

P+S

ELASTOMERIC SPRINGS CELLULAR AND COMPACT



P+S Polyurethan-Elastomere GmbH & Co. KG
Kielweg 17 · DE-49356 Diepholz



P+S POLYURETHAN-ELASTOMERE GMBH & CO. KG

The **dynamic and highly resilient** construction elements made of polyurethane elastomers have been impressing customers from a wide range of industries since 1972.

Both compact and foamed elastomers are characterised by outstanding technical properties. Customers from all over the world rely on the environmentally friendly elastomers from P+S.

Creative solution competence, a **strong knowledge of the industry**, modern polyurethane materials, as well as a **high degree in adherence to**

lead times and service orientation, are essential components of our corporate culture.

With the achievement of our **certifications**:

- ISO 9001:2015 (Quality Management)
- ISO 14001:2015 (environmental management)
- ISO 45001:2018 (Occupational Health and Safety),

we are regularly confirmed that we design our processes to be efficient as well as sustainable and energy-saving.





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ELASTOMERIC SPRINGS

Description, instructions for use and available versions

DESCRIPTION:

P+S elastomeric springs are suitable for a wide range of applications in many different industrial sectors. Our range includes both the cellular elastomeric springs, made of the foamed VULKOCCELL® material, and the compact elastomeric springs, made of the casted DIEPOTHAN® material.

The two product ranges differ in appearance, sizes and load capacities.

VULKOCCELL® is characterised by its high dynamic load-bearing capacity and impressive volume compressibility under load. DIEPOTHAN®, on the other hand, can handle even higher loads while maintaining similar size and shape to a VULKOCCELL® component. A further difference can be found in the deformation under load. While a VULKOCCELL® component exhibits

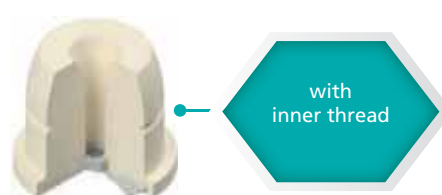
minimal lateral deformation due to its foam structure (up to around 50% load), a DIEPOTHAN® component does show some lateral deformation, which must be taken into account.

Both materials are characterised by their excellent resistance to mineral oils and greases and can be used continuously in the temperature range from -30 to +80°C. Bear in mind, however, that use in the temperature range below 0°C can lead to hardening of the material, which pushes the load limits accordingly.

Place your trust in our high-quality elastomeric springs, which can be used in a wide range of applications. Contact us today to find out more about our products and their areas of application. We look forward to hearing from you!

NOTES ON THE USE OF P+S ELASTOMERIC SPRINGS CELLULAR:

- ⬡ we recommend designing the spring elements to operate within a compression range of 35-70%.
- ⬡ a load up to 85 % is possible, however, this would increase the final forces exponentially.
- ⬡ a lateral expansion of the spring elements of up to 50 % must be taken into account in the design.
- ⬡ a full-surface contact area and counter-pressure area must be guaranteed when using a **P+S spring element** in order to achieve the technical load values specified later.
- ⬡ technical load curves and recommended load ranges can be found starting on page 5.



NOTES ON THE USE OF P+S ELASTOMERIC SPRINGS COMPACT:

- ⬡ we recommend loading the spring elements in the range from 0 to a maximum of 25 or 35 % dynamic load. A load on the spring beyond this range is only permitted for a short time.
- ⬡ a lateral expansion of the spring elements of up to 50% must be considered in the design.
- ⬡ a full-surface contact area and counter-pressure area must be guaranteed when using a **P+S spring element** in order to achieve the technical load values specified later.
- ⬡ technical load curves and recommended load ranges can be found starting on page 16.



