

BUTTERFLY VALVE – DN50 (2") to DN200 (8")

PVC-U, PVC-C, PP-H, PVDF

Conform to the 2014/68/EU Directive



DN50 – PP-H – with ABS hand lever



DN200 – PVC-U – with gearbox

MAIN FEATURES

- This type of valve has the advantage of a robust construction, with a one-piece body and a symmetrical and solid centered butterfly, ensuring a strong sealing on the elastomer seal in both flow directions.
- Installation on the piping of this valve must be done in the open position.
- The valve is equipped by default with an operating lever, but can also be equipped with a handwheel gearbox.
- The irreversible handwheel gearbox enables stopping and position holding while facilitating operation.
- The operating lever is equipped with a 13 indexed position adjusting system (15 for DN200)

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SAFI

Av. Jacques Moisson – BP 1
26770 TAULIGNAN
FRANCE
Tél.: (+33) 04 75 53 56 29
Fax : (+33) 04 75 53 62 78
info@safi-valves.com

SAFI Limited

35 Holton Road
Holton Heath Trading Park
POOLE Dorset - BH16 6LT
UNITED KINGDOM
Tél.: (+44) 1202 624618
Fax : (+44) 1202 628500
sales@safi-valves.com

SAFI Deutschland

Kunststoffarmaturen
Vertriebs GmbH
Jahnstrasse 29
64319 PFUNGSTADT
DEUTSCHLAND
Tél. : (+49) 61 57 81 919
Fax : (+49) 61 57 82 025
info-deutschland@safi-valves.com

SAFI Fábrica de Válvulas

C/ Carboners, 35
Pol. Ind. La Cometa
43700 EL VENDRELL
TARRAGONA-ESPAÑA
Tel.: (+34) 977 665 147
Fax : (+34) 977 664 989
info@safi-valvulas.com

SAFI América

Las Garzas Trade Center
Las Garzas N°950, Galpon A
Quilicura
SANTIAGO – CHILE
Tfno.: (+56) 2 2510 3500
info@safi-america.com

DIMENSIONS

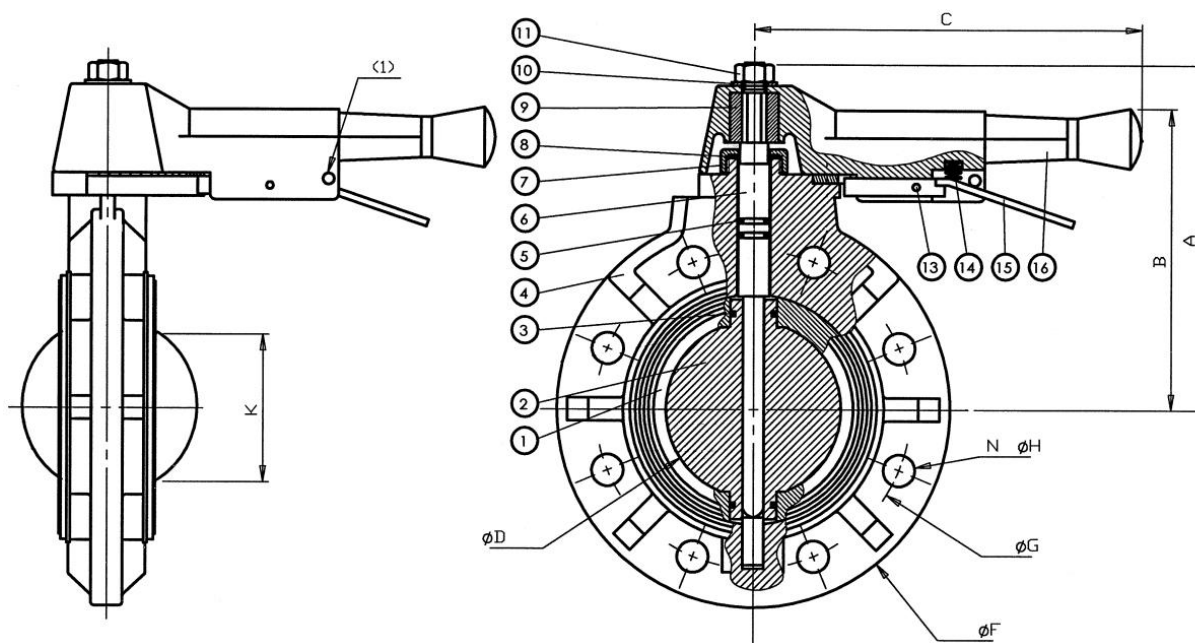
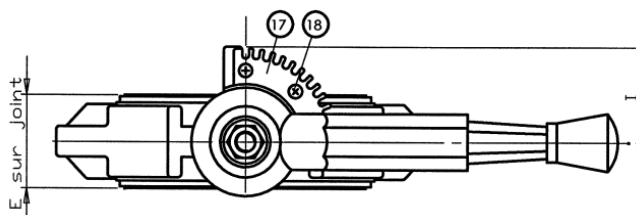


Diagram representing a DN100



DN	A	B	C	ØD	E	ØF	ØG		ØH		I	K	N	
							DIN	ANSI	DIN	ANSI			DIN	ANSI
50	168	140	220	56	41	165	125	120,6	18	19	57	47	4	4
65	178	149	220	72	45	185	145	139,7	18	19	57	62	4	4
80	183	154	220	79	45	200	160	152,4	18	19	57	70	8	4
100	196	170	220	102	55	229	180	190,5	18	19	57	93	8	8
125	256	217	310	130	65	254	210	215,9	18	22	85	119	8	8
150	276	226	310	150	70	285	240	241,3	23	22	85	138	8	8
200	307	254	414	203	87	337	295	298,4	23	22	85	191	8	8

DIN = Drilling in accordance with EN 1092-1 PN10

ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150

DN	WEIGHT (in Kg)					
	PVC-U / PVC-C		PP-H		PVDF	
	Without Handle	With Handle	Without Handle	With Handle	Without Handle	With Handle
50	0,9	1,3	0,7	1,0	1,4	1,7
65	1,2	1,5	0,9	1,2	1,7	2,0
80	1,3	1,7	1,0	1,3	1,9	2,2
100	2,1	2,5	1,6	2,0	3,0	3,4
125	3,4	4,1	2,6	3,3	4,9	5,6
150	5	5,7	3,8	4,5	6,9	7,6
200	10	10,7	6,3	7,0	9,4	10,1

