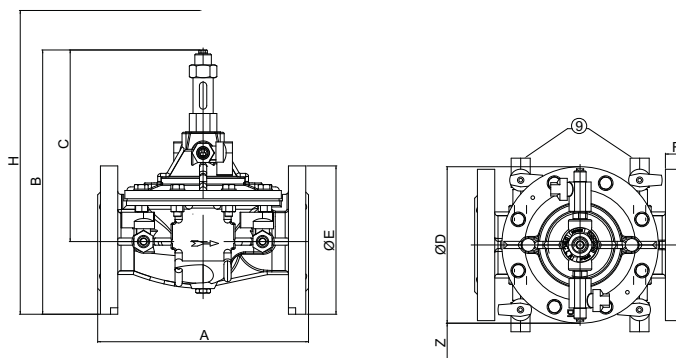
When the pilot G opens or closes, pressure in the upper chamber forces more or less on the membrane to open or close the main valve.

## TECHNICAL INFORMATION

Minimum upstream pressure : 1 bar  
 TEMPERATURE MAX : 90° C  
 Version with flanges : PFA 25 if not indicated  
 Threaded version 1"1/2 F/F except C 900  
 Vertical installation : IN OPTION

H : MAX. VERTICAL  
 OVERALL DIMENSION  
 (including the pilot circuit)

⑨ PRESSURE GAUGES



## DIMENSIONS (EXCEPT TYPE 900)

| DN          | A mm | B mm | C mm | Ø<br>D mm | Ø<br>E mm | F mm | H mm* | H mm<br>C501 | Z mm | Kg  | 9   | 10  |
|-------------|------|------|------|-----------|-----------|------|-------|--------------|------|-----|-----|-----|
| 1" 1/2(F/F) | 230  | 267  | 210  | 170       | 6 pans    | -    | 400   | 800          | 254  | 8   | 1/4 | 1/4 |
| 40          | 230  | 285  | 210  | 170       | 152       | 23   | 400   | 800          | 254  | 12  | 1/4 | 1/4 |
| 50          | 230  | 285  | 210  | 170       | 161       | 23   | 400   | 800          | 254  | 13  | 1/4 | 1/4 |
| 65          | 290  | 352  | 257  | 200       | 185       | 24   | 470   | 770          | 254  | 21  | 3/8 | 1/4 |
| 80          | 310  | 372  | 272  | 217       | 200       | 26   | 500   | 790          | 254  | 26  | 3/8 | 3/8 |
| 100         | 350  | 423  | 302  | 241       | 235       | 28   | 510   | 810          | 254  | 39  | 3/8 | 3/8 |
| 125         | 400  | 506  | 371  | 296       | 270       | 30   | 570   | 870          | 254  | 59  | 3/8 | 3/8 |
| 150         | 480  | 551  | 401  | 363       | 300       | 20   | 650   | 1070         | 254  | 73  | 3/8 | 3/8 |
| 200         | 600  | 709  | 529  | 467       | 360       | 22   | 750   | 1150         | 254  | 122 | 3/8 | 3/8 |
| 250         | 730  | 844  | 631  | 587       | 425       | 24   | 900   | 1260         | 254  | 208 | 1/2 | 1/2 |
| 300         | 850  | 975  | 730  | 680       | 486       | 27   | 1100  | 1370         | 254  | 328 | 1/2 | 1/2 |

It is advisable to use a strainer upstream and an air relief valve downstream

\*(Except C501) 78 / flats

## DIMENSIONS 901 - 902 - 903 - 904 - 906

| DN  | A mm | B mm | C mm | Ø<br>D mm | Ø<br>E mm | F mm | H mm | Z mm | Kg  | 9   | 10  |
|-----|------|------|------|-----------|-----------|------|------|------|-----|-----|-----|
| 40  | 274  | 285  | 210  | 170       | 152       | 23   | 400  | 254  | 15  | 1/4 | 3/8 |
| 50  | 274  | 285  | 210  | 170       | 161       | 23   | 400  | 254  | 16  | 1/4 | 3/8 |
| 65  | 314  | 352  | 257  | 200       | 185       | 24   | 470  | 254  | 24  | 3/8 | 1/4 |
| 80  | 334  | 372  | 272  | 217       | 200       | 26   | 500  | 254  | 29  | 3/8 | 3/8 |
| 100 | 374  | 423  | 302  | 241       | 235       | 28   | 510  | 254  | 42  | 3/8 | 3/8 |
| 125 | 430  | 506  | 371  | 296       | 270       | 30   | 570  | 254  | 63  | 3/8 | 3/8 |
| 150 | 512  | 551  | 401  | 363       | 300       | 20   | 650  | 254  | 77  | 3/8 | 3/8 |
| 200 | 626  | 709  | 529  | 467       | 360       | 22   | 750  | 254  | 127 | 3/8 | 3/8 |
| 250 | 760  | 844  | 631  | 587       | 425       | 24   | 900  | 254  | 218 | 1/2 | 1/2 |
| 300 | 880  | 975  | 730  | 680       | 486       | 27   | 1100 | 254  | 348 | 1/2 | 1/2 |

Connection : flanges drilled PN 10 - PN 16 - PN 25 : to be specified

## IMPORTANT

- Pilot circuit always mounted on the right hand side of valve, looking downstream direction of valve (for other execution, consult us).
- Control valve installed according to your parameters. These parameters are always required with the order : this is necessary to guarantee a correct functioning of your installation.

## HOW TO SELECT THE RIGHT SIZE

## KV FACTOR

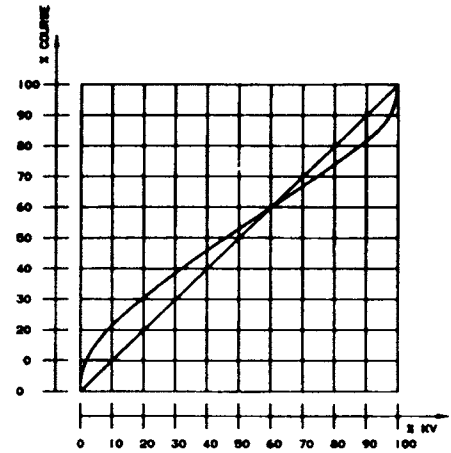
## FLOW RATE OPENING

| Sizes | Except C 900 | C900 | Maxi m³/h | m³/h    | L/s    | ζ     |
|-------|--------------|------|-----------|---------|--------|-------|
| 1"1/2 | 0,520        | -    | 20,34     | 26,35   | 7,32   | 5,78  |
| 40    | 0,675        | 5    | 32,00     | 45,66   | 12,68  | 1,93  |
| 50    | 0,675        | 7    | 32,00     | 45,66   | 12,68  | 4,70  |
| 65    | 0,855        | 14   | 54,00     | 57,75   | 16,08  | 8,39  |
| 80    | 1,600        | 18   | 82,00     | 80,00   | 22,22  | 10,00 |
| 100   | 2,720        | 28   | 127,00    | 136,00  | 37,78  | 8,47  |
| 125   | 4,400        | 44   | 199,00    | 220,00  | 61,11  | 7,90  |
| 150   | 5,280        | 64   | 286,00    | 264,00  | 73,33  | 11,38 |
| 200   | 13,500       | 113  | 509,00    | 600,00  | 166,67 | 6,96  |
| 250   | 25,000       | 177  | 795,00    | 900,00  | 250,00 | 7,56  |
| 300   | 40,900       | 255  | 1145,00   | 1224,00 | 340,00 | 8,47  |

To size this valve correctly and avoid undesirable operating characteristics (noise, excessive wear, poor regulation) which result from oversizing (or undersizing), use the sizing guide and choose the smallest valve size compatible with the indicated flow rates.

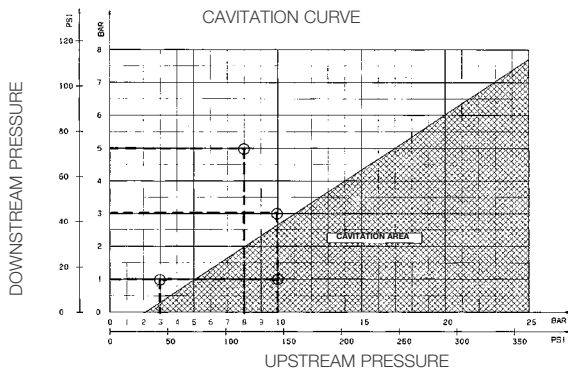
### NOTE :

- 1 - For a throttling valve application requiring a wide range of flows a dual valve installation should be used.
- 2 - The maximum flow rates listed above were calculated by using a velocity of 4,5 m/second. The throttling valve is capable of handling larger flows for short periods of time ; however, the increase in maximum flow should be limited to 25% of the above values.
- 3 - For C900 series : min. flow 1m/s.a



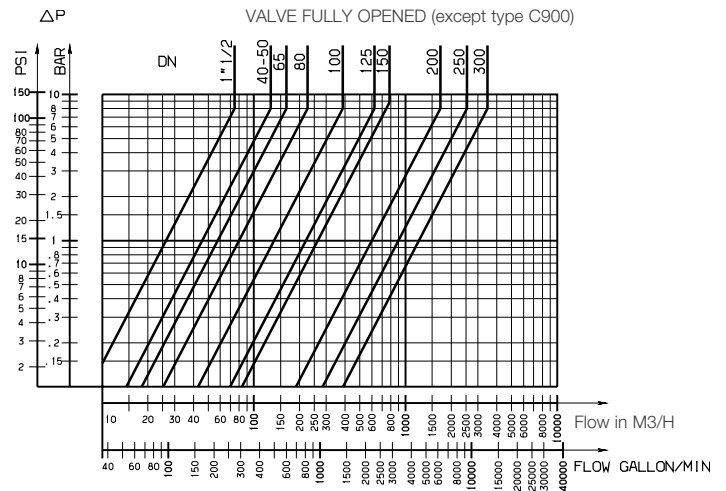
## CAVITATION

## HEADLOSS CHART



A too large differential pressure and a low downstream pressure may result in damage to the valve by cavitation. To avoid it, refer to the cavitation curve.

To avoid cavitation please refer to above diagram and if needed reduce the differential pressure by installing and connecting two or more control valves in same line (consult us). Stainless steel seat and counter seat are standard



Chapter 3.2

Stabilisers

PRESSURE REDUCING VALVES

C101

Controls and maintains a constant preset reduced downstream pressure regardless of variations in downstream demand or upstream pressure.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

C101C

Type C 101 provided with a check valve feature.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

C102

Type C 101 equipped with two identical pilot valves. The addition of a second pilot allows uninterrupted working while servicing one of the pilots or ease the change of a different pressure setting.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**C108**

Type C 101 enables the main valve to fully open if the upstream pressure is below a preset level.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**COMBINED PRESSURE REDUCING VALVES**

**C104**

Working with two pilots, maintains a preset upstream pressure and a preset downstream pressure reduction.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**C104C**

Type C 104 provided with a check valve feature.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**BACK PRESSURE VALVES**

**C301**

Controls and maintains a preset upstream pressure, regardless of variations in downstream demand.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



**C301C**

Type C 301 provided with a check valve feature.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**DIFFERENTIAL BACK PRESSURE**

**C306**

Differential pressure valve : maintains a constant preset differential pressure across the valve or a pump.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



**C306C**

Type C 306 provided with a check valve feature.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



## Chapter 3.3

## Altitude

## ALTITUDE VALVES FLOAT OPERATED

## C701

Controls the level of a tank. Maintains constant level by means of float tap regulation. (Connecting pipe Ø10/12 mm from the pressure tap to the valve not included)



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

## C702

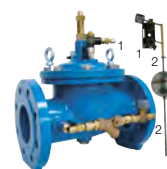
Type C 701 provided with a preset sustaining upstream pressure feature. (Connecting pipe Ø10/12 mm from the pressure tap to the valve not included)



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

## C717

Regulates mechanically water in a tank by a volume by means of a float with 2 positions. Closes at a preset high water level, opens at a given low water level. Maximum difference of level : 3,6m. (Connecting pipe Ø4/6 mm from the pressure tap to the valve not included)



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**C737**

Type C717 provided with a pre-set upstream pressure sustaining feature. Maximum difference of level : 3,6 m. Connecting pipe Ø4/6 mm from the pressure tap to the valve non included.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**C707**

Regulates contents of a tank by volume of water using float regulation (not included) : closes at a preset high water level and opens at a given low water level.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**C727**

Type C 707 provided with a preset upstream pressure sustaining feature.

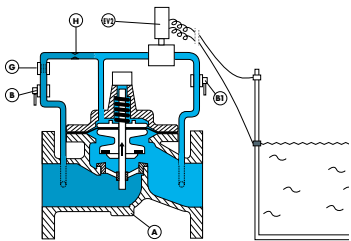


| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

**WORKING PRINCIPLE**

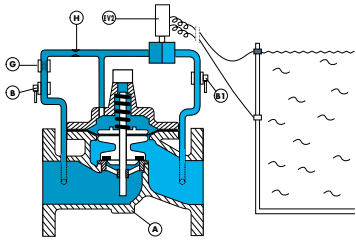
EXAMPLE : Type C707

The low level sensor opens the solenoid valve, emptying the upper chamber. The main valve opens.



The upper level sensor closes the solenoid valve, the upstream pressure in the upper chamber closes the main valve.

- A Main valve housing : cast iron
- B Upstream isolation valve : nickel-plated brass
- B1 Downstream isolation valve : nickel-plated brass
- G 2 ways solenoid valve - G Filter : brass
- H Orifice-needle valve : stainless steel or brass



ALTITUDE VALVES PILOT OPERATED

C201

Prevents overflowing and maintains the level of water in a storage tank, pilot controlled exists in top-fill or bottom-fill versions. Minimum setting : 2 m.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

C221

Same control valve as C201 but fitted with a preset upstream sustaining pressure function exists in top-fill or bottom-fill versions. Minimum setting : 2m



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

Chapter 3.4

Protection

OVERPRESSURE PROTECTION, DISCHARGE VALVE

C401

Installed for the protection against the excess of pressure.

| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



C401C

Type C401 provided with a check valve feature.

| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



ANTI-WATER HAMMER PROTECTION

C501

Eliminates all pressure fluctuations which occur when pump starts, during electric power failure or pump failure.

| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



## PUMP PROTECTION

### C601

Eliminates pressure fluctuations and water hammer in the mains, when pump starts and shuts down, by slow and controlled opening and closing operation.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

## ON/OFF OPTION ELECTRICALLY CONTROLLED

### C801/C802

C801 : With solenoid valve normally closed. Opens when contact is on. PN depending on solenoid valve.

C802 : With solenoid valve normally open. Closed when contact is on.



| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |

## OVERSPEED PROTECTION

### C906

Safety valve which closes when the flow speed exceeds a preset value. Protects against downstream pipe breakage. Re-set manually.



| DN        | DN  |
|-----------|-----|
| 40 and 50 | 150 |
| 65        | 200 |
| 80        | 250 |
| 100       | 300 |
| 125       |     |

## FLOW RATE CONTROL/FLOW LIMITER

### C901

Controls and maintains a preset maximum flowrate at the delivery, regardless of changing upstream and downstream pressures.



| DN        | DN  |
|-----------|-----|
| 40 and 50 | 150 |
| 65        | 200 |
| 80        | 250 |
| 100       | 300 |
| 125       |     |

## FLOW RATE CONTROL/FLOW LIMITER

### C902

Type C 901 provided with a preset downstream reduced pressure control feature.

| ACS<br>WRAS |  |   |  |
|-------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| DN          |  | DN                                                                                                                                                                      |  |
| 40 and 50   |  | 150                                                                                                                                                                     |  |
| 65          |  | 200                                                                                                                                                                     |  |
| 80          |  | 250                                                                                                                                                                     |  |
| 100         |  | 300                                                                                                                                                                     |  |
| 125         |  |                                                                                                                                                                         |  |



### C903

Type C 901 + a control of high level of water in a tank by means of a regulating pilot.  
(Exists in top-fill or bottom-fill versions).

| ACS<br>WRAS |  |   |  |
|-------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| DN          |  | DN                                                                                                                                                                      |  |
| 40 and 50   |  | 150                                                                                                                                                                     |  |
| 65          |  | 200                                                                                                                                                                     |  |
| 80          |  | 250                                                                                                                                                                     |  |
| 100         |  | 300                                                                                                                                                                     |  |
| 125         |  |                                                                                                                                                                         |  |



### C904

Type C 901 provided with a preset sustaining upstream pressure feature.).

| ACS<br>WRAS |  |   |  |
|-------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| DN          |  | DN                                                                                                                                                                          |  |
| 40 and 50   |  | 150                                                                                                                                                                         |  |
| 65          |  | 200                                                                                                                                                                         |  |
| 80          |  | 250                                                                                                                                                                         |  |
| 100         |  | 300                                                                                                                                                                         |  |
| 125         |  |                                                                                                                                                                             |  |



## PRESSURE GAUGES

### OPTION 1

Pressure gauges with purge taps. (10 bar, 16 bar, 25 bar)

| DN          |  | DN  |  |
|-------------|--|-----|--|
| 1"1/2 (F/F) |  | 125 |  |
| 40 and 50   |  | 150 |  |
| 65          |  | 200 |  |
| 80          |  | 250 |  |
| 100         |  | 300 |  |



### SOLENOID VALVE

#### OPTION 2

2 way solenoid valve PN25 (on certain versions) Others : consult us - IP65

| Normally Closed |           | Normally Open |           |
|-----------------|-----------|---------------|-----------|
| DC              | 12V/CC    | DC            | 12V/CC    |
| DC              | 24V/CC    | DC            | 24V/CC    |
| AC              | 24V/50Hz  | AC            | 24V/50Hz  |
| AC              | 220V/50Hz | AC            | 220V/50Hz |



### POSITION INDICATOR

#### OPTION 3

Mechanical position indicator (maxi 6 A, 300 V) 1 N.O. contact and 1 N/C contact - IP67

| DN          | DN  |
|-------------|-----|
| 1"1/2 (F/F) | 125 |
| 40 and 50   | 150 |
| 65          | 200 |
| 80          | 250 |
| 100         | 300 |



### MOTORISATION

#### OPTION 4

TYPE C900 EXCEPT C906 MOTORISATION of regulating pilot

- Remote signal : 0-20 mA - 0-10 volt
- Supply voltage : 24 volts/50Hz
- Controllable flow rate by intensity variation
- Selection by switch



### OVERPRESSURE PROTECTION - WATER DISTRIBUTION

#### AB900 PN 16\*

Safety valve to protect pipe systems from water hammering.  
Cast iron or C-steel cap, C-steel flange, polyurethane seal, steel spring.  
PFA PRESSURE 16 bar\*

\* DN200, 2 settings :  
149B5897A (PN10) - 1 to 10 bar  
149B5897C (PN16) - 9 to 16 bar

APPROVAL : ACS



| Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|
| 149B 5891       | on request  | 60  |
| 149B 5892       | on request  | 65  |
| 149B 5893       | on request  | 80  |
| 149B 5894       | on request  | 100 |
| 149B 5895       | on request  | 125 |
| 149B 5896       | on request  | 150 |
| 149B 5897*      | on request  | 200 |

3 settings available A : 1 to 7 bar - B : 6 to 12 bar C : 10 to 16 bar

Dimensions at the end of the section.

**AB900 PN 25**

Relief valve for protecting the pipes against water hammering. Cast iron or steel cap, steel flange, polyurethane valve seal, steel spring.

PFA PRESSURE 25 bar

APPROVAL : ACS



3

| Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|
| 149B 009172     | on request  | 60  |
| 149B 009174     | on request  | 65  |
| 149B 009175     | on request  | 80  |
| 149B 009176     | on request  | 100 |
| 149B 009178     | on request  | 125 |
| 149B 009179     | on request  | 150 |

Spring : 16 to 25 bar

Dimensions at the end of the section.

**WATER DISTRIBUTION AND HOT WATER HEATING SYSTEMS****14BIS HP**

Safety valve with progressive opening @ 80°C

Casing : bronze - brass

Spring : stainless steel

14BIS HP : delivered unset and not safety sealed, settings from 2 to 15 bar

14BIS HP PL : delivered preset and safety sealed, settings from 2 to 15 bar (requested setting to be specified while ordering).

APPROVAL : ACS

**male/female**

| Legacy Part No.     | Part Number | DN   |
|---------------------|-------------|------|
| <b>male/female</b>  |             |      |
| 149B7089            | 10077172    | 3/8" |
| 149B7095            | 10060766    | 1/2" |
| 149B56836           | on request  | 3/4" |
| 149B7113            | 10060768    | 1"   |
| <b>14 BIS HP PL</b> |             |      |
| 149B7255            | 10078535    | 3/8" |
| 149B7096            | 10078917    | 1/2" |
| 149B7106            | 10060767    | 3/4" |
| 149B7114            | 10060769    | 1"   |

Dimensions at the end of the section.

### 14BIS BP

Safety valve with progressive opening @ 80°C

Casing : bronze - brass

Spring : stainless steel

14BIS BP : delivered unset and not safety sealed, setting from 0.5 to 1.9 bar

14BIS BP PL : delivered preset and safety sealed, settings from 0.9 to 1.9 bar (requested setting to be specified while ordering).

APPROVAL : ACS



#### male/female

| Legacy Part No.     | Part Number | DN   |
|---------------------|-------------|------|
| <b>male/female</b>  |             |      |
| 149B7077            | 10060765    | 3/8" |
| 149B7079            | on request  | 1/2" |
| 149B7081            | on request  | 3/4" |
| 149B7083            | on request  | 1"   |
| <b>14 BIS BP PL</b> |             |      |
| 149B7078            | on request  | 3/8" |
| 149B7080            | on request  | 1/2" |
| 149B7082            | on request  | 3/4" |
| 149B7084            | on request  | 1"   |

Dimensions at the end of the section.

### 14BIS HPT & 14BIS BPT

Safety valve with progressive opening @ 80°C

Casing : bronze - brass

Spring : stainless steel

14BIS HPT and 14BIS BPT : fitted with a PTFE coated disc for temperature higher than 80°C, up to 200°C

This valve is never preset or safety sealed

APPROVAL : ACS



#### male/female

| Legacy Part No.               | Part Number | DN   |
|-------------------------------|-------------|------|
| <b>14BIS HPT male/female</b>  |             |      |
| 149B7121                      | on request  | 3/8" |
| 149B7122                      | on request  | 1/2" |
| 149B7123                      | on request  | 3/4" |
| 149B7124                      | 10060770    | 1"   |
| <b>14 BIS BPT male/female</b> |             |      |
| 149B7085                      | on request  | 3/8" |
| 149B7086                      | on request  | 1/2" |
| 149B7087                      | on request  | 3/4" |
| 149B7088                      | on request  | 1"   |

Dimensions at the end of the section.

**EVACUATES PRESSURE FOR WATER APPLICATION****SV1821 - female / female**

θ 75°C

Settings : 1 to 12 bar maximum

No pre-setting in standard (on request, possibility to pre-set)

BODY : brass

SPRING : carboxylated steel C72

SEAL SEAT : NBR

**3**

| Legacy Part No. | Part Number | DN    |
|-----------------|-------------|-------|
| 149B6834        | 10060709    | 3/8"  |
| 149B6835        | 10060710    | 1/2"  |
| 149B6836        | 10060711    | 3/4"  |
| 149B6837        | 10060712    | 1"    |
| 149B6838        | 10060713    | 1"1/4 |
| 149B6839        | 10060714    | 1"1/2 |
| 149B6840        | 10060715    | 2"    |
| 149B6841        | 10060716    | 2"1/2 |
| 149B6842        | 10060717    | 3"    |

**RP204 - female / female**

GUARANTEED UPSTREAM PRESSURE 40 bar θ 80°C

Pressure gauge 1/4" connection

Spring : 1 to 7 bar

Preset : 3 bar

Membrane : EPDM

BODY : brass - Bronze DN 2" 1/2 to 4"

SEAT SEAL : EPDM

SEAT AND SPRING : stainless steel

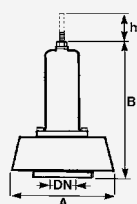
APPROVAL : ACS



| Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|
| 149B6670        | on request  | 15  |
| 149B6671        | 10060679    | 20  |
| 149B6672        | on request  | 25  |
| 149B6664        | on request  | 32  |
| 149B6665        | on request  | 40  |
| 149B6666        | on request  | 50  |
| 149B6667        | on request  | 65  |
| 149B6668        | on request  | 80  |
| 149B6673        | on request  | 100 |

## OVERALL DIMENSIONS

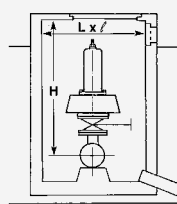
### Type AB900



Type AB900

| DN  | A mm | B mm | h mm | Kg  |
|-----|------|------|------|-----|
| 60  | 380  | 510  | 120  | 30  |
| 65  | 380  | 510  | 120  | 30  |
| 80  | 380  | 510  | 120  | 32  |
| 100 | 400  | 520  | 120  | 36  |
| 125 | 570  | 550  | 130  | 65  |
| 150 | 570  | 550  | 150  | 80  |
| 200 | 690  | 700  | 180  | 120 |

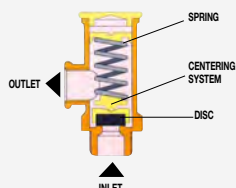
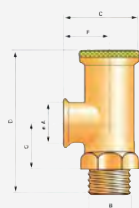
### Type AB900



Type AB900

| DN    | H mm | L x I mm    |
|-------|------|-------------|
| 60-65 | 1200 | 1500 x 1500 |
| 80    | 1200 | 1500 x 1500 |
| 100   | 1200 | 1500 x 1500 |
| 125   | 1500 | 1700 x 1700 |
| 150   | 1500 | 1700 x 1700 |
| 200   | 1700 | 1700 x 1700 |

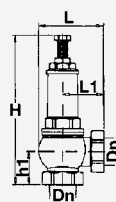
### 14BIS



Types  
 14BIS HP - 14BIS HP PL  
 14BIS BP - 14BIS BP PL  
 14BIS HPT - 14BIS BPT  
 male/female

| DN   | θ B mm | θ A mm | C mm | D mm | F mm | G mm | Kg    |
|------|--------|--------|------|------|------|------|-------|
| 3/8" | 12/17  | 12/17  | 40   | 71   | 24   | 20   | 0,165 |
| 1/2" | 15/21  | 12/17  | 40   | 71   | 24   | 20   | 0,170 |
| 3/4" | 20/27  | 15/21  | 48   | 83   | 28   | 26,5 | 0,290 |
| 1"   | 26/34  | 20/27  | 57   | 95   | 33   | 31,5 | 0,450 |

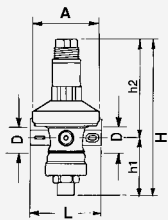
### SV1821



Type SV1821  
 female/female

| DN    | L mm | L1 mm | H mm | h1 mm |
|-------|------|-------|------|-------|
| 3/8"  | 45   | 24    | 118  | 25    |
| 1/2"  | 55   | 36    | 124  | 30    |
| 3/4"  | 64   | 40    | 148  | 32    |
| 1"    | 75   | 48    | 163  | 40    |
| 1"1/4 | 89   | 56    | 193  | 43    |
| 1"1/2 | 100  | 62    | 212  | 47    |
| 2"    | 123  | 75    | 238  | 60    |
| 2"1/2 | 146  | 87    | 300  | 75    |
| 3"    | 150  | 85    | 325  | 86    |

RP204

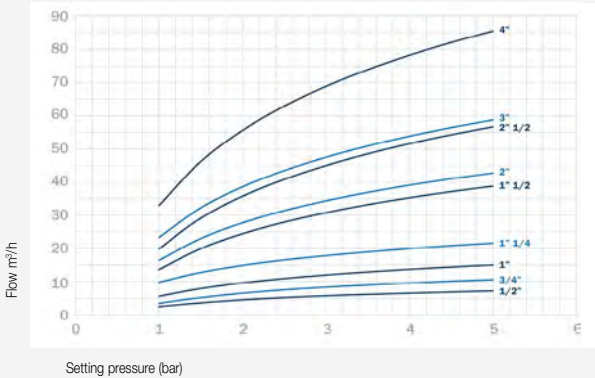


Type RP 204  
female/female

| DN  | D       |       | L<br>mm | A<br>mm | H<br>mm | h1<br>mm | h2<br>mm |
|-----|---------|-------|---------|---------|---------|----------|----------|
|     | mm      | "     |         |         |         |          |          |
| 15  | 15/21   | 1/2"  | 76      | 73      | 155,5   | 67,5     | 88       |
| 20  | 20/27   | 3/4"  | 91      | 89      | 196     | 73       | 123      |
| 25  | 26/34   | 1"    | 105     | 101     | 201     | 81       | 120      |
| 32  | 33/42   | 1"1/4 | 138     | 124     | 235     | 82,5     | 152,5    |
| 40  | 40/49   | 1"1/2 | 170     | 154     | 256     | 95       | 161      |
| 50  | 50/60   | 2"    | 184     | 169     | 270     | 92,5     | 177,5    |
| 65  | 66/76   | 2"1/2 | 206,5   | 180     | 330     | 121,5    | 208,5    |
| 80  | 80/90   | 3"    | 204     | 192     | 374     | 143      | 231      |
| 100 | 102/114 | 4"    | 274     | 262     | 495,5   | 175      | 320,5    |

HEADLOSS CHART

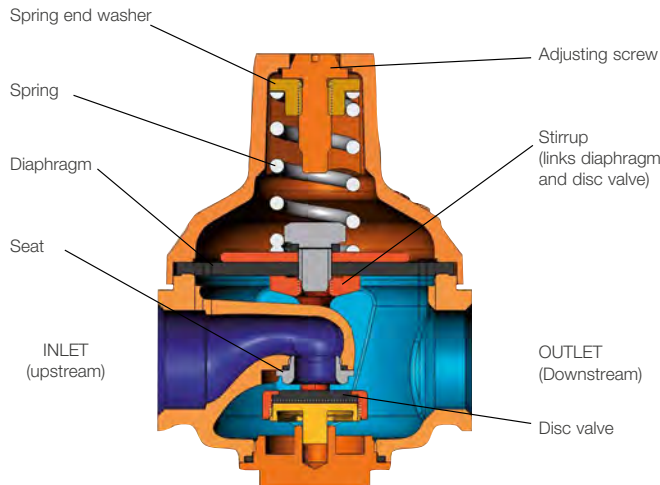
TYPE RP204



## Chapter 3.5

# Desbordes Pressure Reducing Valves

All pressure reducing valve bodies are made of bronze. Due to their design, they are not affected by scale or dirt, and do not need any maintenance. They are suitable for cold and hot water up to 80°C for a maximum upstream pressure of 25 bar and reduce pressure between 0.5 and 6 bar. They can be installed in any position if flow direction stipulated by the arrow is respected. They can be fitted on compressed air, neutral gases and fuel oil at ambient temperature circuits. Consult us for starting DN50 on compressed air and neutral gases applications. The ranges of figures 7, 8, 9, 10 and 11 are in accordance with the european standard EN1567. Serie 11 fulfils higher specification controlled by **NF** label. All pressure reducing valve bodies are guaranteed for 5 years.



The outlet pressure acts on the bottom face of the diaphragm, compressing the spring when it exceeds the pre-set value and thus closing the valve.

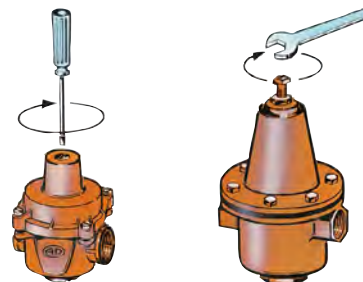
As long as no water is drawn off the downstream side (no flow condition), the outlet pressure is thus kept at the pre-set value.

When water is drawn off on the downstream side, the outlet pressure decreases and the spring pushes against the diaphragm, opening the valve. Under prolonged flow conditions, a self-damping effect occurs in the valve opening instead of a series of pulsating opening and closing movements.

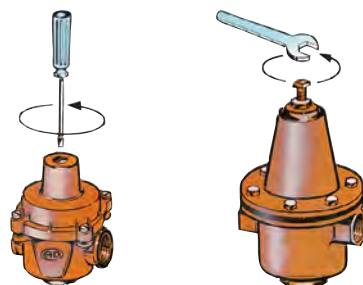
The Desbordes pressure reducing valve is also a pressure regulating valve.

## SETTING THE PRESSURE REDUCING VALVE

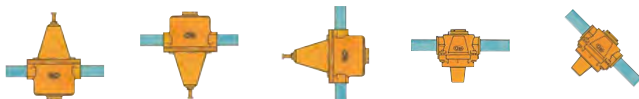
To increase downstream pressure :



To decrease downstream pressure :



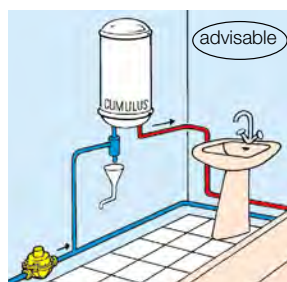
## INSTALLATION



In domestic water supply, the Desbordes pressure reducing valves are fitted just after the water meter and thus protect the whole installation.

If there is a frost risk, they should be drained.

They can be fitted in any position (horizontal, upside down, fluid ascending or reversed and inclined) but the direction of flow indicated by the engraved arrow on the valve body, must be respected.



The setting of the Desbordes pressure reducing valve must be operated under no flow condition. Downstream isolating valve must be shut. The static pressure will be adjusted.

To increase downstream pressure : tighten adjusting screw (clockwise).

To decrease downstream pressure :

- Slacken the adjusting screw (anticlockwise).

- Release the pressure by slightly opening a tap on the downstream side. Close the tap.

- Tight the adjustment screw again until requested pressure is reached.

A slight pressure drop on the downstream side is normal : it corresponds to the head loss of the valve itself.

## FOR WATER DISTRIBUTION DOMESTIC AND INDIVIDUAL

**10 & 10RC male / 10BIS & 10BISRC female/female**

Maximum upstream pressure 25 bar @ 80°C

10 : Pressure gauge connection at the bottom of the casing

10 BIS : With 1/4" plugs on both sides to allow pressure gauge connection

Possibility of assembly of compensating spring (except for 4" size) to obtain settings at 0.5 bar

Setting : from 1 to 6 bar (indicative value according to EN1567 standard)

Pre-set at 3 bar

CASING : bronze

APPROVALS : ACS

10 - 10BIS : 

| Legacy Part No. | Part Number | DN | Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|-----------------|-------------|----|
| <b>10</b>       |             |    | <b>10RC</b>     |             |    |
| 149B7000        | 10078337    | 15 | 149B7029        | 10087345    | 15 |
| 149B7001        | on request  | 20 | 149B7030        | on request  | 20 |
| 149B7002        | on request  | 25 | 149B7031        | on request  | 25 |

| Legacy Part No. | Part Number | DN  | Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|-----------------|-------------|-----|
| <b>10BIS</b>    |             |     | <b>10BIS RC</b> |             |     |
| 149B7003        | 10060730    | 10  | 149B7019        | on request  | 10  |
| 149B7004        | 10060731    | 15  | 149B7020        | 10060742    | 15  |
| 149B7005        | 10060732    | 20  | 149B7021        | 10078834    | 20  |
| 149B7006        | 10060733    | 25  | 149B7022        | 10060743    | 25  |
| 149B7007        | 10060734    | 32  | 149B7023        | 10060744    | 32  |
| 149B7008        | 10060735    | 40  | 149B7024        | on request  | 40  |
| 149B7009        | 10060736    | 50  | 149B7025        | on request  | 50  |
| 149B7011        | 10060737    | 65  | 149B7027        | on request  | 65  |
| 149B7012        | 10060738    | 80  | 149B7028        | on request  | 80  |
| 149B7225        | 10060796    | 100 | -               |             | 100 |



Dimensions at the end of the section.

**10TER & 10TER RC with flanges**

Maximum upstream pressure 16 bar @ 80°C

Flange drilling PN16

Standard EN1092.

With 1/4" plugs on both sides to allow pressure gauge connection

APPROVAL : ACS



| Legacy Part No. | Part Number | DN  | Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|-----------------|-------------|-----|
| <b>10 TER</b>   |             |     | <b>10TER RC</b> |             |     |
| 149B7032        | 10060745    | 32  | 149B7038        | on request  | 32  |
| 149B7033        | 10060746    | 40  | 149B7039        | on request  | 40  |
| 149B7034        | 10060747    | 50  | 149B7040        | 10060750    | 50  |
| 149B7036        | 10060748    | 65  | 149B7042        | on request  | 65  |
| 149B7037        | 10060749    | 80  | 149B7043        | 10060751    | 80  |
| 149B7226        | 10060797    | 100 | -               |             | 100 |

Dimensions at the end of the section.

## SEA WATER APPLICATIONS VERY AGGRESSIVE WATER

### 10 BIS BZ female/female

Maximum upstream pressure 25 bar @ 80°C

All internal components in Bronze

With 1/4" plugs on both sides to allow pressure gauge connection - Setting : from 1 to 6 bar (indicative value according to EN1567 standard)

APPROVAL : ACS

Manufactured on order only



| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| 149B7013        | 10060739    | 25 |
| 149B7014        | on request  | 32 |
| 149B7015        | 10060740    | 40 |
| 149B7016        | 10060741    | 50 |
| 149B7017        | on request  | 65 |
| 149B7018        | on request  | 80 |

Dimensions at the end of the section.

## SPARE PARTS

### for pressure reducers Ref. 10, 10 BIS and 10 TER

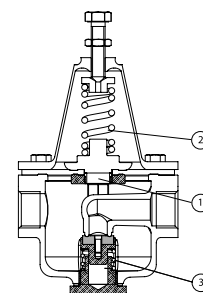
\* The complete stirrup includes :

the stirrup, the stirrup plug, the diaphragm, the seal and the counter seat, fully assembled.