Hardness: 70° Shore A



Hardness: 80° Shore A



Hardness: 90° Shore A

ELASTOMERIC SPRINGS CELLULAR MADE OF VULKOCELL®

Overview of the standard program

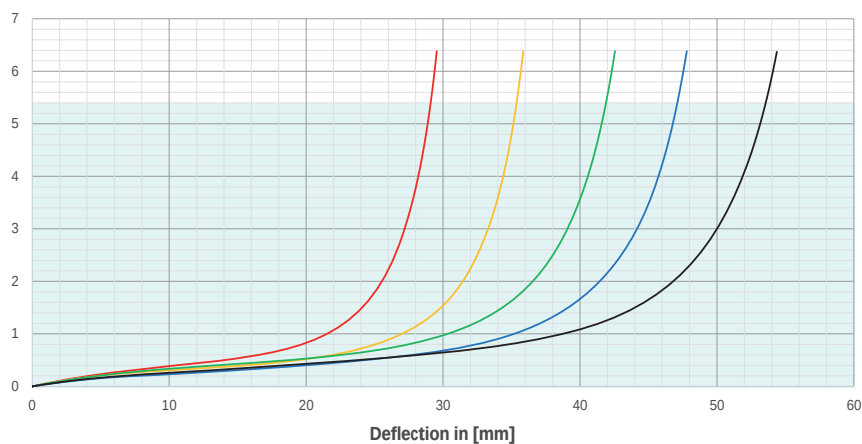


NOMINAL SIZE	DIMENSIONS			VULKOCCELL NH 24 - 40		VULKOCCELL NH 24 - 50		VULKOCCELL NH 24 - 60		LINK TO THE LOAD DIAGRAM
				Max. dynamic load capacity		Max. dynamic load capacity		Max. dynamic load capacity		
	ØD1 [mm]	ØD2 [mm]	Height [mm]	Deflection [mm]	Force [kN]	Deflection [mm]	Force [kN]	Deflection [mm]	Force [kN]	
50 (60)	50	60	41	28.7	5.4	28.7	8.7	28.7	12.8	Page 6
	50	60	51	35.7	5.4	35.7	8.7	35.7	12.8	
	50	60	61	42.7	5.4	42.7	8.7	42.7	12.8	
	50	60	66	46.2	5.4	46.2	8.7	46.2	12.8	
	50	60	76	53.2	5.4	53.2	8.7	53.2	12.8	
63 (80)	63	80	51	35.7	8.0	35.7	13.0	35.7	19.0	Page 7
	63	80	64	44.8	8.0	44.8	13.0	44.8	19.0	
	63	80	76	53.2	8.0	53.2	13.0	53.2	19.0	
	63	80	84	58.8	8.0	58.8	13.0	58.8	19.0	
	63	80	96	67.2	8.0	67.2	13.0	67.2	19.0	
80 (95)	80	95	66	46.2	12.0	46.2	19.6	46.2	28.7	Page 8
	80	95	81	56.7	12.0	56.7	19.6	56.7	28.7	
	80	95	96	67.2	12.0	67.2	19.6	67.2	28.7	
	80	95	106	74.2	12.0	74.2	19.6	74.2	28.7	
	80	95	126	88.2	12.0	88.2	19.6	88.2	28.7	
100 (120)	100	120	81	56.7	19.6	56.7	32.0	56.7	46.8	Page 9
	100	120	101	70.7	19.6	70.7	32.0	70.7	46.8	
	100	120	121	84.7	19.6	84.7	32.0	84.7	46.8	
	100	120	133	93.1	19.6	93.1	32.0	93.1	46.8	
	100	120	151	105.7	19.6	105.7	32.0	105.7	46.8	
112 (135)	112	135	91	63.7	25.8	63.7	42.0	63.7	61.5	Page 10
	112	135	111	77.7	25.8	77.7	42.0	77.7	61.5	
	112	135	131	91.7	25.8	91.7	42.0	91.7	61.5	
	112	135	151	105.7	25.8	105.7	42.0	105.7	61.5	
	112	135	171	119.7	25.8	119.7	42.0	119.7	61.5	
125 (145)	125	145	101	70.7	32.7	70.7	53.2	70.7	77.9	Page 11
	125	145	125	87.5	32.7	87.5	53.2	87.5	77.9	
	125	145	151	105.7	32.7	105.7	53.2	105.7	77.9	
	125	145	166	116.2	32.7	116.2	53.2	116.2	77.9	
	125	145	191	133.7	32.7	133.7	53.2	133.7	77.9	
140 (165)	140	165	111	77.7	38.3	77.7	62.3	77.7	91.2	Page 12
	140	165	141	98.7	38.3	98.7	62.3	98.7	91.2	
	140	165	166	116.2	38.3	116.2	62.3	116.2	91.2	
	140	165	186	130.2	38.3	130.2	62.3	130.2	91.2	
	140	165	210	147.0	38.3	147.0	62.3	147.0	91.2	
160 (185)	160	185	131	91.7	52.2	91.7	84.9	91.7	124.3	Page 13
	160	185	161	112.7	52.2	112.7	84.9	112.7	124.3	
	160	185	185	129.5	52.2	129.5	84.9	129.5	124.3	
	160	185	211	147.7	52.2	147.7	84.9	147.7	124.3	
	160	185	241	168.7	52.2	168.7	84.9	168.7	124.3	
180 (210)	180	210	161	112.7	64.5	112.7	105.0	112.7	153.6	Page 14
	180	210	185	129.5	64.5	129.5	105.0	129.5	153.6	
	180	210	211	147.7	64.5	147.7	105.0	147.7	153.6	
	180	210	236	165.2	64.5	165.2	105.0	165.2	153.6	
	180	210	266	186.2	64.5	186.2	105.0	186.2	153.6	
200 (230)	200	230	161	112.7	81.5	112.7	132.7	112.7	194.2	Page 15
	200	230	201	140.7	81.5	140.7	132.7	140.7	194.2	
	200	230	236	165.2	81.5	165.2	132.7	165.2	194.2	
	200	230	266	186.2	81.5	186.2	132.7	186.2	194.2	
	200	230	301	210.7	81.5	210.7	132.7	210.7	194.2	