PARTS LIST

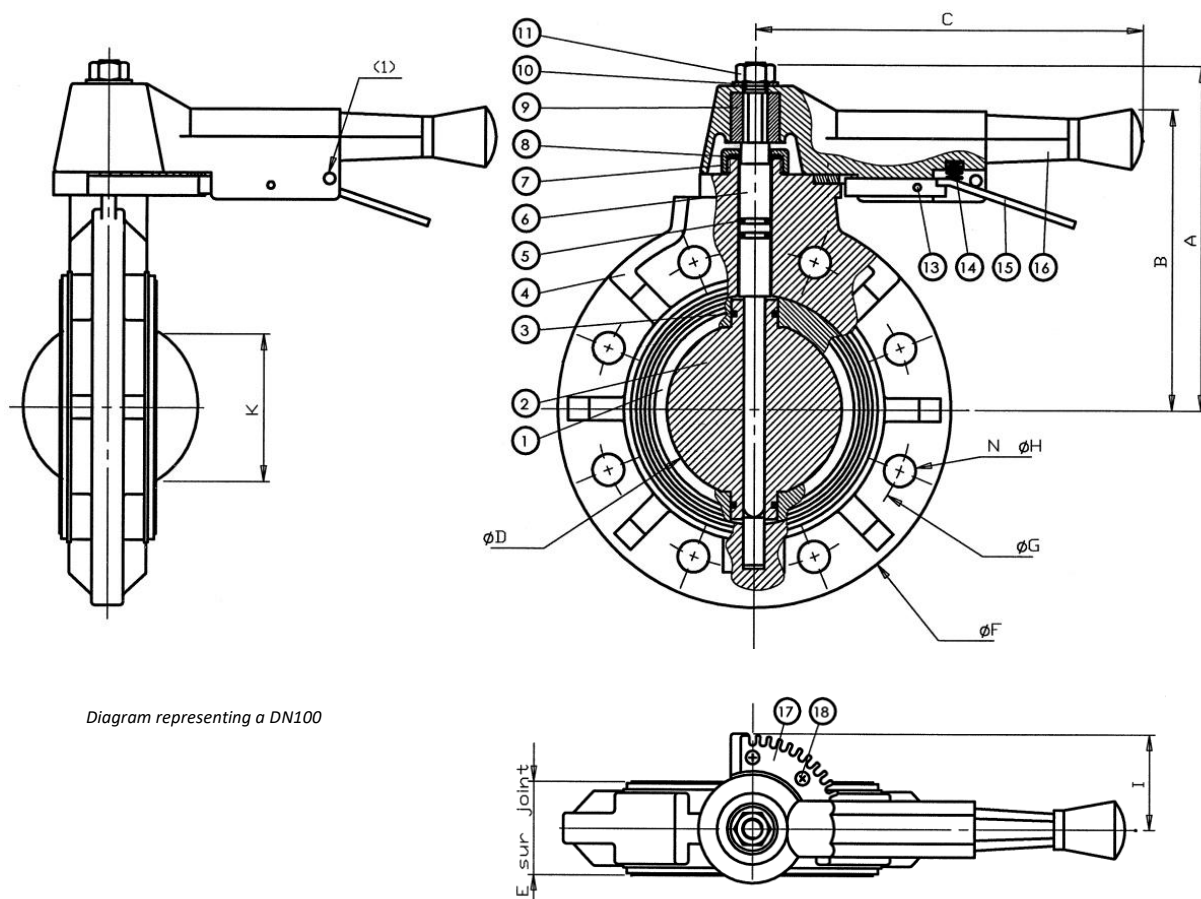
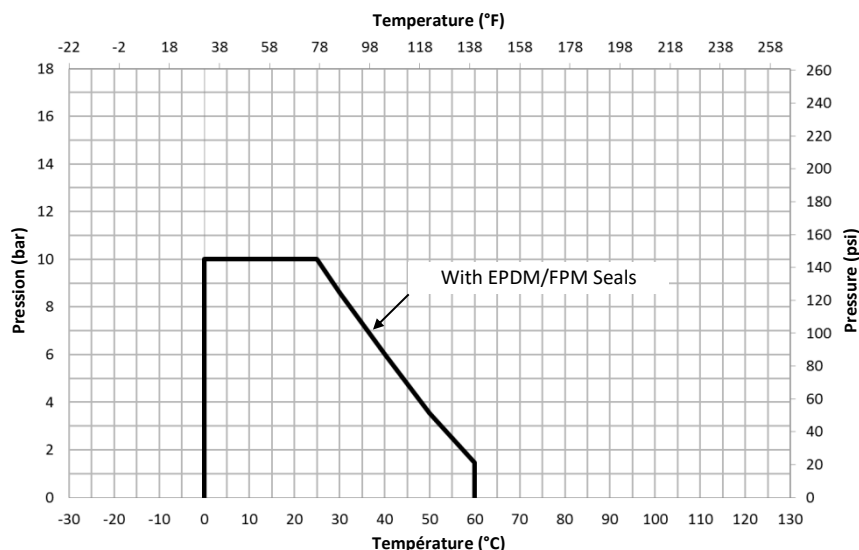


Diagram representing a DN100

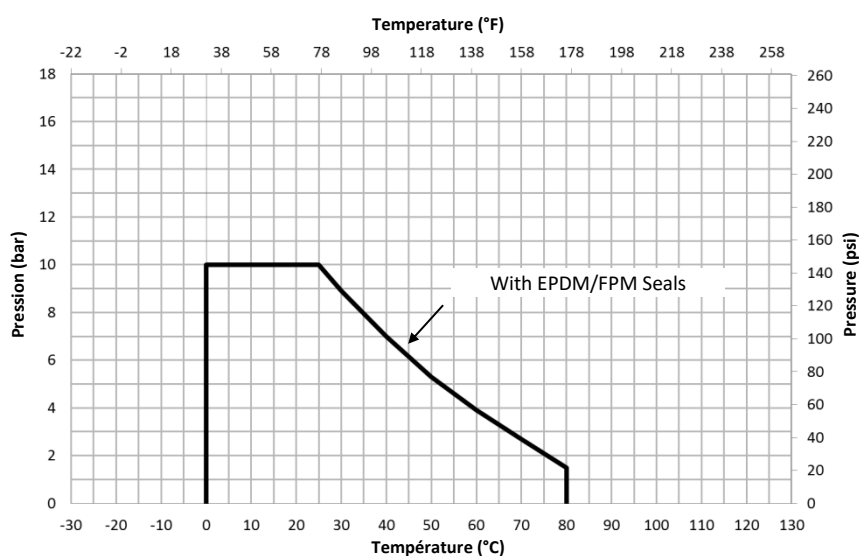
N°	QTY	DESCRIPTION	MATERIAL
1	1	SEAL	EPDM/FPM
2	1	BUTTERFLY	PVC-U/PVC-C/PP-H/PVDF
3	2	O-RING	EPDM/FPM
4	1	BODY	PVC-U/PVC-C/PP-H/PVDF
5	2	O-RING	EPDM/FPM
6	1	SHAFT	SS 410
7	1	RETAINING NUT	PVC-U/PP-H/PVDF
8	1	WASHER	SS 304
9	1	METAL INSERT	STEEL
10	1	WASHER	SS 304
11	1	NUT	SS 304
13	1	LOCKING SET PIN	LAITON
14	1	SPRING	SS 304
15	1	BLOCKING LEVER	SS 304
16	1	MANEUVER LEVER	ABS
17	1	NOTCH PLATE	SS 304
18	3/4	HOLDING PLATE SCREW	SS 304