DN100 : membrane (ref. 149F023362)

| 1. Complete stirrup*<br>Legacy Part No. | 1. Complete stirrup*<br>Part Number | DN  | mm      | "     |
|-----------------------------------------|-------------------------------------|-----|---------|-------|
| 149B7045                                | 10078795                            | 10  | 12/17   | 3/8   |
| 149B7045                                | 10078795                            | 15  | 15/21   | 1/2   |
| 149B7046                                | 10060752                            | 20  | 20/27   | 3/4   |
| 149B7047                                | 10060753                            | 25  | 26/34   | 1     |
| 149B7048                                | on request                          | 32  | 33/42   | 1 1/4 |
| 149B7049                                | 10060754                            | 40  | 40/49   | 1 1/2 |
| 149B7050                                | 10060755                            | 50  | 50/60   | 2     |
| 149B7052                                | 10060756                            | 65  | 66/76   | 2 1/2 |
| 149B7053                                | 10060757                            | 80  | 80/90   | 3     |
| consult us                              |                                     | 100 | 102/114 | 4     |

| 2. Setting spring<br>Legacy Part No. | 2. Setting spring<br>Part Number | DN  | mm      | "     |
|--------------------------------------|----------------------------------|-----|---------|-------|
| 149B7285                             | #N/A                             | 10  | 12/17   | 3/8   |
| 149B7285                             | #N/A                             | 15  | 15/21   | 1/2   |
| 149B7286                             | #N/A                             | 20  | 20/27   | 3/4   |
| 149B7287                             | 10060804                         | 25  | 26/34   | 1     |
| 149B7288                             | 10060805                         | 32  | 33/42   | 1 1/4 |
| 149B7289                             | 10060806                         | 40  | 40/49   | 1 1/2 |
| 149B7290                             | 10060807                         | 50  | 50/60   | 2     |
| 149F025528                           | 10060808                         | 65  | 66/76   | 2 1/2 |
| 149B7293                             | 10060809                         | 80  | 80/90   | 3     |
|                                      |                                  | 100 | 102/114 | 4     |



## SPARE PARTS (CONTINUED)

| 3. Compensating<br>spring<br>Legacy<br>Part No. | 3. Compensating<br>spring<br>Part<br>Number | DN  | mm      | "                |
|-------------------------------------------------|---------------------------------------------|-----|---------|------------------|
| 149F025550                                      | on request                                  | 10  | 12/17   | 3/8              |
| 149F025550                                      | on request                                  | 15  | 15/21   | 1/2              |
| 149B7354                                        | on request                                  | 20  | 20/27   | 3/4              |
| 149F025552                                      | on request                                  | 25  | 26/34   | 1                |
| 149B7356                                        | on request                                  | 32  | 33/42   | 1 <sup>1/4</sup> |
| 149F025554                                      | on request                                  | 40  | 40/49   | 1 <sup>1/2</sup> |
| 149F025555                                      | on request                                  | 50  | 50/60   | 2                |
| 149F025556                                      | on request                                  | 65  | 66/76   | 2 <sup>1/2</sup> |
| 149F025557                                      | on request                                  | 80  | 80/90   | 3                |
|                                                 |                                             | 100 | 102/114 | 4                |

## Pressure gauge nipple - 487 female/male

Female/male with 1/4" plug

Casing in bronze



| Legacy<br>Part No. | Part<br>Number | DN               |       |
|--------------------|----------------|------------------|-------|
| 149B7179           | 10060785       | 1/2              | 15/21 |
| 149B7180           | 10060786       | 3/4              | 20/27 |
| 149B7181           | 10060787       | 1                | 26/34 |
| 149B7182           | 10060788       | 1 <sup>1/4</sup> | 33/42 |
| 149B7183           | on request     | 1 <sup>1/2</sup> | 40/49 |
| 149B7184           | 10060789       | 2                | 50/60 |
| 149B7185           | on request     | 2 <sup>1/4</sup> | 60/70 |
| 149B7186           | 10060790       | 2 <sup>1/2</sup> | 66/76 |
| 149B7187           | 10060791       | 3                | 80/90 |

## FLATS AND HOUSES INDIVIDUAL WATER SUPPLY

**11 & 11RC male/male / 11BIS & 10BISRC female/female / 11EP female/male**

Maximum upstream pressure 25 bar @ 80°C

Downstream setting : 1 to 5.5 bar (indicative value according to EN1567 standard)

Possibility of assembly of compensating spring to obtain settings at 0.5 bar

With 1/4" plugs on both sides to allow pressure gauge connection

Pre-set at 3 bar

casing : bronze

seat : stainless steel DN 15 and 20

11 : male/male

11 BIS : female/female

11 EP : union-nut/male

APPROVALS : ACS   : DN15-20-25  
: (11-11BIS)

| Legacy Part No. | Part Number | DN | Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|-----------------|-------------|----|
| <b>11</b>       |             |    | <b>11RC</b>     |             |    |
| 149B7054        | 10060758    | 15 | 149B7068        | 10060764    | 15 |
| 149B7055        | 10060759    | 20 | 149B7069        | on request  | 20 |
| 149B7489        | on request  | 25 |                 |             |    |
| 149B7548        | 10079388    | 32 |                 |             |    |
| 149B7567        | 10079801    | 40 |                 |             |    |
| 149B7565        | on request  | 50 |                 |             |    |

| Legacy Part No. | Part Number | DN | Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|-----------------|-------------|----|
| <b>11BIS</b>    |             |    | <b>11BIS RC</b> |             |    |
| 149B7056        | 10060760    | 15 | 149B7063        | 10060762    | 15 |
| 149B7057        | 10060761    | 20 | 149B7064        | 10060763    | 20 |
| 149B7314        | 10060811    | 25 |                 |             |    |
| 149B7549        | 10060822    | 32 |                 |             |    |
| 149B7558        | 10060828    | 40 |                 |             |    |
| 149B7561        | 10060830    | 50 |                 |             |    |

| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| <b>11EP</b>     |             |    |
| 149B7511        | on request  | 20 |



Dimensions at the end of the section.

## FLATS AND HOUSES INDIVIDUAL WATER SUPPLY

**11 DO male/male**

Maximum upstream pressure 25 bar @ 80°C

Settings : from 1 bar to 5.5 bar (indicative value according to EN1567 standard)

Delivered pre-set at 3 bar

Equipped with 2 plugs 1/4" on each side to allow the mounting of a pressure gauge and 2 fittings removables

casing : bronze

COVER : Bronze (\*cover : composite material)

seat : stainless steel

APPROVALS : ACS  : DN15-20-25

| Legacy Part No. | Part Number | DN | Legacy Part No. | Part Number | DN  |
|-----------------|-------------|----|-----------------|-------------|-----|
|                 | <b>11</b>   |    |                 | <b>11RC</b> |     |
| 149B7640        | 10060844    | 15 | 149B7218        | 10060795    | 20* |
| 149B7641        | 10060845    | 20 |                 |             |     |
| 149B7228        | 10060798    | 25 |                 |             |     |
| 149B7550        | 10060823    | 32 |                 |             |     |
| 149B7559        | 10060829    | 40 |                 |             |     |
| 149B7562        | 10060831    | 50 |                 |             |     |

Dimensions at the end of the section.

## VERY LOW PRESSURE, AGRICULTURE, IRRIGATION, LABORATORY

**11BIS RCBP female/female**

Maximum upstream pressure 10 bar @ 80°C

Settings : from 0.1 bar to 0.6 bar

With 1/4" plugs on both sides to allow pressure gauge connection

Table of flow available on request

Casing : bronze

Seat : stainless steel

APPROVAL : ACS



| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| 149B7065        | on request  | 20 |

Dimensions at the end of the section.

## MULTI 7 - FLATS AND HOUSES INDIVIDUAL WATER SUPPLY

**MULTI 7 MULTI CONNECTIONS**

Maximum upstream pressure 16 bar @ 80°C

With 1/4" plugs on both sides to allow pressure gauge connection

CASING : Bronze - Pre-set at 3 bar

Downstream setting : 1 to 5.5 bar (indicative value according to EN1567 standard)

Delivered with 3 nuts allowing 16 different connecting possibilities in 1/2" and 3/4"

APPROVAL : ACS



| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| 149B7540        | 10060821    | 20 |

Dimensions at the end of the section.

## JUNIOR - FLATS AND HOUSES INDIVIDUAL WATER SUPPLY

### JUNIOR

Maximum upstream pressure 16 bar @ 80°C

With 1/4" plugs on both sides to allow pressure gauge connection

Downstream setting : 1 to 5.5 bar (indicative value according to EN1567 standard)

Possibility to set-up pre-set at 3 bar downstream

casing : bronze

APPROVAL : ACS

7BIS : female/female

7EP : union-nut/male

7SP : male/union-nut



| Legacy Part No.             | Part Number | DN |
|-----------------------------|-------------|----|
| <b>7BIS - female/female</b> |             |    |
| 149B7209                    | 10060792    | 15 |
| 149B7210                    | 10060793    | 20 |
| 149B7552                    | 10060824    | 25 |
| 149B7553                    | 10060825    | 32 |
| 149B7554                    | 10060826    | 40 |
| 149B7555                    | 10060827    | 50 |

| Legacy Part No.          | Part Number | DN |
|--------------------------|-------------|----|
| <b>7EP - female/male</b> |             |    |
| 149B7211                 | 10079655    | 15 |
| 149B7212                 | on request  | 20 |



| Legacy Part No.          | Part Number | DN |
|--------------------------|-------------|----|
| <b>7SP - male/female</b> |             |    |
| 149B7248                 | on request  | 20 |



Dimensions at the end of the section.

## PROTECTION OF INDIVIDUAL DEVICE, WATER HEATER

### SECURO 5 SP male/female

Maximum upstream pressure 16 bar @ 80°C

1/4" pressure gauge connection and drain at the bottom of the casing

Downstream setting : 1 to 5.5 bar (indicative value according to EN1567 standard) - Possibility to set-up pre-set at 3 bar downstream

Casing : chrome plated bronze

Upstream connection : male, downstream : with union nut

APPROVAL : ACS



| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| 149B7312        | 10060810    | 20 |

Dimensions at the end of the section.

## WATER SUPPLY OF HOUSE BLOCKS, COLLECTIVE HOUSING

**REDUNEUF 9 male/male & 9 BIS female/female**

Maximum upstream pressure 25 bar @ 80°C

Non-adjustable set at 3 bar

With 1/4" plugs on both sides to allow pressure gauge connection

Casing : bronze

Seat in stainless steel

APPROVALS :  ACS

3

| Legacy Part No.    | Part Number | DN |
|--------------------|-------------|----|
| <b>9 male/male</b> |             |    |
| 149B7219           | on request  | 15 |
| 149B7220           | on request  | 20 |
| 149B7221           | on request  | 25 |

| Legacy Part No.           | Part Number | DN |
|---------------------------|-------------|----|
| <b>9BIS female/female</b> |             |    |
| 149B7222                  | on request  | 15 |
| 149B7223                  | on request  | 20 |
| 149B7224                  | on request  | 25 |



Dimensions at the end of the section.

**PRESSURE REDUCING VALVE QUATRO****12 BIS SR female / female**

Maximum upstream pressure 25 bar @ 80°C

Pressure reducing valve - setting from 1 to 5.5 bar (indicative value according to EN1567 standard)

Antipollution check valve

Drain valve to allow the emptying of the downstream installation

Pre-set at 3 bar

With 1/4" plugs on both sides to allow pressure gauge connection

APPROVAL : ACS

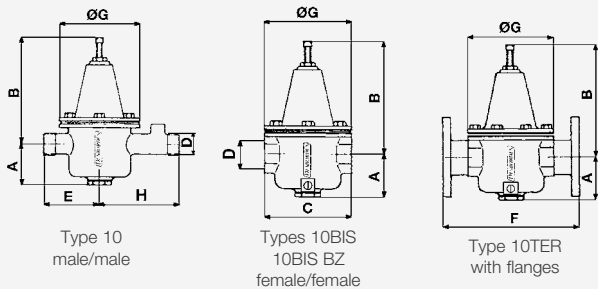


| Legacy Part No. | Part Number | DN |
|-----------------|-------------|----|
| 149B7076        | on request  | 20 |

Dimensions at the end of the section.

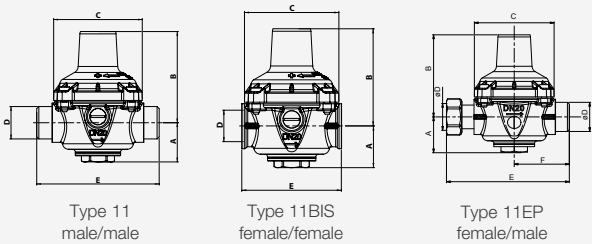
OVERALL DIMENSIONS

Type 10



| D   |       | D       | A   | B   | C   | E  | F   | G   | H   | Kg   |       |       |         |
|-----|-------|---------|-----|-----|-----|----|-----|-----|-----|------|-------|-------|---------|
|     |       | mm      | "   | mm  | mm  | mm | mm  | mm  | mm  | 10   | 10BIS | 10TER | 10BISBZ |
| 10  | 3/8   | 12/17   | 48  | 120 | 92  | 65 | -   | 92  | 95  | 1,3  | 1,25  | -     | -       |
| 15  | 1/2   | 15/21   | 48  | 120 | 92  | 65 | -   | 92  | 95  | 1,3  | 1,25  | -     | -       |
| 20  | 3/4   | 20/27   | 55  | 130 | 108 | 78 | -   | 108 | 102 | 1,90 | 1,75  | -     | -       |
| 25  | 1     | 26/34   | 60  | 160 | 123 | 88 | -   | 123 | 116 | 2,6  | 2,70  | -     | 2,70    |
| 32  | 1 1/4 | 33/42   | 77  | 180 | 155 | -  | 240 | 155 | -   | 4,80 | 8,50  | 4,80  |         |
| 40  | 1 1/2 | 40/49   | 84  | 205 | 172 | -  | 260 | 172 | -   | 6,50 | 10,9  | 6,50  |         |
| 50  | 2     | 50/60   | 105 | 235 | 198 | -  | 288 | 198 | -   | 9,80 | 14,3  | 9,80  |         |
| 65  | 2 1/2 | 66/76   | 118 | 270 | 215 | -  | 305 | 215 | -   | 13,5 | 21,3  | 13,5  |         |
| 80  | 3     | 80/90   | 143 | 300 | 234 | -  | 330 | 234 | -   | 17,9 | 27,9  | 17,9  |         |
| 100 | 4     | 102/114 | 120 | 350 | 250 | -  | 385 | 260 | -   | 33,6 | 50,0  | -     |         |

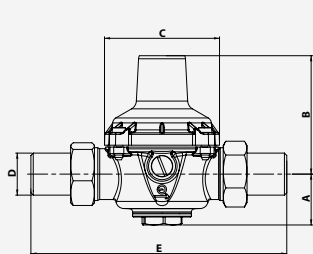
Type 11



| DN | D     |       | A  | B   | C   | E   | E    | Kg      |            |
|----|-------|-------|----|-----|-----|-----|------|---------|------------|
|    | mm    | "     |    |     |     |     |      | Ref. 11 | Ref. 11bis |
| 15 | 15/21 | 1/2   | 31 | 60  | 59  | 85  | 66   | 0,70    | 0,70       |
| 20 | 20/27 | 3/4   | 32 | 75  | 73  | 100 | 76,5 | 0,90    | 0,90       |
| 25 | 26/34 | 1     | 40 | 102 | 94  | 122 | 98   | 2,00    | 1,90       |
| 32 | 33/42 | 1 1/4 | 51 | 179 | 104 | 132 | 126  | 3,90    | 3,90       |
| 40 | 40/49 | 1 1/2 | 46 | 185 | 104 | 132 | 132  | 5,00    | 4,20       |
| 50 | 50/60 | 2     | 54 | 194 | 104 | 146 | 146  | 5,30    | 5,20       |

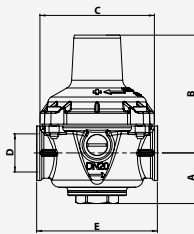
| DN | D     |     | A  | B  | E   | F  | C  | Kg   |
|----|-------|-----|----|----|-----|----|----|------|
|    | mm    | "   |    |    |     |    |    |      |
| 20 | 20/27 | 3/4 | 31 | 75 | 112 | 50 | 73 | 0,88 |

Type 11DO



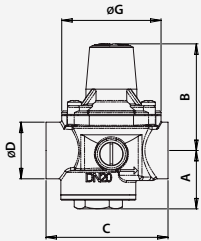
| DN | D     |       | A  | B   | C   | E   | Kg   |
|----|-------|-------|----|-----|-----|-----|------|
|    | mm    | "     |    |     |     |     |      |
| 15 | 15/21 | 1/2   | 31 | 60  | 59  | 140 | 0,90 |
| 20 | 20/27 | 3/4   | 32 | 75  | 73  | 160 | 1,30 |
| 25 | 26/34 | 1     | 40 | 102 | 94  | 180 | 2,50 |
| 32 | 33/42 | 1 1/4 | 51 | 179 | 104 | 200 | 4,60 |
| 40 | 40/49 | 1 1/2 | 46 | 185 | 104 | 220 | 5,00 |
| 50 | 50/60 | 2     | 54 | 194 | 104 | 250 | 5,50 |

Type 11BIS RCBP



| DN | D     |     | A  | B  | C  | E    | Kg   |
|----|-------|-----|----|----|----|------|------|
|    | mm    | "   |    |    |    |      |      |
| 20 | 20/27 | 3/4 | 32 | 75 | 73 | 76,5 | 0,92 |

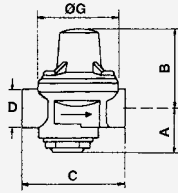
MULTI 7



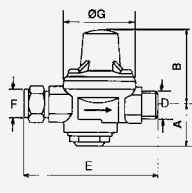
Type MULTI 7  
multi connections

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | G<br>mm |
|----|-------|-----|---------|---------|---------|---------|
|    | mm    | "   |         |         |         |         |
| 20 | 20/27 | 3/4 | 33      | 61      | 70      | 57      |

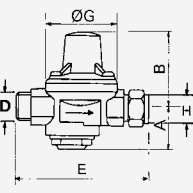
7 Junior



Type 7BIS  
female/female



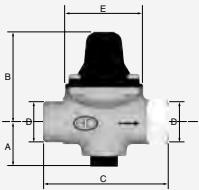
Type 7EP  
female/male



Type 7SP  
male/female

| D  | D     |       | A<br>mm | B<br>mm | C<br>mm | E<br>mm | F<br>" | G<br>mm | H<br>" | Kg   |     |     |
|----|-------|-------|---------|---------|---------|---------|--------|---------|--------|------|-----|-----|
|    | mm    | "     |         |         |         |         |        |         |        | 7BIS | 7EP | 7SP |
| 15 | 15/21 | 1/2   | 30      | 56      | 64,5    | 92      | 3/4    | 50      | -      | 0,5  | 0,5 | -   |
| 20 | 20/27 | 3/4   | 33,5    | 61      | 70      | 95      | 3/4    | 57      | 3/4    | 0,6  | 0,8 | 0,8 |
| 25 | 26/34 | 1     | 30      | 68      | 81      | -       | -      | 70      | -      | 0,95 | -   | -   |
| 32 | 33/42 | 1 1/4 | 34,5    | 91      | 97      | -       | -      | 81      | -      | 1,55 | -   | -   |
| 40 | 40/49 | 1 1/2 | 36,5    | 106     | 110     | -       | -      | 92      | -      | 2,05 | -   | -   |
| 50 | 50/60 | 2     | 45,5    | 106     | 135     | -       | -      | 120     | -      | 3,70 | -   | -   |

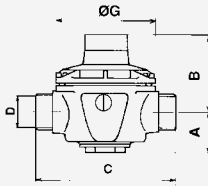
5 SP



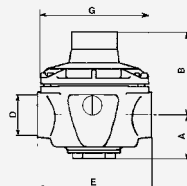
Type 5 SP  
male/female

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | E<br>mm | kg  |
|----|-------|-----|---------|---------|---------|---------|-----|
|    | mm    | "   |         |         |         |         |     |
| 20 | 20/27 | 3/4 | 29      | 58      | 82      | 50      | 0,4 |

Type 9



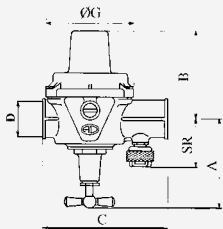
Type 9  
male/male



Type 9BIS  
female/female

| DN | D     |     | A<br>mm | B<br>mm | E<br>mm | C<br>mm | G<br>mm | Kg   |       |
|----|-------|-----|---------|---------|---------|---------|---------|------|-------|
|    | mm    | "   |         |         |         |         |         | 9    | 9 BIS |
| 15 | 15/21 | 1/2 | 31      | 53      | 66      | 85      | 59      | 0,55 | 0,56  |
| 20 | 20/27 | 3/4 | 31      | 59      | 76,5    | 100     | 73      | 0,78 | 0,84  |
| 25 | 26/34 | 1   | 43      | 66      | 98      | 122     | 94      | 1,45 | 1,54  |

12BIS



Type 12BIS  
female/female

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | G<br>mm | SR<br>mm | kg   |
|----|-------|-----|---------|---------|---------|---------|----------|------|
|    | mm    | "   |         |         |         |         |          |      |
| 20 | 20/27 | 3/4 | 78      | 75      | 104     | 73      | 44       | 1.05 |

## Chapter 3.6

## Miscellaneous

## WATER HAMMER ARRESTORS

**21 Range**Cold or Hot water  $\theta$  80°C

Shown in chrome plated version

To be placed at the closest point to the water hammer generating area

Operating pressure 3 bar, maxi 5 bar (for upper pressure, see industrial anti-water hammer devices)

APPROVAL : ACS

21 : water hammer arrestor for straight line

21BIS D : water hammer arrestor for straight line

21BIS E : angle water hammer arrestor

21BIS EB : vertical dead end water hammer arrestor

21BISFLEX : straight line water hammer arrestor with flexible hose

| Legacy<br>Part No.              | Part<br>Number | DN |
|---------------------------------|----------------|----|
| <b>21 male/male</b>             |                |    |
| 149B7138                        | 10079628       | 20 |
| <b>21BIS D female/female</b>    |                |    |
| 149B7243                        | on request     | 15 |
| <b>21BIS E female/female</b>    |                |    |
| 149B7244                        | on request     | 15 |
| <b>21BIS EB female</b>          |                |    |
| 149B7245                        | on request     | 20 |
| <b>21BIS Flex female/female</b> |                |    |
| 149B7246                        | on request     | 15 |

Dimensions at the end of the section.



21



21BIS D



21BIS E



21BIS EB



21BIS FLEX

## PRESSURE GAUGES

**212AD**

«PRESSADE» gauge for quick inspection of pressure on any orifice from 8 to 20 mm

Rubber connection

Dial from 0 to 10 bar



| Legacy Part No. | Part Number |
|-----------------|-------------|
| 149B7145        | 10060777    |

**2212 B male**

Gauge with central needle

ABS casing

Male thread 1/4" vertical

Diameter 50 mm



| Legacy Part No. | Part Number | Scale in bar |
|-----------------|-------------|--------------|
| 149B7157        | on request  | 1            |
| 149B7161        | on request  | 4            |
| 149B7162        | 10060780    | 6            |
| 149B7158        | on request  | 10           |
| 149B7159        | 10060779    | 16           |
| 149B7160        | on request  | 25           |

**212G male**

Gauge with glycerine bath - Glycerine bath protects from vibrations

Stainless steel casing

Male thread 1/4" vertical

Diameter 60 mm



| Legacy Part No. | Part Number | Scale in bar |
|-----------------|-------------|--------------|
| 149B7139        | 10060773    | 1            |
| 149B7143        | on request  | 4            |
| 149B7144        | 10060776    | 6            |
| 149B7140        | 10060774    | 10           |
| 149B7141        | 10060775    | 16           |
| 149B7142        | on request  | 25           |

**3212 B male**

Gauge with central needle

ABS casing with axial connection

Male thread 1/4" horizontal

Diameter 50 mm



| Legacy Part No. | Part Number | Scale in bar |
|-----------------|-------------|--------------|
| 149B7176        | on request  | 4            |
| 149B7177        | 10060783    | 6            |
| 149B7174        | 10060781    | 10           |
| 149B7175        | 10060782    | 16           |

### 312 G male

Gauge with glycerine bath  
Glycerine bath protects from vibrations  
Stainless steel casing with axial connection  
Male thread 1/4" vertical  
Diameter 60 mm



| Legacy Part No. | Part Number | Scale in bar |
|-----------------|-------------|--------------|
| 149B7176        | on request  | 4            |
| 149B7177        | 10060783    | 6            |
| 149B7174        | 10060781    | 10           |
| 149B7175        | 10060782    | 16           |

### 213 BIS male/female

Stop valve in brass with automatic drain cock  
Male thread 1/4" Female output



| Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|
| 149B7156        | 10060778    | 1/4 |
| 149B7155        | on request  | 3/8 |

## PRESSURE SWITCHES

### Pressure Switch CS

θ 60°C

Pressure switch CS - Pressure switch triphased and monophased.  
2 to 20 bar, 12 amperes, 220-415 volt, IP43, 1/2" connections.  
For control of boosting pumps, hydrophoric groups



| Legacy Part No.<br>without valve | Part Number<br>without valve | Setting range (*)<br>(bar) | Legacy Part No.<br>with valve<br>compression | Part Number<br>with valve<br>compression | Setting range (*)<br>(bar) |
|----------------------------------|------------------------------|----------------------------|----------------------------------------------|------------------------------------------|----------------------------|
| 149B 5906                        | 10060641                     | 2 - 6                      | 149B 5909                                    | 10060643                                 | 2 - 6                      |
| 149B 5907                        | 10060642                     | 4 - 12                     | 149B 5910                                    | 10060644                                 | 4 - 12                     |
| 1                                |                              | UV                         | 1                                            |                                          | UV                         |

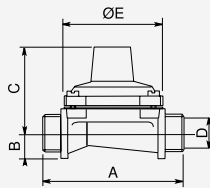
\*Air Pressure

### Accessories

DECOMPRESSION VALVE  
To be mounted on pressure switch CS (above)

| Legacy Part No.<br>without valve | Part Number<br>without valve | UV |
|----------------------------------|------------------------------|----|
| 149B 5905                        | 10060640                     | 1  |

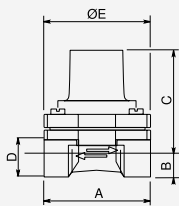
21



Type 21  
male/male

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | E<br>mm | kg   |
|----|-------|-----|---------|---------|---------|---------|------|
|    | mm    | "   |         |         |         |         |      |
| 20 | 20/27 | 3/4 | 100     | 18,0    | 61,0    | 72,5    | 0,75 |

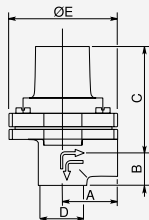
21BIS D



Type 21BIS D  
female/female

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | E<br>mm | kg   |
|----|-------|-----|---------|---------|---------|---------|------|
|    | mm    | "   |         |         |         |         |      |
| 15 | 15/21 | 1/2 | 59,0    | 13,5    | 59,0    | 59,0    | 0,50 |

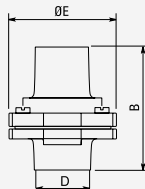
21BIS E



Type 21BIS E  
female/female

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | E<br>mm | kg   |
|----|-------|-----|---------|---------|---------|---------|------|
|    | mm    | "   |         |         |         |         |      |
| 15 | 15/21 | 1/2 | 29,5    | 17,0    | 59,0    | 59,0    | 0,50 |

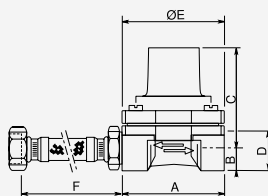
21BIS EB



Type 21BIS EB  
female

| DN | D     |     | E<br>mm | B<br>mm | kg   |
|----|-------|-----|---------|---------|------|
|    | mm    | "   |         |         |      |
| 20 | 20/27 | 3/4 | 59,0    | 66,0    | 0,45 |

21BIS FLEX



Type 21BIS FLEX  
female/female

| DN | D     |     | A<br>mm | B<br>mm | C<br>mm | E<br>mm | F<br>mm | kg   |
|----|-------|-----|---------|---------|---------|---------|---------|------|
|    | mm    | "   |         |         |         |         |         |      |
| 15 | 15/21 | 1/2 | 59,0    | 13,5    | 59,0    | 59,0    | 130     | 0,50 |

## Chapter 3.7

## Solenoid Valves

## SOLENOID VALVES

## INDIRECT ACTION, NORMALLY CLOSED - WKB2 female/female

θ max 100°C

Membrane solenoid valve, indirect action (pilot) normally closed. 2 ways. Brass body. Brass and stainless steel inner system.

EPDM membrane (-30°C +100°C).

Operating pressure : please consult us

FKM membrane (0°C +100°C).

Operating pressure : please consult us

Protection : IP 65 with connection

Option : manual action on request

Approval : **WRAS** (EPDM version )  
ACS



| Legacy<br>Part No.<br>220V/50Hz | Part<br>Number<br>220V/50Hz | Legacy<br>Part No.<br>24V/50Hz | Part<br>Number<br>24V/50Hz | Legacy<br>Part No.<br>24DC | Part<br>Number<br>24DC | Ø<br>“ mm | UV   |
|---------------------------------|-----------------------------|--------------------------------|----------------------------|----------------------------|------------------------|-----------|------|
| <b>EPDM</b>                     |                             |                                |                            |                            |                        |           |      |
| 149B 6699                       | 10060680                    | 149B 6706                      | on request                 | 149B 6713                  | 10060686               | 3/8       | 12 1 |
| 149B 6700                       | 10029359                    | 149B 6707                      | 10060683                   | 149B 6714                  | 10060687               | 1/2       | 15 1 |
| 149B 6701                       | 10060681                    | 149B 6708                      | 10046046                   | 149B 6715                  | 10060688               | 3/4       | 20 1 |
| 149B 6702                       | 10045761                    | 149B 6709                      | 10046047                   | 149B 6716                  | 10060689               | 1         | 25 1 |
| 149B 6703                       | on request                  | 149B 6710                      | 10060684                   | 149B 6717                  | 10060690               | 1 1/4     | 32 1 |
| 149B 6704                       | 10045763                    | 149B 6711                      | 10060685                   | 149B 6718                  | 10060691               | 1 1/2     | 40 1 |
| 149B 6703V                      | on request                  | 149B 6710V                     | on request                 | 149B 6717V                 | on request             | 1 1/4     | 32 1 |
| 149B 6704V                      | on request                  | 149B 6711V                     | on request                 | 149B 6718V                 | on request             | 1 1/2     | 40 1 |
| 149B 6705V                      | on request                  | 149B 6712V                     | on request                 | 149B 6719V                 | 10064822               | 2         | 50 1 |
| <b>FKM</b>                      |                             |                                |                            |                            |                        |           |      |
| 149B 6705                       | 10045764                    | 149B 6712                      | on request                 | 149B 6719                  | on request             | 2         | 50 1 |
| 149B 6699V                      | on request                  | 149B 6706V                     | on request                 | 149B 6713V                 | on request             | 3/8       | 12 1 |
| 149B 6700V                      | 10064811                    | 149B 6707V                     | on request                 | 149B 6714V                 | 10064821               | 1/2       | 15 1 |
| 149B 6701V                      | on request                  | 149B 6708V                     | on request                 | 149B 6715V                 | on request             | 3/4       | 20 1 |
| 149B 6702V                      | 10064816                    | 149B 6709V                     | on request                 | 149B 6716V                 | on request             | 1         | 25 1 |

Dimensions at the end of the section.

**INDIRECT ACTION, NORMALLY OPEN - WZB2 female/female**

θ max 100°C

Membrane solenoid valve, indirect action (pilot) normally open. 2 ways. Brass body. Brass and stainless steel inner system.

EPDM membrane (-30°C +100°C).

Operating pressure : please consult us

FKM membrane (0°C +100°C).

Operating pressure : please consult us

Protection : IP 65 with connection

Approval : **WRAS** (EPDM version )  
ACS

| Legacy Part No.<br>220V/50Hz | Part Number<br>220V/50Hz | Legacy Part No.<br>24V/50Hz | Part Number<br>24V/50Hz | Legacy Part No.<br>24DC | Part Number<br>24DC | Ø<br>“ mm | UV |
|------------------------------|--------------------------|-----------------------------|-------------------------|-------------------------|---------------------|-----------|----|
| <b>EPDM</b>                  |                          |                             |                         |                         |                     |           |    |
| 149B 6720                    | on request               | 149B 6727                   | on request              | 149B 6734               | on request          | 3/8 12    | 1  |
| 149B 6721                    | 10046287                 | 149B 6728                   | 10078796                | 149B 6735               | 10060697            | 1/2 15    | 1  |
| 149B 6722                    | 10041716                 | 149B 6729                   | 10078376                | 149B 6736               | 10060698            | 3/4 20    | 1  |
| 149B 6723                    | 10041717                 | 149B 6730                   | on request              | 149B 6737               | on request          | 1 25      | 1  |
| 149B 6724                    | 10041718                 | 149B 6731                   | 10078375                | 149B 6738               | on request          | 1 1/4 32  | 1  |
| 149B 6725                    | 10041719                 | 149B 6732                   | on request              | 149B 6739               | on request          | 1 1/2 40  | 1  |
| 149B 6726                    | 10060695                 | 149B 6733                   | 10060696                | 149B 6740               | on request          | 2 50      | 1  |
| <b>FKM</b>                   |                          |                             |                         |                         |                     |           |    |
| 149B 6720V                   | on request               | 149B 6727V                  | on request              | 149B 6734V              | on request          | 3/8 12    | 1  |
| 149B 6721V                   | on request               | 149B 6728V                  | on request              | 149B 6735V              | on request          | 1/2 15    | 1  |
| 149B 6722V                   | on request               | 149B 6729V                  | on request              | 149B 6736V              | on request          | 3/4 20    | 1  |
| 149B 6723V                   | 10064825                 | 149B 6730V                  | on request              | 149B 6737V              | on request          | 1 25      | 1  |
| 149B 6724V                   | on request               | 149B 6731V                  | on request              | 149B 6738V              | on request          | 1 1/4 32  | 1  |
| 149B 6725V                   | on request               | 149B 6732V                  | on request              | 149B 6739V              | on request          | 1 1/2 40  | 1  |
| 149B 6726V                   | on request               | 149B 6733V                  | on request              | 149B 6740V              | on request          | 2 50      | 1  |

Dimensions at the end of the section.

**INDIRECT ACTION, DIRECT ACTION 1/8", 1/4" - WB12 female/female**

θ max 100°C

Membrane solenoid valve, indirect action (pilot) except 1/8", 1/4" direct action normally closed. 2 ways. 316 stainless steel body and stainless steel inner system. FKM membrane (0°C +100°C).

DN 1/8-1/4 (-10°C to + 100°C).

Operating pressure : please consult us.

Protection IP65 with connection.

Option : manual action on request except 1/4", 1/8"



| Legacy Part No.<br>220V/50Hz<br>9W | Part Number<br>220V/50Hz<br>9W | Legacy Part No.<br>24V/50Hz<br>9W | Part Number<br>24V/50Hz<br>9W | Legacy Part No.<br>24DC 15W | Part Number<br>24DC 15W | Ø<br>“ mm | UV |
|------------------------------------|--------------------------------|-----------------------------------|-------------------------------|-----------------------------|-------------------------|-----------|----|
| 149B 6741                          | on request                     | 149B 6749                         | on request                    | 149B 6757                   | on request              | 1/8 3     | 1  |
| 149B 6742                          | on request                     | 149B 6750                         | on request                    | 149B 6758                   | 10082426                | 1/4 4,5   | 1  |
| 149B 6743                          | on request                     | 149B 6751                         | on request                    | 149B 6759                   | on request              | 3/8 15    | 1  |
| 149B 6744                          | on request                     | 149B 6752                         | on request                    | 149B 6760                   | on request              | 1/2 15    | 1  |
| 149B 6745                          | on request                     | 149B 6753                         | on request                    | 149B 6761                   | on request              | 3/4 20    | 1  |
| 149B 6746                          | on request                     | 149B 6754                         | on request                    | 149B 6762                   | on request              | 1 25      | 1  |
| 149B 6747                          | on request                     | 149B 6755                         | on request                    | 149B 6763                   | on request              | 1 1/4 32  | 1  |
| 149B 6748                          | on request                     | 149B 6756                         | on request                    | 149B 6764                   | on request              | 1 1/2 40  | 1  |

Dimensions at the end of the section.

### INDIRECT ACTION, NORMALLY CLOSED - WZE2 female/female

θ max 100°C

Membrane solenoid valve, indirect action (pilot) normally closed. 2 ways. brass body, brass and stainless steel inner system.

EPDM membrane (-30°C +100°C).

Operating pressure : please consult us

Protection : IP 65 with connection

Approval : **WRAS** ACS



| Legacy Part No.<br>220V/50Hz | Part Number<br>220V/50Hz | Legacy Part No.<br>24V/50Hz | Part Number<br>24V/50Hz | Legacy Part No.<br>24DC | Part Number<br>24DC | Ø<br>“ mm | UV |
|------------------------------|--------------------------|-----------------------------|-------------------------|-------------------------|---------------------|-----------|----|
| 149B 6765                    | 10060699                 | 149B 6768                   | on request              | 149B 6771               | on request          | 3/8 10    | 1  |
| 149B 6766                    | 10060700                 | 149B 6769                   | on request              | 149B 6772               | on request          | 1/2 10    | 1  |
| 149B 6767                    | on request               | 149B 6770                   | on request              | 149B 6773               | 10060701            | 3/4 18    | 1  |

Dimensions at the end of the section.

### ASSISTED LIFT OPERATED, NORMALLY CLOSED - HK2 female/female

θ max 100°C

Solenoid valve with direct action, assisted lift operated, normally closed. 2 ways. DZR brass body. Brass and stainless steel inner system.

EPDM membrane (-30°C +100°C).

Operating pressure : please consult us

Protection : IP 65 with connection.

Approval : **WRAS** ACS



| Legacy Part No.<br>220V/50Hz | Part Number<br>220V/50Hz | Legacy Part No.<br>24V/50Hz | Part Number<br>24V/50Hz | Legacy Part No.<br>24DC | Part Number<br>24DC | Ø<br>“ mm | UV |
|------------------------------|--------------------------|-----------------------------|-------------------------|-------------------------|---------------------|-----------|----|
| 149B 6789                    | on request               | 149B 6793                   | on request              | 149B 6797               | on request          | 3/8 10    | 1  |
| 149B 6790                    | 10060704                 | 149B 6794                   | on request              | 149B 6798               | 10060707            | 1/2 12    | 1  |
| 149B 6791                    | 10060705                 | 149B 6795                   | on request              | 149B 6799               | 10060708            | 3/4 18    | 1  |
| 149B 6792                    | 10060706                 | 149B 6796                   | on request              | 149B 6800               | on request          | 1 22      | 1  |

Dimensions at the end of the section.

### DIRECT ACTION FOR GAS OIL, NORMALLY CLOSED - AKB2 female/female

θ max 100°C

Solenoid valve with direct acting, for gas oil, normally closed. 2 ways. Brass body. Brass and stainless steel inner system.

FKM Membrane : -10°C +100°C.

Operating pressure : please consult us

Protection : IP 65 with connection



| Legacy Part No.<br>220V/50Hz | Part Number<br>220V/50Hz | Legacy Part No.<br>24V/50Hz | Part Number<br>24V/50Hz | Legacy Part No.<br>24DC | Part Number<br>24DC | Ø<br>“ mm | UV |
|------------------------------|--------------------------|-----------------------------|-------------------------|-------------------------|---------------------|-----------|----|
| 149B 6774                    | on request               | 149B 6779                   | on request              | 149B 6784               | on request          | 1/8 3     | 1  |
| 149B 6775                    | on request               | 149B 6780                   | 10060702                | 149B 6785               | on request          | 1/4* 3    | 1  |
| 149B 6776                    | on request               | 149B 6781                   | on request              | 149B 6786               | on request          | 1/4 4,5   | 1  |
| 149B 6777                    | on request               | 149B 6782                   | on request              | 149B 6787               | on request          | 3/8 4,5   | 1  |
| 149B 6778                    | on request               | 149B 6783                   | 10060703                | 149B 6788               | on request          | 1/2 8     | 1  |

Dimensions at the end of the section.

Coil

θ max ambient 40°C  
Coil without connection for solenoid valve : WZB2 - WKB2 - WKE2 - WBI2 - HK2 - AKB2  
(IP65 with connection)



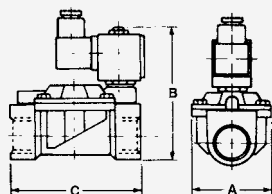
| Legacy<br>Part No. | Part<br>Number | Tension          | UV |
|--------------------|----------------|------------------|----|
| 149B 5290          | 10060596       | 220/230V 50Hz 9W | 1  |
| 149B 5291          | on request     | 380/400V 50Hz 9W | 1  |
| 149B 5292          | 10060597       | 24V 50Hz 9W      | 1  |
| 149B 5293          | on request     | 12V 50Hz 9W      | 1  |
| 149B 5294          | on request     | 110V 50Hz 9W     | 1  |
| 149B 5295          | on request     | 12V d.c 15W      | 1  |
| 149B 5296          | 10060598       | 24V d.c 15W      | 1  |
| 149B 5583          | on request     | 48V 50Hz 9W      | 1  |

## OVERALL DIMENSIONS

### IMPORTANT

- All technical information concern standard coils
- All solenoid valves can be delivered with a standard coil 220 V / 50 Hz ref. 5290 or 24 V / 50 Hz ref. 5292 or 24 V DC ref. 5296 and a connector
- All our solenoid valves can be delivered ON DEMAND with a different coil at the same price as the standard.