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø50 (60) – VULKOCCELL®

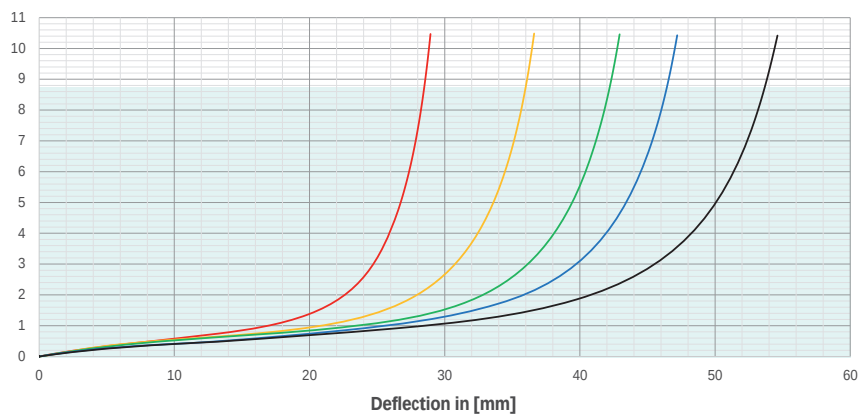
Force in [kN]



DIMENSIONS in [mm]:
Ø50 (60) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
41	70	28.7	254100153	254100053	
51	70	35.7	254101153	254101053	
61	70	42.7	254102153	254102053	
66	70	46.2	254103153	254103053	
76	70	53.2	254104153	254104053	

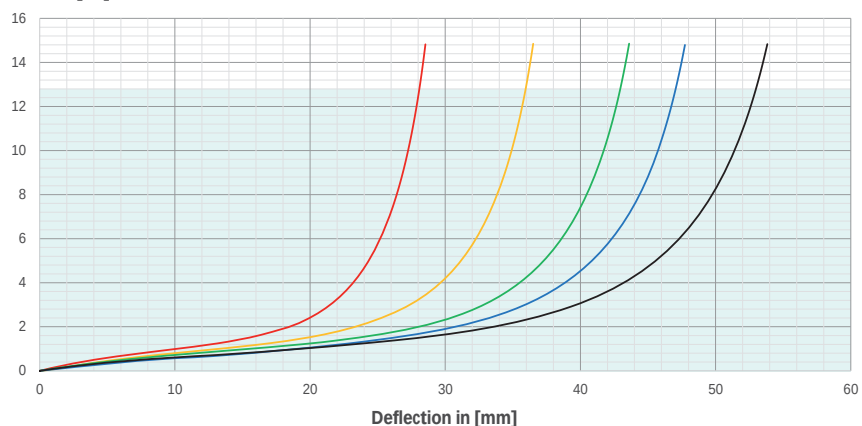
Force in [kN]



DIMENSIONS in [mm]:
Ø50 (60) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
41	70	28.7	254100155	254100055	
51	70	35.7	254101155	254101055	
61	70	42.7	254102155	254102055	
66	70	46.2	254103155	254103055	
76	70	53.2	254104155	254104055	