FPM type B - FPM type SAFKM5 available for DN80, 100

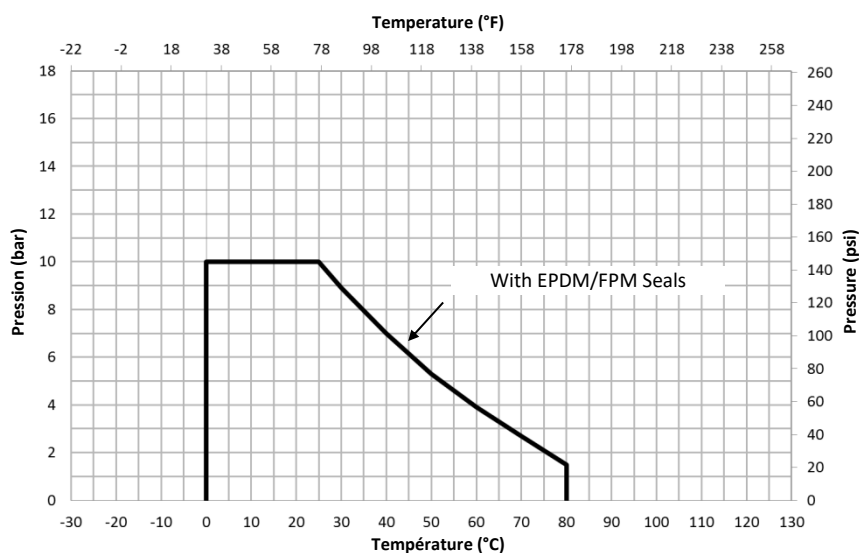
PRESSURE / TEMPERATURE CURVES



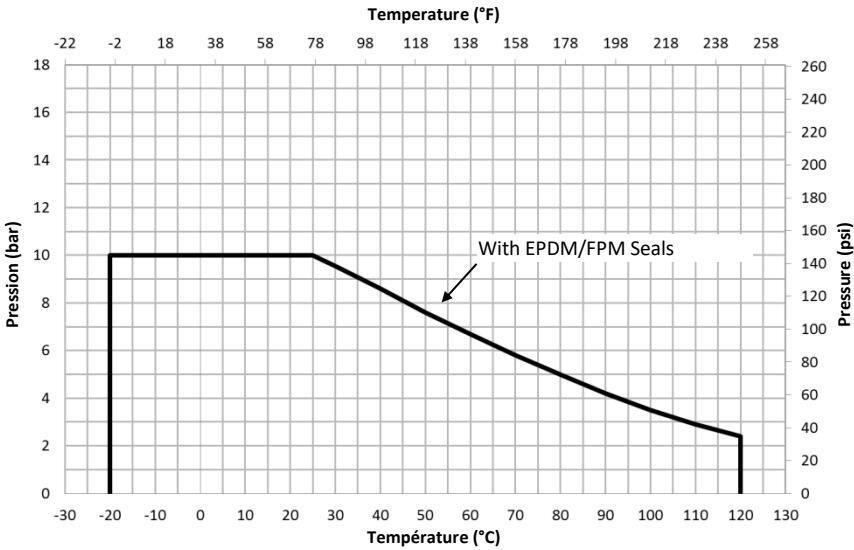
BODY in PVC-U



BODY in PVC-C



BODY in PP-H



Pressure / Temperature Summary

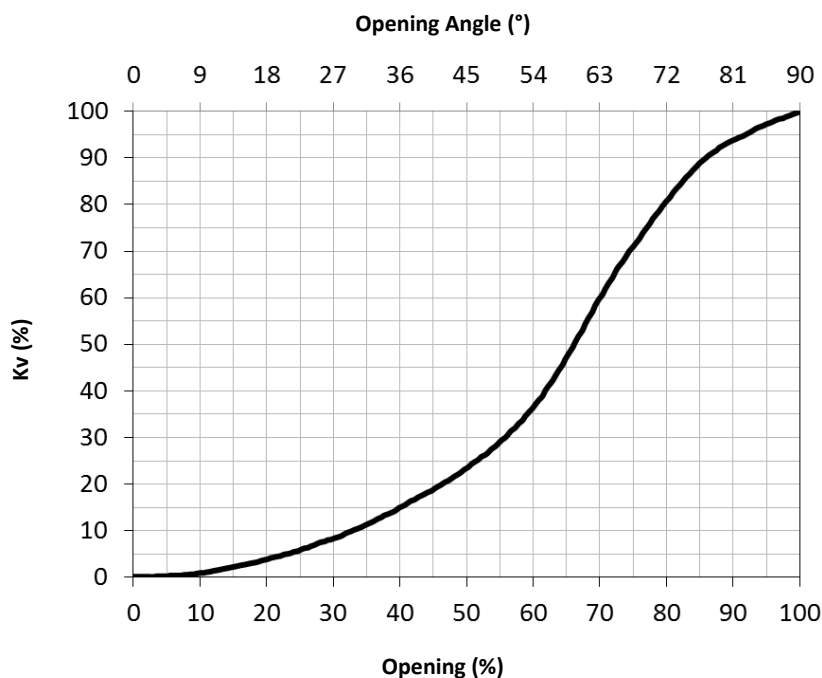
DN	Type of Seals	Working Pressure	Working Temperature			
			PVC-U	PVC-C	PP-H	PVDF
DN50 to DN200	EPDM / FPM	10 bars at 20°C	- 0°C to +60°C	0°C to +80°C	0°C to +80°C	- 20°C to +120°C

The mechanical characteristics of the FPM and FPM seals subjected to an ambient temperature below –5°C require the implementation of proper insulation on the valves equipped with such seals. Contact us for more information.

PRESSURE LOSS

DN	Kv (m ³ /h)
50	79
65	131
80	198
100	325
125	634
150	940
200	2293

Kv defined according to NF EN 1267



Our valves are guaranteed for an average fluid velocity in the pipeline of ≤ 3 m/s. Please contact us with the working conditions for any higher speed.

CHEMICAL RESISTANCE

The chemical resistance of the valve is subject to the type of fluid, the temperature, the pressure, as well as the materials and seals of the valve.