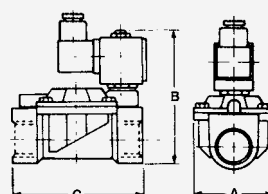
### WKB2 - WZB2



Types WKB2  
WZB2

| Connect.<br>FF | Passage | A<br>mm | B<br>mm | C<br>mm | kg   | Kv m³/H | T<br>opening<br>ms* | T<br>closing<br>ms* |
|----------------|---------|---------|---------|---------|------|---------|---------------------|---------------------|
| 3/8            | 15      | 52      | 109     | 80      | 0,96 | 2,5     | 40                  | 350                 |
| 1/2            | 15      | 52      | 109     | 80      | 0,96 | 4       | 40                  | 350                 |
| 3/4            | 20      | 58      | 116     | 90      | 1,16 | 8       | 40                  | 1000                |
| 1              | 25      | 70      | 130     | 109     | 1,56 | 11      | 300                 | 1000                |
| 1 1/4          | 32      | 82      | 142     | 120     | 2,16 | 18      | 1000                | 2500                |
| 1 1/2          | 40      | 95      | 156     | 130     | 3,36 | 24      | 1500                | 4000                |
| 2              | 50      | 113     | 167     | 162     | 4,46 | 40      | 5000                | 10000               |

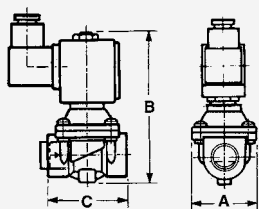
### WB12



Type  
WB12

| Connect.<br>FF | Passage | A<br>mm | B<br>mm | C<br>mm | kg   | Kv m³/H | T<br>opening<br>ms* | T<br>closing<br>ms* |
|----------------|---------|---------|---------|---------|------|---------|---------------------|---------------------|
| 1/8            | 3       | 34      | 84      | 35      | 0,36 | 0,30    | 20                  | 20                  |
| 1/4            | 4,5     | 34      | 84      | 35      | 0,36 | 0,55    | 20                  | 20                  |
| 3/8            | 15      | 52      | 109     | 80      | 0,96 | 2,5     | 40                  | 350                 |
| 1/2            | 15      | 52      | 109     | 80      | 0,96 | 4       | 40                  | 350                 |
| 3/4            | 20      | 58      | 116     | 90      | 1,16 | 8       | 40                  | 1000                |
| 1              | 25      | 70      | 130     | 109     | 1,56 | 11      | 300                 | 1000                |
| 1 1/4          | 32      | 82      | 142     | 120     | 2,16 | 18      | 1000                | 2500                |
| 1 1/2          | 40      | 95      | 156     | 130     | 3,36 | 24      | 1500                | 4000                |

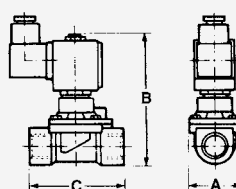
### WKE2



Types WKE2

| Connect.<br>FF | Passage | A<br>mm | B<br>mm | C<br>mm | kg   | Kv m³/H | T<br>opening<br>ms* | T<br>closing<br>ms* |
|----------------|---------|---------|---------|---------|------|---------|---------------------|---------------------|
| 3/8            | 10      | 48      | 90      | 51,5    | 0,45 | 1,5     | 50                  | 300                 |
| 1/2            | 10      | 54      | 90      | 51,5    | 0,45 | 1,5     | 50                  | 300                 |
| 3/4            | 18      | 62      | 101     | 90      | 0,81 | 6       | 200                 | 500                 |

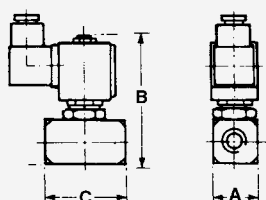
### HK2



Types HK2

| Connect.<br>FF | Passage | A<br>mm | B<br>mm | C<br>mm | kg   | Kv m³/H | T<br>opening<br>ms* | T<br>closing<br>ms* |
|----------------|---------|---------|---------|---------|------|---------|---------------------|---------------------|
| 3/8            | 10      | 52,5    | 103,5   | 58      | 0,76 | 2,5     | 100                 | 100                 |
| 1/2            | 12      | 52,5    | 103,5   | 58      | 0,76 | 4       | 100                 | 100                 |
| 3/4            | 18      | 58      | 110     | 90      | 0,96 | 6       | 150                 | 100                 |
| 1              | 22      | 58      | 118,6   | 90      | 1,26 | 7       | 150                 | 100                 |

### AKB2



Types AKB2

| Connect.<br>FF | Passage | A<br>mm | B<br>mm | C<br>mm | kg   | Kv m³/H | T<br>opening<br>ms* | T<br>closing<br>ms* |
|----------------|---------|---------|---------|---------|------|---------|---------------------|---------------------|
| 1/8            | 3       | 34      | 84      | 38      | 0,36 | 0,30    | 20                  | 20                  |
| 1/4            | 3       | 34      | 84      | 38      | 0,36 | 0,30    | 20                  | 20                  |
| 1/4            | 4,5     | 34      | 84      | 38      | 0,36 | 0,55    | 20                  | 20                  |
| 3/8            | 4,5     | 34      | 84      | 38      | 0,36 | 0,55    | 20                  | 20                  |
| 1/2            | 8       | 48      | 90      | 49      | 0,45 | 1       | 20                  | 30                  |

\* The indicated times concern the medium water.  
The exact time depends of pressure conditions.

## Chapter 3.8

# Air Valves

3

### AIR CONTROL WATER DISTRIBUTION SYSTEMS

All water pipes carry air... This air may have been introduced at the time the water system was filled, or during maintenance work, but can also arise from the working of pumps or dissolved air in reservoirs... Depending upon its source and upon the pressure in the network, the air can arise in the form of bubbles or in emulsion. Indeed the higher the water pressure the greater the quantity of air dissolved in it. Decompression resulting from fluctuations in flow along the network (bends, junctions...) encourages the air to degasify. It will naturally rise and accumulate at high points.

The installation of automatic equipment such as air valves and anti-water hammer valves allows most of the problems caused by air to be solved.



### TRIPLE FUNCTION FOR CLEAR WATER

#### VE320 with flange PN16

PRESSURE PFA 16 bar @ 60°C

Triple function air valves for clear water. Ductile iron casing, PA 6 (polyamid) spindle, stainless steel drain cock, NBR (nitrile) drain cock seal, large orifice seal in polyurethane or NBR (DN100).

APPROVAL : ACS



| Legacy Part No.  | Part Number | DN       |
|------------------|-------------|----------|
| 149B 5884        | 10060632    | 40-50-60 |
| 149B 5885        | 10060633    | 65       |
| 149B 5886        | 10060634    | 80       |
| 149B 5887        | 10060635    | 100      |
| With stop valve* |             |          |
| 149B 5884 R      | 10064766    | 40-50-60 |
| 149B 5885 R      | 10064769    | 65       |

\*Other Ø consult us

#### VE320 with flange PN25

PRESSURE PFA 16 bar @ 60°C

Triple function air valves for clear water. Ductile iron casing, PA 6 (polyamid) spindle, stainless steel drain cock, NBR (nitrile) drain cock seal, large orifice seal in polyurethane or NBR (DN100).

APPROVAL : ACS



| Legacy Part No.  | Part Number | DN       |
|------------------|-------------|----------|
| 149B 0091 66     | 10064765    | 40-50-60 |
| 149B 0091 68     | 10064768    | 65       |
| 149B 0091 70     | on request  | 80       |
| 149B 0091 71     | on request  | 100      |
| With stop valve* |             |          |
| 149B 0091 67     | 10064767    | 40-50-60 |
| 149B 0091 69     | on request  | 65       |

\*Other Ø consult us

## TRIPLE FUNCTION FOR WASTE WATER

### VE330 with flange PN16

PRESSURE PFA 16 bar @ 60°C

Delivered with set pin.

SEAL in polyurethane.

CASING : DN80 and 100, GJS ductile iron DN150 in Steel

SPINDLE : Polyamid (PA66).



| Legacy Part No. | Part Number | DN  |
|-----------------|-------------|-----|
| 149B 5888       | 10060636    | 80  |
| 149B 5889       | 10060637    | 100 |
| 149B 5890       | 10060638    | 150 |

Air valve with stop valve : consult us

## SINGLE FUNCTION FOR CLEAR WATER

### VE120

PRESSURE PFA 16 bar @ 100°C

Ductile iron casing, NBR (nitrile) seal.

Drain valve : nickel plated brass.

APPROVAL : ACS



| Legacy Part No. | Part Number | Designation                              |
|-----------------|-------------|------------------------------------------|
| 149B 2867       | 10060316    | Air valve alone F1"                      |
| 149B 2867 BR    | 10061988    | Air valve with flange with connection*   |
| 149B 2867 RM    | 10061989    | Air valve with connection M1"            |
| 149B 2867 VA    | 10061990    | Air valve with stop valve M1"            |
| 149B 2867 VB    | 10048937    | Air valve with stop valve + with flange* |

\*Flange DN 40 / 50 / 60

### VE120 with flange PN25

PRESSURE PFA 25 bar @ 100°C

Ductile iron casing, NBR (nitrile) seal.

Drain valve : nickel plated brass.

APPROVAL : ACS



| Legacy Part No. | Part Number | Designation                              |
|-----------------|-------------|------------------------------------------|
| 149B 2868       | 10060317    | Air valve alone F1"                      |
| 149B 2868 BR    | on request  | Air valve with flange with connection*   |
| 149B 2868 RM    | on request  | Air valve with connection M1"            |
| 149B 2868 VA    | 10061992    | Air valve with stop valve M1"            |
| 149B 2868 VB    | 10061993    | Air valve with stop valve + with flange* |

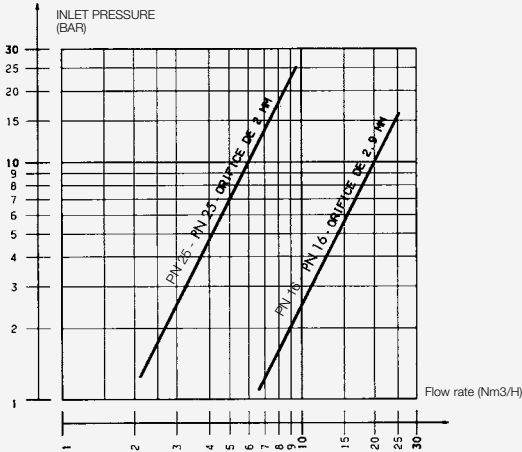
\*Flange DN 40 / 50 / 60

OVERALL DIMENSIONS & TECHNICAL INFORMATION

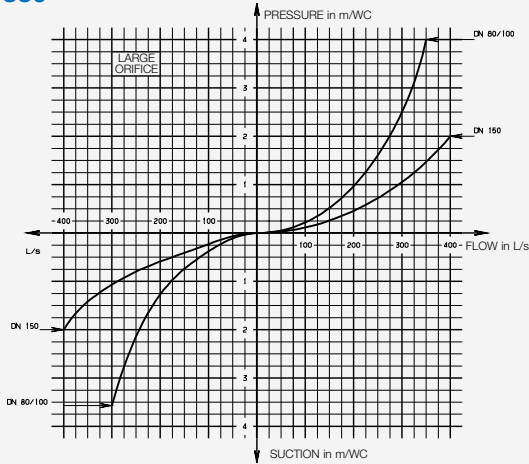
TECHNICAL PARAMETERS FLOW/PRESSURE GRAPHS

These flow chart indicate the flow of air evacuated or sucked in by the large orifice of the air valves. The choice of present flow rate of the air valve is a function of the loss of pressure which can be sustained by the system.

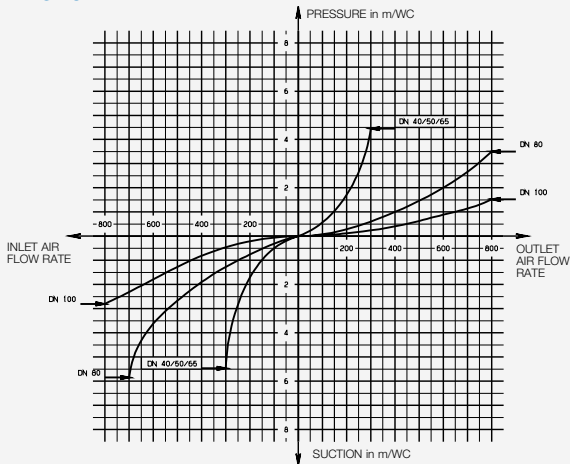
VE 120



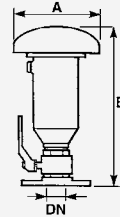
VE 330



VE 320



VE320



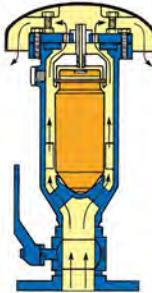
Type VE320

| DN              | For pipe Ø mm | A mm | B mm | Kg |
|-----------------|---------------|------|------|----|
| 40/50/60        | ≤ 200         | 196  | 380  | 12 |
| 65              | ≤ 200         | 196  | 375  | 12 |
| 80              | ≤ 500         | 224  | 350  | 19 |
| 100             | ≤ 1000        | 224  | 400  | 22 |
| With Stop Valve |               |      |      |    |
| 40/50/60        | ≤ 200         | 196  | 465  | 13 |
| 65              | ≤ 200         | 196  | 456  | 13 |

TRIPLE FUNCTION AIR VALVE TYPE VE 320 FOR CLEAR WATER

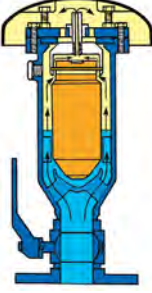
This model ensures continuous and automatic evacuation, but also influx and release of air at fast speed.

FUNCTION 1



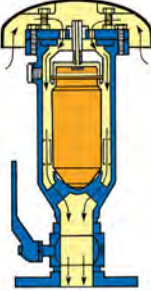
FAST RELEASE OF AIR

FUNCTION 2



RELEASING AIR UNDER PRESSURE

FUNCTION 3



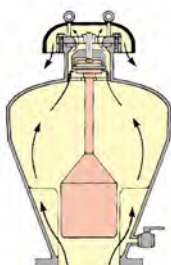
RAPID INFLUX OF AIR

### 3 FUNCTION AIR VALVES FOR WASTE WATER

This model works in the same way as VE 320.

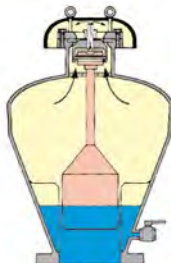
The body of the valve is simply over-sized to avoid contact between waste water and the top part of the moving section.

#### 1. FUNCTION



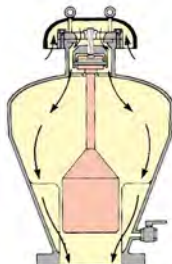
**FAST RELEASE OF AIR**

#### 2. FUNCTION



**RELEASING AIR UNDER PRESSURE**

#### 3. FUNCTION



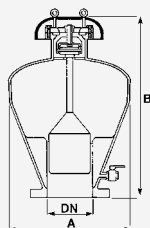
**RAPID INFLUX OF AIR**

### MAINTENANCE OF AIR VALVES

To check that an air valve works correctly, simply unscrew the screw in the middle of the air valve cover's :

- a jet of water indicates that the apparatus works correctly.
- pressure air jet indicates that the air valve is doesn't perform correctly and should be cleaned.

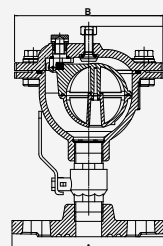
#### VE330



Type VE330

| DN  | For pipe Ø mm | A mm | B mm | Kg   |
|-----|---------------|------|------|------|
| 80  | 80 to 200     | 325  | 580  | 33,0 |
| 100 | 200 to 600    | 325  | 580  | 33,0 |
| 150 | > 600         | 360  | 650  | 55,0 |

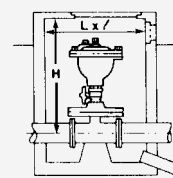
#### VE120



Type VE120

| DN                                               | A mm | B mm | Total Length | Kg   |
|--------------------------------------------------|------|------|--------------|------|
| Air valve alone F 1"                             |      | 175  | 158          | 5,00 |
| Air valve with flange with connection 40/50/60   | 185  | 175  | 214          | 8,10 |
| Air valve with connection M1"                    |      | 175  | 180          | 5,00 |
| Air valve with stop valve M1"                    |      | 175  | 218          | 5,30 |
| Air valve with stop valve + with flange 40/50/60 | 185  | 175  | 246          | 8,40 |

#### VE120

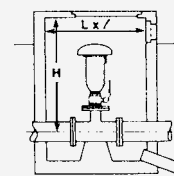


Type VE120

| DN           | H mm | L x I mm  | * mm      |
|--------------|------|-----------|-----------|
| 40 - 50 - 60 | 900  | 600 x 600 | 150 x 150 |

\*Minimum air entrance section of air at top of manhole

#### VE320

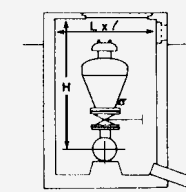


Type VE320

| DN          | H mm | L x I mm  | * mm      |
|-------------|------|-----------|-----------|
| 50-40/60-65 | 1100 | 600x600   | 150 x 150 |
| 80          | 1200 | 600x600   | 200 x 200 |
| 100         | 1300 | 600 x 600 | 300 x 300 |

\*Minimum air entrance section of air at top of manhole

#### VE330



Type VE330

| DN     | H mm | L x I mm    | * mm      |
|--------|------|-------------|-----------|
| 80/100 | 1200 | 1000 x 1000 | 300 x 300 |
| 150    | 1500 | 1200 x 1200 | 300 x 300 |

\*Minimum air entrance section of air at top of manhole

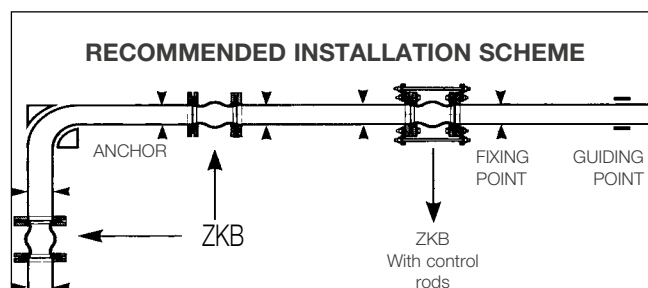
# Chapter 4

## Rubber Expansion Joints

## Chapter 4

# Rubber Expansion Joints

Mounted on piping installations, the ZKT joint absorbs expansions, contractions, oscillations and vibrations, diminishes hammering, reduces noise and prevents electric currents from spreading.



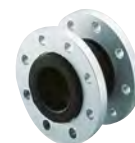
### ZKB

PRESSURE PFA/PS in bar - See pressure/θ curve  
Rubber expansion joint with galvanised steel flanges.

Stainless steel flanges : consult us:

θ 28" to 36" : consult us

OPTION : with vacuum ring



| Legacy<br>Part No.<br>EPDM | Part<br>Number<br>EPDM | Legacy<br>Part No.<br>NBR | Part<br>Number<br>NBR | DN<br>“ | PFA<br>mm water | L1 | PS<br>L2 | G1  | G2 | Cat | UV |
|----------------------------|------------------------|---------------------------|-----------------------|---------|-----------------|----|----------|-----|----|-----|----|
| <b>PN10 flanges</b>        |                        |                           |                       |         |                 |    |          |     |    |     |    |
| 149B 5141 C                | 10064702               | 149B 5141 N               | 10064704              | 1 1/4   | 32              | 16 | 16       | 0,5 | 16 | 3.3 | 1  |
| 149B 5142 C                | 10064706               | 149B 5142 N               | 10064708              | 1 1/2   | 40              | 16 | 16       | 0,5 | 16 | 3.3 | 1  |
| 149B 5143 C                | 10028772               | 149B 5143 N               | 10064710              | 2       | 50              | 16 | 16       | 0,5 | 16 | 3.3 | 1  |
| 149B 5144 C                | 10028773               | 149B 5144 N               | 10064712              | 2 1/2   | 65              | 16 | 16       | 0,5 | 15 | 3.3 | 1  |
| 149B 5145 C                | 10028774               | 149B 5145 N               | 10064714              | 3       | 80              | 16 | 16       | 0,5 | 12 | 3.3 | 1  |
| 149B 5146 C                | 10028775               | 149B 5146 N               | 10064716              | 4       | 100             | 16 | 16       | 0,5 | 10 | 3.3 | 1  |
| 149B 5147 C                | 10028776               | 149B 5147 N               | 10064718              | 5       | 125             | 16 | 16       | 0,5 | 8  | 3.3 | 1  |
| 149B 5148 C                | 10028771               | 149B 5148 N               | 10064720              | 6       | 150             | 16 | 13       | 0,5 | 6  | 3.3 | 1  |
| 149B 5149 C                | 10064722               | 149B 5149 N               | 10064726              | 8       | 200             | 10 | 10       | 0,5 | 5  | 3.3 | 1  |
| 149B 5150 C                | 10064729               | 149B 5150 N               | 10078767              | 10      | 250             | 10 | 8        | 0,5 | 4  | 3.3 | 1  |
| 149B 5151 C                | 10064732               | 149B 5151 N               | 10064736              | 12      | 300             | 10 | 6        | 0,5 | 3  | 3.3 | 1  |
| 149B 5152 C                | 10064737               | 149B 5152 N               | on request            | 14      | 350             | 8  | 5        | 0,5 | 2  | 3.3 | 1  |
| 149B 5153 C                | 10064741               | 149B 5153 N               | on request            | 16      | 400             | 8  | 5        | 0,5 | 2  | 3.3 | 1  |
| 149B 5154 C                | on request             | 149B 5154 N               | on request            | 18      | 450             | 8  | 4        | 0,5 | 2  | 3.3 | 1  |
| 149B 5155 C                | 10064743               | 149B 5155 N               | 10064744              | 20      | 500             | 8  | 4        | 0,5 | 2  | 3.3 | 1  |
| 149B 5156 C                | 10064745               | 149B 5156 N               | on request            | 24      | 600             | 8  | 3        | 0,5 | 1  | 3.3 | 1  |
| <b>PN16 flanges</b>        |                        |                           |                       |         |                 |    |          |     |    |     |    |
| 149B 008285                | 10064724               | 149B 5007 N               | 10064653              | 8       | 200             | 16 | 10       | 0,5 | 5  | 3.3 | 1  |
| 149B 008287                | 10064730               | 149B 5008 N               | 10064655              | 10      | 250             | 16 | 8        | 0,5 | 4  | 3.3 | 1  |
| 149B 008291                | 10064734               | 149B 5009 N               | 10064656              | 12      | 300             | 16 | 6        | 0,5 | 3  | 3.3 | 1  |
| 149B 008294                | 10064739               | 149B 5010 N               | on request            | 14      | 350             | 8  | 5        | 0,5 | 2  | 3.3 | 1  |
| 149B 008301                | on request             | 149B 5011 N               | 10064666              | 16      | 400             | 8  | 5        | 0,5 | 2  | 3.3 | 1  |
| 149B 008305                | on request             | 149B 5012 N               | on request            | 18      | 450             | 8  | 4        | 0,5 | 2  | 3.3 | 1  |
| 149B 008312                | 10081594               | 149B 5013 N               | on request            | 20      | 500             | 8  | 4        | 0,5 | 2  | 3.3 | 1  |
| 149B 008314                | 10064746               | 149B 5014 N               | on request            | 24      | 600             | 8  | 3        | 0,5 | 1  | 3.3 | 1  |

Dimensions at the end of the section.

**ZKT - female/female**

PRESSURE PFA/PS in bar - See pressure/θ curve

Rubber expansion joint with galvanised ductile iron union nut connections.

OPTION :

Bronze connection in case of electrolytic risk.



| Legacy<br>Part No.<br>EPDM | Part<br>Number<br>EPDM | Legacy<br>Part No.<br>NBR | Part<br>Number<br>NBR | DN<br>“ | PFA<br>water | L1 | PS<br>L2 | G1  | G2 | Cat | UV |
|----------------------------|------------------------|---------------------------|-----------------------|---------|--------------|----|----------|-----|----|-----|----|
| 149B 5126                  | 10060563               | 149B 5126 N               | 10064693              | 3/4     | 10           | 10 | 10       | 10  | 10 | 3.3 | 1  |
| 149B 5127                  | 10060564               | 149B 5127 N               | 10064695              | 1       | 10           | 10 | 10       | 10  | 10 | 3.3 | 1  |
| 149B 5128                  | 10060565               | 149B 5128 N               | on request            | 1 1/4   | 10           | 10 | 10       | 0,5 | 10 | 3.3 | 1  |
| 149B 5129                  | 10060566               | 149B 5129 N               | 10064697              | 1 1/2   | 10           | 10 | 10       | 0,5 | 10 | 3.3 | 1  |
| 149B 5130                  | 10060567               | 149B 5130 N               | 10064699              | 2       | 10           | 10 | 10       | 0,5 | 10 | 3.3 | 1  |
| 149B 5131                  | 10060568               | 149B 5131 N               | 10064700              | 2 1/2   | 10           | 10 | 10       | 0,5 | 10 | 3.3 | 1  |
| 149B 5132                  | 10060569               | 149B 5132 N               | on request            | 3       | 10           | 10 | 10       | 0,5 | 10 | 3.3 | 1  |

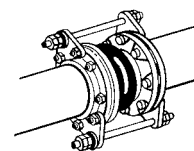
Dimensions at the end of the section.

**Control Rods for flanges PN10 and PN16**

Galvanised steel

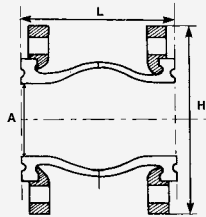
Control rods.

| Legacy<br>Part No.<br>PN10 | Part<br>Number<br>PN10 | Legacy<br>Part No.<br>PN16 | Part<br>Number<br>PN16 | DN<br>“ | mm  | UV |
|----------------------------|------------------------|----------------------------|------------------------|---------|-----|----|
| 149B 5436                  | 10060622               | -                          | -                      | 1 1/4   | 32  | 1  |
| 149B 5437                  | 10060623               | -                          | -                      | 1 1/2   | 40  | 1  |
| 149B 5438                  | 10028791               | -                          | -                      | 2       | 50  | 1  |
| 149B 5439                  | on request             | -                          | -                      | 2 1/2   | 65  | 1  |
| 149B 5440                  | on request             | -                          | -                      | 3       | 80  | 1  |
| 149B 5441                  | 10028794               | -                          | -                      | 4       | 100 | 1  |
| 149B 5442                  | on request             | -                          | -                      | 5       | 125 | 1  |
| 149B 5443                  | 10028790               | -                          | -                      | 6       | 150 | 1  |
| 149B 5444                  | 10060624               | 149B 0089 40               | 10064753               | 8       | 200 | 1  |
| 149B 5445                  | 10060625               | 149B 0089 41               | 10064754               | 10      | 250 | 1  |
| 149B 5446                  | 10060626               | 149B 0089 42               | 10064755               | 12      | 300 | 1  |
| 149B 5447                  | 10060627               | 149B 0089 43               | 10064756               | 14      | 350 | 1  |
| 149B 5448                  | 10060628               | 149B 0089 44               | on request             | 16      | 400 | 1  |
| 149B 5449                  | on request             | 149B 0089 45               | on request             | 18      | 450 | 1  |
| 149B 5450                  | 10060629               | 149B 0089 47               | on request             | 20      | 500 | 1  |
| 149B 5451                  | 10060630               | 149B 0089 48               | 10064757               | 24      | 600 | 1  |



OVERALL DIMENSIONS & TECHNICAL INFORMATION

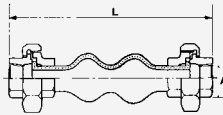
ZKB



Type ZKB  
with flanges

| DN<br>" | A<br>mm | H<br>mm | L<br>mm | Kg    |
|---------|---------|---------|---------|-------|
| 1 1/4   | 32      | 140     | 95      | 3,00  |
| 1 1/2   | 40      | 150     | 95      | 3,50  |
| 2       | 52      | 165     | 105     | 3,86  |
| 2 1/2   | 68      | 185     | 115     | 5,45  |
| 3       | 76      | 200     | 130     | 6,50  |
| 4       | 103     | 220     | 135     | 7,00  |
| 5       | 128     | 250     | 170     | 11,00 |
| 6       | 152     | 285     | 180     | 14,00 |
| 8       | 194     | 340     | 205     | 20,91 |
| 10      | 250     | 395     | 240     | 25,00 |
| 12      | 300     | 445     | 260     | 38,18 |
| 14      | 320     | 505     | 265     | 50,00 |
| 16      | 372     | 565     | 265     | 60,00 |
| 18      | 415     | 615     | 265     | 70,00 |
| 20      | 454     | 670     | 265     | 88,64 |
| 24      | 580     | 780     | 254     | 95,00 |

ZKT

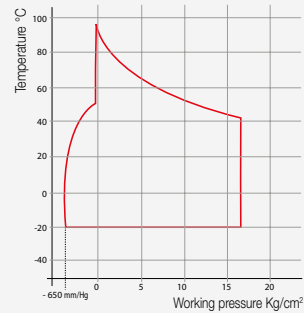


Type ZKT  
female/female

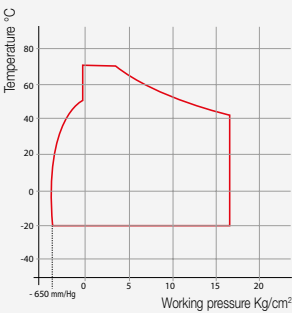
| A     |    | L<br>mm | Kg    |
|-------|----|---------|-------|
| "     | mm |         |       |
| 3/4   | 20 | 200     | 0,775 |
| 1     | 25 | 200     | 0,685 |
| 1 1/4 | 32 | 200     | 1,585 |
| 1 1/2 | 40 | 200     | 1,985 |
| 2     | 50 | 200     | 2,980 |
| 2 1/2 | 65 | 225     | 2,335 |
| 3     | 80 | 225     | 2,600 |

PRESSURE TEMPERATURE CURVES  
FOR WATER APPLICATION

EPDM



NBR



# Chapter 5

## Shut Off Valves

SYLAX WITH NOTCHED DUCTILE  
HANDLEVER

SYLAX - ANSI 150 AND PN25 VALVE  
OPTIONS

SYLAX WITH MANUAL GEARBOX

SYLAX FM/CNPP FOR SPRINKLER SYSTEMS  
WITH MANUAL GEAR BOX

SYLAX GAS

TILIS

LYCENE

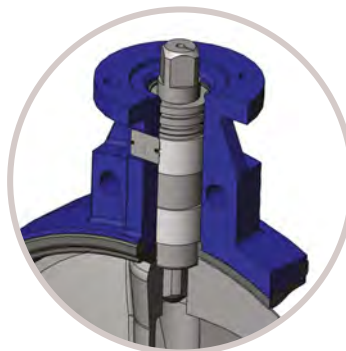
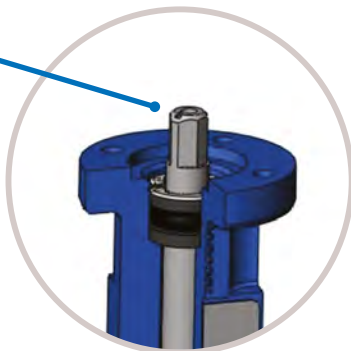
EMARIS

MANUAL ACTUATIONS AND ACCESSORIES

BALL VALVES

## A CHOICE OF THE HIGHEST PERFORMANCE TECHNOLOGIES FOR THE 25 TO 1200 MM RANGE

By concentrating the technologies in the field and by integrating technical solutions of the highest standard, Socla is realising its ambition : the competitiveness of a standard range, reliability and a comprehensive approach, offering a multiplicity of solutions.



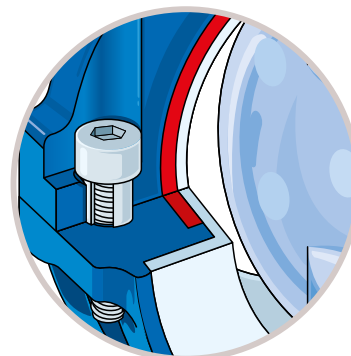
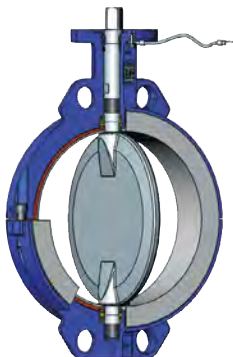
### SYLAX

(DN>350mm) feature :

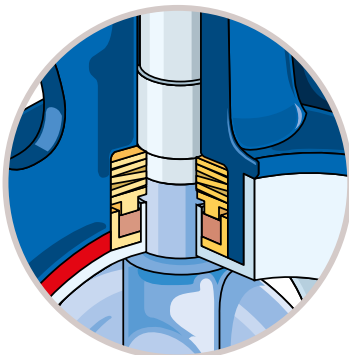
- Safety anti-ejection circlip keeps shaft in place and allows easy maintenance
- Safety reinforced by double watertightness

- Safety anti-ejection circlip keeps shaft in place and allows easy maintenance.
- Safety reinforced by double watertightness.
- Spline driven one piece shaft connected to floating disc guarantees high reliability of tightness and torque transmission in the long term.

- High power transmission with robust squared connection between the shaft and the disc.
- Complete protection of the shaft and valve body from fluids.
- Reliability of movement with self-lubricating bearings.



- Very high level of working safety for chemical media, food processing industries and pure water thanks to quality components :
  - PTFE liner (3 mm thick).
  - Stainless steel 316L mirror polished and SS 316L PFA coated (2,5 mm thick).
- Liner back-up enclosed in the body ensures perfect disc tightness.



- PFA moulding up the stem ensuring zero leakage
- Tightness at shaft location with bearing and spring

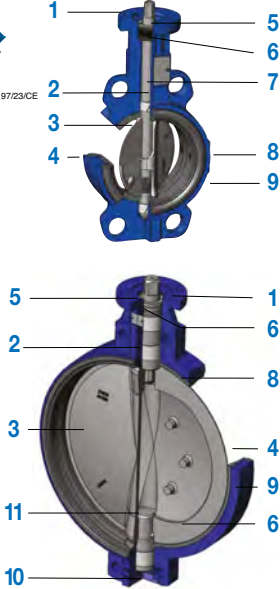


### TRACEABILITY

- Identification and traceability ensured by riveted metal tag.

SYLAX DN 25 TO 1200 MM

- Multiple combinations
- Short listed in industry
- Easy maintenance
- Reliability - Robustness



| Main technical features<br>Designed in accordance<br>with EN593 |                                                                                                                                                       |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                               | Top connection according to ISO5211 standard.                                                                                                         |
| 2                                                               | Anti-friction bearings                                                                                                                                |
| 3                                                               | Squared driven shaft connected to spherically machined disc. Floating disc allows self centering thus preventing stress on the liner during operation |
| 4                                                               | Tongue and groove seat design allows perfect tightness.                                                                                               |
| 5                                                               | Circlip preventing ejection of shaft                                                                                                                  |
| 6                                                               | Secondary sealing                                                                                                                                     |
| 7                                                               | One piece shaft                                                                                                                                       |
| 8                                                               | Replaceable elastomer liner ensures full protection of shaft and body                                                                                 |
| 9                                                               | Face to face dimensions according to :<br>ISO 5752 class 20<br>NFEN 558 class 20<br>API609 table 2 (except DN >350mm)                                 |
| 10                                                              | Access plate for dismantling of shaft                                                                                                                 |
| 11                                                              | Two part shaft equipped with anti friction bearings                                                                                                   |

Sylax butterfly valves are designed for industrial processes and general services.

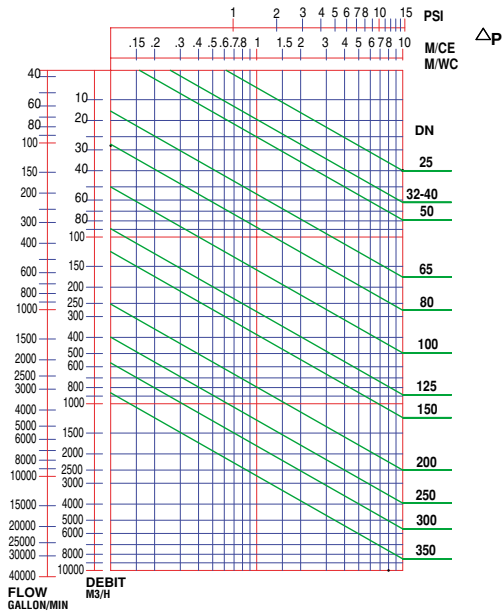
Sylax are designed to operate in many different fields including metallurgical, mining, paper-making, shipbuilding, nuclear, environmental and mechanical industries.

Sylax is well recognised in the car, chemical, food industries, water plants...

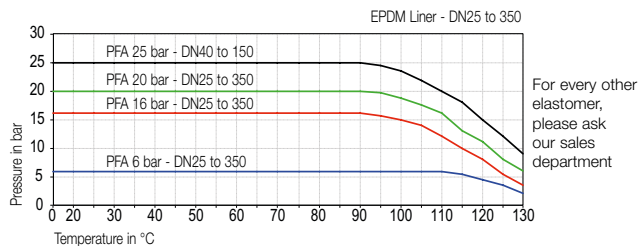
For special applications, especially for particularly difficult media, contact our technical team.