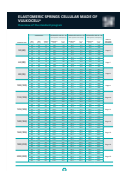
Force in [kN]



DIMENSIONS in [mm]:
Ø50 (60) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
41	70	28.7	254100157	254100057	
51	70	35.7	254101157	254101057	
61	70	42.7	254102157	254102057	
66	70	46.2	254103157	254103057	
76	70	53.2	254104157	254104057	

To the load overview



DESIGN RECOMMENDATION:

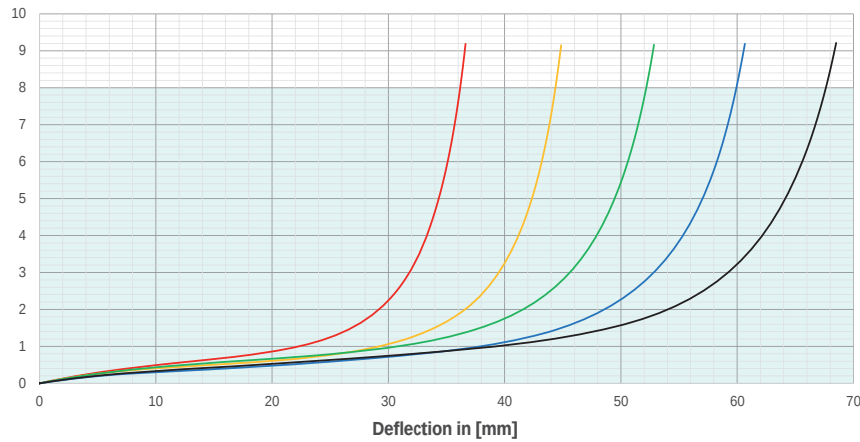
- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø63 (80) – VULKOCCELL®



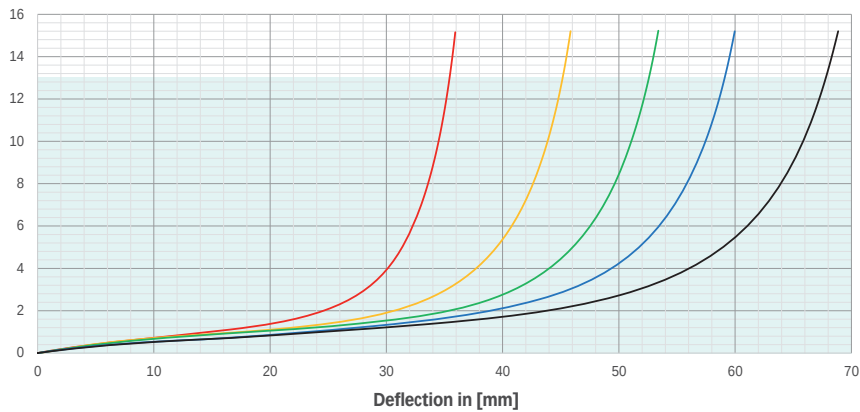
Force in [kN]



DIMENSIONS in [mm]:
Ø63 (80) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
51	70	35.7	8	254105153	254105053
64	70	44.8	8	254106153	254106053
76	70	53.2	8	254107153	254107053
84	70	58.8	8	254108153	254108053
96	70	67.2	8	254109153	254109053

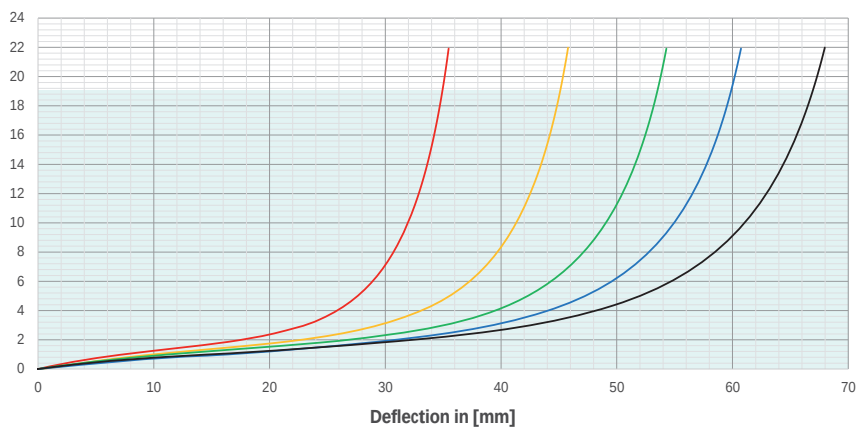
Force in [kN]