Please contact us to have a personalized analysis of the resistance of one of our products to a given fluid

You can also consult, for information only, the table given in ISO 10358. However, this table cannot be considered as a recommendation by SAFI who could not be held liable for the use of this document.

OPTION: HANDWHEEL OPERATION

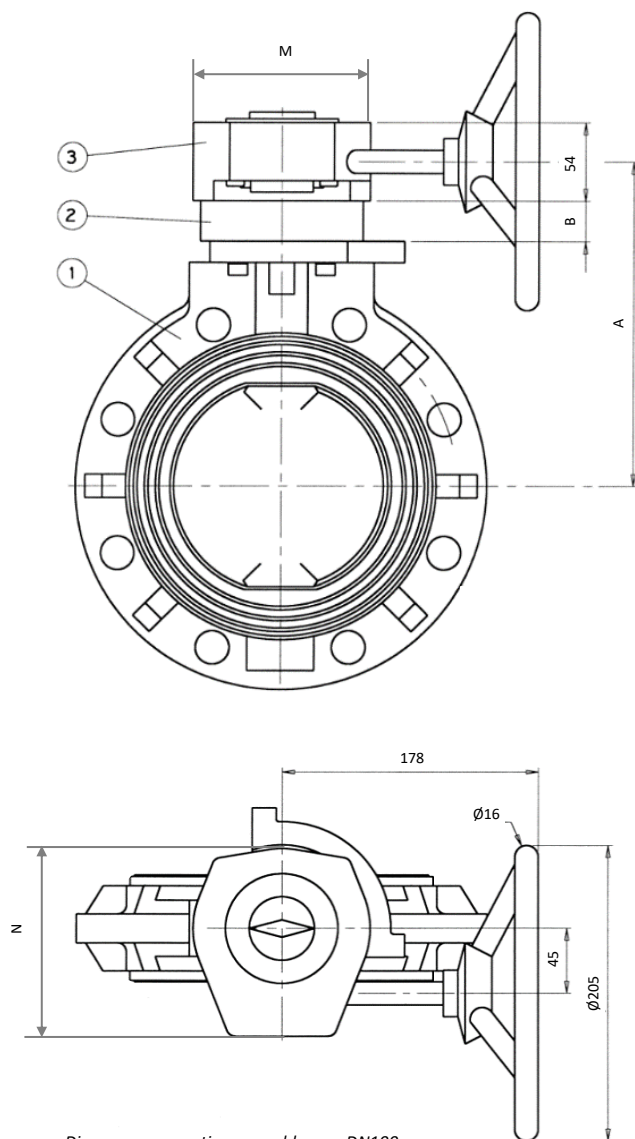


Diagram representing assembly on a DN100

Item	Qty	DESCRIPTION	MATERIAL
1	1	Butterfly valve DN50 to DN200	PVC-U / PVC-C PP-H / PVDF
2	4	Adapter	PP-H
3	4	Manual gearbox	Coated Aluminium

DN	A	B	M	N	PRODUCT CODE
50	179	30	120	132	2013-01J
65	189	30	120	132	
80	199	30	120	132	
100	205	22	120	132	
125	257	48	120	132	
150	272	48	120	132	
200	294	50	120	132	Consult us

The irreversible handwheel gearbox enables stopping and position holding while facilitating operation

OPTION: MOUNTING KIT (ISO 5211)

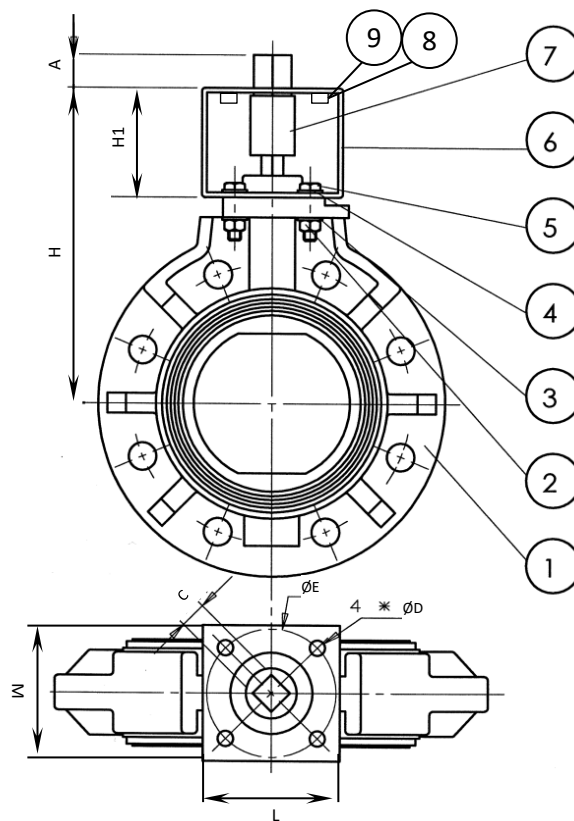


Diagram representing
assembly on a DN100

Item	Qty	DESCRIPTION	MATERIAL
	DN50 à DN200		
1	1	Butterfly Valve	PVC-U / PVC-C PP-H / PVDF
2	4	Nut	SS 316
3	4	Washer	SS 316
4	4	Spring Washer	SS 316

Item	Qty	DESCRIPTION	MATERIAL
	DN50 à DN200		
5	4	Screw	SS 316
6	1	Bracket	SS 304+Epoxy
7	1	Drive	SS 304+Epoxy
8	4	Spring Washer	SS 316
9	4	Screw	SS 316

DN	A	H	H1	L	M	ISO 5211 FIXINGS											
						F05			F07			F10			F12		
						C*	ØD	ØE	C*	C*	C*	C*	ØD	ØE	C*	ØD	ØE
50	15	175	73	80	60	14	Ø6,5	Ø50	-	-	-	-	-	-	-	-	-
	23	175	73	100	80	-	-	-	17	Ø8,5	Ø70	-	-	-	-	-	-
65	15	183	73	80	60	14	Ø6,5	Ø50	-	-	-	-	-	-	-	-	-
	23	183	73	100	80	-	-	-	17	Ø8,5	Ø70	-	-	-	-	-	-
80	23	191	73	100	80	-	-	-	17	Ø8,5	Ø70	-	-	-	-	-	-
	24	191	73	100	80	-	-	-	22	Ø8,5	Ø70	-	-	-	-	-	-
100	24	207	73	100	80	-	-	-	17	Ø8,5	Ø70	-	-	-	-	-	-
	24	207	73	125	100	-	-	-	-	-	-	22	Ø10,5	Ø102	-	-	-
125	24	265	105	100	80	17	Ø6,5	Ø50	17	Ø8,5	Ø70	-	-	-	-	-	-
	24	270	110	140	120	-	-	-	-	-	-	22	Ø10,5	Ø102	22	Ø12,5	Ø125
150	24	282	105	100	80	22	Ø6,5	Ø50	22	Ø8,5	Ø70	-	-	-	-	-	-
	29	287	110	140	120	-	-	-	-	-	-	27	Ø10,5	Ø102	27	Ø12,5	Ø125
200	24	279	75	180	130	-	-	-	-	-	-	22	Ø10,5	Ø102	22	Ø12,5	Ø125
	36	279	75	180	130	-	-	-	-	-	-	36	Ø10,5	Ø102	36	Ø12,5	Ø125