On request : we can supply butterfly valves type SYLAX conformed to the Directive 94/9/CE (products or systems used in a explosive atmosphere : see the extra price table page 87)

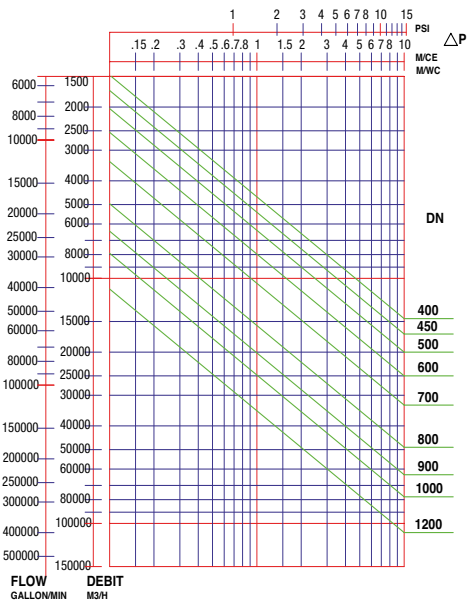
HEADLOSS CHART FOR WATER AT 20°C SYLAX



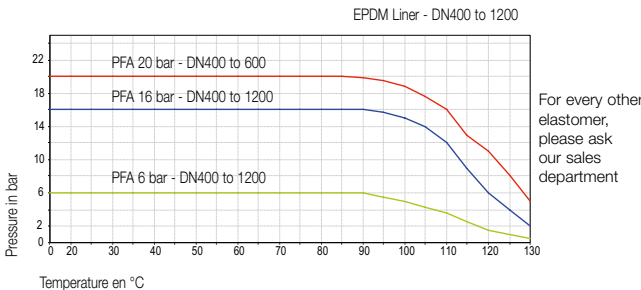
PRESSURE/TEMPERATURE CHART



HEADLOSS CHART FOR WATER AT 20°C SYLAX



PRESSURE/TEMPERATURE CHART

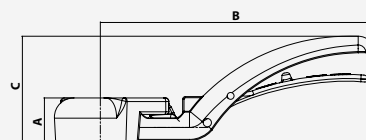


## Chapter 5.1

# Shut Off Valves - Sylax with Notched Ductile Handlever

### SYLAX WITH NOTCHED DUCTILE IRON HANDLEVER

| EPDM - High content<br>Nitrile Carboxylated nitrile<br>- Silicone | FKM - CSM    | White EPDM   | A  | B   | C   |
|-------------------------------------------------------------------|--------------|--------------|----|-----|-----|
| DN 25 a 100                                                       | DN 32 a 100  | DN 32 a 100  | 33 | 200 | 78  |
| DN 125 a 150                                                      | DN 125       | -            | 33 | 290 | 98  |
| DN 200 a 250                                                      | DN 150 a 250 | DN 125 a 200 | 42 | 450 | 128 |
| DN 300                                                            | -            | -            | 42 | 450 | 128 |



### SYLAX WAFER TYPE - DUCTILE IRON EPOXY COATED DISC

#### EDPM - Drinking water

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

#### Nitrile - Untreated Water

θ +5°/+85°



| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G 036 113                   | 10063314               | 149G 045 116                  | on request                | 50       | 3,3  |
| 149G 039 453                   | 10081715               | 149G 045 117                  | on request                | 65       | 3,6  |
| 149G 023 622                   | 10063317               | 149G 045 118                  | on request                | 80       | 4,0  |
| 149G 038 573                   | 10063318               | 149G 045 119                  | on request                | 100      | 7,1  |
| 149G 038 574                   | 10063321               | 149G 045 120                  | on request                | 125      | 7,5  |
| 149G 038 575                   | 10077141               | 149G 045 121                  | on request                | 150      | 8,4  |
| 149G 039 454                   | 10063324               | 149G 045 122                  | on request                | 200      | 16,6 |
| 149G 039 455                   | 10063327               | 149G 045 123 (*)              | on request                | 250      | 22,9 |
| 149G 039 456                   | 10063329               | 149G 045 124 (*)              | on request                | 300      | 32,5 |

Flange rating PN 6/10/16/ASA 150. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar

**SYLAX LUG TYPE - DUCTILE IRON EPOXY COATED DISC****EDPM - Drinking water**

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

**Nitrile - Untreated Water**

θ +5°/+85°



| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G 039 457                   | 10081737         | 149G 045 134            | on request          | 50    | 3,7  |
| 149G 039 458                   | on request       | 149G 045 135            | on request          | 65    | 5,0  |
| 149G 039 459                   | on request       | 149G 045 136            | on request          | 80    | 5,0  |
| 149G 039 460                   | on request       | 149G 045 137            | on request          | 100   | 7,7  |
| 149G 039 461                   | on request       | 149G 045 138            | on request          | 125   | 9,8  |
| 149G 039 462                   | on request       | 149G 045 139            | on request          | 150   | 10,9 |
| 149G 039 463 (***)             | 10078380         | 149G 045 140 (***)      | on request          | 200   | 23,1 |
| 149G 039 464 (***)             | 10063292         | 149G 045 141 (**)       | on request          | 250   | 28,0 |
| 149G 039 465 (***)             | on request       | 149G 045 142 (**)       | on request          | 300   | 38,4 |
| 149G 039 466 (*)               | on request       | 149G 045 143 (*)        | on request          | 200   | 23,6 |
| 149G 039 467 (*)               | on request       | 149G 045 144 (*)        | on request          | 250   | 28,1 |
| 149G 039 468 (*)               | on request       | 149G 045 145 (*)        | on request          | 300   | 38,3 |

Flange rating PN 10/16. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar and PN10

(\*\*) PFA = PS maxi = 10 bar and PN16

(\*\*\*) PN16

**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC****EDPM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - General services and industrial processes, hydrocarbons**

θ +5°/+85°



| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G 012 313                   | 10063420         | 149G 019 665            | 10063492            | 32/40 | 2,9  |
| 149G 012 322                   | 10063427         | 149G 026 594            | 10063496            | 50    | 3,3  |
| 149G 012 332                   | 10063433         | 149G 012 399            | 10063498            | 65    | 3,7  |
| 149G 012 339                   | 10063441         | 149G 012 401            | 10063503            | 80    | 4,0  |
| 149G 059 541                   | 10063450         | 149G 012 403            | 10063508            | 100   | 7,1  |
| 149G 012 360                   | 10063459         | 149G 012 406            | 10063513            | 125   | 7,7  |
| 149G 012 368                   | 10063470         | 149G 012 409            | 10063517            | 150   | 9,1  |
| 149G 420 89                    | 10063476         | 149G 421 09             | 10063520            | 200   | 16,6 |
| 149G 420 90                    | 10063483         | 149G 421 10 (*)         | 10063522            | 250   | 23,2 |
| 149G 420 91                    | 10063486         | 149G 421 11 (*)         | 10063524            | 300   | 25,2 |

Flange rating PN 6/10/16/ASA 150. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar

### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

**EDPM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - General services and industrial processes, hydrocarbons**

θ +5°/+85°



| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G 016 753                   | 10063563               | 149G 016 755                  | 10063657                  | 32       | 3,4  |
| 149G 016 754                   | 10063571               | 149G 059 626                  | 10063659                  | 40       | 3,4  |
| 149G 016 219                   | 10063582               | 149G 016 303                  | 10079489                  | 50       | 3,7  |
| 149G 012 574                   | 10063590               | 149G 059 628                  | 10063662                  | 65       | 5,1  |
| 149G 012 577                   | 10063597               | 149G 038 678                  | 10063663                  | 80       | 5,0  |
| 149G 012 582                   | 10063612               | 149G 012 602                  | 10063667                  | 100      | 7,7  |
| 149G 012 584                   | 10063619               | 149G 012 605                  | 10063669                  | 125      | 10,0 |
| 149G 012 586                   | 10063626               | 149G 012 607                  | 10063670                  | 150      | 11,6 |
| 149G 424 92 (***)              | 10063642               | 149G 425 12 (***)             | 10079490                  | 200      | 23,1 |
| 149G 424 93 (***)              | 10063648               | 149G 425 13 (**)              | 10079534                  | 250      | 28,3 |
| 149G 424 94 (***)              | 10063651               | 149G 425 14 (**)              | on request                | 300      | 31,1 |
| 149G 424 89 (*)                | on request             | 149G 425 09 (*)               | 10063672                  | 200      | 23,6 |
| 149G 424 90 (*)                | on request             | 149G 425 10 (*)               | on request                | 250      | 28,4 |
| 149G 424 91 (*)                | on request             | 149G 425 11 (*)               | on request                | 300      | 31,0 |

Flange rating PN 10/16. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar and PN10

(\*\*) PFA = PS maxi = 10 bar and PN16

(\*\*\*) PFA = PS maxi = 16 bar and PN16

### SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC

**Silicone - Air or dry hot gas, ice-cold water, industrial process**

θ -10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM - Industrial fluids, acids, bases hydrocarbons**

θ +5°/+180°



Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.

| Legacy<br>Part No.<br>SILICONE | Part<br>Number<br>SILICONE | Kg   | Legacy<br>Part No.<br>FKM | Part<br>Number<br>FKM | Kg   | DN<br>mm |
|--------------------------------|----------------------------|------|---------------------------|-----------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                            |      |                           |                       |      |          |
| 149G 020 771                   | on request                 | 2,9  | 149G 012 052              | 10063347              | 2,9  | 32/40    |
| 149G 020 775                   | 10063862                   | 3,3  | 149G 012 054              | 10063353              | 3,3  | 50       |
| 149G 020 779                   | 10063863                   | 3,7  | 149G 019 277              | 10063355              | 3,8  | 65       |
| 149G 016 543                   | on request                 | 4,0  | 149G 016 085              | 10063357              | 4,1  | 80       |
| 149G 020 787                   | 10063866                   | 7,1  | 149G 012 063              | 10063359              | 7,2  | 100      |
| 149G 020 791                   | 10063868                   | 7,8  | 149G 012 066              | 10063361              | 7,9  | 125      |
| 149G 017 229                   | 10063871                   | 9,1  | 149G 072 719              | 10063364              | 9,4  | 150      |
| 149G 020 799 (*)               | 10077310                   | 16,9 | 149G 036 556              | 10063366              | 17,0 | 200      |
| 149G 020 803 (*)               | on request                 | 23,2 |                           |                       |      | 250      |
| 149G 020 807 (*)               | on request                 | 25,3 |                           |                       |      | 300      |

Flange rating PN 6/10/16/ASA 150. PFA 10 bar (water) / PS

(\*) PFA = PS maxi = 6 bar

**SYLAX LUG TYPE - 316 STAINLESS STEEL DISC****Silicone - Air or dry hot gas, ice-cold water, industrial process**

θ -10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM - Industrial fluids, acids, bases hydrocarbons**

θ +5°/+180°



Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg   | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg   | DN mm |
|--------------------------------|-------------------------|------|------------------------|--------------------|------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |      |                        |                    |      |       |
| 149G 022 126                   | 10064222                | 4,5  | 149G 022 188           | 10064243           | 3,4  | 32    |
| 149G 022 130                   | 10064225                | 4,5  | 149G 022 192           | 10064244           | 3,4  | 40    |
| 149G 022 134                   | 10064229                | 4,8  | 149G 014 686           | 10064245           | 3,8  | 50    |
| 149G 022 138                   | 10064232                | 5,1  | 149G 022 200           | 10064246           | 5,2  | 65    |
| 149G 022 142                   | 10064235                | 5,0  | 149G 022 204           | 10064247           | 5,1  | 80    |
| 149G 022 146                   | 10064238                | 7,7  | 149G 059 993           | 10064249           | 7,8  | 100   |
| 149G 022 150                   | 10064239                | 10,1 | 149G 014 692           | on request         | 10,2 | 125   |
| 149G 014 676                   | 10064240                | 11,7 | 149G 073 770           | 10079539           | 11,9 | 150   |
| 149G 022 173 (**)              | 10064241                | 23,4 | 149G 046 220 (****)    | 10079494           | 23,5 | 200   |
| 149G 022 177 (**)              | 10064242                | 27,2 | -                      | -                  | -    | 250   |
| 149G 022 181 (**)              | on request              | 29,4 | -                      | -                  | -    | 300   |
| 149G 022 158 (*)               | on request              | 23,9 | 149G 046 219 (***)     | on request         | 24,0 | 200   |
| 149G 022 162 (*)               | on request              | 27,3 | -                      | -                  | -    | 250   |
| 149G 022 166 (*)               | on request              | 31,1 | -                      | -                  | -    | 300   |

Flange rating PN 10/16. PFA 10 bar (water) / PS

(\*) PFA = PS maxi = 6 bar and PN10

(\*\*) PFA = PS maxi = 6 bar and PN16

(\*\*\*) PN10

(\*\*\*\*) PN16

**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC****CARBOXYLATED NITRILE - Powdery, abrasive fluids**

θ +5°/+110°



| Legacy Part No.  | Part Number | Kg   | Legacy Part No.  | Part Number | Kg   | DN mm |
|------------------|-------------|------|------------------|-------------|------|-------|
| 149G 045 006     | 10064495    | 2,6  | 149G 042 613     | 10063723    | 2,9  | 32/40 |
| 149G 045 007     | 10064498    | 3,3  | 149G 035 671     | on request  | 3,2  | 50    |
| 149G 045 008     | 10064500    | 3,7  | 149G 035 672     | on request  | 3,7  | 65    |
| 149G 045 009     | on request  | 4,0  | 149G 035 673     | 10063724    | 4,0  | 80    |
| 149G 045 010     | 10064503    | 6,3  | 149G 093 454     | 10063725    | 7,1  | 100   |
| 149G 045 011     | 10080440    | 7,8  | 149G 017 247     | on request  | 7,7  | 125   |
| 149G 045 012     | 10064511    | 9,3  | 149G 035 676     | on request  | 9,2  | 150   |
| 149G 045 014 (*) | 10064515    | 16,9 | 149G 035 677 (*) | on request  | 16,7 | 200   |
| 149G 045 015 (*) | 10064519    | 23,3 | 149G 035 678 (*) | on request  | 23,1 | 250   |
| 149G 045 017 (*) | 10063371    | 25,0 | 149G 035 679 (*) | on request  | 24,7 | 300   |

Flange rating PN 6/10/16/ASA 150. PFA 10 bar (water) / PS

(\*) PFA = PS maxi = 6 bar

### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

**CARBOXYLATED NITRILE - Powdery, abrasive fluids**

θ +5°/+110°



| Legacy Part No.  | Part Number | Kg   | Legacy Part No.   | Part Number | Kg   | DN mm |
|------------------|-------------|------|-------------------|-------------|------|-------|
| -                | -           | -    | 149G 045 031      | on request  | 3,4  | 32    |
| -                | -           | -    | 149G 045 032      | on request  | 3,4  | 40    |
| 149G 045 022     | 10064520    | 3,7  | 149G 045 033      | on request  | 3,7  | 50    |
| 149G 045 024     | on request  | 4,2  | 149G 045 034      | on request  | 5,1  | 65    |
| 149G 042 964     | 10062566    | 5,1  | 149G 045 035      | on request  | 5,0  | 80    |
| 149G 045 025     | 10064522    | 7,6  | 149G 045 036      | on request  | 7,7  | 100   |
| 149G 045 026     | on request  | 10,2 | 149G 045 037      | on request  | 10,1 | 125   |
| 149G 045 027     | on request  | 11,8 | 149G 045 038      | on request  | 11,7 | 150   |
| 149G 045 028 (*) | on request  | 23,1 | 149G 045 039 (**) | on request  | 23,2 | 200   |
| 149G 045 029 (*) | on request  | 29,9 | 149G 045 040 (**) | on request  | 28,2 | 250   |
| 149G 045 030 (*) | on request  | 31,7 | 149G 045 044 (**) | on request  | 30,5 | 300   |
| -                | -           | -    | 149G 045 042 (*)  | on request  | 23,7 | 200   |
| -                | -           | -    | 149G 045 043 (*)  | on request  | 28,2 | 250   |
| -                | -           | -    | 149G 045 041 (*)  | on request  | 30,5 | 300   |

Flange rating PN10/16. PFA 10 bar (water) / PS

(\*) PFA = PS maxi = 6 bar and PN10

(\*\*) PFA = PS maxi = 6 bar and PN16

### SYLAX WAFER TYPE - ALU BRONZE DISC

**EDPM - General and industrial services, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body



**Nitrile - Sea water, ship yards**

θ +5°/+85°

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | Kg   | DN mm |
|--------------------------------|------------------|-------------------------|---------------------|------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |      |       |
| 149G 012 273                   | 10062612         | 149G 016 864            | on request          | 3,8  | 32/40 |
| 149G 016 135                   | 10063404         | 149G 012 293            | 10063413            | 3,3  | 50    |
| 149G 019 541                   | 10063406         | 149G 012 295            | 10088663            | 3,7  | 65    |
| 149G 016 136                   | on request       | 149G 012 297            | 10078747            | 4,0  | 80    |
| 149G 019 549                   | 10063407         | 149G 016 029            | on request          | 7,1  | 100   |
| 149G 019 553                   | 10063408         | 149G 012 300            | on request          | 7,8  | 125   |
| 149G 012 282                   | 10063409         | 149G 016 296            | 10063416            | 8,5  | 150   |
| 149G 420 49                    | 10082537         | 149G 420 69             | 10063417            | 16,4 | 200   |
| 149G 420 50                    | on request       | 149G 420 70(*)          | on request          | 22,2 | 250   |
| 149G 420 51                    | on request       | 149G 420 71(*)          | on request          | 25,2 | 300   |

Flange rating PN 6/10/16/ASA 150. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar

**SYLAX LUG TYPE - ALU BRONZE DISC****EDPM - General and industrial services, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°



| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|---------------------|----------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |      |          |
| 149G 012 527                   | on request          | 149G 019 968               | on request             | 4,5  | 32       |
| 149G 035 531                   | on request          | 149G 019 972               | on request             | 4,3  | 40       |
| 149G 019 922                   | on request          | 149G 058 955               | 10080009               | 3,7  | 50       |
| 149G 012 534                   | on request          | 149G 044 002               | 10083709               | 5,1  | 65       |
| 149G 019 930                   | on request          | 149G 019 984               | 10080010               | 5,0  | 80       |
| 149G 019 934                   | on request          | 149G 019 988               | 10080446               | 7,8  | 100      |
| 149G 019 938                   | on request          | 149G 019 992               | 10063552               | 10,1 | 125      |
| 149G 019 942                   | on request          | 149G 019 996               | 10063555               | 11,0 | 150      |
| 149G 424 52(***)               | 10063550            | 149G 424 72(***)           | 10083708               | 22,9 | 200      |
| 149G 424 53(***)               | on request          | 149G 424 73(**)            | on request             | 27,3 | 250      |
| 149G 424 54(***)               | on request          | 149G 424 74(**)            | on request             | 29,4 | 300      |
| 149G 424 49(*)                 | on request          | 149G 424 69(*)             | on request             | 23,5 | 200      |
| 149G 424 50(*)                 | on request          | 149G 424 70(*)             | on request             | 27,4 | 250      |
| 149G 424 51(*)                 | on request          | 149G 424 71(*)             | on request             | 31,1 | 300      |

Flange rating PN 10/16. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar and PN10

(\*\*) PFA = PS maxi = 10 bar and PN16

(\*\*\*) PN16

**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC****EDPM - Drinking water, general services and industrial processes, swimming pool water**

θ -15°/+120° Stainless Steel body

**Nitrile - General services and industrial processes, hydrocarbons**

θ +5°/+85° Stainless Steel body



| Legacy Part No.<br>EDPM     | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | Kg   | DN<br>mm |
|-----------------------------|---------------------|----------------------------|------------------------|------|----------|
| <b>STAINLESS STEEL BODY</b> |                     |                            |                        |      |          |
| 149G 016 610                | 10063788            | 149G 018 560               | 10080832               | 2,8  | 32/40    |
| 149G 012 987                | 10063793            | 149G 016 818               | 10063829               | 3,0  | 50       |
| 149G 012 991                | 10063795            | 149G 016 819               | on request             | 3,0  | 65       |
| 149G 012 993                | 10063798            | 149G 016 820               | on request             | 4,3  | 80       |
| 149G 012 998                | 10063800            | 149G 016 816               | 10080720               | 4,2  | 100      |
| 149G 015 990                | on request          | 149G 016 821               | on request             | 8,5  | 125      |
| 149G 013 005                | 10063802            | 149G 016 817               | on request             | 9,5  | 150      |
| 149G 013 009                | 10063804            | 149G 016 822               | on request             | 18,2 | 200      |
| 149G 016 814                | on request          | 149G 016 823(*)            | on request             | 25,1 | 250      |
| 149G 016 815                | on request          | 149G 016 824(*)            | on request             | 30,8 | 300      |

Flange rating PN 10/16. PFA 16 bar (water) / PS

(\*) PFA = PS maxi = 10 bar

### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

**EDPM** - Drinking water, general services and industrial processes, swimming pool water

θ -15°/+120° with STAINLESS STEEL body

**Nitrile** - General services and industrial processes, hydrocarbons

θ +5°/+85° with STAINLESS STEEL body



| Legacy<br>Part No.<br>EDPM  | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|-----------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>STAINLESS STEEL BODY</b> |                        |                               |                           |      |          |
| 149G 020 660                | 10063840               | 149G 020 669                  | on request                | 3,9  | 50       |
| 149G 020 661                | 10081133               | 149G 020 670                  | on request                | 4,9  | 65       |
| 149G 020 662                | 10063842               | 149G 020 671                  | on request                | 3,2  | 80       |
| 149G 020 663                | on request             | 149G 020 672                  | 10086760                  | 5,8  | 100      |
| 149G 063 722                | on request             | 149G 020 673                  | on request                | 5,9  | 125      |
| 149G 020 665                | on request             | 149G 020 674                  | on request                | 7,0  | 150      |
| 149G 020 666(***)           | on request             | 149G 020 675(***)             | on request                | 34,0 | 200      |
| 149G 020 667(***)           | on request             | 149G 020 676(**)              | on request                | 44,0 | 250      |
| 149G 020 668(***)           | on request             | 149G 020 677(**)              | on request                | 58,0 | 300      |
| 149G 041 721(*)             | on request             | 149G 041 724(*)               | on request                | 34,0 | 200      |
| 149G 041 722(*)             | on request             | 149G 041 725(*)               | on request                | 44,0 | 250      |
| 149G 041 723(*)             | on request             | 149G 041 726(*)               | on request                | 58,0 | 300      |

Flange rating PN 10/16. PFA 16 bar (water) / PS

(\*) ISO PN10 and PN10

(\*\*) ISO PN10

(\*\*\*) ISO PN16

## Chapter 5.2

# Shut Off Valves - ANSI 150 and PN25 Valve Options

### SYLAX WAFER TYPE - DUCTILE IRON POLYAMIDE COATED DISC

EDPM - General and industrial services

θ -10°/+90°

Nitrile - General and industrial services, untreated water

θ +5°/+85°



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#### ANSI 150 / 20 Bar

| Legacy<br>Part No.<br>EDPM | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|----------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| DUCTILE IRON GGG40 BODY    |                        |                               |                           |      |          |
| 149G 039 540               | 10064261               | 149G 046 105                  | 10064383                  | 3,3  | 50       |
| 149G 014 779               | 10064264               | 149G 046 106                  | on request                | 3,7  | 65       |
| 149G 039 541               | 10064265               | 149G 046 107                  | 10064384                  | 3,2  | 80       |
| 149G 039 542               | 10064268               | 149G 042 781                  | 10064385                  | 7,1  | 100      |
| 149G 039 568               | 10064269               | 149G 046 108                  | on request                | 7,6  | 125      |
| 149G 039 543               | on request             | 149G 046 109                  | on request                | 9,7  | 150      |
| 149G 039 544               | 10064442               | 149G 046 110                  | 10064472                  | 16,7 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

#### PN25 / 25 Bar

| Legacy<br>Part No.<br>EDPM | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|----------------------------|------------------------|------|----------|
| DUCTILE IRON GGG40 BODY    |                        |      |          |
| 149G 015 179               | 10064415               | 4,3  | 50       |
| 149G 026 507               | 10064424               | 3,9  | 65       |
| 149G 016 807               | 10064426               | 4,2  | 80       |
| 149G 028 957               | 10064429               | 7,7  | 100      |
| 149G 026 545               | 10064432               | 9,4  | 125      |
| 149G 026 546               | 10064434               | 10,2 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

## SYLAX LUG TYPE - DUCTILE IRON POLYAMIDE COATED DISC

EDPM - General and industrial services

θ -10°/+90°

Nitrile - General and industrial services, untreated water

θ +5°/+85°



### ANSI 150 / 20 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |      |          |
| 149G 039 554                   | on request             | 149G 046 152                  | on request                | 3,8  | 50       |
| 149G 039 555                   | on request             | 149G 046 153                  | on request                | 4,1  | 65       |
| 149G 039 556                   | 10064140               | 149G 046 154                  | on request                | 3,9  | 80       |
| 149G 039 557                   | on request             | 149G 046 155                  | on request                | 8,2  | 100      |
| 149G 039 569                   | on request             | 149G 046 156                  | on request                | 9,0  | 125      |
| 149G 039 558                   | 10064141               | 149G 046 157                  | on request                | 12,2 | 150      |
| 149G 039 559                   | on request             | 149G 046 158                  | on request                | 23,6 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

### PN25 / 25 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|--------------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |      |          |
| 149G 046 571                   | 10064321               | 3,8  | 50       |
| 149G 062 787                   | 10064324               | 5,0  | 65       |
| 149G 060 016                   | 10064325               | 5,2  | 80       |
| 149G 034 285                   | 10064326               | 8,3  | 100      |
| 149G 034 288                   | 10064327               | 11,2 | 125      |
| 149G 034 291                   | 10064329               | 11,8 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX WAFER TYPE - ALU BRONZE DISC****EDPM - General and industrial services** $\theta$  -10°/+90°**Nitrile - Sea water, ship yards** $\theta$  +5°/+85°**ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |      |          |
| 149G 039 545                   | on request             | 149G 046 135                  | on request                | 3,8  | 40       |
| 149G 039 546                   | on request             | 149G 046 136                  | on request                | 3,3  | 50       |
| 149G 039 547                   | on request             | 149G 046 137                  | on request                | 2,9  | 65       |
| 149G 039 548                   | on request             | 149G 046 138                  | on request                | 3,2  | 80       |
| 149G 039 549                   | 10077352               | 149G 046 139                  | 10064386                  | 7,2  | 100      |
| 149G 039 570                   | on request             | 149G 043 396                  | on request                | 7,8  | 125      |
| 149G 044 114                   | on request             | 149G 044 657                  | on request                | 9,8  | 150      |
| 149G 039 551                   | on request             | 149G 046 140                  | on request                | 16,5 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 / 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|--------------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |      |          |
| 149G 039 534                   | 10064000               | 3,8  | 40       |
| 149G 016 808                   | on request             | 4,3  | 50       |
| 149G 016 809                   | on request             | 4,7  | 65       |
| 149G 021 130                   | on request             | 3,4  | 80       |
| 149G 033 106                   | on request             | 7,7  | 100      |
| 149G 033 109                   | on request             | 9,6  | 125      |
| 149G 033 112                   | on request             | 10,3 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

## SYLAX LUG TYPE - ALU BRONZE DISC

**EDPM - General and industrial services**

θ -10°/+90°

**Nitrile - Sea water, ship yards**

θ +5°/+85°



### ANSI 150 / 20 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |      |          |
| 149G 039 560                   | on request             |                               |                           | 2,6  | 32       |
| 149G 039 561                   | on request             | 149G 046 167                  | on request                | 3,7  | 40       |
| 149G 039 562                   | on request             | 149G 046 168                  | 10082372                  | 3,8  | 50       |
| 149G 039 563                   | on request             | 149G 046 169                  | on request                | 4,3  | 65       |
| 149G 039 564                   | on request             | 149G 046 170                  | on request                | 3,9  | 80       |
| 149G 062 814                   | on request             | 149G 046 171                  | on request                | 8,2  | 100      |
| 149G 039 571                   | on request             | 149G 058 929                  | on request                | 9,0  | 125      |
| 149G 039 566                   | on request             | 149G 046 173                  | on request                | 9,9  | 150      |
| 149G 039 567                   | on request             | 149G 046 174                  | on request                | 20,6 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

### PN25 / 25 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|--------------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |      |          |
| 149G 039 537                   | on request             | 2,6  | 32       |
| 149G 039 538                   | on request             | 4,3  | 40       |
| 149G 016 803                   | on request             | 3,8  | 50       |
| 149G 016 804                   | on request             | 5,8  | 65       |
| 149G 016 805                   | on request             | 4,5  | 80       |
| 149G 034 306                   | on request             | 8,3  | 100      |
| 149G 034 309                   | on request             | 9,0  | 125      |
| 149G 034 312                   | on request             | 12,6 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX WAFER TYPE - 316 L STAINLESS STEEL DISC****EDPM - Drinking water, general and industrial services** $\theta$  -10°/+90°**Nitrile - Sea water, general and industrial services** $\theta$  +5°/+85°**ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |      |          |
| 149G 045 545                   | 10064282               | 149G 046 119                  | on request                | 2,9  | 40       |
| 149G 038 570                   | 10064283               | 149G 046 120                  | 10064288                  | 3,3  | 50       |
| 149G 085 477                   | on request             | 149G 046 121                  | 10064289                  | 3,7  | 65       |
| 149G 045 550                   | 10064286               | 149G 046 122                  | 10064290                  | 3,2  | 80       |
| 149G 028 535                   | 10064287               | 149G 046 123                  | 10064291                  | 7,5  | 100      |
| 149G 044 406                   | 10079163               | 149G 046 124                  | on request                | 8,0  | 125      |
| 149G 045 552                   | 10078916               | 149G 046 125                  | on request                | 10,4 | 150      |
| 149G 045 553                   | on request             | 149G 046 126                  | on request                | 17,0 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 / 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|--------------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |      |          |
| 149G 045 554                   | on request             | 2,9  | 40       |
| 149G 045 555                   | 10064439               | 4,3  | 50       |
| 149G 045 556                   | 10064389               | 4,7  | 65       |
| 149G 016 813                   | 10064393               | 4,2  | 80       |
| 149G 027 934                   | 10064399               | 8,2  | 100      |
| 149G 045 557                   | 10064403               | 9,6  | 125      |
| 149G 044 395                   | 10064405               | 10,2 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX LUG TYPE - 316 L STAINLESS STEEL DISC**

**EDPM - Drinking water, general and industrial services**

θ -10°/+90°

**Nitrile - Sea water, general and industrial services**

θ +5°/+85°



**ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | Kg   | DN<br>mm |
|--------------------------------|------------------------|-------------------------------|---------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |      |          |
| 149G 048 642                   | on request             |                               |                           | 2,6  | 32       |
| 149G 045 558                   | 10079551               | 149G 046 159                  | 10079022                  | 2,9  | 40       |
| 149G 045 559                   | 10079500               | 149G 046 160                  | 10064006                  | 3,8  | 50       |
| 149G 045 560                   | on request             | 149G 046 161                  | 10064007                  | 4,2  | 65       |
| 149G 045 561                   | 10064562               | 149G 046 162                  | 10079553                  | 3,9  | 80       |
| 149G 045 562                   | 10064563               | 149G 046 163                  | 10079312                  | 8,5  | 100      |
| 149G 045 563                   | on request             | 149G 046 164                  | 10078413                  | 10,3 | 125      |
| 149G 045 564                   | 10079585               | 149G 046 165                  | 10079503                  | 12,9 | 150      |
| 149G 045 565                   | 10064564               | 149G 046 166                  | on request                | 23,9 | 200      |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 / 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Kg   | DN<br>mm |
|--------------------------------|------------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |      |          |
| 149G 045 566                   | on request             | 3,5  | 32       |
| 149G 045 567                   | 10064356               | 3,5  | 40       |
| 149G 045 571                   | 10064338               | 4,1  | 50       |
| 149G 016 079                   | 10064341               | 5,8  | 65       |
| 149G 093 463                   | 10064343               | 7,2  | 80       |
| 149G 045 572                   | 10064346               | 8,8  | 100      |
| 149G 045 573                   | 10064348               | 11,5 | 125      |
| 149G 045 574                   | 10064350               | 12,4 | 150      |

Flange rating PN 25. PFA 25 bar (water) / PS

# Chapter 5.3

## Shut Off Valves - Sylax with Manual Gearbox

### SYLAX WITH MANUAL GEAR BOX



**MANUAL GEAR BOX  
LONGLIFE LUBRICATED  
ACTUATED WITH GEAR**



5

### SYLAX WAFER TYPE - DUCTILE IRON POLYAMIDE COATED DISC

#### EPDM - General and industrial services

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

#### Nitrile - General and industrial services, untreated water

θ +5°/+85°



| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080012                     | 10063375               | 149G080013                    | on request                | 50       | 3,6  |
| 149G079923                     | on request             | 149G080014                    | on request                | 65       | 4,0  |
| 149G079839                     | on request             | 149G080015                    | on request                | 80       | 4,3  |
| 149G079094                     | on request             | 149G079602                    | on request                | 100      | 6,2  |
| 149G079297                     | on request             | 149G079969                    | on request                | 125      | 8,1  |
| 149G079095                     | 10063384               | 149G079603                    | on request                | 150      | 8,5  |
| 149G079298                     | 10063387               | 149G079370                    | 10063401                  | 200      | 16,3 |
| 149G079968                     | on request             | 149G079971 (*)                | on request                | 250      | 22,7 |
| 149G079188                     | on request             | 149G079335 (*)                | 10083314                  | 300      | 33,9 |
| 149G079207                     | 10064378               | 149G080016                    | on request                | 350      | 40,4 |

Flange rating PN 6/10/16/ASA 150. PFA 16 bar (water) / PS

\* PFA = PS maxi = 10 bar

## SYLAX LUG TYPE - DUCTILE IRON POLYAMIDE COATED DISC

### EPDM - General and industrial services

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

### Nitrile - General and industrial services, untreated water

θ +5°/+85°



| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G080019                     | on request       | 149G080023              | on request          | 50    | 4,0  |
| 149G080020                     | on request       | 149G080024              | on request          | 65    | 4,5  |
| 149G080021                     | on request       | 149G080025              | on request          | 80    | 5,4  |
| 149G079327                     | on request       | 149G079977              | on request          | 100   | 7,7  |
| 149G079972                     | 10063533         | 149G079978              | on request          | 125   | 9,9  |
| 149G079973                     | 10063537         | 149G079737              | on request          | 150   | 8,0  |
| 149G079974 (*)                 | on request       | 149G079486 (*)          | on request          | 200   | 22,5 |
| 149G079975 (*)                 | on request       | 149G079540 (*)          | on request          | 250   | 29,0 |
| 149G079787 (*)                 | on request       | 149G079371 (*)          | on request          | 300   | 40,4 |
| 149G079295 (*)                 | on request       | 149G080026 (*)          | on request          | 350   | 49,2 |
| 149G079288 (***)               | on request       | 149G079454 (***)        | on request          | 200   | 22,2 |
| 149G079976 (***)               | on request       | 149G079980 (**)         | on request          | 250   | 28,5 |
| 149G079343 (***)               | 10063543         | 149G079981 (**)         | on request          | 300   | 39,9 |
| 149G080022 (***)               | on request       | 149G080027 (***)        | on request          | 350   | 48,4 |

Flange rating PN 10/16. PFA 16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10

\*\* PFA = PS maxi = 10 bar and PN16

\*\*\* PN16

## SYLAX WAFER TYPE - DUCTILE IRON POLYAMIDE COATED DISC

### CARBOXYLATED NITRILE - Powdery, abrasive fluids

θ +5°/+110°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080037                     | on request  | 50    | 3,6  |
| 149G080039                     | on request  | 65    | 4,1  |
| 149G080036                     | on request  | 80    | 4,3  |
| 149G079994                     | on request  | 100   | 7,7  |
| 149G079953                     | on request  | 125   | 9,6  |
| 149G079996                     | on request  | 150   | 10,1 |
| 149G079995 (*)                 | on request  | 200   | 16,3 |
| 149G079997 (*)                 | on request  | 250   | 25,1 |
| 149G079993 (*)                 | on request  | 300   | 34,4 |
| 149G080038 (*)                 | on request  | 350   | 44,8 |

Flange rating PN 6/10/16/ASA 150 PFA 10 bar (water) / PS

\* PFA = PS maxi = 6 bar

**SYLAX LUG TYPE - DUCTILE IRON POLYAMIDE COATED DISC****CARBOXYLATED NITRILE - Powdery, abrasive fluids** $\theta +5^{\circ}/+110^{\circ}$ 

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080040                     | on request  | 50    | 4,0  |
| 149G080041                     | on request  | 65    | 4,5  |
| 149G080042                     | on request  | 80    | 5,5  |
| 149G079952                     | on request  | 100   | 9,3  |
| 149G079985                     | on request  | 125   | 11,5 |
| 149G079992                     | on request  | 150   | 9,7  |
| 149G079989 (*)                 | on request  | 200   | 22,6 |
| 149G079990 (*)                 | on request  | 250   | 31,4 |
| 149G079991 (*)                 | on request  | 300   | 40,9 |
| 149G080044 (*)                 | on request  | 350   | 53,6 |
| 149G079986 (**)                | on request  | 200   | 22,3 |
| 149G079987 (**)                | on request  | 250   | 31,4 |
| 149G079988 (**)                | on request  | 300   | 40,9 |
| 149G080043 (**)                | on request  | 350   | 52,6 |

Flange rating PN 10/16. PFA 10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar and PN16

**SYLAX WAFER TYPE - DUCTILE IRON EPOXY COATED DISC****EPDM - Drinking water** $\theta -10^{\circ}/+90^{\circ}$  with CAST IRON GG25 body $\theta -15^{\circ}/+90^{\circ}$  with DUCTILE IRON GGG40 body**NITRILE - Untreated water** $\theta +5^{\circ}/+85^{\circ}$ 

| Legacy Part No.<br>EPDM        | Part Number<br>EPDM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN mm | Kg   |
|--------------------------------|---------------------|----------------------------|------------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |       |      |
| 149G080113                     | 10063315            | 149G080117                 | on request             | 50    | 3,6  |
| 149G080114                     | on request          | 149G080118                 | on request             | 65    | 4,1  |
| 149G080115                     | 10080854            | 149G080119                 | on request             | 80    | 4,3  |
| 149G079944                     | 10088632            | 149G080082                 | on request             | 100   | 6,3  |
| 149G080049                     | on request          | 149G080083                 | on request             | 125   | 8,1  |
| 149G080050                     | on request          | 149G080084                 | on request             | 150   | 10,1 |
| 149G079466                     | 10088661            | 149G080085                 | on request             | 200   | 16,3 |
| 149G080051                     | 10063328            | 149G080086 (*)             | on request             | 250   | 22,7 |
| 149G079145                     | 10088638            | 149G080087 (*)             | on request             | 300   | 33,9 |
| 149G079146                     | 10064423            | 149G080052                 | on request             | 350   | 40,5 |

Flange rating PN 6/10/16/ASA 150. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar

### SYLAX WAFER TYPE - DUCTILE IRON EPOXY COATED DISC (Continued)

#### EPDM - Drinking water

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

#### NITRILE - Untreated water

θ +5°/+85°

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G073186                     | 10062626            | 149G082440                 | on request             | 400      | 71,2  |
| 149G073187                     | 10063083            | 149G073189                 | on request             | 450      | 89,0  |
| 149G073188                     | on request          | 149G073190                 | on request             | 500      | 113,0 |
| 149G082453                     | on request          | 149G082502                 | on request             | 600      | 174,3 |
| 149G082362                     | on request          | 149G082364                 | on request             | 700      | 251,6 |
| 149G082363                     | on request          | 149G082365                 | on request             | 800      | 296,6 |
| 149G065431                     | on request          | 149G065440                 | on request             | 900      | 497,0 |
| 149G065432                     | 10063086            | 149G082545                 | on request             | 1000     | 556,0 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G082327                     | 10064368            | 149G082443                 | 10063526               | 400      | 71,2  |
| 149G073192                     | 10064371            | 149G073194                 | 10063528               | 450      | 89,0  |
| 149G070889                     | 10064374            | 149G073195                 | on request             | 500      | 113,0 |
| 149G082454                     | 10064375            | 149G082456                 | on request             | 600      | 174,3 |
| 149G081136                     | on request          | 149G082366                 | on request             | 700      | 251,6 |
| 149G079805                     | 10064377            | 149G085327                 | on request             | 800      | 296,6 |
| 149G065448                     | on request          | 149G065456                 | on request             | 900      | 501,0 |
| 149G065449                     | 10064421            | 149G082546                 | on request             | 1000     | 556,0 |

Flange rating PN 16. PFA 10/16 bar (water) / PS

### SYLAX LUG TYPE - DUCTILE IRON EPOXY COATED DISC

#### EPDM - Drinking water

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

#### NITRILE - Untreated water

θ +5°/+85°

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|---------------------|----------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |      |
| 149G080122                     | on request          | 149G080125                 | on request             | 50       | 4,0  |
| 149G080123                     | on request          | 149G080126                 | on request             | 65       | 4,4  |
| 149G080124                     | on request          | 149G080127                 | on request             | 80       | 5,4  |
| 149G080045                     | on request          | 149G080092                 | on request             | 100      | 7,7  |
| 149G080046                     | on request          | 149G080093                 | on request             | 125      | 9,9  |
| 149G080047                     | on request          | 149G080094                 | on request             | 150      | 8,0  |
| 149G080055 (*)                 | on request          | 149G080089 (*)             | on request             | 200      | 22,5 |
| 149G080056 (*)                 | on request          | 149G080090 (*)             | on request             | 250      | 28,9 |
| 149G080057 (*)                 | on request          | 149G080091 (*)             | on request             | 300      | 40,4 |
| 149G080103 (*)                 | on request          | 149G080088                 | on request             | 350      | 49,2 |

Flange rating PN 10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10



**SYLAX LUG TYPE - DUCTILE IRON EPOXY COATED DISC (Continued)****EPDM - Drinking water**

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

**NITRILE - Untreated water**

θ +5°/+85°

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|---------------------|----------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |      |
| 149G079184                     | 10088320            | 149G080095                 | on request             | 200      | 22,2 |
| 149G080048                     | 10084996            | 149G080096 (**)            | on request             | 250      | 28,5 |
| 149G080054                     | 10079428            | 149G080097 (**)            | on request             | 300      | 39,9 |
| 149G080128                     | on request          | 149G080053                 | on request             | 350      | 48,4 |