DIMENSIONS in [mm]:
Ø63 (80) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
51	70	35.7	13	254105155	254105055
64	70	44.8	13	254106155	254106055
76	70	53.2	13	254107155	254107055
84	70	58.8	13	254108155	254108055
96	70	67.2	13	254109155	254109055

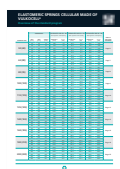
Force in [kN]



DIMENSIONS in [mm]:
Ø63 (80) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M8 x 30]	Inner thread [M8]	
51	70	35.7	19	254105157	254105057
64	70	44.8	19	254106157	254106057
76	70	53.2	19	254107157	254107057
84	70	58.8	19	254108157	254108057
96	70	67.2	19	254109157	254109057

To the load overview



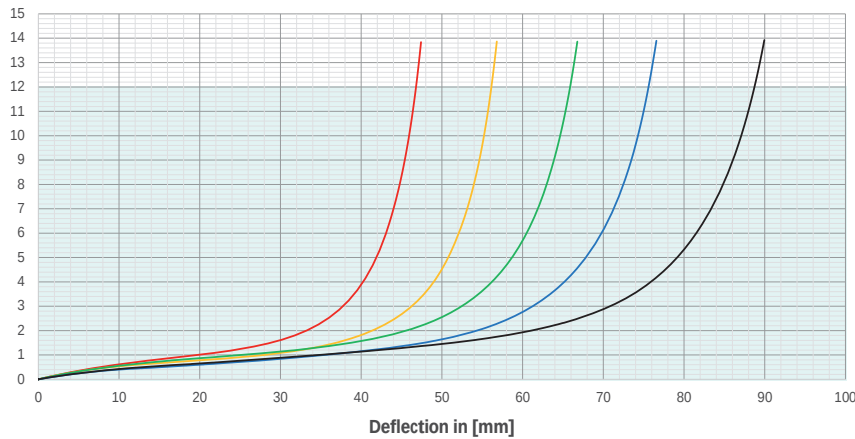
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø80 (95) – VULKOCCELL®

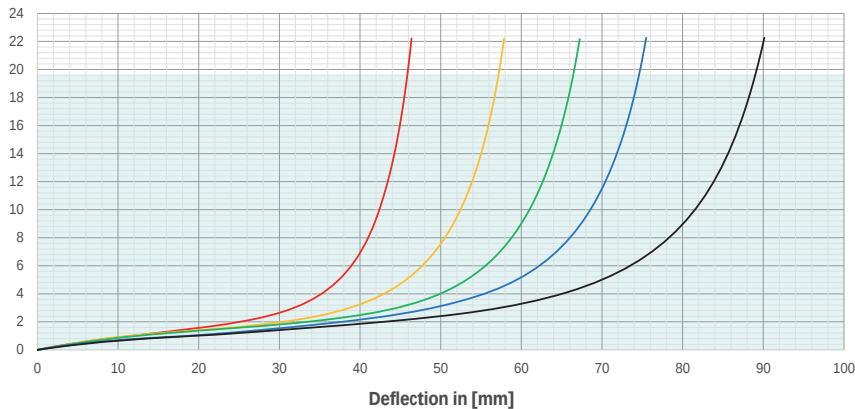
Force in [kN]



DIMENSIONS in [mm]:
Ø80 (95) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M10 x 30]	Inner thread [M10]	
66	70	46.2	12	254110153	254110053
81	70	56.7	12	254111153	254111053
96	70	67.2	12	254112153	254112053
106	70	74.2	12	254113153	254113053
126	70	88.2	12	254114153	254114053