Other Dimensions: On Request *According to standard

** Multistandard bracket

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Available Kits

DN	ISO 5211 FIXINGS (CONNECTION/SQ* 45°)		WEIGHT OF KIT	PRODUCT CODE
DN50, DN65 and DN80	F05	14	Consult us	KIT0023
	F07	17		KIT0024
	F07	17		KIT0144
	F05	22		KIT0181
	F07	22		KIT0036
DN100	F07	17		KIT0005
	F07	22		KIT0402
	F10	22		KIT0165
	F10	27		KIT0403
DN125	F05/F07	17		KIT0039
	F05/F07	22		KIT0083
	F10/F12	22		KIT0017
	F10/F12	27		KIT0148
DN150	F05/F07	17		KIT0039
	F05/F07	22		KIT0083
	F10/F12	22		KIT0017
	F10/F12	27		KIT0148
	F10/F12	36		KIT0409
DN200	F10/F12	22		KIT0038
	F10/F12	27		KIT0163
	F10/F12	36	KIT0166	

*SQ : Square Drive 45°

Minimum operating torque required to actuate valve

DN	MINIMUM REQUIRED TORQUE (Safety Coefficient x2 included)
	PVC-U / PVC-C / PP-H / PVDF
DN50	30 N.m
DN65	30 N.m
DN80	50 N.m
DN100	110 N.m

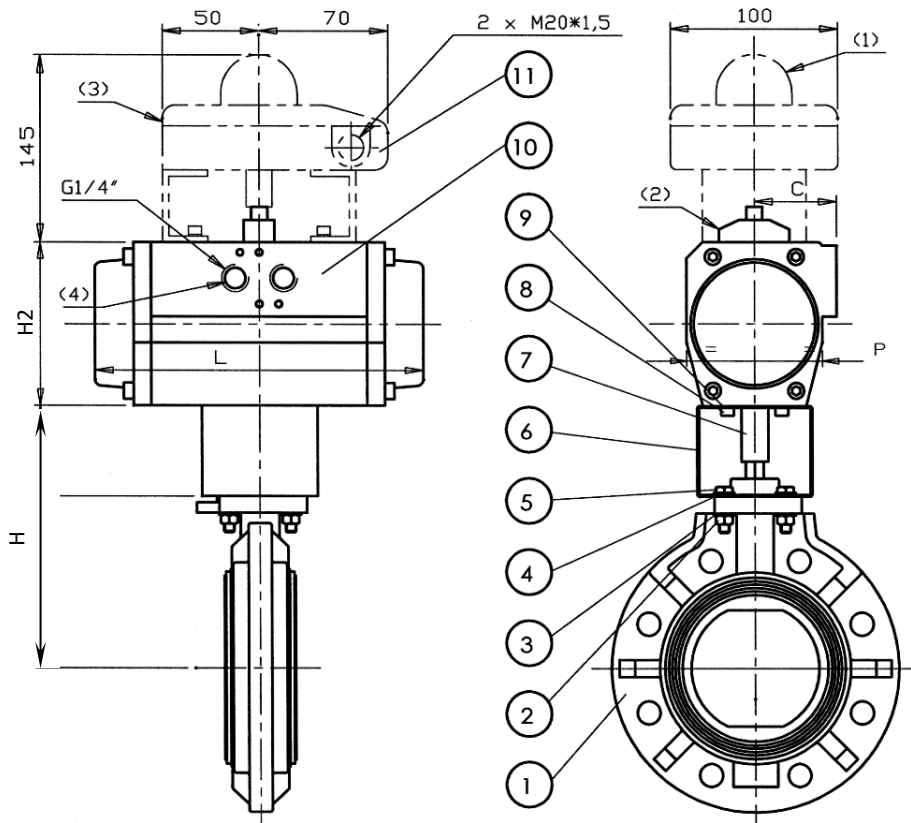
DN	MINIMUM REQUIRED TORQUE (Safety Coefficient x2 included)
	PVC-U / PVC-C / PP-H / PVDF
DN125	110 N.m
DN150	170 N.m
DN200	360 N.m

The « valve torque for actuation » is the required torque to open the valve when dP=PN and including a safety coefficient.

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OPTION: PNEUMATIC ACTUATION



N°	QTY	DESCRIPTION	MATERIAL
1 to 9		See page 10	
10	1	Actuator Double Acting or Fail Safe	Polyamide or Aluminium or Stainless Steel
11	1	Limit Switch Box (option)	Aluminium or Stainless Steel

- (1) Visual position indicator of Limit Switch Box.
(2) Visual position indicator of Actuator
(3) Limit Switch Box (option) - see TDS-ACTPN-0002
(4) NAMUR mounting pattern for electro pneumatic control

Pneumatic Actuators recommendation according to DN and Material of the Valves

POLYAMIDE or ALUMINIUM Actuator

DN	ACTUATOR	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	C	L	H2	P	WEIGHT of Actuator in Kg	PRODUCT CODE	MATERIAL
DN50	Double Acting (DA)	F05	14	See dimensions for each DN on page 8	51	160	90	70	1,19	2007-73B	Actuator in Polyamide
	Double Acting (DA)	F05/F07	14		47	175	81	81	1,5	2007-83C	Actuator in Aluminium
	Fail Safe	F05/F07	17		54	248	98	96	3,77	2007-84E (NC) 2007-85E (NO)	
DN65	Double Acting (DA)	F05	14		51	160	90	70	1,19	2007-73B	Actuator in Polyamide
	Double Acting (DA)	F05/F07	14		47	175	81	81	1,5	2007-83C	Actuator in Aluminium
	Fail Safe	F05/F07	17		54	248	98	96	3,77	2007-84E (NC) 2007-85E (NO)	
DN80	Double Acting (DA)	F07	17		66	175	111,5	70	1,97	2007-73C	Actuator in Polyamide
	Double Acting (DA)	F05/F07	17		54	186	98	96	2,15	2007-83D	Actuator in Aluminium
	Fail Safe	F07/F10	22		66	261	154	131	7,89	2007-84G (NC) 2007-85G (NO)	
DN100	Double Acting (DA)	F05/F07	17		62	241	117	114	4,15	2007-83F	
	Fail Safe	F07/F10	22		73	367	168,5	145	13,21	2007-84I (NC) 2007-85I (NO)	
DN125	Double Acting (DA)	F05/F07	17		62	241	117	114	4,15	2007-83F	
	Fail Safe	F07/F10	22		73	367	168,5	145	13,21	2007-84I (NC) 2007-85I (NO)	
DN150	Double Acting (DA)	F07/F10	22		66	261	154	131	6,45	2007-83G	
	Fail Safe	F10/F12	27		91	380,5	202	181	21	2007-84J (NF) 2007-85J (NO)	
DN200	Double Acting (DA)	F07/F10	22		73	367	168,5	145	10,65	2007-83I	
	Fail Safe	F10/F14	36		114	467	257	230	42,30	2007-84L (NC) 2007-85L (NO)	