Flange rating PN16. PFA 10/16 bar (water) / PS

\*\* PFA = PS maxi = 10 bar and PN16

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G082444                     | on request          | 149G082445                 | on request             | 400      | 90,6  |
| 149G073197                     | 10062627            | 149G073200                 | on request             | 450      | 115,0 |
| 149G073198                     | on request          | 149G073201                 | on request             | 500      | 159,0 |
| 149G082420                     | on request          | 149G082422                 | on request             | 600      | 186,0 |

Flange rating PN10. PFA 10/16 bar (water) / PS

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G082446                     | 10064027            | 149G082447                 | on request             | 400      | 90,6  |
| 149G073202                     | 10064030            | 149G073205                 | on request             | 450      | 115,0 |
| 149G073203                     | 10078745            | 149G073206                 | on request             | 500      | 160,0 |
| 149G082421                     | on request          | 149G082423                 | 10062334               | 600      | 186,0 |

Flange rating PN16. PFA 10/16 bar (water) / PS



**SYLAX DOUBLE FLANGED - DUCTILE IRON EPOXY COATED DISC (Continued)**

**EPDM - Drinking water**

θ -10°/+90° with CAST IRON GG25 body

θ -15°/+90° with DUCTILE IRON GGG40 body

**NITRILE - Untreated water**

θ +5°/+85°



| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G079684                     | 10064011         | 149G079799              | on request          | 150   | 8,5  |
| 149G079328                     | 10076701         | 149G080099              | on request          | 200   | 20,8 |
| 149G079898                     | 10064530         | 149G080100 (*)          | 10078981            | 250   | 30,7 |
| 149G079123                     | 10064531         | 149G080101 (*)          | on request          | 300   | 49,6 |
| 149G079142 (*)                 | on request       | 149G080102 (*)          | on request          | 350   | 63,1 |
| 149G079284 (**)                | 10064528         | 149G080098 (**)         | on request          | 350   | 62,9 |

Flange rating PN10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10

\*\* PN16

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082448                     | 10064534         | 149G082449              | on request          | 400   | 95,6   |
| 149G073207                     | on request       | 149G073209              | on request          | 450   | 111,0  |
| 149G071106                     | 10064537         | 149G073210              | on request          | 500   | 155,0  |
| 149G082458                     | 10062609         | 149G082505              | on request          | 600   | 227,0  |
| 149G082368                     | on request       | 149G082369              | on request          | 700   | 318,0  |
| 149G081961                     | on request       | 149G082370              | on request          | 800   | 434,0  |
| 149G065476                     | on request       | 149G065485              | on request          | 900   | 610,0  |
| 149G065477                     | on request       | 149G082547              | on request          | 1000  | 725,0  |
| 149G061911                     | 10086761         | 149G061913              | on request          | 1200  | 1037,5 |

Flange rating PN10. PFA 10/16 bar (water) / PS

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082328                     | 10064538         | 149G082450              | on request          | 400   | 95,6   |
| 149G073211                     | 10078594         | 149G073213              | on request          | 450   | 111,0  |
| 149G072882                     | 10077149         | 149G073214              | 10080403            | 500   | 152,0  |
| 149G082459                     | 10062514         | 149G082509              | on request          | 600   | 227,0  |
| 149G081137                     | 10062516         | 149G082372              | on request          | 700   | 318,0  |
| 149G082371                     | 10062518         | 149G082373              | on request          | 800   | 434,0  |
| 149G065494                     | on request       | 149G065503              | 10080402            | 900   | 608,0  |
| 149G065495                     | 10062519         | 149G082550              | on request          | 1000  | 718,0  |
| 149G061912                     | on request       | 149G061914              | 10080401            | 1200  | 1037,5 |

Flange rating PN16. PFA 10/16 bar (water) / PS

**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC****EPDM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**NITRILE - General services and industrial processes, hydrocarbons**

θ +5°/+85°

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|---------------------|----------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |      |
| 149G080175                     | on request          | 149G080176                 | on request             | 32/40    | 3,2  |
| 149G079065                     | 10063429            | 149G080177                 | on request             | 50       | 3,6  |
| 149G079400                     | on request          | 149G080178                 | 10063500               | 65       | 4,0  |
| 149G079334                     | on request          | 149G080179                 | on request             | 80       | 4,3  |
| 149G080139                     | 10063453            | 149G079039                 | 10063510               | 100      | 6,1  |
| 149G079096                     | on request          | 149G080140                 | on request             | 125      | 8,3  |
| 149G079311                     | 10063472            | 149G079470                 | 10063518               | 150      | 8,9  |
| 149G079080                     | on request          | 149G079099                 | 10063521               | 200      | 16,3 |
| 149G079562                     | 10063484            | 149G080141 (*)             | on request             | 250      | 23,0 |
| 149G079122                     | 10063488            | 149G080142 (*)             | 10079828               | 300      | 34,8 |
| 149G079906                     | 10063490            | 149G080190                 | 10063525               | 350      | 41,1 |

Flange rating PN 6/10/16/ASA 150. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



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**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC (continued)****EPDM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**NITRILE - General services and industrial processes, hydrocarbons**

θ +5°/+85°

| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G082462                     | 10064453            | 149G082465                 | on request             | 400      | 71,2  |
| 149G073229                     | 10064444            | 149G073231                 | on request             | 450      | 89,0  |
| 149G070632                     | 10064414            | 149G073232                 | on request             | 500      | 116,0 |
| 149G079240                     | 10064452            | 149G082516                 | on request             | 600      | 174,3 |
| 149G082273                     | on request          | 149G082374                 | on request             | 700      | 251,6 |
| 149G082151                     | 10063678            | 149G082375                 | on request             | 800      | 296,6 |
| 149G065646                     | on request          | 149G065654                 | on request             | 900      | 519,0 |
| 149G065647                     | on request          | 149G082561                 | on request             | 1000     | 582,0 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



| Legacy Part No.<br>EDPM        | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|---------------------|----------------------------|------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                     |                            |                        |          |       |
| 149G082467                     | 10063685            | 149G082468                 | on request             | 400      | 71,2  |
| 149G073233                     | 10063689            | 149G073235                 | on request             | 450      | 89,0  |
| 149G071143                     | 10063696            | 149G073236                 | on request             | 500      | 116,0 |
| 149G082460                     | 10063698            | 149G082521                 | on request             | 600      | 174,3 |
| 149G079446                     | on request          | 149G082376                 | on request             | 700      | 251,6 |
| 149G079804                     | on request          | 149G082377                 | on request             | 800      | 296,6 |
| 149G065662                     | on request          | 149G065670                 | on request             | 900      | 521,0 |
| 149G065663                     | on request          | 149G082562                 | on request             | 1000     | 589,0 |

Flange rating PN 16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar

### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

**EPDM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**NITRILE - General services and industrial processes, hydrocarbons**

θ +5°/+85°

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G080182                     | on request       | 149G080183              | on request          | 32    | 3,5  |
| 149G079643                     | 10063575         | 149G080184              | on request          | 40    | 3,5  |
| 149G079357                     | 10079822         | 149G080185              | 10063661            | 50    | 4,0  |
| 149G079156                     | on request       | 149G080186              | on request          | 65    | 4,5  |
| 149G079578                     | 10063603         | 149G080187              | 10063665            | 80    | 5,4  |
| 149G079137                     | 10063615         | 149G080144              | on request          | 100   | 7,7  |
| 149G079367                     | 10063621         | 149G080145              | on request          | 125   | 10,1 |
| 149G079358                     | 10063628         | 149G091923              | 10063671            | 150   | 8,4  |
| 149G079359 (*)                 | on request       | 149G080147 (*)          | on request          | 200   | 22,6 |
| 149G080143 (*)                 | on request       | 149G080148 (*)          | on request          | 250   | 29,3 |
| 149G079678 (*)                 | 10063636         | 149G080149 (*)          | on request          | 300   | 41,3 |
| 149G079677 (*)                 | on request       | 149G080191 (*)          | on request          | 350   | 49,9 |

Flange rating PN 10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10



### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC (continued)

**EPDM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**NITRILE - General services and industrial processes, hydrocarbons**

θ +5°/+85°

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G079423                     | 10077338         | 149G080150              | on request          | 200   | 22,3 |
| 149G079473                     | 10063649         | 149G080151 (**)         | 10081593            | 250   | 28,8 |
| 149G079472                     | 10063653         | 149G080152 (**)         | 10063675            | 300   | 40,8 |
| 149G080192                     | 10063656         | 149G080193              | 10063676            | 350   | 49,1 |

Flange rating PN 16. PFA 10/16 bar (water) / PS

\*\* PFA = PS maxi = 10 bar and PN16



| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg    |
|--------------------------------|------------------|-------------------------|---------------------|-------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |       |
| 149G082469                     | 10064449         | 149G082470              | on request          | 400   | 90,6  |
| 149G073237                     | on request       | 149G073240              | on request          | 450   | 115,0 |
| 149G073238                     | 10086949         | 149G073241              | 10080462            | 500   | 166,0 |
| 149G082424                     | 10086950         | 149G082426              | on request          | 600   | 186,0 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg    |
|--------------------------------|------------------|-------------------------|---------------------|-------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |       |
| 149G082471                     | 10064254         | 149G082472              | 10064219            | 400   | 90,6  |
| 149G073242                     | 10083777         | 149G073245              | on request          | 450   | 115,0 |
| 149G073243                     | 10064257         | 149G073246              | 10064220            | 500   | 162,0 |
| 149G082425                     | 10083776         | 149G082427              | on request          | 600   | 186,0 |

Flange rating PN 16. PFA 10/16 bar (water) / PS

**SYLAX DOUBLE FLANGED - 316 STAINLESS STEEL DISC****EPDM - Drinking water, general services and industrial processes, swimming pool water**

θ -10°/+120° with CAST IRON GG25 body

θ -15°/+120° with DUCTILE IRON GGG40 body

**NITRILE - General services and industrial processes, hydrocarbons**

θ +5°/+85°



| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G079458                     | 10064037         | 149G080194              | on request          | 150   | 8,9  |
| 149G079081                     | 10064545         | 149G079796              | on request          | 200   | 20,8 |
| 149G097476                     | 10064546         | 149G080162              | on request          | 250   | 31,0 |
| 149G097474                     | 10081649         | 149G080163              | on request          | 300   | 50,6 |
| 149G079320 (*)                 | on request       | 149G080164 (*)          | on request          | 350   | 63,8 |
| 149G080161 (**)                | 10064542         | 149G080160 (**)         | on request          | 350   | 63,6 |

Flange rating PN 10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10

\*\* PN16

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082476                     | 10064549         | 149G082477              | on request          | 400   | 95,6   |
| 149G073247                     | on request       | 149G073249              | on request          | 450   | 111,0  |
| 149G070498                     | 10064551         | 149G073250              | on request          | 500   | 158,0  |
| 149G079366                     | on request       | 149G082463              | on request          | 600   | 227,0  |
| 149G082378                     | on request       | 149G082380              | on request          | 700   | 318,0  |
| 149G082379                     | on request       | 149G082381              | on request          | 800   | 434,0  |
| 149G065703                     | on request       | 149G065711              | on request          | 900   | 627,0  |
| 149G065704                     | on request       | 149G082563              | on request          | 1000  | 746,0  |
| 149G065972                     | on request       | 149G065372              | on request          | 1200  | 1037,5 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

| Legacy Part No. EPDM           | Part Number EPDM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082479                     | 10064554         | 149G082495              | 10064559            | 400   | 95,6   |
| 149G073251                     | 10064555         | 149G073254              | 10064561            | 450   | 111,0  |
| 149G073252                     | 10064556         | 149G073255              | on request          | 500   | 156,0  |
| 149G082125                     | 10062522         | 149G081546              | on request          | 600   | 227,0  |
| 149G082119                     | 10062523         | 149G082382              | on request          | 700   | 318,0  |
| 149G079803                     | 10077388         | 149G082383              | on request          | 800   | 434,0  |
| 149G065719                     | on request       | 149G065727              | on request          | 900   | 625,0  |
| 149G065720                     | 10062525         | 149G082564              | on request          | 1000  | 744,0  |
| 149G065973                     | on request       | 149G065373              | on request          | 1200  | 1037,5 |

Flange rating PN 16. PFA 10/16 bar (water) / PS

### SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC

**SILICONE** - Air or dry hot gas, ice-cold water, industrial processes

θ -10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM** - Industrial fluids, acids, bases, hydrocarbons

θ +5°/+180°

Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.

| Legacy<br>Part No.<br>SILICONE | Part<br>Number<br>SILICONE | Kg   | Legacy<br>Part No.<br>FKM | Part<br>Number<br>FKM | Kg   | DN<br>mm |
|--------------------------------|----------------------------|------|---------------------------|-----------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                            |      |                           |                       |      |          |
| 149G080249                     | on request                 | 3,2  | 149G080252                | 10085772              | 3,3  | 32/40    |
| 149G080250                     | on request                 | 3,6  | 149G080253                | on request            | 4,2  | 50       |
| 149G080251                     | on request                 | 4,1  | 149G079100                | on request            | 4,2  | 65       |
| 149G080265                     | on request                 | 4,3  | 149G080254                | on request            | 4,4  | 80       |
| 149G079314                     | 10063867                   | 6,1  | 149G079040                | on request            | 6,3  | 100      |
| 149G080203                     | 10063869                   | 10,0 | 149G080201                | on request            | 9,9  | 125      |
| 149G080204                     | on request                 | 10,5 | 149G079583                | on request            | 10,8 | 150      |
| 149G079313 (*)                 | on request                 | 16,5 | 149G079238                | on request            | 16,7 | 200      |
| 149G080205 (*)                 | on request                 | 22,9 | 149G080234                | on request            | 23,5 | 250      |
| 149G080206 (*)                 | on request                 | 35,4 | 149G080202                | on request            | 35,9 | 300      |
| 149G080270 (*)                 | on request                 | 42,5 | 149G080271                | on request            | 42,8 | 350      |

Flange rating PN 6/10/16/ASA 150. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar



**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC (Continued)****SILICONE - Air or dry hot gas, ice-cold water, industrial processes**

θ - 10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM - Industrial fluids, acids, bases, hydrocarbons**

θ +5°/+180°

Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg    | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg    | DN<br>mm |
|--------------------------------|-------------------------|-------|------------------------|--------------------|-------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |       |                        |                    |       |          |
| 149G082518 (*)                 | on request              | 71,0  | 149G082523             | 10064446           | 77,0  | 400      |
| 149G073273 (*)                 | on request              | 91,8  | 149G073276             | on request         | 98,5  | 450      |
| 149G073274 (*)                 | on request              | 120,0 | 149G073277             | on request         | 126,0 | 500      |
| 149G082466 (*)                 | on request              | 170,0 | 149G082534             | on request         | 194,0 | 600      |
| 149G082411 (*)                 | on request              | 330,0 | 149G082580             | on request         | 373,8 | 700      |
| 149G082412 (*)                 | on request              | 575,8 | 149G082581             | on request         | 580,9 | 800      |
| 149G065757 (*)                 | on request              | 622,7 | 149G082555             | on request         | 622,7 | 900      |
| 149G065758 (*)                 | on request              | 711,0 | 149G082565             | on request         | 711,0 | 1000     |

Flange rating PN 10. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg    | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg    | DN<br>mm |
|--------------------------------|-------------------------|-------|------------------------|--------------------|-------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |       |                        |                    |       |          |
| 149G073279 (*)                 | on request              | 91,6  | 149G073280             | on request         | 98,3  | 450      |
| 149G073278 (*)                 | on request              | 120,0 | 149G073281             | on request         | 126,0 | 500      |
| 149G082533 (*)                 | on request              | 170,0 | 149G082535             | on request         | 194,0 | 600      |
| 149G082413 (*)                 | on request              | 329,6 | 149G082582             | on request         | 373,4 | 700      |
| 149G082414 (*)                 | on request              | 575,2 | 149G082583             | on request         | 580,3 | 800      |
| 149G065772 (*)                 | on request              | 621,4 | 149G065779             | on request         | 621,4 | 900      |
| 149G065773 (*)                 | on request              | 705,0 | 149G082566             | on request         | 705,0 | 1000     |

Flange rating PN 16. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar



### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

**SILICONE** - Air or dry hot gas, ice-cold water, industrial processes

θ -10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM** - Industrial fluids, acids, bases, hydrocarbons

θ +5°/+180°

Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.



| Legacy<br>Part No.<br>SILICONE | Part<br>Number<br>SILICONE | Kg   | Legacy<br>Part No.<br>FKM | Part<br>Number<br>FKM | Kg   | DN<br>mm |
|--------------------------------|----------------------------|------|---------------------------|-----------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                            |      |                           |                       |      |          |
| 149G080255                     | on request                 | 3,5  | 149G080260                | on request            | 3,6  | 32       |
| 149G080256                     | on request                 | 3,5  | 149G080261                | on request            | 3,6  | 40       |
| 149G080257                     | on request                 | 4,0  | 149G080262                | on request            | 3,9  | 50       |
| 149G080258                     | on request                 | 4,6  | 149G080263                | on request            | 4,6  | 65       |
| 149G080259                     | on request                 | 5,4  | 149G080264                | on request            | 5,5  | 80       |
| 149G080218                     | on request                 | 7,7  | 149G080227                | 10084511              | 7,9  | 100      |
| 149G080219                     | on request                 | 11,9 | 149G080228                | on request            | 11,7 | 125      |
| 149G080220                     | on request                 | 10,0 | 149G080229                | on request            | 10,4 | 150      |
| 149G080221 (*)                 | on request                 | 22,7 | 149G079862 (***)          | 10064252              | 23,0 | 200      |
| 149G080222 (*)                 | on request                 | 29,2 | 149G080230 (***)          | on request            | 29,8 | 250      |
| 149G080223 (*)                 | on request                 | 41,9 | 149G46611 (***)           | on request            | 50,0 | 300      |
| 149G080272 (*)                 | on request                 | 50,3 | 149G080273 (***)          | on request            | 51,2 | 350      |

Flange rating PN 10/16. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar

\*\*\* PN10

**SYLAX LUG TYPE - 316 STAINLESS STEEL DISC (Continued)****SILICONE - Air or dry hot gas, ice-cold water, industrial processes**

θ -10°/+200° with CAST IRON GG25 body

θ - 25°/+200° with DUCTILE IRON GGG40 body

**FKM - Industrial fluids, acids, bases, hydrocarbons**

θ +5°/+180°

Whilst FKM and Silicone have high temperature thresholds, these materials are not recommended for use on WET DUTY at high temperature. DRY duties only recommended at high temperature thresholds. Not for use on hot water.

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg   | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg   | DN<br>mm |
|--------------------------------|-------------------------|------|------------------------|--------------------|------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |      |                        |                    |      |          |
| 149G080224 (**)                | on request              | 22,4 | 149G080231             | on request         | 22,6 | 200      |
| 149G080225 (**)                | 10088626                | 28,8 | 149G080232             | on request         | 29,3 | 250      |
| 149G080226 (**)                | on request              | 41,4 | 149G46615              | on request         | 49,4 | 300      |
| 149G080274 (**)                | 10088627                | 49,5 | 149G080275             | on request         | 50,4 | 350      |

Flange rating PN 16. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar

\*\*\* PN10

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg    | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg    | DN<br>mm |
|--------------------------------|-------------------------|-------|------------------------|--------------------|-------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |       |                        |                    |       |          |
| 149G082530 (*)                 | on request              | 95,0  | 149G082524             | on request         | 100,0 | 400      |
| 149G073283 (*)                 | on request              | 120,4 | 149G073286             | on request         | 126,8 | 450      |
| 149G073282 (*)                 | on request              | 159,0 | 149G073287             | 10087172           | 165,0 | 500      |
| 149G082441 (*)                 | on request              | 250,0 | 149G082541             | on request         | 273,0 | 600      |

Flange rating PN 10. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar

\*\*\* PN10

| Legacy Part No.<br>SILICONE    | Part Number<br>SILICONE | Kg    | Legacy Part No.<br>FKM | Part Number<br>FKM | Kg    | DN<br>mm |
|--------------------------------|-------------------------|-------|------------------------|--------------------|-------|----------|
| <b>DUCTILE IRON GGG40 BODY</b> |                         |       |                        |                    |       |          |
| 149G082528                     | on request              | 95,0  | 149G082526             | on request         | 100,0 | 400      |
| 149G073289                     | on request              | 118,5 | 149G073292             | on request         | 125,3 | 450      |
| 149G073290                     | on request              | 159,0 | 149G073293             | on request         | 165,0 | 500      |
| 149G082442                     | on request              | 246,0 | 149G082544             | on request         | 270,0 | 600      |

Flange rating PN 16. PFA 6/10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar

\*\*\* PN10



### SYLAX WAFER TYPE - ALU BRONZE DISC

**EDPM - General and industrial services, swimming pool water**

θ - 10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080353                     | on request             | 149G080357                    | on request                | 32/40    | 3,5  |
| 149G080354                     | on request             | 149G080358                    | on request                | 50       | 3,9  |
| 149G080355                     | on request             | 149G079143                    | on request                | 65       | 4,3  |
| 149G080356                     | on request             | 149G080359                    | on request                | 80       | 4,5  |
| 149G080297                     | on request             | 149G080304                    | on request                | 100      | 6,2  |
| 149G080298                     | on request             | 149G079133                    | on request                | 125      | 8,1  |
| 149G080299                     | on request             | 149G079732                    | 10082474                  | 150      | 8,6  |
| 149G080300                     | on request             | 149G079909                    | on request                | 200      | 16,1 |
| 149G079078                     | on request             | 149G080305                    | on request                | 250      | 21,9 |
| 149G080302                     | on request             | 149G079895                    | on request                | 300      | 33,6 |
| 149G080303                     | on request             | 149G080360                    | on request                | 350      | 41,1 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



**SYLAX WAFER TYPE - ALU BRONZE DISC (continued)****EDPM - General and industrial services, swimming pool water**

θ - 10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°

| Legacy<br>Part No.<br>EDPM | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg    |
|----------------------------|------------------------|-------------------------------|---------------------------|----------|-------|
| <b>DUCTILE IRON BODY</b>   |                        |                               |                           |          |       |
| 149G082496                 | on request             | 149G082498                    | on request                | 400      | 71,2  |
| 149G073310                 | on request             | 149G073313                    | on request                | 450      | 89,0  |
| 149G073311                 | on request             | 149G073314                    | on request                | 500      | 117,0 |
| 149G082497                 | on request             | 149G082525                    | on request                | 600      | 174,3 |
| 149G082473                 | on request             | 149G082475                    | on request                | 700      | 251,6 |
| 149G082474                 | on request             | 149G082478                    | on request                | 800      | 296,6 |
| 149G065537                 | on request             | 149G065545                    | on request                | 900      | 521,0 |
| 149G065538                 | on request             | 149G082569                    | on request                | 1000     | 579,0 |

Flange rating PN 10. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg    |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |       |
| 149G082499                     | on request             | 149G082500                    | 10062568                  | 400      | 71,2  |
| 149G093464                     | on request             | 149G073320                    | on request                | 450      | 89,0  |
| 149G073318                     | on request             | 149G073321                    | on request                | 500      | 117,0 |
| 149G082527                     | on request             | 149G082529                    | on request                | 600      | 174,3 |
| 149G082480                     | on request             | 149G082015                    | on request                | 700      | 251,6 |
| 149G082481                     | on request             | 149G082482                    | on request                | 800      | 296,6 |
| 149G065553                     | on request             | 149G065561                    | on request                | 900      | 520,0 |
| 149G065554                     | on request             | 149G082570                    | on request                | 1000     | 579,0 |

Flange rating PN16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



### SYLAX LUG TYPE - ALU BRONZE DISC

**EDPM - General and industrial services, swimming pool water**

θ - 10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°

| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|-------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |      |
| 149G080363                     | on request       | 149G079831              | on request          | 32    | 3,8  |
| 149G080364                     | 10063549         | 149G079386              | on request          | 40    | 3,8  |
| 149G080365                     | on request       | 149G080368              | on request          | 50    | 4,3  |
| 149G080366                     | on request       | 149G080369              | on request          | 65    | 4,7  |
| 149G080367                     | on request       | 149G080370              | on request          | 80    | 5,7  |
| 149G080314                     | on request       | 149G079235              | on request          | 100   | 7,8  |
| 149G080315                     | on request       | 149G079317              | on request          | 125   | 10,0 |
| 149G079218                     | on request       | 149G079708              | on request          | 150   | 8,1  |
| 149G080316 (*)                 | on request       | 149G079234 (*)          | on request          | 200   | 22,4 |
| 149G080372 (*)                 | on request       | 149G079233 (*)          | on request          | 250   | 28,2 |
| 149G080317 (*)                 | on request       | 149G080318 (*)          | 10063145            | 300   | 40,1 |
| 149G079375 (*)                 | on request       | 149G080371 (*)          | 10064455            | 350   | 49,9 |

Flange rating PN10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



### SYLAX LUG TYPE - ALU BRONZE DISC (continued)

**EDPM - General and industrial services, swimming pool water**

θ - 10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°

| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg    |
|--------------------------------|------------------|-------------------------|---------------------|-------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |       |
| 149G082503                     | on request       | 149G082504              | 10064411            | 400   | 90,6  |
| 149G073323                     | on request       | 149G073325              | on request          | 450   | 115,0 |
| 149G073324                     | on request       | 149G073326              | on request          | 500   | 161,0 |
| 149G082483                     | on request       | 149G082485              | on request          | 600   | 186,0 |

Flange rating PN10. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar



| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg    |
|--------------------------------|------------------|-------------------------|---------------------|-------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |       |
| 149G082506                     | 10070368         | 149G082508              | on request          | 400   | 90,6  |
| 149G073329                     | on request       | 149G073332              | on request          | 450   | 115,0 |
| 149G073330                     | on request       | 149G073333              | on request          | 500   | 162,0 |
| 149G082484                     | on request       | 149G082486              | on request          | 600   | 186,0 |

Flange rating PN16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar

**SYLAX DOUBLE FLANGED - ALU BRONZE DISC****EDPM - General and industrial services, swimming pool water**

θ - 10°/+120° with CAST IRON GG25 body

θ - 15°/+120° with DUCTILE IRON GGG40 body

**Nitrile - Sea water, ship yards**

θ +5°/+85°



| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No NITRILE | Part Number NITRILE | DN mm | Kg   |
|--------------------------------|------------------|------------------------|---------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                        |                     |       |      |
| 149G080373                     | on request       | 149G080374             | on request          | 150   | 8,6  |
| 149G080327                     | on request       | 149G080332             | on request          | 200   | 20,7 |
| 149G080328                     | on request       | 149G079490 (*)         | on request          | 250   | 30,0 |
| 149G080329                     | on request       | 149G080333 (*)         | on request          | 300   | 49,4 |
| 149G080331 (*)                 | on request       | 149G080335 (*)         | on request          | 350   | 63,8 |
| 149G080330 (**)                | on request       | 149G080334 (**)        | on request          | 350   | 63,6 |

Flange rating PN10/16. PFA 10/16 bar (water) / PS

\* PFA = PS maxi = 10 bar and PN10

\*\* PN16

| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082510                     | on request       | 149G082512              | on request          | 400   | 95,6   |
| 149G073335                     | on request       | 149G066734              | on request          | 450   | 111,0  |
| 149G073336                     | on request       | 149G081720              | on request          | 500   | 158,0  |
| 149G082553                     | on request       | 149G082554              | on request          | 600   | 227,0  |
| 149G082487                     | on request       | 149G082489              | on request          | 700   | 318,0  |
| 149G082488                     | on request       | 149G082490              | on request          | 800   | 434,0  |
| 149G065586                     | on request       | 149G065594              | on request          | 900   | 627,0  |
| 149G065587                     | on request       | 149G082577              | on request          | 1000  | 745,0  |
| 149G065974                     | on request       | 149G065402              | on request          | 1200  | 1037,5 |

Flange rating PN10. PFA 10/16 bar (water) / PS

| Legacy Part No. EDPM           | Part Number EDPM | Legacy Part No. NITRILE | Part Number NITRILE | DN mm | Kg     |
|--------------------------------|------------------|-------------------------|---------------------|-------|--------|
| <b>DUCTILE IRON GGG40 BODY</b> |                  |                         |                     |       |        |
| 149G082514                     | on request       | 149G082515              | on request          | 400   | 95,6   |
| 149G073340                     | on request       | 149G073343              | on request          | 450   | 111,0  |
| 149G073341                     | on request       | 149G073344              | on request          | 500   | 155,0  |
| 149G082551                     | on request       | 149G082552              | on request          | 600   | 227,0  |
| 149G082491                     | on request       | 149G082493              | on request          | 700   | 318,0  |
| 149G082492                     | on request       | 149G082494              | on request          | 800   | 434,0  |
| 149G065602                     | on request       | 149G065610              | on request          | 900   | 622,0  |
| 149G065603                     | on request       | 149G082578              | on request          | 1000  | 741,0  |
| 149G065975                     | on request       | 149G065403              | on request          | 1200  | 1037,5 |

Flange rating PN16. PFA 10/16 bar (water) / PS

### SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC

CARBOXYLATED NITRILE - Powdery, abrasive fluids

θ +5°/+110°



| Legacy Part No.                | Part Number | Kg   | DN mm |
|--------------------------------|-------------|------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |      |       |
| 149G080483                     | on request  | 3,2  | 40    |
| 149G080484                     | on request  | 3,6  | 50    |
| 149G080485                     | on request  | 4,1  | 65    |
| 149G080486                     | on request  | 4,3  | 80    |
| 149G080393                     | on request  | 7,7  | 100   |
| 149G080394                     | on request  | 9,9  | 125   |
| 149G080395                     | on request  | 10,5 | 150   |
| 149G080396 (*)                 | on request  | 11,0 | 200   |
| 149G080397 (*)                 | on request  | 25,4 | 250   |
| 149G080398 (*)                 | on request  | 35,3 | 300   |

Flange rating PN 6/10/16/ASA 150. PFA 10 bar (water) / PS

\* PFA = PS maxi = 6 bar

### SYLAX LUG TYPE - 316 STAINLESS STEEL DISC

CARBOXYLATED NITRILE - Powdery, abrasive fluids

θ +5°/+110°



| Legacy Part No.                | Part Number | Kg   | DN mm |
|--------------------------------|-------------|------|-------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |      |       |
| 149G080487                     | on request  | 3,5  | 32    |
| 149G080488                     | on request  | 3,5  | 40    |
| 149G080489                     | on request  | 4,0  | 50    |
| 149G080490                     | on request  | 4,5  | 65    |
| 149G080491                     | on request  | 5,5  | 80    |
| 149G080456                     | on request  | 9,3  | 100   |
| 149G080467                     | on request  | 11,7 | 125   |
| 149G080454                     | on request  | 10,1 | 150   |
| 149G080468 (**)                | on request  | 22,3 | 200   |
| 149G080469 (**)                | on request  | 31,3 | 250   |
| 149G080470 (**)                | on request  | 41,3 | 300   |
| 149G080471 (*)                 | on request  | 22,6 | 200   |
| 149G080472 (*)                 | on request  | 31,7 | 250   |
| 149G080473 (*)                 | on request  | 41,8 | 300   |

Flange rating PN 10/16. PFA 10 bar (water) / PS

\* PFA = PS maxi = 6 bar and PN10

\*\* PFA = PS maxi = 6 bar and PN16

**SYLAX WAFER TYPE - 316 STAINLESS STEEL DISC****EPDM** - Drinking water, general and industrial services, swimming pool water

θ -15°/110°

**NITRILE** - General services and industrial processes, hydrocarbons

θ +5°/85°

| Legacy Part No.<br>EDPM     | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg   |
|-----------------------------|---------------------|----------------------------|------------------------|----------|------|
| <b>STAINLESS STEEL BODY</b> |                     |                            |                        |          |      |
| 149G080545                  | on request          | 149G080549                 | on request             | 32/40    | 2,9  |
| 149G080546                  | on request          | 149G080550                 | on request             | 50       | 3,7  |
| 149G080547                  | on request          | 149G080551                 | on request             | 65       | 4,1  |
| 149G080548                  | on request          | 149G080552                 | on request             | 80       | 4,5  |
| 149G080404                  | on request          | 149G080410                 | on request             | 100      | 6,5  |
| 149G080405                  | on request          | 149G080411                 | on request             | 125      | 7,9  |
| 149G080406                  | 10079150            | 149G080412                 | on request             | 150      | 8,5  |
| 149G080407                  | on request          | 149G080413                 | on request             | 200      | 16,9 |
| 149G080408                  | on request          | 149G080414 (*)             | on request             | 250      | 23,4 |
| 149G080409                  | 10088769            | 149G080415 (*)             | on request             | 300      | 34,6 |

Flange rating PN10/16. PFA 16 bar (water) / PS

\* ISO PN10



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**SYLAX LUG TYPE - 316 STAINLESS STEEL DISC****EPDM** - Drinking water, general and industrial services, swimming pool water

θ -15°/110°

**NITRILE** - General services and industrial processes, hydrocarbons

θ +5°/85°

| Legacy Part No.<br>EDPM     | Part Number<br>EDPM | Legacy Part No.<br>NITRILE | Part Number<br>NITRILE | DN<br>mm | Kg   |
|-----------------------------|---------------------|----------------------------|------------------------|----------|------|
| <b>STAINLESS STEEL BODY</b> |                     |                            |                        |          |      |
| 149G080553                  | on request          | 149G080556                 | on request             | 50       | 1,6  |
| 149G080554                  | on request          | 149G080557                 | on request             | 65       | 5,1  |
| 149G080555                  | on request          | 149G080558                 | on request             | 80       | 5,9  |
| 149G080416                  | on request          | 149G43586                  | on request             | 100      | 2,5  |
| 149G43567                   | on request          | 149G43587                  | on request             | 125      | 6,6  |
| 149G080417                  | on request          | 149G43588                  | on request             | 150      | 12,3 |
| 149G43569 (***)             | on request          | 149G43589 (***)            | on request             | 200      | 9,1  |
| 149G43570 (***)             | on request          | 149G43590 (**)             | on request             | 250      | 18,0 |
| 149G43571 (***)             | on request          | 149G43591 (**)             | on request             | 300      | 39,5 |
| 149G041715 (*)              | on request          | 149G040184 (*)             | on request             | 200      | 9,1  |
| 149G041716 (*)              | on request          | 149G040185 (*)             | on request             | 250      | 37,5 |
| 149G080455 (*)              | on request          | 149G040186 (*)             | on request             | 300      | 44,2 |

Flange rating PN10/16. PFA 16 bar (water) / PS

\* ISO PN10 and PN10

\*\* ISO PN10

\*\*\* ISO PN16



## Chapter 5.4

## Shut Off Valves - Sylax with Manual Gearbox ANSI 150 and PN25 Valve Options

### SYLAX WAFER TYPE - ALU BRONZE DISC

**EPDM** - General and industrial services, swimming pool water

$\theta -10^{\circ}/+90^{\circ}$

**NITRILE** - Sea water, ship yards

$\theta +5^{\circ}/+85^{\circ}$



#### ANSI 150 / 20 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080641                     | on request             | 149G080679                    | on request                | 32/40    | 3,5  |
| 149G080642                     | on request             | 149G080680                    | on request                | 50       | 3,9  |
| 149G080643                     | on request             | 149G080681                    | on request                | 65       | 4,3  |
| 149G080644                     | on request             | 149G080682                    | on request                | 80       | 4,5  |
| 149G080606                     | on request             | 149G080613                    | on request                | 100      | 6,2  |
| 149G080607                     | on request             | 149G080614                    | on request                | 125      | 9,7  |
| 149G080608                     | on request             | 149G080615                    | on request                | 150      | 10,2 |
| 149G080609                     | on request             | 149G080616                    | 10064474                  | 200      | 16,2 |
| 149G080610                     | on request             |                               |                           | 250      | 25,0 |
| 149G080611                     | on request             |                               |                           | 300      | 34,1 |
| 149G080612                     | on request             |                               |                           | 350      | 45,7 |

Flange rating ASA 150. PFA 20 bar (water) / PS

#### PN25 25 Bar

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | DN<br>mm | Kg   |
|--------------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |          |      |
| 149G080650                     | on request             | 32/40    | 4,2  |
| 149G085224                     | on request             | 50       | 4,6  |
| 149G080652                     | on request             | 65       | 4,3  |
| 149G080653                     | on request             | 80       | 4,5  |
| 149G079904                     | on request             | 100      | 7,8  |
| 149G091976                     | on request             | 125      | 17,3 |
| 149G080626                     | on request             | 150      | 10,1 |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX LUG TYPE - ALU BRONZE DISC****EPDM** - General and industrial services, swimming pool water

θ -10°/+90°

**NITRILE** - Sea water, ship yards

θ +5°/+85°

**ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080649                     | on request             | 149G080687                    | on request                | 32       | 3,8  |
| 149G080645                     | on request             | 149G080683                    | on request                | 40       | 3,8  |
| 149G080646                     | on request             | 149G080684                    | on request                | 50       | 4,3  |
| 149G080647                     | on request             | 149G080685                    | on request                | 65       | 4,7  |
| 149G080648                     | on request             | 149G080686                    | on request                | 80       | 5,1  |
| 149G080617                     | on request             | 149G080622                    | on request                | 100      | 7,8  |
| 149G080618                     | on request             | 149G080623                    | on request                | 125      | 11,3 |
| 149G080619                     | on request             | 149G080624                    | on request                | 150      | 12,7 |
| 149G048492                     | on request             | 149G080625                    | on request                | 200      | 23,3 |
| 149G080620                     | on request             |                               |                           | 250      | 30,8 |
| 149G080621                     | on request             |                               |                           | 300      | 40,1 |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | DN<br>mm | Kg   |
|--------------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |          |      |
| 149G080654                     | on request             | 32       | 4,5  |
| 149G080655                     | on request             | 40       | 4,5  |
| 149G080656                     | on request             | 50       | 4,1  |
| 149G080657                     | on request             | 65       | 5,3  |
| 149G080658                     | on request             | 80       | 5,7  |
| 149G080627                     | on request             | 100      | 9,2  |
| 149G080628                     | 10064333               | 125      | 11,0 |
| 149G080629                     | 10064334               | 150      | 12,3 |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX WAFER TYPE - 316 L STAINLESS STEEL DISC**

**EPDM** - Drinking water, general services and industrial processes

θ -10°/+90°

**NITRILE** - Sea water, general services and industrial processes

θ +5°/+85°



**ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080659                     | on request             | 149G080688                    | on request                | 32/40    | 3,3  |
| 149G080660                     | on request             | 149G080689                    | on request                | 50       | 3,6  |
| 149G080661                     | on request             | 149G080690                    | on request                | 65       | 4,1  |
| 149G080662                     | on request             | 149G080691                    | on request                | 80       | 4,3  |
| 149G079421                     | on request             | 149G079002                    | on request                | 100      | 6,3  |
| 149G080569                     | on request             | 149G080571                    | on request                | 125      | 9,8  |
| 149G080570                     | on request             | 149G080572                    | on request                | 150      | 10,4 |
| 149G080584                     | 10064458               | 149G080598                    | on request                | 200      | 16,3 |
| 149G080585                     | 10064410               |                               |                           | 250      | 25,5 |
| 149G080586                     | on request             |                               |                           | 300      | 36,9 |
| 149G080600                     | on request             |                               |                           | 350      | 45,8 |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | DN<br>mm | Kg   |
|--------------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |          |      |
| 149G080668                     | 10079450               | 32/40    | 3,1  |
| 149G080669                     | 10064441               | 50       | 4,1  |
| 149G079287                     | 10064391               | 65       | 4,1  |
| 149G079325                     | 10064395               | 80       | 4,4  |
| 149G080581                     | 10064401               | 100      | 7,8  |
| 149G080582                     | on request             | 125      | 9,2  |
| 149G080583                     | 10064407               | 150      | 10,2 |

Flange rating PN 25. PFA 25 bar (water) / PS

**SYLAX LUG TYPE - 316 L STAINLESS STEEL DISC****EPDM - Drinking water, general services and industrial processes** $\theta -10^{\circ}/+90^{\circ}$ **NITRILE - Sea water, general services and industrial processes** $\theta +5^{\circ}/+85^{\circ}$ **ANSI 150 / 20 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | Legacy<br>Part No.<br>NITRILE | Part<br>Number<br>NITRILE | DN<br>mm | Kg   |
|--------------------------------|------------------------|-------------------------------|---------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |                               |                           |          |      |
| 149G080664                     | on request             | 149G080692                    | on request                | 32       | 3,6  |
| 149G080665                     | on request             | 149G080693                    | on request                | 40       | 3,6  |
| 149G080666                     | on request             | 149G080694                    | on request                | 50       | 4,0  |
| 149G080663                     | on request             | 149G080695                    | on request                | 65       | 4,5  |
| 149G080667                     | on request             | 149G080696                    | on request                | 80       | 4,9  |
| 149G080601                     | on request             | 149G080594                    | on request                | 100      | 7,9  |
| 149G080602                     | on request             | 149G080595                    | on request                | 125      | 11,4 |
| 149G080603                     | 10080102               | 149G080596                    | on request                | 150      | 12,9 |
| 149G079876                     | on request             | 149G080561                    | on request                | 200      | 22,9 |
| 149G080604                     | on request             |                               |                           | 250      | 31,3 |
| 149G080605                     | on request             |                               |                           | 300      | 42,9 |

Flange rating ASA 150. PFA 20 bar (water) / PS

**PN25 25 Bar**

| Legacy<br>Part No.<br>EDPM     | Part<br>Number<br>EDPM | DN<br>mm | Kg   |
|--------------------------------|------------------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                        |          |      |
| 149G080672                     | on request             | 32       | 3,4  |
| 149G079642                     | on request             | 40       | 3,4  |
| 149G080670                     | 10064339               | 50       | 3,9  |
| 149G080671                     | on request             | 65       | 5,1  |
| 149G080630                     | on request             | 80       | 5,5  |
| 149G079758                     | 10064347               | 100      | 9,2  |
| 149G080576                     | 10064349               | 125      | 11,1 |
| 149G080577                     | 10064351               | 150      | 12,5 |

Flange rating PN 25. PFA 25 bar (water) / PS

## Chapter 5.5

## SYLAX FM/CNPP for sprinkler systems with manual gear box

## SYLAX FM/CNPP FOR SPRINKLER SYSTEMS WITH MANUAL GEAR BOX

CNPP AND FM APPROVALS

COMPETITIVE QUALITY AND PRICE RATIO

RELIABILITY

PN16 design pressure butterfly valves dedicated to sprinkler systems, all valves are equipped with chain and padlocks. Limit switches inside gear box are also available.

**Factory Mutual** approval n° 3029234 date 06/06/2006

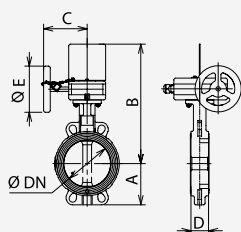
On request : tapped lugs body, ALU BRONZE DISCS.

**CNPP** approval n° YO/AL/12/037 date 02/12/2003

On request : tapped lugs body, alu bronze or stainless steel discs - Version PS 20 bar

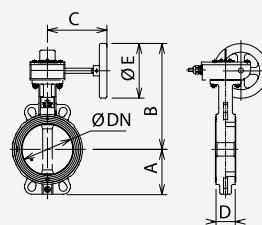
## OVERALL DIMENSIONS &amp; TECHNICAL INFORMATION

## SYLAX CNPP



| DN    | A   | B   | C   | D  | E   | Type      |
|-------|-----|-----|-----|----|-----|-----------|
| 32/40 | 57  | 281 | 118 | 32 | 125 | 232-07 LX |
| 50    | 62  | 294 | 118 | 43 | 125 | 232-07 LX |
| 65    | 70  | 303 | 118 | 46 | 125 | 232-07 LX |
| 80    | 89  | 309 | 118 | 46 | 125 | 232-07 LX |
| 100   | 106 | 333 | 118 | 52 | 125 | 232-07 LX |
| 125   | 120 | 348 | 118 | 56 | 125 | 232-07 LX |
| 150   | 132 | 361 | 118 | 56 | 125 | 232-07 LX |
| 200   | 164 | 419 | 205 | 60 | 200 | 232-10 LX |
| 250   | 200 | 444 | 205 | 68 | 200 | 232-10 LX |
| 300   | 238 | 469 | 205 | 78 | 200 | 232-10 LX |

## SYLAX FM



| DN    | A   | B     | C   | D  | E   | Type   |
|-------|-----|-------|-----|----|-----|--------|
| 32/40 | 57  | 232   | 168 | 32 | 100 | 150 LX |
| 50    | 62  | 238   | 168 | 43 | 100 | 150 LX |
| 65    | 70  | 247   | 168 | 46 | 100 | 150 LX |
| 80    | 89  | 253   | 168 | 46 | 100 | 150 LX |
| 100   | 106 | 277   | 175 | 52 | 120 | 150 LX |
| 125   | 120 | 292   | 175 | 56 | 120 | 150 LX |
| 150   | 131 | 305   | 175 | 56 | 120 | 150 LX |
| 200   | 164 | 386   | 228 | 60 | 200 | 550 LX |
| 250   | 200 | 411,5 | 228 | 68 | 200 | 550 LX |
| 300   | 235 | 461,5 | 234 | 78 | 250 | 550 LX |

## Chapter 5.6

## Shut Off Valves - SYLAX GAS

**SYLAX GAS : BUTTERFLY VALVES FOR GAS APPLICATIONS NF ROB-GAZ / DVGW**

ON REQUEST : Range SYLAX GAS PS 8 bar. ALU BRONZE DISCs. Butterfly valves under NF ROB-GAZ approval are limited on temperature from -20°C to +60°C.

Valves also available with full yellow paint finish on the body – contact us for details

**SYLAX GAS WAFER TYPE WITH NOTCHED YELLOW HANDLE  
- 316 STAINLESS STEEL DISC**

**NITRILE - Gas applications**

θ -20°/+60°

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 038 792                   | 10064185    | 32/40 | 2,9  |
| 149G 038 793                   | 10064187    | 50    | 3,3  |
| 149G 038 794                   | 10064191    | 65    | 3,7  |
| 149G 038 795                   | 10064193    | 80    | 4,0  |
| 149G 038 796                   | 10064199    | 100   | 7,1  |
| 149G 038 797                   | 10064202    | 125   | 7,7  |
| 149G 038 798                   | 10064206    | 150   | 8,5  |
| 149G 038 799                   | 10064211    | 200   | 16,6 |
| 149G 038 800                   | on request  | 250   | 23,3 |

Flange rating PN 6/10/16/ASA 150. PS 6 bar

**SYLAX GAS LUG TYPE WITH NOTCHED YELLOW HANDLE  
- 316 STAINLESS STEEL DISC**

**NITRILE - Gas applications**

θ -20°/+60°

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 038 811                   | on request  | 32    | 3,3  |
| 149G 038 812                   | on request  | 40    | 3,4  |
| 149G 038 813                   | 10064294    | 50    | 3,7  |
| 149G 038 814                   | 10064295    | 65    | 5,1  |
| 149G 038 815                   | 10064299    | 80    | 5,1  |
| 149G 038 816                   | 10064305    | 100   | 7,7  |
| 149G 038 817                   | 10064309    | 125   | 10,1 |
| 149G 038 818                   | 10064314    | 150   | 11,0 |
| 149G 038 821 (*)               | 10064273    | 200   | 23,1 |
| 149G 038 822 (*)               | 10064276    | 250   | 23,6 |
| 149G 038 819 (**)              | 10064317    | 200   | 28,4 |
| 149G 038 820 (**)              | 10079840    | 250   | 28,5 |

Flange rating PN10/16. PS 6 bar

\* PN10

\*\* PN16



## SYLAX GAS WAFER TYPE WITH MANUAL GEAR BOX - 316 STAINLESS STEEL DISC

**NITRILE - Gas applications**

θ -20°/+60°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 080 759                   | on request  | 40    | 3,3  |
| 149G 080 760                   | on request  | 50    | 3,6  |
| 149G 080 761                   | on request  | 65    | 4,1  |
| 149G 080 762                   | on request  | 80    | 4,3  |
| 149G 080 726                   | on request  | 100   | 6,3  |
| 149G 080 727                   | 10064203    | 125   | 9,7  |
| 149G 080 728                   | on request  | 150   | 10,6 |
| 149G 080 729                   | on request  | 200   | 16,3 |
| 149G 080 730                   | on request  | 250   | 23,0 |
| 149G 079 286                   | 10064217    | 300   | 34,8 |

Flange rating PN 6/10/16/ASA 150. PS 6 bar

## SYLAX GAS LUG TYPE WITH MANUAL GEAR BOX - 316 STAINLESS STEEL DISC

**NITRILE - Gas applications**

θ -20°/+60°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 080767                    | on request  | 40    | 3,6  |
| 149G 080768                    | on request  | 50    | 4,0  |
| 149G 080769                    | on request  | 65    | 4,6  |
| 149G 080770                    | on request  | 80    | 5,5  |
| 149G 080734                    | on request  | 100   | 7,9  |
| 149G 080735                    | on request  | 125   | 11,6 |
| 149G 080736                    | on request  | 150   | 10,1 |
| 149G 080737 (**)               | on request  | 200   | 22,2 |
| 149G 080738 (**)               | on request  | 250   | 28,8 |
| 149G 080739 (**)               | 10064320    | 300   | 40,8 |
| 149G 080731 (*)                | on request  | 200   | 22,6 |
| 149G 080732 (*)                | 10064277    | 250   | 29,3 |
| 149G 080733 (*)                | 10064281    | 300   | 41,4 |

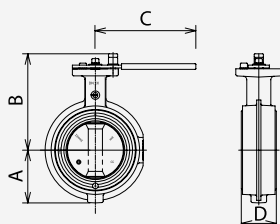
Flange rating PN 10/16. PS 6 bar

\* PN10

\*\* PN16

## OVERALL DIMENSIONS & TECHNICAL INFORMATION

### SYLAX GAS RING SHAPED BODY



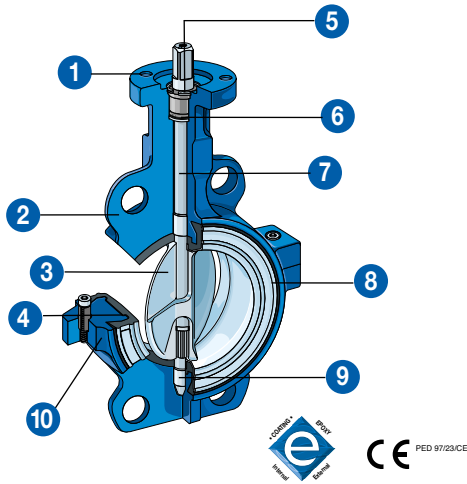
| DN  | A  | B   | D  | C   |
|-----|----|-----|----|-----|
| 50  | 58 | 137 | 43 | 140 |
| 80  | 72 | 153 | 46 | 140 |
| 100 | 83 | 165 | 52 | 140 |

# Chapter 5.7

## Shut Off Valves - TILIS

### TILIS DN 50 TO 300MM

- Food fluids
- Carrying of mildly corrosive media
- Dismountable and easily maintained



#### MAIN TECHNICAL FEATURES DESIGNED IN ACCORDANCE WITH EN593

|    |                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Connection flange according to ISO 5211 standard                                                                                                     |
| 2  | Two part body for easy maintenance of the butterfly valve                                                                                            |
| 3  | Spline driven shaft connected to spherically machined disc. Floating disc allows self centering thus preventing stress on the liner during operation |
| 4  | Tongue and groove seat design allows perfect tightness                                                                                               |
| 5  | Circlip preventing blow-out of shaft                                                                                                                 |
| 6  | Secondary sealing                                                                                                                                    |
| 7  | One piece shaft                                                                                                                                      |
| 8  | Replaceable elastomer liner ensures full protection of shaft and body                                                                                |
| 9  | Anti-friction bearings                                                                                                                               |
| 10 | Face to face dimensions according to :<br>ISO 5752 class 20.<br>NFEN 558 class 20.<br>API 609 table 2                                                |

TILIS is designed for the food processing industry and the carrying of mildly corrosive media.

For processes where hygiene is of the utmost importance, TILIS with PTFE coating (FDA approved) and EPDM liner, together with stainless steel 316 disc is highly recommended.

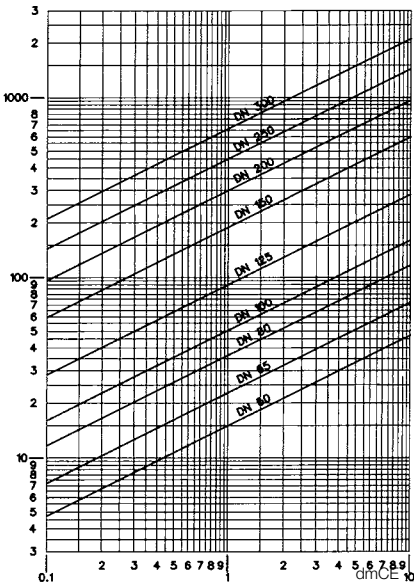
TILIS is designed for industrial applications where elastomer cannot be used. The two part body can be quickly taken apart for easy maintenance.

Greatly appreciated throughout industry, TILIS valves are used for mineral water, cosmetic process, detergents, fertilisers and weed-killers.

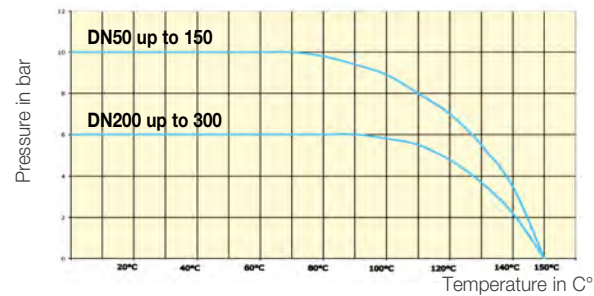
On request : we can supply butterfly valves type TILIS conformed to the Directive 94/9/CE

#### HEADLOSS CHART

For water at 20°C  
m³/h



#### TILIS - PRESSURE/TEMPERATURE DIAGRAM



### TILIS WAFER TYPE 316 STAINLESS STEEL DISC

EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids

θ +5°/+150°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 013 015                   | 10063807    | 50    | 5,8  |
| 149G 013 025                   | 10063812    | 65    | 5,9  |
| 149G 059 737                   | 10063815    | 80    | 6,2  |
| 149G 013 039                   | 10063820    | 100   | 7,3  |
| 149G 013 047                   | 10063822    | 125   | 7,6  |
| 149G 013 051                   | 10063826    | 150   | 9,0  |
| 149G 038 871 (*)               | 10063702    | 200   | 12,9 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)

\* PS maxi = 6 bar

### TILIS LUG TYPE 316 STAINLESS STEEL DISC

EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids

θ +5°/+150°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 016 787                   | 10063972    | 50    | 5,6  |
| 149G 059 869                   | 10063975    | 65    | 4,9  |
| 149G 059 870                   | 10063977    | 80    | 7,2  |
| 149G 059 871                   | 10063981    | 100   | 7,4  |
| 149G 016 789                   | 10063984    | 125   | 8,4  |
| 149G 059 872                   | 10063986    | 150   | 11,0 |
| 149G 038 872 (*)               | on request  | 200   | 20,0 |
| 149G 038 873 (**)              | on request  | 200   | 20,0 |

Flange rating PN 10/16. PS 10 bar (water)

\* PS maxi = 6 bar and PN16

\*\* PS maxi = 6 bar and PN10

### TILIS WAFER TYPE 316 STAINLESS STEEL DISC

EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids

θ +5°/+150°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080799                     | on request  | 50    | 4,2  |
| 149G080800                     | on request  | 65    | 4,7  |
| 149G080801                     | 10063817    | 80    | 4,4  |
| 149G080790                     | on request  | 100   | 8,0  |
| 149G080791                     | on request  | 125   | 9,3  |
| 149G080792                     | 10078554    | 150   | 10,3 |
| 149G080782 (*)                 | 10079430    | 200   | 16,2 |
| 149G079617 (*)                 | 10087715    | 250   | 14,4 |
| 149G080783 (*)                 | 10087716    | 300   | 35,0 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)

\* PS maxi = 6 bar

**TILIS LUG TYPE 316 STAINLESS STEEL DISC****EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids** $\theta +5^{\circ}/+150^{\circ}$ 

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080802                     | 10063973    | 50    | 4,0  |
| 149G080803                     | on request  | 65    | 4,5  |
| 149G080804                     | 10063979    | 80    | 2,1  |
| 149G080793                     | 10063983    | 100   | 3,7  |
| 149G080794                     | on request  | 125   | 11,5 |
| 149G080795                     | on request  | 150   | 12,6 |
| 149G088303 (*)                 | on request  | 200   | 29,1 |
| 149G080796 (*)                 | on request  | 250   | 30,7 |
| 149G080797 (*)                 | on request  | 300   | 40,8 |
| 149G079858 (**)                | on request  | 200   | 29,5 |
| 149G080771 (**)                | on request  | 250   | 31,2 |
| 149G080772 (**)                | on request  | 300   | 41,4 |

Flange rating PN 10/16. PS 10 bar (water)

\* PS maxi = 6 bar and PN16

\*\* PS maxi = 6 bar and PN10

**TILIS WAFER TYPE 316 STAINLESS STEEL MIRROR POLISHED DISC****EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids** $\theta +5^{\circ}/+150^{\circ}$ 

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 016 842                   | on request  | 50    | 5,9  |
| 149G 016 843                   | on request  | 65    | 6,1  |
| 149G 012 688                   | on request  | 80    | 6,5  |
| 149G 016 844                   | 10063706    | 100   | 7,9  |
| 149G 016 845                   | 10063707    | 125   | 8,7  |
| 149G 016 846                   | on request  | 150   | 10,3 |
| 149G 038 874 (*)               | on request  | 200   | 16,7 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)

\* PS maxi = 6 bar

**TILIS LUG TYPE 316 STAINLESS STEEL MIRROR POLISHED DISC****EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids** $\theta +5^{\circ}/+150^{\circ}$ 

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 016 740                   | on request  | 50    | 4,7  |
| 149G 016 741                   | on request  | 65    | 4,9  |
| 149G 016 742                   | on request  | 80    | 7,5  |
| 149G 016 743                   | on request  | 100   | 7,4  |
| 149G 059 106                   | on request  | 125   | 8,4  |
| 149G 059 107                   | on request  | 150   | 11,0 |
| 149G 038 875 (*)               | on request  | 200   | 20,0 |
| 149G 038 876 (**)              | on request  | 200   | 20,0 |

Flange rating PN 10/16. PS 10 bar (water)

\* PS maxi = 6 bar and PN16

\*\* PS maxi = 6 bar and PN10

### TILIS WAFER TYPE 316 STAINLESS STEEL MIRROR POLISHED DISC

EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids

θ +5°/+150°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080806                     | on request  | 50    | 4,0  |
| 149G080807                     | on request  | 65    | 4,5  |
| 149G080808                     | on request  | 80    | 4,1  |
| 149G080784                     | on request  | 100   | 7,3  |
| 149G080785                     | on request  | 125   | 8,4  |
| 149G080786                     | on request  | 150   | 9,0  |
| 149G080787 (*)                 | on request  | 200   | 12,9 |
| 149G080788 (*)                 | on request  | 250   | 8,8  |
| 149G080789 (*)                 | on request  | 300   | 25,7 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)

\* PS maxi = 6 bar

### TILIS LUG TYPE 316 STAINLESS STEEL MIRROR POLISHED DISC

EPR/PTFE - Food fluids, drinks, pharmaceutical and cosmetic fluids

θ +5°/+150°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080809                     | on request  | 50    | 3,8  |
| 149G080810                     | on request  | 65    | 4,2  |
| 149G080811                     | on request  | 80    | 5,1  |
| 149G080776                     | on request  | 100   | 8,7  |
| 149G080777                     | on request  | 125   | 10,6 |
| 149G080778                     | on request  | 150   | 11,3 |
| 149G080779 (*)                 | on request  | 200   | 18,5 |
| 149G080780 (*)                 | on request  | 250   | 25,1 |
| 149G080781 (*)                 | on request  | 300   | 32,1 |
| 149G080773 (**)                | on request  | 200   | 18,9 |
| 149G080774 (**)                | on request  | 250   | 25,6 |
| 149G080775 (**)                | on request  | 300   | 31,6 |

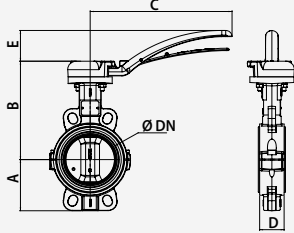
Flange rating PN 10/16. PS 10 bar (water)

\* PS maxi = 6 bar and PN16

\*\* PS maxi = 6 bar and PN10

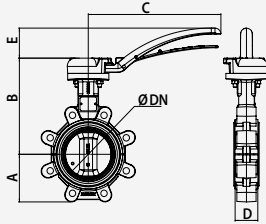
OVERALL DIMENSIONS & TECHNICAL INFORMATION

Tilis Wafer Lever



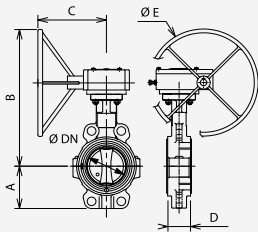
| DN  | A   | B   | C   | D  | E  |
|-----|-----|-----|-----|----|----|
| 50  | 62  | 169 | 200 | 43 | 45 |
| 65  | 70  | 178 | 200 | 46 | 45 |
| 80  | 89  | 184 | 200 | 46 | 45 |
| 100 | 106 | 208 | 290 | 52 | 65 |
| 125 | 120 | 223 | 290 | 56 | 65 |
| 150 | 131 | 236 | 290 | 56 | 65 |
| 200 | 164 | 293 | 450 | 60 | 86 |

Tilis Lugged Lever



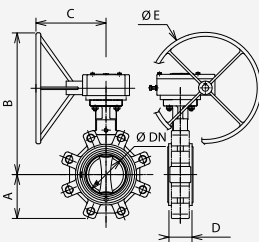
| DN  | A   | B   | C   | D  | E  |
|-----|-----|-----|-----|----|----|
| 50  | 62  | 169 | 200 | 43 | 45 |
| 65  | 70  | 178 | 200 | 46 | 45 |
| 80  | 89  | 184 | 200 | 46 | 45 |
| 100 | 106 | 208 | 290 | 52 | 65 |
| 125 | 120 | 223 | 290 | 56 | 65 |
| 150 | 131 | 236 | 290 | 56 | 65 |
| 200 | 164 | 293 | 450 | 60 | 86 |

Tillis Wafer Gearbox



| DN  | A   | B     | C   | D  | E   | Kg   |
|-----|-----|-------|-----|----|-----|------|
| 50  | 61  | 224,5 | 120 | 41 | 125 | 4,1  |
| 65  | 69  | 233,5 | 120 | 44 | 125 | 4,5  |
| 80  | 88  | 239,5 | 120 | 44 | 125 | 5,1  |
| 100 | 105 | 302   | 197 | 50 | 200 | 8,2  |
| 125 | 119 | 317   | 197 | 54 | 200 | 9,2  |
| 150 | 130 | 330   | 197 | 54 | 200 | 11,1 |
| 200 | 163 | 372,5 | 197 | 58 | 200 | 18,6 |
| 250 | 199 | 433   | 239 | 66 | 250 | 24,8 |
| 300 | 234 | 483   | 293 | 76 | 300 | 36,7 |

Tilis Lugged Gearbox



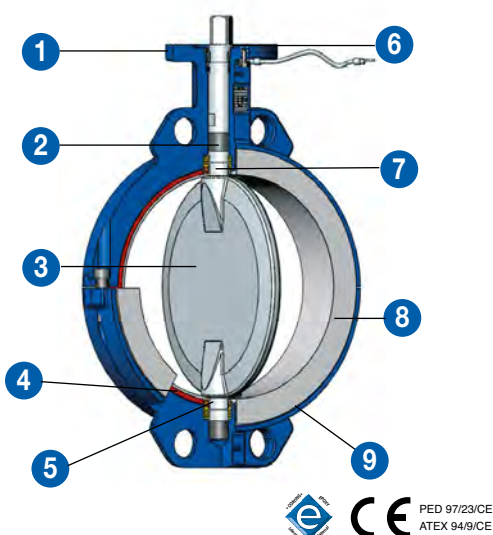
| DN  | A   | B     | C   | D  | E   | Kg   |
|-----|-----|-------|-----|----|-----|------|
| 50  | 61  | 224,5 | 120 | 41 | 125 | 4,4  |
| 65  | 69  | 233,5 | 120 | 44 | 125 | 5,0  |
| 80  | 88  | 239,5 | 120 | 44 | 125 | 5,9  |
| 100 | 106 | 302   | 197 | 50 | 200 | 9,8  |
| 125 | 123 | 317   | 197 | 54 | 200 | 12,3 |
| 150 | 149 | 330   | 197 | 54 | 200 | 13,8 |
| 200 | 178 | 372,5 | 197 | 58 | 200 | 24,2 |
| 250 | 211 | 433   | 239 | 66 | 250 | 33,1 |
| 300 | 243 | 483   | 293 | 76 | 300 | 43,7 |

## Chapter 5.8

# Shut Off Valves - LYCENE

### LYCENE DN 32/40 TO 300 MM

- Suitable for highly corrosive media and pure water
- High level of working safety - long term efficiency
- High level of technology

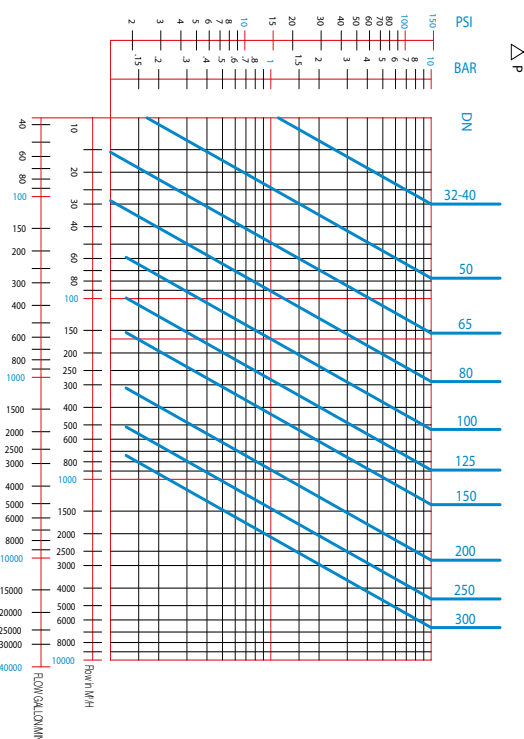


#### MAIN TECHNICAL FEATURES DESIGNED IN ACCORDANCE WITH EN593

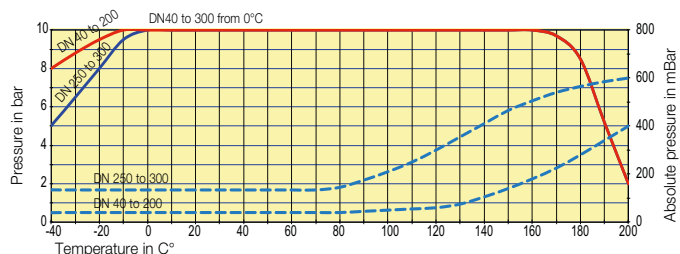
- |                                        |                                                                   |
|----------------------------------------|-------------------------------------------------------------------|
| 1                                      | ISO top connection according to EN ISO 5211                       |
| 2                                      | Anti-friction bearing                                             |
| 3                                      | One piece blow out proof shaft and PFA coated disc (2,5 mm thick) |
| 4                                      | Liner back-up is enclosed in the body                             |
| 5                                      | PFA moulding up the stem ensuring zero leakage                    |
| 6                                      | Upper sealing                                                     |
| 7                                      | Tightness at shaft location with bearing and spring               |
| 8                                      | PTFE liner (3 mm thick)                                           |
| Face to face dimensions according to : |                                                                   |
| 9                                      | ISO 5720 class 20.                                                |
|                                        | EN 558 class 20.                                                  |
|                                        | API 609 table 2.                                                  |

LYCENE Butterfly valves are specifically designed for chemical media, food processing industries and pure water.

This valve offers a very high level of reliability due to its resistance to corrosion. A very high level of working safety for difficult media thanks to PFA and PTFE plastomer liner. In addition to the standard models, we can offer customisations for particularly difficult media.



#### LYCENE - PRESSURE/TEMPERATURE DIAGRAM



From -40°C up to 0°C and from +80°C up to +200°C, the temperature variation does not exceed 30°C in continuous functioning. Peaks beyond this variation are tolerated.

Torque figures available on request.

## REGULATION

**DIRECTIVE 94/9/CE :** (ATEX : ATmosphere EXplosive)

The standard butterfly valves type LYCENE comply with (are conformed to) the Directive concerning equipment and protective systems intended for use in potentially EXplosive Atmospheres 94/9/CE. For some applications, the valves (don't comply with) (are not conformed to) the Directive and therefore, they won't be supplied with a Declaration of Conformity CE.

This directive is only applicable for the following atmospheric conditions :  
 $-20^{\circ}\text{C} < T < +60^{\circ}\text{C}$  ;  $0,8 \text{ bar} \leq P \leq 1,2 \text{ bar}$ .

In this risk analysis, the fluid which passes through the valve is not taken into account. It is under the responsibility of the user to take into consideration the risks generated by the fluid like :

Heating of the surface of the valve, internal chocks generated by granulates, wave of chocks due to the installation (water hammering). Or the risks due to foreign bodies which are inside the installation.

Classification of the bare shaft valve :

The marking of the bare shaft valve is :  II 2 DG

Classification of the set valve + actuation :

- Valve with a hand lever :

The use of the hand levers produced by Socla within a ATEX area do not represent additional risks. The valve with a hand lever is in conformity with (conformed to) the marking :  II 2 DG.

- Valve with other actuators :

The classification of the valve + actuation supplied by Socla is similar to the lowest classification of the components which compose the assemblyset.

No additional marking will be used to indicate the classification of the assemblyset.

If only one component of the assemblyset is not marked with ATEX label therefore the complete assemblyset is not conformed to ATEX directive.

## LYCENE WITH NOTCHED DUCTILE IRON HANDLEVER. WITH NOTCHED DUCTILE IRON HANDLEVER 10 POSITIONS PADLOCKABLE

**LYCENE WAFER TYPE 316 STAINLESS STEEL DISC**

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

$\theta -40^{\circ}/+200^{\circ}$

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G 058 826                   | 10063861    | 32    | 3,9  |
| 149G 035 093                   | 10062570    | 40    | 3,4  |
| 149G 010 607                   | 10062573    | 50    | 4,6  |
| 149G 010 608                   | 10062577    | 65    | 5,2  |
| 149G 010 609                   | 10062580    | 80    | 7,1  |
| 149G 056 603                   | 10062583    | 100   | 8,8  |
| 149G 056 685                   | 10062586    | 125   | 15,0 |
| 149G 056 686                   | 10062588    | 150   | 20,4 |
| 149G 056 687                   | 10062591    | 200   | 29,5 |
| 149G 010 614                   | on request  | 250   | 39,3 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)  
 Dimensions at the end of the section.



5

**LYCENE LUG TYPE 316 STAINLESS STEEL DISC**

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

$\theta -40^{\circ}/+200^{\circ}$

| Legacy Part No.                       | Part Number              | DN mm | Kg   |
|---------------------------------------|--------------------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b>        |                          |       |      |
| 149G 058 828                          | on request               | 32    | 3,9  |
| 149G 035 098                          | on request               | 40    | 4,2  |
| 149G 016 672                          | 10062543                 | 50    | 5,7  |
| 149G 016 673                          | on request               | 65    | 6,5  |
| 149G 016 674                          | 10062544                 | 80    | 9,0  |
| 149G 056 691                          | 10062546                 | 100   | 11,2 |
| 149G 056 692                          | 10062548                 | 125   | 18,2 |
| 149G 056 693                          | 10078952                 | 150   | 25,6 |
| 149G 016 678 (*)<br>149G 038 916 (**) | on request<br>on request | 200   | 37,0 |
| 149G 016 679 (*)<br>149G 038 917 (**) | on request<br>on request | 250   | 49,6 |

Flange rating PN 10/16. PS 10 bar (water)

\* PN16

\*\* PN10

Dimensions at the end of the section.



### LYCENE WAFER TYPE 316 STAINLESS STEEL PFA COATED DISC

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

θ -40°/+200°

| Legacy<br>Part No.             | Part<br>Number | DN<br>mm | Kg   |
|--------------------------------|----------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                |          |      |
| 149G 058 827                   | 10063854       | 32       | 3,4  |
| 149G 056 266                   | 10064162       | 40       | 4,6  |
| 149G 014 525                   | 10064165       | 50       | 5,2  |
| 149G 014 526                   | 10064167       | 65       | 7,1  |
| 149G 014 527                   | 10064168       | 80       | 8,8  |
| 149G 056 028                   | 10064170       | 100      | 15,0 |
| 149G 056 596                   | 10064171       | 125      | 20,4 |
| 149G 056 605                   | 10064173       | 150      | 29,5 |
| 149G 060 195                   | 10064177       | 200      | 39,3 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)  
Dimensions at the end of the section.



### LYCENE LUG TYPE 316 STAINLESS STEEL PFA COATED DISC

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

θ -40°/+200°

| Legacy<br>Part No.             | Part<br>Number | DN<br>mm | Kg   |
|--------------------------------|----------------|----------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |                |          |      |
| 149G 058 829                   | on request     | 32       | 4,2  |
| 149G 035 100                   | 10070371       | 40       | 5,7  |
| 149G 016 681                   | on request     | 50       | 6,5  |
| 149G 016 682                   | on request     | 65       | 9,0  |
| 149G 016 683                   | on request     | 80       | 11,2 |
| 149G 056 688                   | on request     | 100      | 18,2 |
| 149G 056 689                   | on request     | 125      | 25,6 |
| 149G 056 690                   | 10081551       | 150      | 37,0 |
| 149G 016 687 (*)               | on request     | 200      | 49,6 |
| 149G 038 919 (**)              | on request     |          |      |

Flange rating PN 10/16. PS 10 bar (water)

(\*) PN16

(\*\*) PN10

Dimensions at the end of the section.



**LYCENE WITH NOTCHED DUCTILE IRON HANDLEVER.  
WITH MANUAL GEAR BOX LONG LIFE LUBRICATED ACTUATED WITH GEAR**

**LYCENE WAFER TYPE 316 STAINLESS STEEL DISC**

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

$\theta -40^{\circ}/+200^{\circ}$

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080825                     | on request  | 32    | 4,2  |
| 149G080819                     | on request  | 40    | 4,2  |
| 149G080820                     | on request  | 50    | 3,8  |
| 149G080821                     | on request  | 65    | 5,2  |
| 149G080822                     | on request  | 80    | 4,3  |
| 149G080823                     | 10062584    | 100   | 7,6  |
| 149G080824                     | on request  | 125   | 8,8  |
| 149G080813                     | on request  | 150   | 12,3 |
| 149G080814                     | on request  | 200   | 18,1 |
| 149G080815                     | 10062593    | 250   | 26,9 |
| 149G079679                     | 10062594    | 300   | 39,9 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)  
Dimensions at the end of the section.



5

**LYCENE LUG TYPE 316 STAINLESS STEEL DISC**

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

$\theta -40^{\circ}/+200^{\circ}$

| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080837                     | on request  | 32    | 4,3  |
| 149G080826                     | on request  | 40    | 4,3  |
| 149G080827                     | on request  | 50    | 4,6  |
| 149G080828                     | on request  | 65    | 5,1  |
| 149G080829                     | on request  | 80    | 5,5  |
| 149G080830                     | 10062547    | 100   | 9,1  |
| 149G080831                     | on request  | 125   | 11,2 |
| 149G080832                     | on request  | 150   | 14,6 |
| 149G080833 (*)                 | on request  | 200   | 24,1 |
| 149G080835 (**)                | on request  |       |      |
| 149G080812 (*)                 | on request  | 250   | 33,2 |
| 149G080816 (**)                | on request  |       |      |
| 149G080834 (*)                 | on request  | 300   | 46,9 |
| 149G080836 (**)                | on request  |       |      |

Flange rating PN 10/16. PS 10 bar (water)

(\*) PN16

(\*\*) PN10

Dimensions at the end of the section.



### LYCENE WAFER TYPE 316 STAINLESS STEEL PFA COATED DISC

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

θ -40°/+200°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080838                     | on request  | 32    | 4,4  |
| 149G080839                     | on request  | 40    | 4,4  |
| 149G080840                     | on request  | 50    | 4,0  |
| 149G079165                     | on request  | 65    | 5,5  |
| 149G080841                     | on request  | 80    | 4,6  |
| 149G080842                     | on request  | 100   | 7,8  |
| 149G080843                     | on request  | 125   | 9,0  |
| 149G079469                     | 10064175    | 150   | 11,3 |
| 149G079834                     | 10064179    | 200   | 18,4 |
| 149G080818                     | 10064180    | 250   | 29,7 |
| 149G080844                     | on request  | 300   | 39,8 |

Flange rating PN 6/10/16/ASA 150. PS 10 bar (water)  
Dimensions at the end of the section.

### LYCENE LUG TYPE 316 STAINLESS STEEL PFA COATED DISC

**SILICONE/PTFE - Corrosive fluids, food processing industries and pure water**

θ -40°/+200°



| Legacy Part No.                | Part Number | DN mm | Kg   |
|--------------------------------|-------------|-------|------|
| <b>DUCTILE IRON GGG40 BODY</b> |             |       |      |
| 149G080855                     | on request  | 32    | 4,5  |
| 149G079132                     | on request  | 40    | 4,5  |
| 149G080845                     | on request  | 50    | 4,9  |
| 149G080846                     | on request  | 65    | 5,3  |
| 149G080847                     | on request  | 80    | 5,7  |
| 149G080848                     | on request  | 100   | 9,3  |
| 149G080849                     | on request  | 125   | 11,4 |
| 149G080850                     | 10063336    | 150   | 13,7 |
| 149G080851 (*)                 | on request  | 200   | 24,4 |
| 149G080854 (**)                | on request  |       |      |
| 149G079210 (*)                 | on request  | 250   | 35,9 |
| 149G080817 (**)                | on request  |       |      |
| 149G080852 (*)                 | on request  | 300   | 46,8 |
| 149G080853 (**)                | on request  |       |      |

Flange rating PN 10/16. PS 10 bar (water)

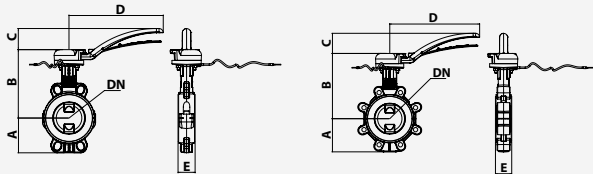
(\*) PN16

(\*\*) PN10

Dimensions at the end of the section.