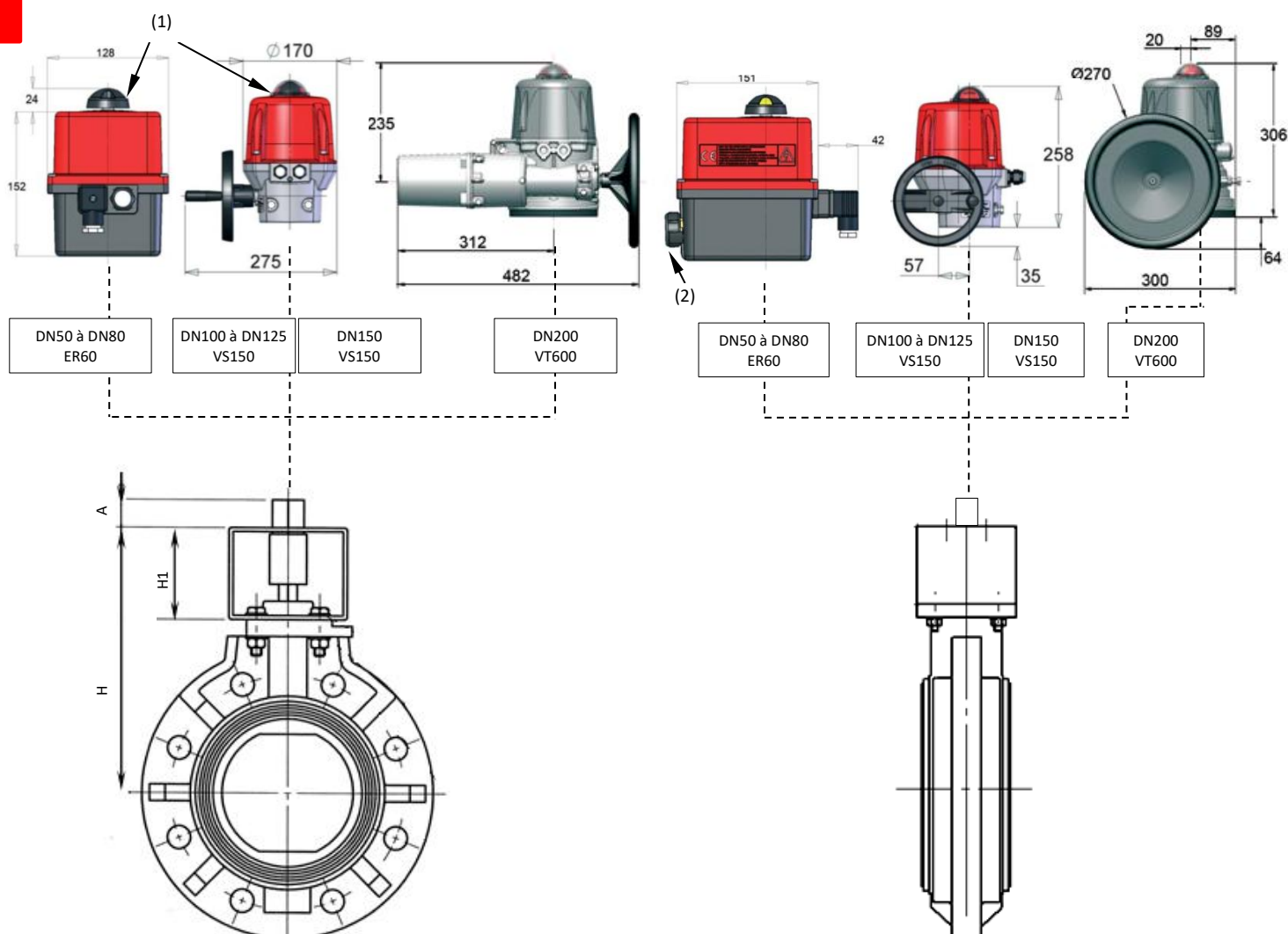
*DSS = Double Square Socket

NC= Normally Closed – NO = Normally Open

Find all the information concerning these actuators by consulting our TDS-ACTPN-0001 product sheet.

Contact us, for other type of Actuators or Limit Switch Boxes

OPTION: ELECTRIC ACTUATION



(1) Visual position indicator.

(2) Release button for manual override

Electric Actuator recommendation according to DN

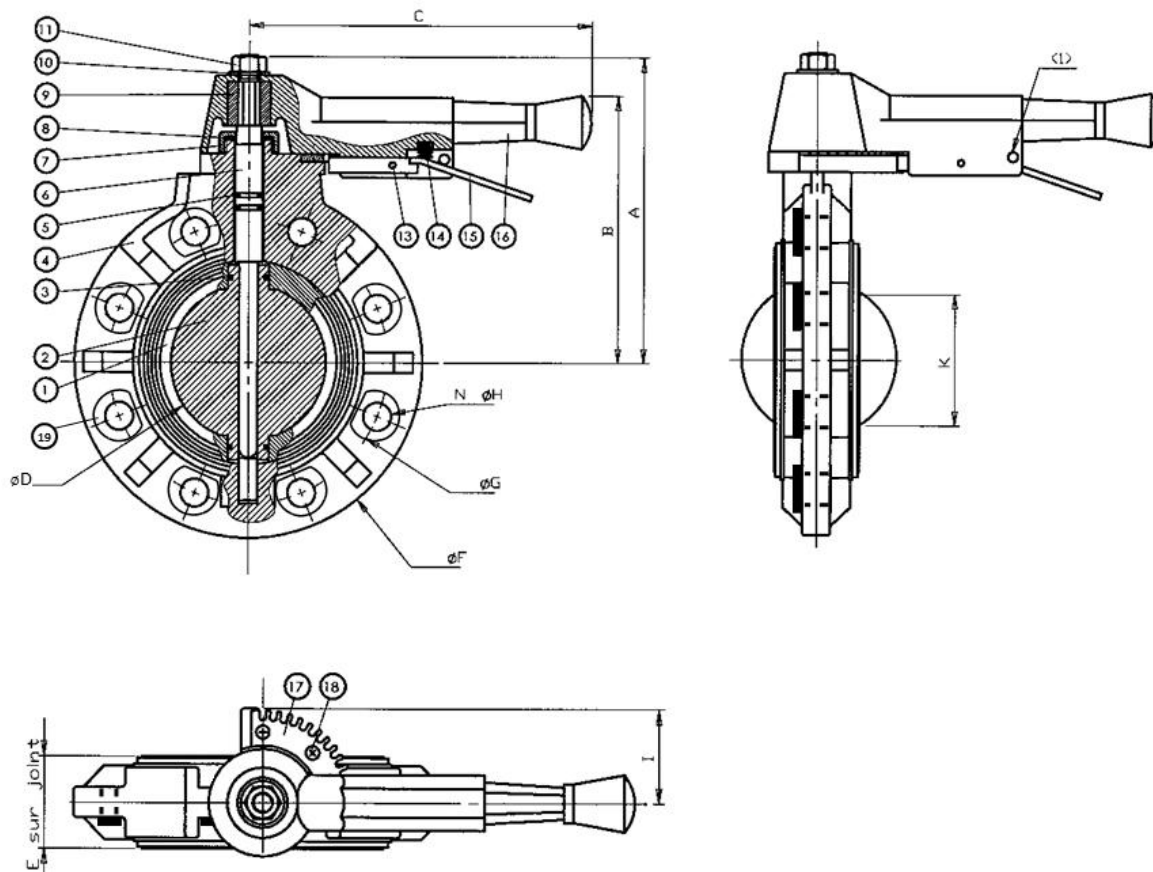
DN	MODEL	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	WEIGHT KG	PRODUCT CODE	MATERIAL	ROTATION 90°
DN50 & DN65	ER60 (15-30V AC 12-48V DC)	F05-F07	22	See dimensions for each DN on page 8	1 to 2,1	2907-43F (ER60)	PA6	12s (ER60)
	ER60 (100-240V AC 100-350V DC)	F05-F07	22		1 to 2,1	2907-43B (ER60)	PA6	12s (ER60)
DN80	ER60 (15-30V AC 12-48V DC)	F05-F07	22		1 to 2,1	2907-43F (ER60)	PA6	12s (ER60)
	ER60 (100-240V AC 100-350V DC)	F05-F07	22		1 to 2,1	2907-43B (ER60)	PA6	12s (ER60)
DN100 & DN125	VS150 (15-30V AC 12-48V DC)	F07-F10	22		5,1 to 6,4	2907-46C	Aluminium + PA6	30s
	VS150 (100-240V AC 100-350V DC)	F07-F10	22		5,1 to 6,4	2907-46A	Aluminium + PA6	30s
	VS150 (400V three phase)	F07-F10	22		5,1 to 6,4	2907-46H	Aluminium + PA6	20s
DN150	VS150 (15-30VAC 12-48VDC)	F07-F10	22		5,1 à 6,4	2907-46C	Aluminium + PA6	30s
	VS150 (100-240VAC 100-350VDC)	F07-F10	22		5,1 à 6,4	2907-46A	Aluminium + PA6	30s
	VS150 (400V Triphasé)	F07-F10	22		5,1 à 6,4	2907-46H	Aluminium + PA6	20s
DN200	VT600 (100-240V AC 100-350V DC)	F10-F12	36		24	2907-48A	Aluminium + PA6	38s
	VT600 (400V three phase)	F10-F12	36		24	2907-48B	Aluminium + PA6	38s

*DSS = Double Square Socket

Find all the information concerning these actuators by consulting our TDS-ACTEL-0001 product sheet

Multiple Options Available: Contact us for more information

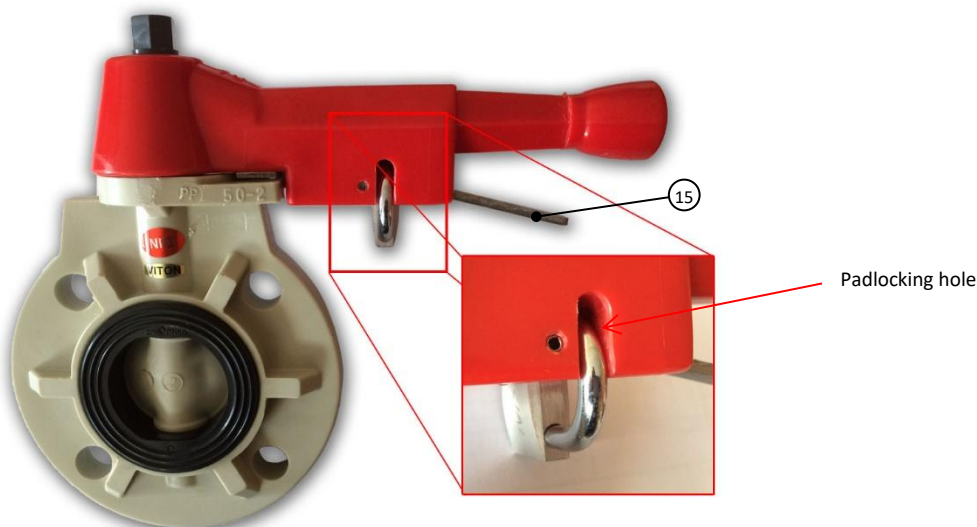
OPTION: FIXING SYSTEM « LUG »



N°	QTY	DESCRIPTION	MATERIAL
1 to 18		See page 4 and 5	
19	4 to 8	LUG Insert	SS 316

DN	Nbr.		LUG Thread	Product code
	DIN	ANSI		
DN50	4	4	M16	2025-19A
DN65	4	4	M16	2025-19B
DN80	8	4	M16	2025-19C (DIN) 2025-21A (ANSI)
DN100	8	8	M16	2025-19D
DN125	8	8	M16	2025-19E
DN150	8	8	M20	2025-20F
DN200	8	8	M20	2025-19G

OPTION: LOCKING SYSTEM



Operation :

A hole ($\varnothing 7,2$) is drilled on the handle.

The implementation of a padlock blocks the use of the lever (N° 15) and locks the Butterfly Valve.

The Locking system does not include Padlock.