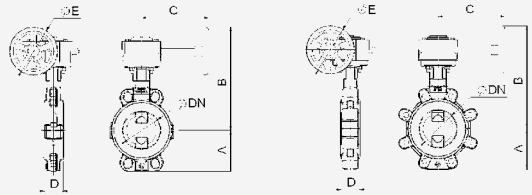
OVERALL DIMENSIONS

Lycene PCF



| DN    | INOX & PFA |     |    |     |      | Kg    |      |
|-------|------------|-----|----|-----|------|-------|------|
|       | A          | B   | C  | D   | E    | Water | Lug  |
| 32/40 | 73         | 163 | 45 | 200 | 32,5 | 3,9   | 3,9  |
| 50    | 69         | 172 | 45 | 200 | 43,5 | 3,4   | 4,2  |
| 65    | 73         | 178 | 45 | 200 | 46,5 | 4,5   | 5,5  |
| 80    | 89         | 183 | 45 | 200 | 46,5 | 5     | 6,5  |
| 100   | 106        | 210 | 65 | 290 | 52,5 | 7     | 9    |
| 125   | 120        | 222 | 65 | 290 | 56,5 | 8,8   | 11,1 |
| 150   | 132        | 249 | 86 | 450 | 56,5 | 15    | 18,1 |
| 200   | 164        | 292 | 86 | 450 | 60,5 | 20,3  | 25,5 |
| 250   | 200        | 318 | 86 | 450 | 68   | 29,4  | 37   |

Lycen RM



| DN  | A     | B     | C   | D    | E   | Kg Water | Kg Lug |
|-----|-------|-------|-----|------|-----|----------|--------|
| 32  | 73    | 219,5 | 120 | 32,5 | 125 | 4,30     | 4,30   |
| 40  | 73    | 219,5 | 120 | 32,5 | 125 | 4,30     | 4,30   |
| 50  | 69    | 228,5 | 120 | 43,5 | 125 | 4,50     | 5,00   |
| 65  | 73    | 234   | 120 | 46,5 | 125 | 4,90     | 5,40   |
| 80  | 89    | 239,5 | 120 | 46,5 | 125 | 5,10     | 6,10   |
| 100 | 106   | 304,5 | 197 | 52,5 | 200 | 8,80     | 10,3   |
| 125 | 119,5 | 317   | 197 | 56,5 | 200 | 10,60    | 13,0   |
| 150 | 132   | 330   | 197 | 56,5 | 200 | 12,20    | 14,4   |
| 200 | 164   | 372,5 | 197 | 60,5 | 200 | 18,40    | 24,7   |
| 250 | 200   | 398   | 197 | 68,5 | 200 | 25,00    | 31,6   |
| 300 | 235   | 458   | 239 | 78,5 | 250 | 37,40    | 44,8   |

## Chapter 5.9

## Xylia2



The Xylia2, successor to the Xylia, belongs to the latest generation of compact butterfly valves. The body is made of ductile iron (GGG40), with a choice of valve DISC in stainless steel (CF8M) or epoxy-coated cast iron (GGG40/DI epoxy). Each valve is fitted with a metal badge on the body for identification and traceability purposes. Seat in EPDM. TB105 approved up to DN300 (on request). Warranty: 2 years.

- Simple design, easy to operate
- Easy installation, excellent sealing performance
- High reliability and long lifetime
- Including position indicator
- Maximum working pressure: PN16
- Operating temperature: -20°C to 120°C (peak)

The Xylia2 is available in WAFER (flanged) and LUG (threaded) type. Operation is manual: with handle (in epoxy-coated aluminium) from DN50 to DN150 or via a worm gearbox DN50 to DN300.

#### XYLIA2 WAFER TYPE WITH STAINLESS STEEL DISC - with handle

| Part Number | Type                   | DN  | Connection | VE    |
|-------------|------------------------|-----|------------|-------|
| 149G34903P  | XYLIA2 Wafer/EPDM/CF8M | 50  | PN16       | 1/160 |
| 149G34904P  | XYLIA2 Wafer/EPDM/CF8M | 65  | PN16       | 1/160 |
| 149G34905P  | XYLIA2 Wafer/EPDM/CF8M | 80  | PN16       | 1/160 |
| 149G34906P  | XYLIA2 Wafer/EPDM/CF8M | 100 | PN16       | 1/120 |
| 149G34907P  | XYLIA2 Wafer/EPDM/CF8M | 125 | PN16       | 1/90  |
| 149G34908P  | XYLIA2 Wafer/EPDM/CF8M | 150 | PN16       | 1/90  |



#### XYLIA2 WAFER TYPE WITH STAINLESS STEEL DISC - with worm gearbox

| Part Number | Type                   | DN  | Connection | VE    |
|-------------|------------------------|-----|------------|-------|
| 149G34903R  | XYLIA2 Wafer/EPDM/CF8M | 50  | PN16       | 1/120 |
| 149G34904R  | XYLIA2 Wafer/EPDM/CF8M | 65  | PN16       | 1/120 |
| 149G34905R  | XYLIA2 Wafer/EPDM/CF8M | 80  | PN16       | 1/120 |
| 149G34906R  | XYLIA2 Wafer/EPDM/CF8M | 100 | PN16       | 1/80  |
| 149G34907R  | XYLIA2 Wafer/EPDM/CF8M | 125 | PN16       | 1/70  |
| 149G34908R  | XYLIA2 Wafer/EPDM/CF8M | 150 | PN16       | 1/70  |
| 149G34909R  | XYLIA2 Wafer/EPDM/CF8M | 200 | PN16       | 1/30  |
| 149G34910R  | XYLIA2 Wafer/EPDM/CF8M | 250 | PN16       | 1/24  |
| 149G34911R  | XYLIA2 Wafer/EPDM/CF8M | 300 | PN16       | 1/20  |



### XYLIA2 WAFER TYPE WITH DUCTILE IRON EPOXY COATED DISC - with handle

| Part Number | Type                       | DN  | Connection | VE    |
|-------------|----------------------------|-----|------------|-------|
| 149G34923P  | XYLIA2 Wafer/EPDM/DI EPOXY | 50  | PN16       | 1/160 |
| 149G34924P  | XYLIA2 Wafer/EPDM/DI EPOXY | 65  | PN16       | 1/160 |
| 149G34925P  | XYLIA2 Wafer/EPDM/DI EPOXY | 80  | PN16       | 1/160 |
| 149G34926P  | XYLIA2 Wafer/EPDM/DI EPOXY | 100 | PN16       | 1/120 |
| 149G34927P  | XYLIA2 Wafer/EPDM/DI EPOXY | 125 | PN16       | 1/90  |
| 149G34928P  | XYLIA2 Wafer/EPDM/DI EPOXY | 150 | PN16       | 1/90  |



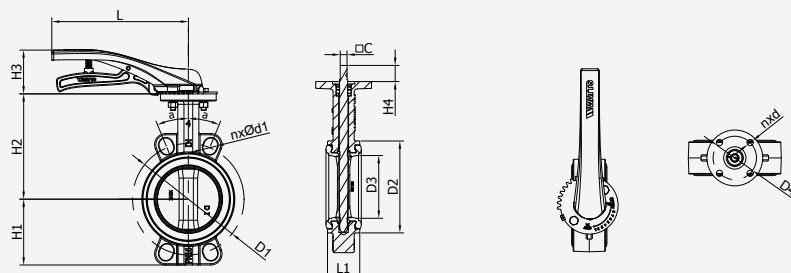
### XYLIA2 WAFER TYPE WITH DUCTILE IRON EPOXY COATED DISC - with worm gearbox

| Part Number | Type                       | DN  | Connection | VE    |
|-------------|----------------------------|-----|------------|-------|
| 149G34923R  | XYLIA2 Wafer/EPDM/DI EPOXY | 50  | PN16       | 1/120 |
| 149G34924R  | XYLIA2 Wafer/EPDM/DI EPOXY | 65  | PN16       | 1/120 |
| 149G34925R  | XYLIA2 Wafer/EPDM/DI EPOXY | 80  | PN16       | 1/120 |
| 149G34926R  | XYLIA2 Wafer/EPDM/DI EPOXY | 100 | PN16       | 1/80  |
| 149G34927R  | XYLIA2 Wafer/EPDM/DI EPOXY | 125 | PN16       | 1/70  |
| 149G34928R  | XYLIA2 Wafer/EPDM/DI EPOXY | 150 | PN16       | 1/70  |
| 149G34929R  | XYLIA2 Wafer/EPDM/DI EPOXY | 200 | PN16       | 1/30  |
| 149G34930R  | XYLIA2 Wafer/EPDM/DI EPOXY | 250 | PN16       | 1/24  |
| 149G34931R  | XYLIA2 Wafer/EPDM/DI EPOXY | 300 | PN16       | 1/20  |



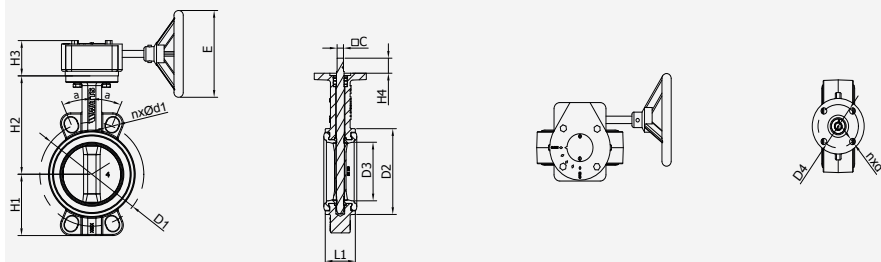
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#### With handle



| DN  | H1  | H2  | H3   | H4 | L1 | L   | C  | D1   | n×Ø   | α     | D2   | D3   | D4  | n×Ød  |
|-----|-----|-----|------|----|----|-----|----|------|-------|-------|------|------|-----|-------|
| 50  | 62  | 136 | 71.2 | 24 | 43 | 218 | 9  | Ø125 | 4-Ø19 | 45°   | Ø91  | Ø54  | Ø70 | 4-Ø10 |
| 65  | 70  | 145 | 71.2 | 24 | 46 | 218 | 9  | Ø145 | 4-Ø19 | 45°   | Ø108 | Ø70  | Ø70 | 4-Ø10 |
| 80  | 89  | 151 | 71.2 | 24 | 46 | 218 | 9  | Ø160 | 4-Ø19 | 22.5° | Ø123 | Ø85  | Ø70 | 4-Ø10 |
| 100 | 106 | 170 | 71.2 | 26 | 52 | 218 | 11 | Ø180 | 4-Ø19 | 22.5° | Ø150 | Ø100 | Ø70 | 4-Ø10 |
| 125 | 119 | 190 | 71.2 | 26 | 56 | 304 | 14 | Ø210 | 4-Ø19 | 22.5° | Ø178 | Ø128 | Ø70 | 4-Ø10 |
| 150 | 131 | 203 | 71.2 | 26 | 56 | 304 | 14 | Ø240 | 4-Ø23 | 22.5° | Ø205 | Ø155 | Ø70 | 4-Ø10 |

With worm gearbox



| DN  | H1  | H2    | H3 | H4 | L1 | ØE   | C  | D1   | nxd1  | α     | D2   | D3   | D4   | nxd   |
|-----|-----|-------|----|----|----|------|----|------|-------|-------|------|------|------|-------|
| 50  | 62  | 136   | 58 | 24 | 43 | Ø134 | 9  | Ø125 | 4xØ19 | 45°   | Ø91  | Ø54  | Ø70  | 4-Ø10 |
| 65  | 70  | 145   | 58 | 24 | 46 | Ø134 | 9  | Ø145 | 4xØ19 | 45°   | Ø108 | Ø70  | Ø70  | 4-Ø10 |
| 80  | 89  | 151   | 58 | 24 | 46 | Ø134 | 9  | Ø160 | 4xØ19 | 22.5° | Ø123 | Ø85  | Ø70  | 4-Ø10 |
| 100 | 106 | 170   | 58 | 26 | 52 | Ø134 | 11 | Ø180 | 4xØ19 | 22.5° | Ø150 | Ø100 | Ø70  | 4-Ø10 |
| 125 | 119 | 190   | 58 | 26 | 56 | Ø134 | 14 | Ø210 | 4xØ19 | 22.5° | Ø178 | Ø128 | Ø70  | 4-Ø10 |
| 150 | 131 | 203   | 58 | 26 | 56 | Ø134 | 14 | Ø240 | 4xØ23 | 22.5° | Ø205 | Ø155 | Ø70  | 4-Ø10 |
| 200 | 164 | 245.5 | 75 | 33 | 60 | Ø255 | 17 | Ø295 | 4xØ23 | 15°   | Ø262 | Ø200 | Ø102 | 4-Ø12 |
| 250 | 199 | 271   | 80 | 27 | 68 | Ø255 | 22 | Ø355 | 4xØ28 | 15°   | Ø314 | Ø250 | Ø102 | 4-Ø12 |
| 300 | 230 | 296   | 80 | 27 | 78 | Ø255 | 22 | Ø410 | 4xØ28 | 15°   | Ø366 | Ø300 | Ø102 | 4-Ø12 |

XYLIA2 LUG TYPE WITH STAINLESS STEEL DISC

- with handle

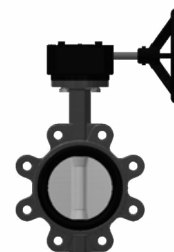
| Part Number | Type                 | DN  | Connection | VE    |
|-------------|----------------------|-----|------------|-------|
| 149G34913P  | XYLIA2 Lug/EPDM/CF8M | 50  | PN16       | 1/120 |
| 149G34914P  | XYLIA2 Lug/EPDM/CF8M | 65  | PN16       | 1/120 |
| 149G34915P  | XYLIA2 Lug/EPDM/CF8M | 80  | PN16       | 1/120 |
| 149G34916P  | XYLIA2 Lug/EPDM/CF8M | 100 | PN16       | 1/100 |
| 149G34917P  | XYLIA2 Lug/EPDM/CF8M | 125 | PN16       | 1/80  |
| 149G34918P  | XYLIA2 Lug/EPDM/CF8M | 150 | PN16       | 1/80  |



XYLIA2 LUG TYPE WITH STAINLESS STEEL DISC

- with worm gearbox

| Part Number | Type                 | DN  | Connection | VE   |
|-------------|----------------------|-----|------------|------|
| 149G34913R  | XYLIA2 Lug/EPDM/CF8M | 50  | PN16       | 1/96 |
| 149G34914R  | XYLIA2 Lug/EPDM/CF8M | 65  | PN16       | 1/96 |
| 149G34915R  | XYLIA2 Lug/EPDM/CF8M | 80  | PN16       | 1/96 |
| 149G34916R  | XYLIA2 Lug/EPDM/CF8M | 100 | PN16       | 1/70 |
| 149G34917R  | XYLIA2 Lug/EPDM/CF8M | 125 | PN16       | 1/50 |
| 149G34918R  | XYLIA2 Lug/EPDM/CF8M | 150 | PN16       | 1/50 |
| 149G34919R  | XYLIA2 Lug/EPDM/CF8M | 200 | PN16       | 1/30 |
| 149G34920R  | XYLIA2 Lug/EPDM/CF8M | 250 | PN16       | 1/20 |
| 149G34921R  | XYLIA2 Lug/EPDM/CF8M | 300 | PN16       | 1/15 |



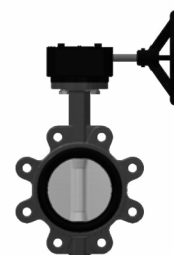
### XYLIA2 LUG TYPE WITH DUCTILE IRON EPOXY COATED DISC - with handle

| Part Number | Type                     | DN  | Connection | VE    |
|-------------|--------------------------|-----|------------|-------|
| 149G34933P  | XYLIA2 Lug/EPDM/DI EPOXY | 50  | PN16       | 1/120 |
| 149G34934P  | XYLIA2 Lug/EPDM/DI EPOXY | 65  | PN16       | 1/120 |
| 149G34935P  | XYLIA2 Lug/EPDM/DI EPOXY | 80  | PN16       | 1/120 |
| 149G34936P  | XYLIA2 Lug/EPDM/DI EPOXY | 100 | PN16       | 1/100 |
| 149G34937P  | XYLIA2 Lug/EPDM/DI EPOXY | 125 | PN16       | 1/80  |
| 149G34938P  | XYLIA2 Lug/EPDM/DI EPOXY | 150 | PN16       | 1/80  |



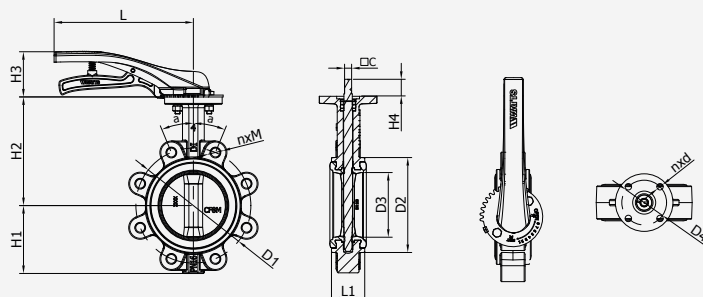
### XYLIA2 LUG TYPE WITH DUCTILE IRON EPOXY COATED DISC - with worm gearbox

| Part Number | Type                     | DN  | Connection | VE   |
|-------------|--------------------------|-----|------------|------|
| 149G34933R  | XYLIA2 Lug/EPDM/DI EPOXY | 50  | PN16       | 1/96 |
| 149G34934R  | XYLIA2 Lug/EPDM/DI EPOXY | 65  | PN16       | 1/96 |
| 149G34935R  | XYLIA2 Lug/EPDM/DI EPOXY | 80  | PN16       | 1/96 |
| 149G34936R  | XYLIA2 Lug/EPDM/DI EPOXY | 100 | PN16       | 1/70 |
| 149G34937R  | XYLIA2 Lug/EPDM/DI EPOXY | 125 | PN16       | 1/50 |
| 149G34938R  | XYLIA2 Lug/EPDM/DI EPOXY | 150 | PN16       | 1/70 |
| 149G34939R  | XYLIA2 Lug/EPDM/DI EPOXY | 200 | PN16       | 1/30 |
| 149G34940R  | XYLIA2 Lug/EPDM/DI EPOXY | 250 | PN16       | 1/20 |
| 149G34941R  | XYLIA2 Lug/EPDM/DI EPOXY | 300 | PN16       | 1/15 |



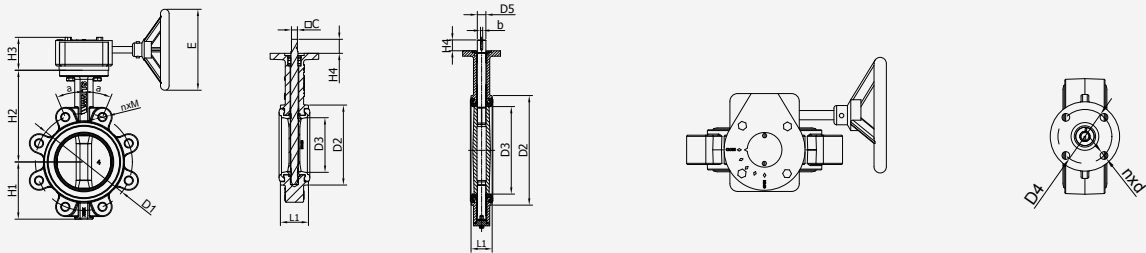
5

#### With handle



| DN  | H1  | H2  | H3 | H4 | L1 | L   | C  | D1   | nxM   | $\alpha$ | D2   | D3     | D4  | nxØd  | Torque (N.m) |      |
|-----|-----|-----|----|----|----|-----|----|------|-------|----------|------|--------|-----|-------|--------------|------|
|     |     |     |    |    |    |     |    |      |       |          |      |        |     |       | Wet          | Dry  |
| 50  | 80  | 161 | 95 | 24 | 43 | 215 | 9  | Ø125 | 4xM16 | 45°      | Ø89  | Ø51,7  | Ø70 | 4-Ø10 | 15,1         | 24,2 |
| 65  | 89  | 175 | 95 | 24 | 46 | 215 | 9  | Ø145 | 4xM16 | 45°      | Ø105 | Ø63,3  | Ø70 | 4-Ø10 | 17,2         | 32,7 |
| 80  | 95  | 181 | 95 | 24 | 46 | 215 | 9  | Ø160 | 8xM16 | 22.5°    | Ø120 | Ø77,7  | Ø70 | 4-Ø10 | 23,2         | 43,7 |
| 100 | 114 | 200 | 95 | 26 | 52 | 215 | 11 | Ø180 | 8xM16 | 22.5°    | Ø148 | Ø103,1 | Ø70 | 4-Ø10 | 39,8         | 72,8 |
| 125 | 127 | 213 | 30 | 26 | 56 | 300 | 14 | Ø210 | 8xM16 | 22.5°    | Ø170 | Ø122,2 | Ø70 | 4-Ø10 | 61,9         | 108  |
| 150 | 139 | 226 | 30 | 26 | 56 | 300 | 14 | Ø240 | 8xM20 | 22.5°    | Ø203 | Ø154,9 | Ø70 | 4-Ø10 | 102          | 174  |

With worm gearbox



| DN  | H1  | H2    | H3 | H4 | L1 | ØE   | C  | D1   | nxM    | α     | D2   | D3     | D4   | n×Ød  | Torque (N.m) |      |
|-----|-----|-------|----|----|----|------|----|------|--------|-------|------|--------|------|-------|--------------|------|
|     |     |       |    |    |    |      |    |      |        |       |      |        |      |       | Wet          | Dry  |
| 50  | 80  | 142,7 | 66 | 24 | 43 | Ø142 | 9  | Ø125 | 4xM16  | 45°   | Ø89  | Ø51,7  | Ø70  | 4-Ø10 | 15.1         | 24.2 |
| 65  | 89  | 155,4 | 66 | 24 | 46 | Ø142 | 9  | Ø145 | 4xM16  | 45°   | Ø105 | Ø63,3  | Ø70  | 4-Ø10 | 17.2         | 32.7 |
| 80  | 95  | 161,8 | 66 | 24 | 46 | Ø142 | 9  | Ø160 | 8xM16  | 22.5° | Ø120 | Ø77,7  | Ø70  | 4-Ø10 | 23.1         | 43.7 |
| 100 | 114 | 177   | 66 | 26 | 52 | Ø142 | 11 | Ø180 | 8xM16  | 22.5° | Ø148 | Ø103,1 | Ø70  | 4-Ø10 | 39.8         | 72.8 |
| 125 | 127 | 189,5 | 66 | 26 | 56 | Ø142 | 14 | Ø210 | 8xM16  | 22.5° | Ø170 | Ø122,2 | Ø70  | 4-Ø10 | 61.9         | 108  |
| 150 | 139 | 204,2 | 66 | 26 | 56 | Ø142 | 14 | Ø240 | 8xM20  | 22.5° | Ø203 | Ø154,9 | Ø70  | 4-Ø10 | 102          | 174  |
| 200 | 175 | 236   | 82 | 33 | 60 | Ø258 | 17 | Ø295 | 12xM20 | 15°   | Ø255 | Ø201,3 | Ø102 | 4-Ø12 | 192          | 330  |
| 250 | 203 | 266,3 | 82 | 26 | 68 | Ø258 | 22 | Ø355 | 12xM24 | 15°   | Ø303 | Ø249,4 | Ø102 | 4-Ø12 | 323          | 549  |
| 300 | 242 | 306,5 | 84 | 26 | 78 | Ø258 | 22 | Ø410 | 12xM24 | 15°   | Ø355 | Ø300,1 | Ø102 | 4-Ø12 | 490          | 799  |

## Chapter 5.10

## Emaris butterfly valves - DN 50-300mm

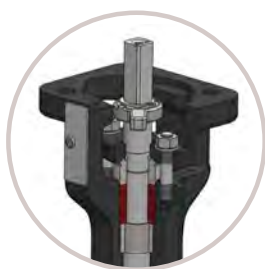
**EMARIS BUTTERFLY VALVES**

DN 50 up to 300 mm (DN350 upto 900 mm, available on request)

- Available in tapped lug version
- Vertical and horizontal mounting of the shaft
- Easy access to the packing gland without removing the actuator
- Tightness seal in RTFE 15% graphite
- Reliable technology : no need of spring or tightness bearing



5



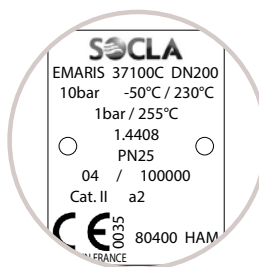
- Body with long neck and integrated arcade, designed to allow insulation.
- Excellent dynamic tightness due to easy adjustment of the packing gland.
- Direct mounting of the actuators on an integrated arcade with large normalised surface.
- Safety anti-ejection circlip keeps shaft in place



- Body : Full range of mounting thanks to centring lug with multiple connections
- Fixation of the the guide plate outside of the seal bearing which guarantees an optimal tightness on the flange
- Disc : long life durability due to double off set disc operating principle minimizing seat wear
- Low torque values
- Tightness zone extended out of the shaft way.

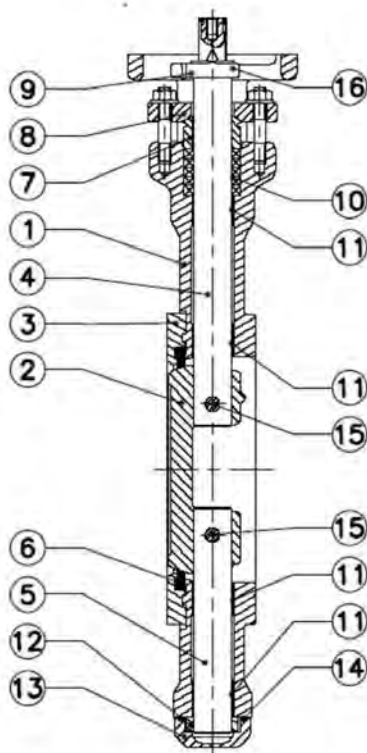


- Excellent guiding and centring of the shaft due to anti-friction bearings
- Double-direction butterfly valve
- Easy-directional maintenance due to a simple design to avoid any mistake by mounting the seal.
- Assembly of the guide plate by screws ensuring an easy access to the seal.
- The external tightness allows a security at the lower shaft way thanks to the o-ring.



- Identification and traceability ensured by riveted metal tag : see page 10

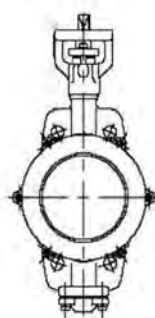
SPARE PARTS LIST AND MATERIALS



STANDARD



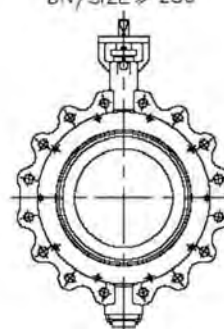
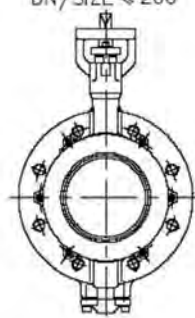
WAFER



LUG

DN / SIZE ≤ 200

DN / SIZE ≥ 250



| No | Description            | Nb     | Materials                    | EN                  |
|----|------------------------|--------|------------------------------|---------------------|
| 1  | Body                   | 1      | Carbon Steel                 | 1.0619 / A216 WCB   |
|    |                        |        | Stainless Steel              | 1.4408 / A351 CF8M  |
| 2  | Disc                   | 1      | Stainless Steel              | 1.4408 / A351 CF8M  |
|    |                        |        | Carbon Steel                 | 1.0619 / A216 WCB   |
| 3  | Seat Ring              | 1      | Stainless Steel              | 1.4408 / A351 CF8M  |
|    |                        |        | Carbon Steel                 | 1.0619 / A216 WCB   |
| 4  | Upper Stem             | 1      | Stainless Steel              | 1.4021 / A276 Gd420 |
| 5  | Lower Stem             | 1      | Stainless Steel              | 1.4542 / A564 Gd630 |
| 6  | Seat                   | 1      | Standard : RTFE 15% Graphite |                     |
| 7  | Packing Gland          | 1      | Stainless Steel              | 1.4307              |
| 8  | Gland Follower         | 1      | Carbon Steel                 | 1.1149              |
|    |                        |        | Stainless Steel              | 1.4401              |
| 9  | Travel Stop            | 1      | Stainless Steel              | 1.4306              |
| 10 | Packing                | 4 to 6 | Graphite                     |                     |
| 11 | Bearing                | 4      | Carbon Steel + PTFE          |                     |
|    |                        |        | Stainless Steel + PTFE       |                     |
| 12 | Disc Locating Shoulder | 1      | Stainless Steel              | 1.4307              |
| 13 | Cover                  | 1      | Carbon Steel                 | 1.0619 / A216 WCB   |
|    |                        |        | Stainless Steel              | 1.4408 / A351 CF8M  |
| 14 | Bottom Seal            | 1      | Graphite / PTFE 25% Glass    |                     |
| 15 | Pin                    | 1      | Stainless Steel              | 1.4404              |
| 16 | Circlips               | 1      | Carbon Steel                 |                     |
|    |                        |        | Stainless Steel              |                     |

## APPROVALS

### DESIGN

According to EN 593 and marking according to EN 19

### ISO TOP CONNECTION FOR ACTUATIONS

According to EN ISO 5211

### FACE TO FACE

According to 558 series 20  
ISO 5752 series 20  
API 609 table 2 Class 300

### CONNECTING FLANGES

According to EN 1092-1 and EN1092-2 : PN10-16-25-40  
ASME/ANSI B16.5 : ASA 150 and 300

### TESTS

According to EN12266-1

- Resistance and tightness of the body (directive PED 2014/68/UE) : test P11 (1,5 x allowable operating pressure).
- Tightness of the seat : test P12 rate A (1,1 x allowable operating pressure).

## EUROPEAN DIRECTIVES

Our butterfly valves are in accordance to the safety requirements of the following directives :

### Directive 2014/68/UE : Equipments under pressure PED (Pressure Equipment Directive)

Applies to the design, manufacturing and the assessment of the conformity of pressure equipment, the maximum allowable pressure of which is 0.5 bar.

Pressure equipment for water supply, distribution, and disposal of water is excluded.

Depending on the type of pressure equipment, maximum allowable temperature (PS), DN, physical nature of the fluid (liquid, gas or vapour) and the degree of danger of the fluid (group 1/2)\*, the directive classifies this same equipment into different categories (article 3.3, I, II, III, IV), required for the assessment of conformity with CE marking.

The equipment defined in article 3.3 of the directive must not bear the CE marking.

(\*) Group 1 : hazardous fluids (directive 67/548/EEC) / explosive / highly flammable / easily flammable / flammable / very toxic / toxic / combustion agents.  
Group 2 : all other fluids.

Important : the indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions. Socla is not responsible for alteration of the products to working conditions not previously specified by the customer.

### Machinery Directive 2006/42/CE : Machinery Directive

In its Appendix I it sets a certain number of Essential Health and Safety Requirements which must be met. It applies to motorised butterfly valves, (with electric, pneumatic or hydraulic actuators). According to this Directive, these sets are "Partly Completed Machineries" designed for being integrated into a machine.

"Partly Completed Machinery" means an assembly which is almost machinery but which cannot in itself perform a specific application. A drive system is partly completed machinery. Partly completed machinery is only intended to be incorporated into or assembled with other machinery or other partly completed machinery or equipment, thereby forming machinery to which this Directive applies.

An instruction notice specifying the installation characteristics and the commission of the Emaris is added to every product ; it is available on our web site [www.socla.com](http://www.socla.com) or on request by our sales department.

## DIRECTIVES

### DIRECTIVE 2014/68/UE EQUIPMENTS UNDER PRESSURE

Products manufactured in conformity with the requirements of the directive, according to pressure, DN and fluid (see upper page)

| Liners | DN mm             | Cat.         | Mounting | PFA         | PS |    |    |    |
|--------|-------------------|--------------|----------|-------------|----|----|----|----|
|        |                   |              |          |             | L1 | L2 | G1 | G2 |
| 40 bar | RTFE 15% graphite | 50 up to 300 | II       | Flanges     | 40 | 25 | 40 | 25 |
|        |                   |              | I        | End of line | 40 | 18 | 18 | 18 |
| 25 bar |                   |              | II       | Flanges     | 25 | 25 | 25 | 25 |
|        |                   |              | I        | End of line | 25 | 18 | 18 | 18 |
| 16 bar |                   |              | II       | Flanges     | 16 | 16 | 16 | 16 |
|        |                   |              | I        | End of line | 16 | 16 | 16 | 16 |
| 10 bar |                   |              | II       | Flanges     | 10 | 10 | 10 | 10 |
|        |                   |              | I        | End of line | 10 | 10 | 10 | 10 |

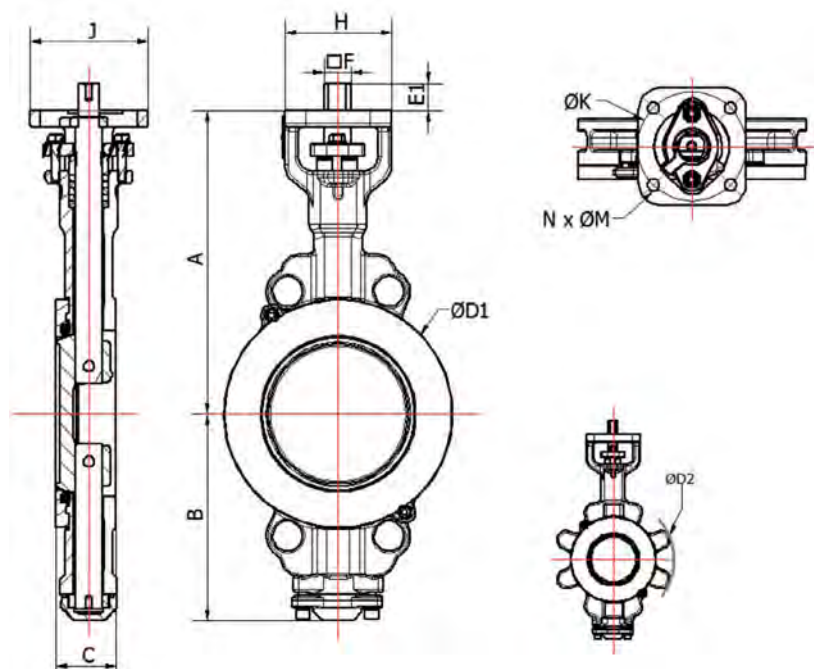
NOTE : Butterfly valves of category II used as «end of line», please consult us.

PS : Maximum allowable pressure (in bar) according to Directive 2014/68/UE

PFA : Allowable operating pressure (in bar) for supply, distribution and disposal of water.

NOTE : for end of line valves, valve must not be mounted between flange (mandatory blind flange).

## APPROVALS

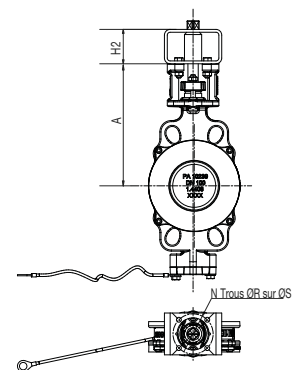


| DN  | A   | B   | C  | ØD1 | ØD2 | SQUARE | TOP FLANGE |     |     |     |     | ISO5211<br>ISO5210 |    | WEIGHT KG |      |
|-----|-----|-----|----|-----|-----|--------|------------|-----|-----|-----|-----|--------------------|----|-----------|------|
|     |     |     |    |     |     | E1     | F          | N°  | H   | J   | K   | N                  | M  | WAFER     | LUG  |
| 50  | 175 | 102 | 43 | 97  | 153 | 25,5   | 11         | F07 | 70  | 80  | 70  | 4                  | 9  | 3,9       | 4,6  |
| 65  | 191 | 116 | 46 | 117 | 173 | 25,5   | 11         | F07 | 70  | 80  | 70  | 4                  | 9  | 5         | 7,1  |
| 80  | 197 | 122 | 46 | 130 | 190 | 25,5   | 11         | F07 | 70  | 80  | 70  | 4                  | 9  | 5,4       | 7,9  |
| 100 | 233 | 149 | 52 | 158 | 225 | 25,5   | 14         | F10 | 100 | 100 | 102 | 4                  | 11 | 9,1       | 11,6 |
| 125 | 245 | 160 | 56 | 188 | 261 | 25,5   | 14         | F10 | 100 | 100 | 102 | 4                  | 11 | 11        | 14,9 |
| 150 | 283 | 193 | 56 | 212 | 294 | 25,5   | 19         | F10 | 100 | 110 | 102 | 4                  | 11 | 15,7      | 20,1 |
| 200 | 307 | 217 | 60 | 267 | 365 | 25,5   | 19         | F10 | 100 | 110 | 102 | 4                  | 14 | 21,9      | 33,7 |
| 250 | 371 | 254 | 68 | 321 | 420 | 36     | 27         | F12 | 132 | 140 | 125 | 4                  | 14 | 37,1      | 51,6 |
| 300 | 399 | 302 | 78 | 372 | 476 | 36     | 27         | F12 | 132 | 140 | 125 | 4                  | 14 | 54        | 87   |

## CONNECTING KIT FOR ACTUATION

We recommend direct mounting of the actuator, otherwise see table below.

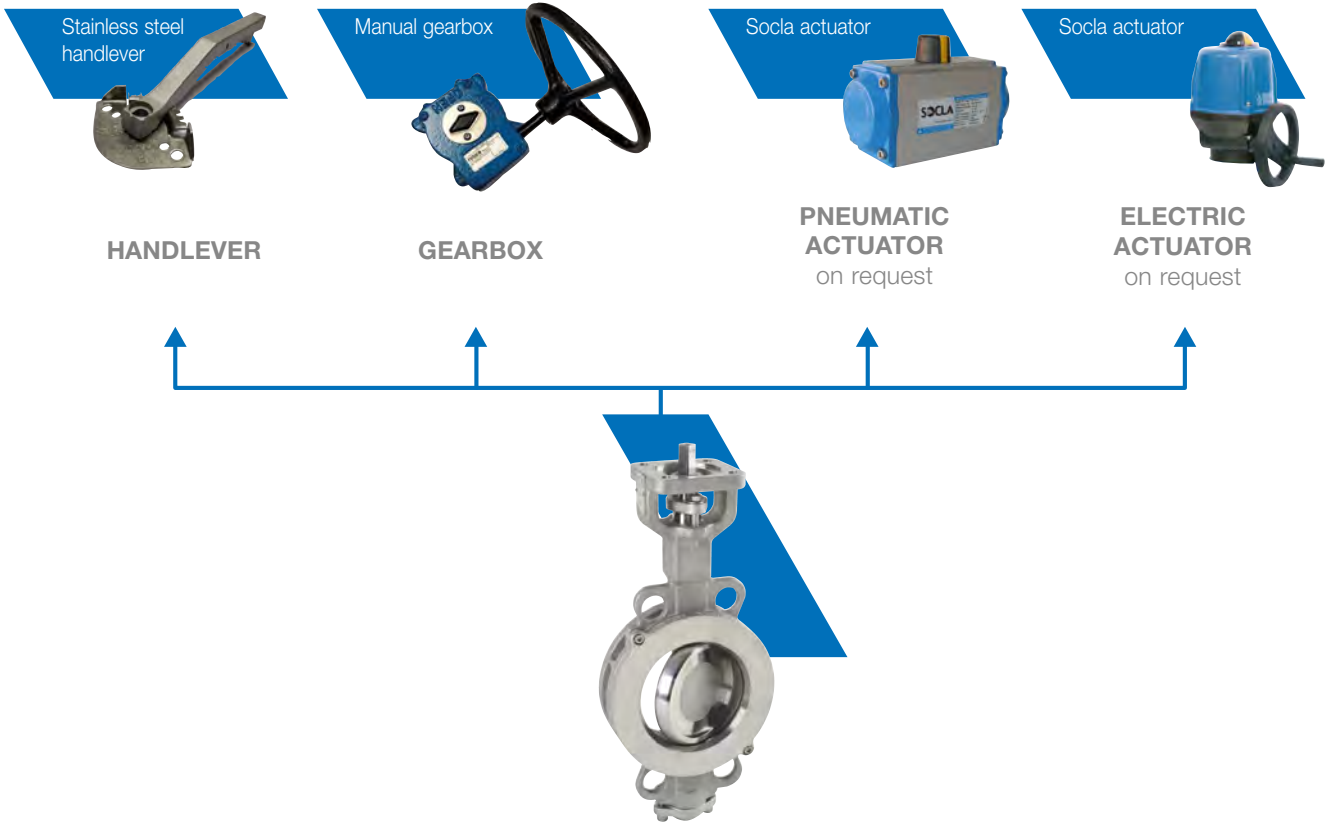
| Exceeding length of the shaft |       |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |
|-------------------------------|-------|------------------------|-----|----------|----|-----|----------|----|-----|----------|-----|-----|----------|-----|-----|----------|-----|-----|----------|-----|
| DN                            | NPS   | Iso to of<br>the valve | F05 |          |    | F07 |          |    | F10 |          |     | F12 |          |     | F14 |          |     | F16 |          |     |
|                               |       |                        | H2  | 4x<br>ØR | ØS | H2  | 4x<br>ØR | ØS | H2  | 4x<br>ØR | ØS  | H2  | 4x<br>ØR | ØS  | H2  | 4x<br>ØR | ØS  | H2  | 4x<br>ØR | ØS  |
| 50                            | 2     | F07/□11                | 60  | 6,5      | 50 | 60  | 8,5      | 70 | 80  | 10,5     | 102 | 80  | 12,5     | 125 |     |          |     |     |          |     |
| 65                            | 2 1/2 |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |
| 80                            | 3     |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |
| 100                           | 4     | F10/□14                | 80  | 6,5      | 50 | 80  | 8,5      | 70 | 80  | 10,5     | 102 | 80  | 12,5     | 125 | 90  | 17       | 140 |     |          |     |
| 125                           | 5     |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |
| 150                           | 6     | F10/□19                | 80  | 6,5      | 50 | 80  | 8,5      | 70 | 80  | 10,5     | 102 | 80  | 12,5     | 125 | 90  | 17       | 140 |     |          |     |
| 200                           | 8     |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |
| 250                           | 10    | F12/□27                |     |          |    | 80  | 8,5      | 70 | 80  | 10,5     | 102 | 90  | 12,5     | 125 | 90  | 17       | 140 | 90  | 22       | 165 |
| 300                           | 12    |                        |     |          |    |     |          |    |     |          |     |     |          |     |     |          |     |     |          |     |



Reminder of the iso top dimensions EN ISO 5211 (see also the overall dimensions). On request : other special executions is subject to technical feasibility.

**ACTUATIONS**

Find below the different standard assembly combinations.  
For any other information, please ask our technical Department.



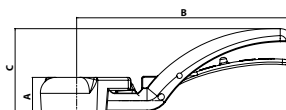
**PLEASE CONTACT US WITH YOUR REQUIREMENTS,  
FOR MORE INFORMATION OR POA QUOTATIONS**

## Chapter 5.11

## Shut Off Valves - Manual Actuations and accessories

**PCF**

Cast iron notched handle : sturdy, reliable, 10 adjustment positions, padlocked for security, wide range of fittings.



| Legacy Part No. | Part Number | DN mm      | A  | B   | C   | Kg  |
|-----------------|-------------|------------|----|-----|-----|-----|
| 149H 001 294    | 10065050    | 25 to 100  | 33 | 200 | 78  | 0,8 |
| 149H 001 454    | 10065052    | 125 to 150 | 33 | 290 | 98  | 1,2 |
| 149H 001 455    | 10065053    | 200        | 42 | 450 | 128 | 2,9 |
| 149H 001 302    | 10065051    | 250        | 42 | 450 | 128 | 2,8 |
| 149H 001 457    | 10065054    | 300        | 42 | 450 | 128 | 3,4 |

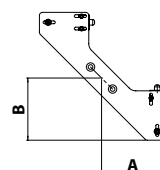
**NOTCHED HANDLEVER WITH 1 MECHANICAL LIMIT SWITCH**

On/off position

| Legacy Part No. | Part Number | DN mm      | Kg  |
|-----------------|-------------|------------|-----|
| 149G CM1 721    | on request  | 25 to 100  | 1,1 |
| 149G CM1 726    | on request  | 125 to 150 | 1,6 |
| 149G CM1 728    | on request  | 200        | 3,4 |
| 149G CM1 729    | on request  | 250        | 3,3 |
| 149G CM1 730    | on request  | 300        | 3,9 |

**PLATE WITH 1 MECHANICAL LIMIT SWITCH FOR PCF HANDLEVER**

IP66 limit switch set



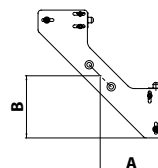
| Legacy Part No. | Part Number | DN mm      | A   | B   | Kg  |
|-----------------|-------------|------------|-----|-----|-----|
| 149G 3E         | 10062509    | 25 to 100  | 105 | 100 | 0,3 |
| 149G 3G         | 10083940    | 125 to 150 | 106 | 100 | 0,3 |
| 149G 3H         | on request  | 200        | 138 | 103 | 0,4 |
| 149G 3H         | on request  | 250        | 138 | 103 | 0,4 |
| 149G 3I         | on request  | 300        | 138 | 103 | 0,5 |



**NOTCHED HANDLEVER WITH 2 MECHANICAL LIMIT SWITCHES**

Signalisation to 0° and 90°

| Legacy Part No. | Part Number | DN mm      | Kg  |
|-----------------|-------------|------------|-----|
| 149G CM1 742    | 10065067    | 25 to 100  | 1,2 |
| 149G CM1 746    | 10065068    | 125 to 150 | 1,7 |
| 149G CM1 748    | on request  | 200        | 3,5 |
| 149G CM1 749    | on request  | 250        | 3,4 |
| 149G CM1 750    | on request  | 300        | 4   |

**PLATE WITH 2 MECHANICAL LIMIT SWITCHES FOR PCF HANDLEVER**

| Legacy Part No. | Part Number | DN mm      | A   | B   | Kg  |
|-----------------|-------------|------------|-----|-----|-----|
| 149G 3J         | 10062510    | 25 to 100  | 105 | 100 | 0,4 |
| 149G 3K         | 10062511    | 125 to 150 | 106 | 100 | 0,4 |
| 149G 3L         | on request  | 200        | 138 | 103 | 0,5 |
| 149G 3L         | on request  | 250        | 138 | 103 | 0,5 |
| 149G 3M         | on request  | 300        | 138 | 103 | 0,6 |

**NOTCHED HANDLEVER WITH IP67 SWITCHBOX**

with 2 mechanical limit switches.

On/off position

| Legacy Part No.<br>Switch master<br>SM-M2 Ref. | Part Number<br>Switch master<br>SM-M2 Ref. | DN mm      | Kg  | Legacy Part No.<br>Switch master<br>SC-M2 Ref. | Part Number<br>Switch master<br>SC-M2 Ref. | DN mm      | Kg  |
|------------------------------------------------|--------------------------------------------|------------|-----|------------------------------------------------|--------------------------------------------|------------|-----|
| 149G CM1 812                                   | 10065069                                   | 25 to 100  | 1,8 | 149G CM1 782                                   | on request                                 | 25 to 100  | 1,8 |
| 149G CM1 816                                   | on request                                 | 125 to 150 | 2,3 | 149G CM1 786                                   | 10084989                                   | 125 to 150 | 2,3 |
| 149G CM1 818                                   | on request                                 | 200        | 4,6 | 149G CM1 788                                   | on request                                 | 200        | 4,6 |
| 149G CM1 819                                   | on request                                 | 250        | 4,6 | 149G CM1 789                                   | on request                                 | 250        | 4,6 |
| 149G CM1 820                                   | on request                                 | 300        | 5,5 | 149G CM1 790                                   | on request                                 | 300        | 5,5 |

**IP66 MECHANICAL LIMIT SWITCH**

IP66 mechanical limit switch

| Legacy Part No. | Part Number | Type                                | Kg  |
|-----------------|-------------|-------------------------------------|-----|
| 149H 003 115    | on request  | IP 66 switch limit - Plunger        | 0.1 |
| 149H 003 119    | on request  | IP 66 switch limit - Roller plunger | 0.1 |



### NOTCHED HANDLEVER WITH IP67 SWITCHBOX

With 2 inductive limit switches.  
On/off position

| Legacy Part No.<br>Switch master<br>SM-D2 Ref. | Part Number<br>Switch master<br>SM-D2 Ref. | DN mm      | Kg  | Legacy Part No.<br>Switch master<br>SC-D2 Ref. | Part Number<br>Switch master<br>SC-D2 Ref. | DN mm      | Kg  |
|------------------------------------------------|--------------------------------------------|------------|-----|------------------------------------------------|--------------------------------------------|------------|-----|
| 149G CM1 882                                   | 10065074                                   | 25 to 100  | 1,8 | 149G CM1 792                                   | on request                                 | 25 to 100  | 1,8 |
| 149G CM1 883                                   | on request                                 | 125 to 150 | 2,3 | 149G CM1 796                                   | on request                                 | 125 to 150 | 2,3 |
| 149G CM1 884                                   | on request                                 | 200        | 4,6 | 149G CM1 798                                   | on request                                 | 200        | 4,6 |
| 149G CM1 885                                   | on request                                 | 250        | 4,6 | 149G CM1 799                                   | on request                                 | 250        | 4,6 |
| 149G CM1 886                                   | on request                                 | 300        | 5,5 | 149G CM1 800                                   | on request                                 | 300        | 5,5 |

### SWITCHBOX

IP67 switchbox with 2 limit switches.

| Legacy Part No.<br>Switch master Ref. | Part Number<br>Switch master Ref. | Type            | Kg  | Legacy Part No.<br>Switch control Ref. | Part Number<br>Switch control Ref. | Type            | Kg  |
|---------------------------------------|-----------------------------------|-----------------|-----|----------------------------------------|------------------------------------|-----------------|-----|
| 149G YE                               | 10065788                          | IP67 mechanical | 0,4 | 149G YF                                | 10065789                           | IP67 mechanical | 0,8 |
| 149G Y9                               | on request                        | IP67 inductive  | 0,4 | 149G YG                                | 10088720                           | IP67 inductive  | 0,8 |
| 149G ZJ                               | on request                        | IP67 ATEX       | 0,4 | 149G YH                                | on request                         | IP67 ATEX       | 0,8 |



### NOTCHED CAST IRON HANDLEVER

with 2 inductive limit switches.  
On/off position

| Legacy Part No. | Part Number | DN mm      | Kg  |
|-----------------|-------------|------------|-----|
| 149G CM1 822    | 10065070    | 25 to 100  | 1,3 |
| 149G CM1 826    | on request  | 125 to 150 | 1,7 |
| 149G CM1 828    | on request  | 200        | 3,4 |
| 149G CM1 829    | on request  | 250        | 3,3 |
| 149G CM1 830    | on request  | 300        | 4   |



### CONNECTION FOR INDUCTIVE LIMIT SWITCH

(suitable for PCF handlever - manual gear box DA and SA actuators)

| Legacy Part No. | Part Number | Male connection for inductive limit switch | Kg   |
|-----------------|-------------|--------------------------------------------|------|
| 149F 018 965    | on request  | To be wired                                | 0,02 |
| 149F 018 966    | on request  | With 2 meter wire                          | 0,02 |
| 149F 018 967    | on request  | With 5 meter wire                          | 0,10 |



## THE APPROVALS AND TESTS

| Organisations                                                                                                         | N°                                                                                     | Products                                                                                              | Sector       | Organisations                                                                                                 | N°                                     | Products                                                  | Sector                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                                      | P-14574 P-14575                                                                        | SYLAX - TILIS<br>SYLAX DN 400 to 1200                                                                 | SHIPBUILDING | <b>WRAS</b><br>Water Regulations Advisory Scheme                                                              | 0510107<br>0510104                     | SYLAX 25 to 350<br>SYLAX 400 to 1200                      | WATER                                                                                                             |
|                                      | 14-GD1155021-PDA                                                                       | SYLAX DN 25 to 350<br>TILIS DN 32 to 300<br>SYLAX DN 400 to 1200                                      | SHIPBUILDING |                              | DW - 6201 CO 0390<br>DG - 4313 BS 0449 | SYLAX DN 25 to 350<br>SYLAX GAS DN 32 to 300              | WATER<br>GAS                                                                                                      |
|                                      | 94/30008 (E3)                                                                          | SYLAX DN 25 to 350<br>TILIS DN 32 to 300<br>SYLAX 400 to 1200<br>LYCENE 50 to 300<br>EMARIS 65 to 150 | SHIPBUILDING | <br>AIB VINCOTTE             | S61/00014                              | BUTTERFLY VALVES                                          | BUILDING<br>CDCII/C7/105/90<br>BUILDING<br>ORGANISATION IN<br>BELGIUM                                             |
|                                      | 03925163<br><br>13926/A0 BV<br>13927/A1 BV                                             | SYLAX DN 25 to 350<br>SYLAX 400 to 1200<br><br>LYCENE 32 to 300<br>EMARIS 65 to 200                   | SHIPBUILDING | <br>PUB<br>SINGAPORE         | WE92413/29                             | SYLAX DN 50 to 300                                        | SANITARY<br>NETWORKS                                                                                              |
|                                    | MAC/135205CS/1<br>MAC/135205CS/3<br>MAC/135205CS/2<br>MAC/135205CS/4<br>MAC/135205CS/5 | SYLAX DN 25 to 350<br>TILIS DN 32 to 300<br>SYLAX 400 to 1200<br>LYCENE 50 to 300<br>EMARIS 65 to 200 | SHIPBUILDING | <br>Le futur en construction | HS98/068<br>HS99/069<br>HS00/044       | SYLAX DN 50 to 300                                        | BUILDING                                                                                                          |
|                                    | 011209                                                                                 | SYLAX DN 40 to 350<br>SYLAX DN 400 to 600<br>TILIS DN 32 to 300                                       | TRANSPORT    |                             | YO/AL/12/037<br>PCA/GIS/PCA            | SYLAX CNPP<br>DN 32/40 to 300<br>up to PN20 with gear box | FIREFIGHTING<br>NETWORKS                                                                                          |
| <br>ROB-GAZ                        | ROB 060-R4                                                                             | SYLAX GAS DN 32 to 300                                                                                | GAS          |                            | 3029234                                | SYLAX FM<br>DN 32 to 300                                  | FIREFIGHTING<br>NETWORKS                                                                                          |
| <br>STROJÍRENSKÝ<br>ZKUŠEBNÍ ÚSTAV | 08.96.0273/0220                                                                        | BUTTERFLY VALVES<br>DN 32 to 350                                                                      | GAS          |                            | PV N° 81                               | SYLAX 25 to 350<br>SYLAX 400 to 1200                      | SOCIETE DU<br>CANAL<br>DE PROVENCE                                                                                |
| ACS<br>FRENCH MINISTRY<br>APPROVAL                                                                                    | 10 ACC NY 126<br>10 ACC NY 126<br>08 ACC NY 279                                        | SYLAX 25 to 350<br>SYLAX 400 to 1200<br>EMARIS 50 to 250                                              | WATER        |                            | R09/62/86<br>R09/62/37                 | BUTTERFLY VALVE<br>WITH ELASTOMER<br>LINER                | LF Antar France<br>ELF Aquitaine<br>production<br>ELF Atochem<br>Petroleum<br>Petro chemical<br>Chemical industry |
| <br>SVGW                           | 9005-2445                                                                              | SYLAX DN 32 to 350<br>SYLAX DN 400 to 600                                                             | WATER        |                            | 03/1992                                | SYLAX,<br>TILIS, LYCENE                                   | CAR INDUSTRY                                                                                                      |
| <br>BELGAQUA                       | SYLAX DN 25 to 1200                                                                    |                                                                                                       | WATER        |                            | DA/PGIO 88.986                         | SYLAX,<br>TILIS, LYCENE                                   | CAR INDUSTRY                                                                                                      |
| <b>kiwa</b>                                                                                                           | K 82439/01                                                                             | SYLAX DN 25 to 1200                                                                                   | WATER        |                                                                                                               |                                        |                                                           |                                                                                                                   |

**DIRECTIVE 97/23/CE : PRESSURE EQUIPMENT DIRECTIVE**

Manufacturing in accordance with the directive requirements for pressure, DN and fluid

ATTENTION: Gas G1 and G2 : The maximum pressure is 6 bar when using cast iron 5.1301 (EN-GJL-250) - (except for sylax gas)

| FAMILY                       | LINERS | DN mm                                                                                       | Cat.        | MOUN-<br>TING | PFA<br>water | PS |    |    |     |
|------------------------------|--------|---------------------------------------------------------------------------------------------|-------------|---------------|--------------|----|----|----|-----|
|                              |        |                                                                                             |             |               |              | L1 | L2 | G1 | G2  |
| SYLAX<br>DN25 to<br>350 mm   | 6 bar  | EPDM, Nitrile (CC333G disc),<br>White EPDM                                                  | 32 to 150   | 3.3           | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 200 to 350  | I             | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | End of line |               | 4            | 4  | 4  | 4  | 4   |
|                              |        | Nitrile (except CC333G disc),<br>Neoprene, Butyl, CSM, Natural rubber, White Natural rubber | 32 to 100   | I             | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 125 to 350  | II            | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | End of line |               | 4            | 4  | 4  | 4  | 4   |
|                              | 10 bar | EPDM, Nitrile (CC333G disc),<br>White Nitrile,<br>Carboxylated nitrile, White EPDM          | 25 to 100   | 3.3           | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | 125 - 150   | I             | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 200 to 350  | I             | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | End of line |               | 6            | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 25          | 3.3           | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | End of line |               | 6            | 6  | 6  | 6  | 6   |
|                              |        | Nitrile (except CC333G disc),<br>FKM                                                        | 32 to 100   | I             | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | 125 to 350  | II            | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | End of line |               | 6            | 6  | 6  | 6  | 6   |
|                              |        | Silicone                                                                                    | 32 to 100   | I             | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | 125 to 150  | II            | Flanges      | 10 | 10 | 10 | 10  |
|                              |        |                                                                                             | 200 to 350  | II            | Flanges      | 6  | 6  | 6  | 6   |
|                              | 16 bar | EPDM, Nitrile (CC333G disc)                                                                 | 32 to 100   | 3.3           | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | 125         | I             | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | 150         | I             | Flanges      | 16 | 10 | 16 | 10  |
|                              |        |                                                                                             | 200 to 300  | I             | Flanges      | 16 | 10 | 16 | 10  |
|                              |        |                                                                                             | 350         | I             | Flanges      | 16 | 10 | 16 | 10  |
|                              |        |                                                                                             | End of line |               | 8            | 8  | 8  | 8  | 8   |
|                              |        | Nitrile (except CC333G disc),<br>Neoprene, Butyl, CSM, Natural rubber, White natural rubber | 32 to 100   | I             | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | 125 - 150   | II            | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | 200 to 300  | II            | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | 350         | II            | Flanges      | 16 | 16 | 16 | 10  |
|                              |        |                                                                                             | End of line |               | 8            | 8  | 8  | 8  | 8   |
|                              |        |                                                                                             | 32 to 250   | 3.3           | Flanges      | 20 |    | 20 |     |
|                              | 20 bar | EPDM, Nitrile (CC333G disc)                                                                 | End of line |               | 12           |    | 12 |    |     |
|                              |        |                                                                                             | 300 - 350   | I             | Flanges      | 20 |    | 20 |     |
|                              |        |                                                                                             | End of line |               | 12           |    | 12 |    |     |
|                              |        | Nitrile (except CC333G disc),<br>Neoprene, Butyl, Natural rubber, White natural rubber      | 32 to 100   | 3.3           | Flanges      | 20 | 20 | 20 |     |
|                              |        |                                                                                             | 125 to 350  | II            | Flanges      | 20 | 20 | 20 |     |
|                              |        |                                                                                             | End of line |               | 12           |    | 12 |    |     |
|                              | 25 bar | EPDM, Nitrile (CC333G disc)                                                                 | 32 to 150   | 3.3           | Flanges      | 25 |    | 25 |     |
|                              |        |                                                                                             | End of line |               | 16           |    | 16 |    |     |
|                              |        |                                                                                             | 32 to 80    | 3.3           | Flanges      | 25 | 25 | 25 |     |
|                              |        | Nitrile (except CC333G disc)                                                                | End of line |               | 16           |    | 16 |    |     |
|                              |        |                                                                                             | 100 to 150  | II            | Flanges      | 25 | 25 | 25 |     |
|                              |        |                                                                                             | End of line |               | 16           |    | 16 |    |     |
| SYLAX<br>DN400 to<br>1200 mm | 6 bar  | EPDM, Nitrile, White EPDM,<br>White Nitrile,<br>Carboxylated nitrile                        | 400 to 500  | I             | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 600         | I             | Flanges      | 6  | 6  | 6  | 5   |
|                              |        |                                                                                             | 700 to 800  | I             | Flanges      | 6  | 6  | 6  | 4   |
|                              |        |                                                                                             | 900 to 1000 | I             | Flanges      | 6  | 6  | 6  | 3,5 |
|                              |        |                                                                                             | 1200        | I             | Flanges      | 6  | 6  | 6  | 2,5 |
|                              |        |                                                                                             | End of line |               | 4            |    | 4  |    |     |
|                              |        | Silicone, Neoprene, Butyl, CSM,<br>FKM, Natural rubber, White natural rubber                | 400 to 500  | I             | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 600 to 800  | II            | Flanges      | 6  | 6  | 6  | 6   |
|                              |        |                                                                                             | 900 to 1000 | II            | Flanges      | 6  | 6  | 6  | 5   |
|                              |        |                                                                                             | 1200        | II            | Flanges      | 6  | 6  | 6  | 4   |
|                              |        |                                                                                             | End of line |               | 4            |    | 4  |    |     |
|                              |        |                                                                                             | End of line |               | 4            |    | 4  |    |     |
|                              | 10 bar | EPDM, Nitrile, White EPDM                                                                   | 400 to 1200 | I             | Flanges      | 10 | 10 | 10 |     |
|                              |        |                                                                                             | End of line |               | 6            |    | 6  |    |     |
|                              |        | CSM, FKM                                                                                    | 400 to 1200 | I             | Flanges      | 10 | 10 | 10 |     |
|                              |        |                                                                                             | End of line |               | 6            |    | 6  |    |     |
|                              | 16 bar | EPDM, Nitrile                                                                               | 400 to 1200 | I             | Flanges      | 16 |    | 16 |     |
|                              |        |                                                                                             | End of line |               | 8            |    | 8  |    |     |
|                              |        | Neoprene, Butyl, Natural rubber,<br>White natural rubber                                    | 400 to 1200 | I             | Flanges      | 16 | 16 | 16 |     |
|                              |        |                                                                                             | End of line |               | 8            |    | 8  |    |     |
|                              | 20 bar | EPDM, Nitrile                                                                               | 400 to 600  | I             | Flanges      | 20 |    | 20 |     |
|                              |        |                                                                                             | End of line |               | 10           |    | 10 |    |     |

| FAMILY               | LINERS          | DN mm                                       | Cat.        | MOUN-<br>TING | PFA<br>water | PS |    |    |      |
|----------------------|-----------------|---------------------------------------------|-------------|---------------|--------------|----|----|----|------|
|                      |                 |                                             |             |               |              | L1 | L2 | G1 | G2   |
| SYLAX<br>FM/<br>CNPP | 16 bar          | EPDM (CNPP approval),<br>EPDM (FM approval) | 32 to 300   | 3.3           | Flanges      | 16 |    | 16 |      |
|                      |                 |                                             | End of line |               | 12           |    | 12 |    |      |
| SYLAX<br>GAS         | 6 bar           | Nitrile                                     | 32 to 100   | I             | Flanges      | 6  |    | 6  | 6    |
|                      |                 |                                             | 125 to 300  | II            | Flanges      | 6  |    | 6  | 6    |
|                      |                 |                                             | End of line |               | 4            |    |    | 4  |      |
|                      |                 |                                             | End of line |               | 4            |    |    | 4  |      |
|                      | 8 bar           | Nitrile                                     | 32 to 100   | I             | Flanges      | 8  |    | 8  | 8    |
|                      |                 |                                             | 125 to 300  | II            | Flanges      | 8  |    | 8  | 8    |
| TILIS                | EPR/PTFE        | 50 to 100                                   | 125 - 150   | II            | Flanges      | 10 | 10 | 10 | 10   |
|                      |                 |                                             | 200 to 300  | II            | Flanges      | 6  | 6  | 6  | 6    |
|                      |                 |                                             | End of line |               | 4            | 4  | 4  | 4  | 4    |
|                      |                 |                                             | 40 to 100   | I             | Flanges      | 10 | 10 | 10 | 10   |
|                      |                 |                                             | 125 to 300  | II            | Flanges      | 10 | 10 | 10 | 10   |
|                      |                 |                                             | End of line |               | 6            | 6  | 6  | 6  | 6    |
| LYCENE               | PTFE/Silicone   | 50 to 100                                   | 125         | II            | Flanges      | 50 | 50 | 50 | 50   |
|                      |                 |                                             | 150         | II            | Flanges      | 50 | 50 | 50 | 23   |
|                      |                 |                                             | 200         | II            | Flanges      | 25 | 25 | 25 | 17,5 |
|                      |                 |                                             | 250         | II            | Flanges      | 25 | 25 | 25 | 14   |
|                      |                 |                                             | 300         | II            | Flanges      | 25 | 25 | 25 | 11,5 |
|                      |                 |                                             | End of line |               | 18           | 18 | 18 | 18 | 16,5 |
| EMARIS               | PTFE reinforced | 50 bar                                      | 125         | II            | Flanges      | 50 | 50 | 50 | 28   |
|                      |                 |                                             | 150         | II            | Flanges      | 50 | 50 | 50 | 23   |
|                      |                 |                                             | 200         | II            | Flanges      | 25 | 25 | 25 | 17,5 |
|                      |                 |                                             | 250         | II            | Flanges      | 25 | 25 | 25 | 14   |
|                      |                 |                                             | 300         | II            | Flanges      | 25 | 25 | 25 | 11,5 |
|                      |                 |                                             | End of line |               | 18           | 18 | 18 | 18 | 16,5 |

For end of line use, the indicated pressures have been de-rated and are shown on the valve identification plate. Butterfly valves are not designed for use on the end of line for gas.

Important notice : the indicated temperature and pressure for the different category of fluids (L1/L2/G1/G2) are not a guarantee of use. Therefore, it is essential to validate the use of the products under given operating conditions with our technical department.

## Chapter 5.12

## Shut Off Valves - Ball Valves

This range will be subject to design and part changes during 2021, please contact your Watts representative for more information

## 3-PIECE BALL VALVES

## INDUSTRY, HIGH TEMPERATURE, HIGH PRESSURE

PRESSURE PFA/PS in bar

BODY : 316 stainless steel. Full bore

BALL : 316 stainless steel

SEALS : PTFE reinforced with 25% of glass fibre

HANDLE : with locking system

APPROVAL :  PED 97/23/CE



5

| Legacy Part No.            | Part Number | DN<br>“ | mm  | PFA<br>water | L1 | PS<br>L2 | G1 | G2 | Cat | UV |
|----------------------------|-------------|---------|-----|--------------|----|----------|----|----|-----|----|
| <b>X3777 Female/Female</b> |             |         |     |              |    |          |    |    |     |    |
| 149B 6041                  | 10060659    | 1/4     | 8   | 63           | 63 | 63       | 63 | 63 | 3.3 | 1  |
| 149B 6042                  | 10060660    | 3/8     | 10  | 63           | 63 | 63       | 63 | 63 | 3.3 | 1  |
| 149B 6043                  | 10060661    | 1/2     | 15  | 63           | 63 | 63       | 63 | 63 | 3.3 | 1  |
| 149B 6044                  | 10060662    | 3/4     | 20  | 63           | 63 | 63       | 63 | 63 | 3.3 | 1  |
| 149B 6045                  | 10060663    | 1       | 25  | 63           | 63 | 63       | 63 | 63 | 3.3 | 1  |
| 149B 6046                  | 10060664    | 1 1/4   | 32  | 63           | 63 | 63       | 63 | 63 | II  | 1  |
| 149B 6047                  | 10060665    | 1 1/2   | 40  | 63           | 63 | 63       | 63 | 63 | II  | 1  |
| 149B 6048                  | 10060666    | 2       | 50  | 40           | 40 | 40       | 40 | 40 | II  | 1  |
| 149B 6049                  | 10060667    | 2 1/2   | 65  | 25           | 25 | 25       | 25 | 25 | II  | 1  |
| 149B 6050                  | 10060668    | 3       | 80  | 25           | 25 | 25       | 25 | 25 | II  | 1  |
| 149B 6051                  | 10060669    | 4       | 100 | 25           | 25 | 25       | 25 | 25 | II  | 1  |

BSP female threaded connection

|                                              |            |       |     |    |    |    |    |    |     |   |
|----------------------------------------------|------------|-------|-----|----|----|----|----|----|-----|---|
| <b>X3777S Socket welding connection ends</b> |            |       |     |    |    |    |    |    |     |   |
| 149B 6041S                                   | on request | 1/4   | 8   | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6042S                                   | on request | 3/8   | 10  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6043S                                   | on request | 1/2   | 15  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6044S                                   | on request | 3/4   | 20  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6045S                                   | 10064783   | 1     | 25  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6046S                                   | on request | 1 1/4 | 32  | 63 | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6047S                                   | on request | 1 1/2 | 40  | 63 | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6048S                                   | 10064790   | 2     | 50  | 40 | 40 | 40 | 40 | 40 | II  | 1 |
| 149B 6049S                                   | on request | 2 1/2 | 65  | 25 | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6050S                                   | on request | 3     | 80  | 25 | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6051S                                   | on request | 4     | 100 | 25 | 25 | 25 | 25 | 25 | II  | 1 |

Socketwelding



(continued)

**INDUSTRY, HIGH TEMPERATURE, HIGH PRESSURE**

PRESSURE PFA/PS in bar

BODY : 316 stainless steel. Full bore

BALL : 316 stainless steel

SEALS : PTFE reinforced with 25% of glass fibre

HANDLE : with locking system

APPROVAL :  PED 97/23/CE



| Legacy<br>Part No.                    | Part<br>Number | DN    |     | PFA   |    | PS |    |    | Cat | UV |
|---------------------------------------|----------------|-------|-----|-------|----|----|----|----|-----|----|
|                                       |                | “     | mm  | water | L1 | L2 | G1 | G2 |     |    |
| X3777B - Butt welding connection ends |                |       |     |       |    |    |    |    |     |    |
| 149B 6041B                            | on request     | 1/4   | 8   | 63    | 63 | 63 | 63 | 63 | 3.3 | 1  |
| 149B 6042B                            | on request     | 3/8   | 10  | 63    | 63 | 63 | 63 | 63 | 3.3 | 1  |
| 149B 6043B                            | 10064778       | 1/2   | 15  | 63    | 63 | 63 | 63 | 63 | 3.3 | 1  |
| 149B 6044B                            | 10064780       | 3/4   | 20  | 63    | 63 | 63 | 63 | 63 | 3.3 | 1  |
| 149B 6045B                            | 10064782       | 1     | 25  | 63    | 63 | 63 | 63 | 63 | 3.3 | 1  |
| 149B 6046B                            | 10064785       | 1 1/4 | 32  | 63    | 63 | 63 | 63 | 63 | II  | 1  |
| 149B 6047B                            | 10064786       | 1 1/2 | 40  | 63    | 63 | 63 | 63 | 63 | II  | 1  |
| 149B 6048B                            | 10064788       | 2     | 50  | 40    | 40 | 40 | 40 | 40 | II  | 1  |
| 149B 6049B                            | 10064792       | 2 1/2 | 65  | 25    | 25 | 25 | 25 | 25 | II  | 1  |
| 149B 6050B                            | 10064793       | 3     | 80  | 25    | 25 | 25 | 25 | 25 | II  | 1  |
| 149B 6051B                            | on request     | 4     | 100 | 25    | 25 | 25 | 25 | 25 | II  | 1  |

Buttwelding

| X3777V - female/female |            |       |     |    |    |    |    |    |     |   |
|------------------------|------------|-------|-----|----|----|----|----|----|-----|---|
| 149B 6041V             | on request | 1/4   | 8   | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6042V             | on request | 3/8   | 10  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6043V             | 10064779   | 1/2   | 15  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6044V             | 10064781   | 3/4   | 20  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6045V             | 10064784   | 1     | 25  | 63 | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6046V             | 10078668   | 1 1/4 | 32  | 63 | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6047V             | 10064787   | 1 1/2 | 40  | 63 | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6048V             | 10064791   | 2     | 50  | 40 | 40 | 40 | 40 | 40 | II  | 1 |
| 149B 6049V             | on request | 2 1/2 | 65  | 25 | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6050V             | on request | 3     | 80  | 25 | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6051V             | on request | 4     | 100 | 25 | 25 | 25 | 25 | 25 | II  | 1 |

BSP female threaded connection



**INDUSTRY, HIGH TEMPERATURE, HIGH PRESSURE**

PRESSURE PFA/PS in bar

BODY : carbon steel, Full bore

BALL : 304 stainless steel

SEALS : PTFE reinforced with 25% of glass fibre

HANDLE : with locking system

APPROVAL :  PED 97/23/CE

| Legacy<br>Part No.<br>EPDM | Part<br>Number<br>EPDM | DN    | PFA | PS    |    |    | Cat | UV |     |    |
|----------------------------|------------------------|-------|-----|-------|----|----|-----|----|-----|----|
|                            |                        | “     | mm  | water | L1 | L2 |     |    | G1  | G2 |
| X3444 - female/female      |                        |       |     |       |    |    |     |    |     |    |
| 149B 6052                  | on request             | 1/4   | 8   | 63    | 63 | 63 | 63  | 63 | 3.3 | 1  |
| 149B 6053                  | on request             | 3/8   | 10  | 63    | 63 | 63 | 63  | 63 | 3.3 | 1  |
| 149B 6054                  | 10060670               | 1/2   | 15  | 63    | 63 | 63 | 63  | 63 | 3.3 | 1  |
| 149B 6055                  | 10060671               | 3/4   | 20  | 63    | 63 | 63 | 63  | 63 | 3.3 | 1  |
| 149B 6056                  | 10060672               | 1     | 25  | 63    | 63 | 63 | 63  | 63 | 3.3 | 1  |
| 149B 6057                  | 10060673               | 1 1/4 | 32  | 63    | 63 | 63 | 63  | 63 | II  | 1  |
| 149B 6058                  | 10060674               | 1 1/2 | 40  | 63    | 63 | 63 | 63  | 63 | II  | 1  |
| 149B 6059                  | 10060675               | 2     | 50  | 40    | 40 | 40 | 40  | 40 | II  | 1  |
| 149B 6060                  | 10060676               | 2 1/2 | 65  | 25    | 25 | 25 | 25  | 25 | II  | 1  |
| 149B 6061                  | 10060677               | 3     | 80  | 25    | 25 | 25 | 25  | 25 | II  | 1  |
| 149B 6062                  | on request             | 4     | 100 | 25    | 25 | 25 | 25  | 25 | II  | 1  |

BSP female threaded connection

**X3444S - Socket welding connection ends**

|            |            |       |     |    |    |    |    |     |   |
|------------|------------|-------|-----|----|----|----|----|-----|---|
| 149B 6052S | on request | 1/4   | 8   | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6053S | on request | 3/8   | 10  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6054S | on request | 1/2   | 15  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6055S | on request | 3/4   | 20  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6056S | 10079771   | 1     | 25  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6057S | on request | 1 1/4 | 32  | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6058S | 10064802   | 1 1/2 | 40  | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6059S | on request | 2     | 50  | 40 | 40 | 40 | 40 | II  | 1 |
| 149B 6060S | on request | 2 1/2 | 65  | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6061S | on request | 3     | 80  | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6062S | on request | 4     | 100 | 25 | 25 | 25 | 25 | II  | 1 |

Socketwelding

**X3444B - Butt welding connection ends**

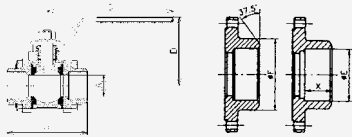
|            |            |       |     |    |    |    |    |     |   |
|------------|------------|-------|-----|----|----|----|----|-----|---|
| 149B 6052B | on request | 1/4   | 8   | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6053B | on request | 3/8   | 10  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6054B | 10064794   | 1/2   | 15  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6055B | 10064796   | 3/4   | 20  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6056B | 10064798   | 1     | 25  | 63 | 63 | 63 | 63 | 3.3 | 1 |
| 149B 6057B | 10064800   | 1 1/4 | 32  | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6058B | 10064801   | 1 1/2 | 40  | 63 | 63 | 63 | 63 | II  | 1 |
| 149B 6059B | 10064803   | 2     | 50  | 40 | 40 | 40 | 40 | II  | 1 |
| 149B 6060B | 10064804   | 2 1/2 | 65  | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6061B | 10064806   | 3     | 80  | 25 | 25 | 25 | 25 | II  | 1 |
| 149B 6062B | 10064807   | 4     | 100 | 25 | 25 | 25 | 25 | II  | 1 |

Buttwelding



OVERALL DIMENSIONS & TECHNICAL INFORMATION

X3777 & X3444

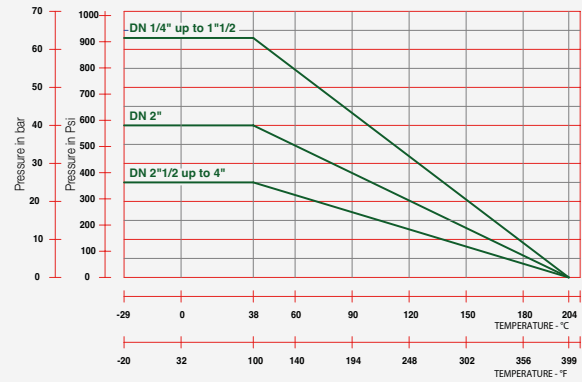


female/female  
Types X3777-X3777S-  
X3777B\*-X3777V-  
X3444-X3444S-  
X3444B\*

| DN    |     | A    | B     | B*    | C   | D   | E     | X  | F    | Kg    |
|-------|-----|------|-------|-------|-----|-----|-------|----|------|-------|
| "     | mm  | mm   | mm    | mm    | mm  | mm  | mm    | mm | mm   |       |
| 1/4   | 8   | 11   | 65(1) | 65(1) | 105 | 58  | 14,2  | 10 | 18,5 | 0,40  |
| 3/8   | 10  | 12,5 | 65(1) | 65(1) | 105 | 58  | 17,6  | 10 | 18,5 | 0,40  |
| 1/2   | 15  | 15   | 74    | 74    | 105 | 58  | 21,8  | 13 | 22,5 | 0,68  |
| 3/4   | 20  | 20   | 83    | 83    | 105 | 60  | 27,2  | 15 | 28,5 | 0,96  |
| 1     | 25  | 25,4 | 94    | 94    | 125 | 68  | 33,9  | 15 | 34,5 | 1,35  |
| 1 1/4 | 32  | 32   | 109   | 111   | 125 | 72  | 42,7  | 15 | 43,5 | 2,50  |
| 1 1/2 | 40  | 38   | 126   | 130   | 150 | 89  | 48,8  | 16 | 50   | 3,00  |
| 2     | 50  | 50   | 148   | 151   | 150 | 96  | 61,2  | 17 | 63   | 4,50  |
| 2 1/2 | 65  | 65   | 180   | 185   | 260 | 126 | 77,0  | 17 | 86   | 8,00  |
| 3     | 80  | 80   | 202   | 212   | 260 | 146 | 89,8  | 17 | 91   | 14,20 |
| 4     | 100 | 100  | 233   | 268   | 280 | 180 | 115,3 | 20 | 117  | 21,50 |

B\* = 74 mm

BALL VALVE :  
PRESSURE TEMPERATURE CHART



**SOCCLA WARRANTY:**

Unless otherwise stipulated, the Supplier provides a 5 years warranty including the Socla pneumatic and electric actuators (except backflow preventer RPZ, water meters and all other type of motorisations which are guaranteed 1 year). The warranty begins from the date of provision of the products in the Supplier's premises. Said warranty covers only defective materials and manufacturing. To invoke the warranty, the Purchaser must immediately notify the Supplier in writing of defects it has observed in the product, and specify the operating circumstances in which these defects were noticed. The disconnectors type BA are subjected to an annual statutory check and are guaranteed if the installation conditions are complied with, for a duration of one year from the date of invoicing of the product.

The warranty, at the Supplier's discretion, consists only of repairing or replacing products that it finds defective upon their arrival at its premises. Travel, transport and shipment costs and assembly and disassembly costs such as handling costs are not included in the warranty.



Your Socla Partner

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