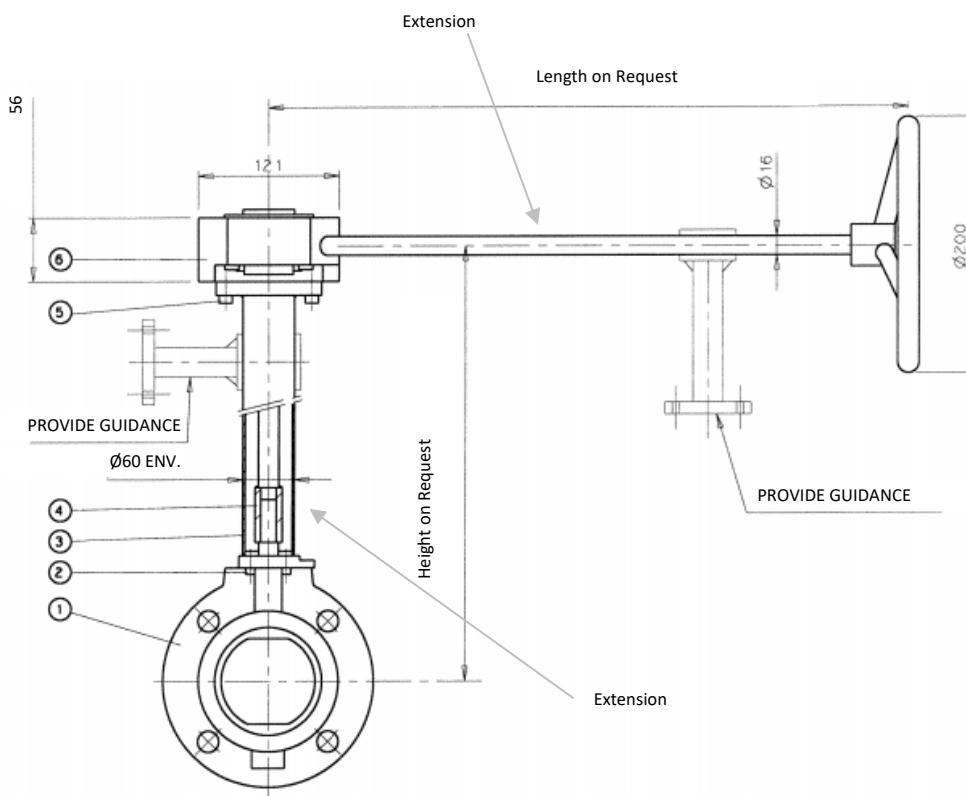
Safi recommends using a padlock with a 7 mm diameter wire to ensure the padlocking system functions properly.

INSTALLATION, OPERATION, MAINTENANCE

To ensure optimum, safe installation of this type of product, please refer to the installation, operation and maintenance technical data sheet: **TDS-IOM-0001**.

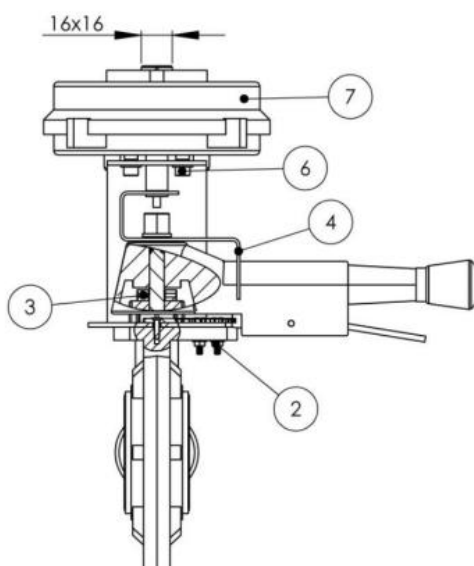
Compliance with these technical instructions is essential to preserve the product warranty and ensure correct operation over time..

OTHER AVAILABLE OPTIONS



Raised control* / Steering wheel extension

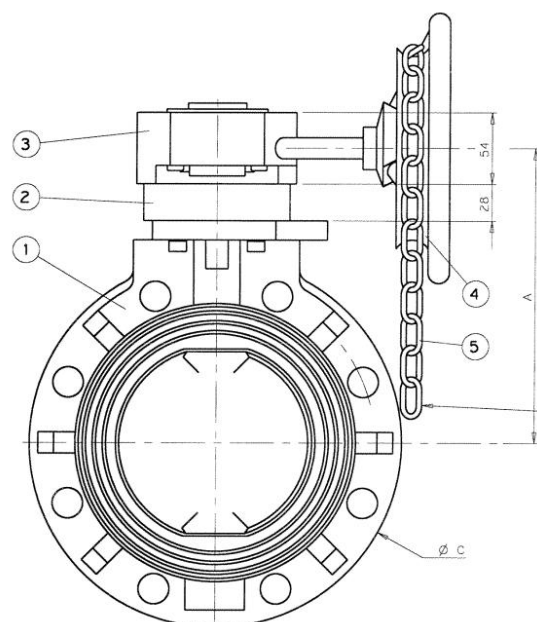
*Manual, Pneumatic or Electric.



DN50 to DN125 + DN200

Limit switch box

(see FT TDS-ACTPN-0002)



Chain Operation

Contact us, for more information on the Available Options.

DETERMINING A PRODUCT CODE

TYPE	SPÉCIFICATION	DN	-	-	Manchette et joints
3600 = PVC-U 3610 = PVC-C 3700 = PP-H 3800 = PVDF	- = Flanges with drilling in accordance with EN 1092-1 PN10 (DIN) A = Flanges with drilling in accordance with EN1759-1/ASME B16.5 Class 150 (ANSI) W = without handle or without Gearbox I = SS 316 shaft P = PVDF butterfly L = ABS lever handle (only for DN200)	05 = DN50 06 = DN65 07 = DN80 08 = DN100 09 = DN125 10 = DN150 11 = DN200	W	W	E = EPDM V = FPM Z = FPM type SAFKM5 (DN80, 100 only)

Example: 3600-05WWE

3600	-	05	W	W	E
PVC-U Body and Butterfly	Flanges with drilling in accordance with EN 1092-1 PN10 (DIN)	DN50	-	-	EPDM Seal and O-rings

Example: 3700P08WWV – mixed butterfly valve (PP-H body and PVDF butterfly)

3700	A	P	08	W	W	V
PP-H Body	Flanges with drilling in accordance with EN1759-1/ASME B16.5 CLASS 150 (ANSI)	PVDF Butterfly	DN100	-	-	FPM Seal and O-rings

Example: 3700-08WWV + 2013-01J

3700-08WWV	+	2013-01J
PP-H Butterfly Valve, Flanges with drilling in accordance with EN 1092-1 PN10 (DIN) DN100 FPM Seals and O-rings	+	Handwheel Gearbox

Example: 3700-08WWV + 2025-19D (LUG)

3700-08WWV	+	2025-19D
PP-H Butterfly Valve, Flanges with drilling in accordance with EN 1092-1 PN10 (DIN) DN100 FPM Seals and O-rings	+	LUG FIXING