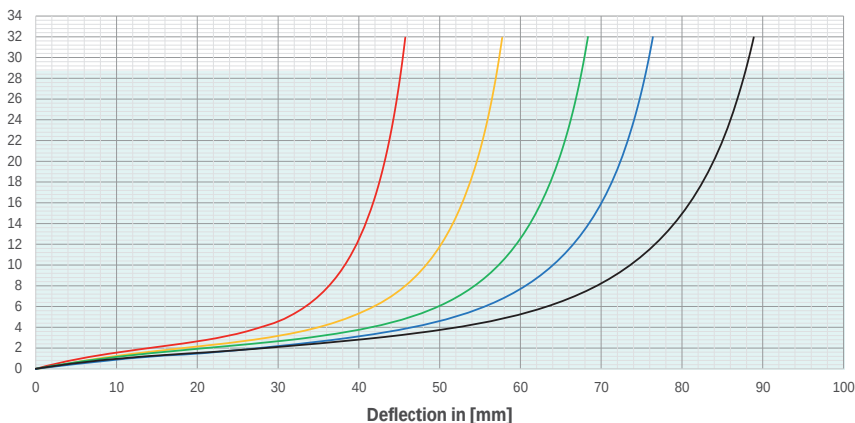
Force in [kN]



DIMENSIONS in [mm]:
Ø80 (95) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M10 x 30]	Inner thread [M10]	
66	70	46.2	19.6	254110155	254110055
81	70	56.7	19.6	254111155	254111055
96	70	67.2	19.6	254112155	254112055
106	70	74.2	19.6	254113155	254113055
126	70	88.2	19.6	254114155	254114055

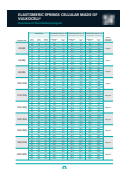
Force in [kN]



DIMENSIONS in [mm]:
Ø80 (95) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M10 x 30]	Inner thread [M10]	
66	70	46.2	28.7	254110157	254110057
81	70	56.7	28.7	254111157	254111057
96	70	67.2	28.7	254112157	254112057
106	70	74.2	28.7	254113157	254113057
126	70	88.2	28.7	254114157	254114057

To the load overview



DESIGN RECOMMENDATION:

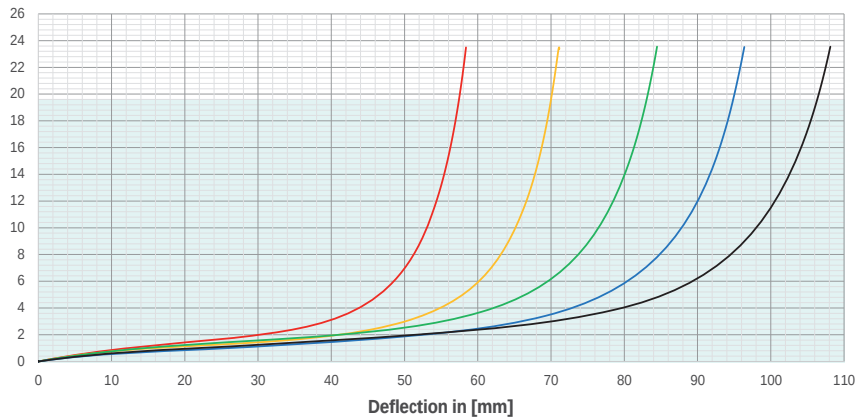
- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø100 (120) – VULKOCCELL®



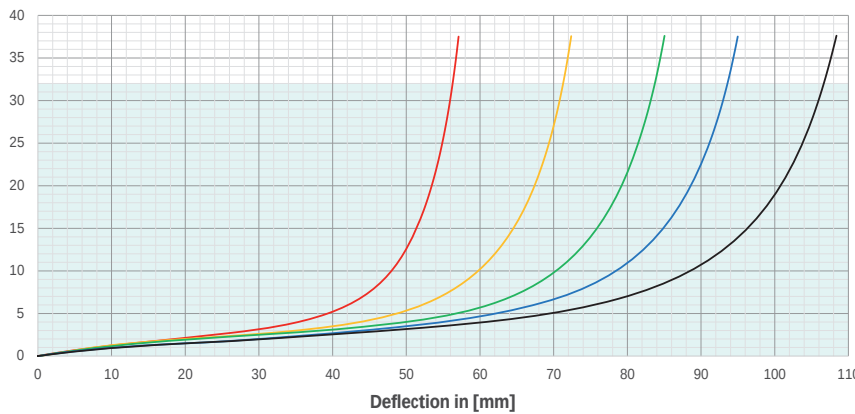
Force in [kN]



DIMENSIONS in [mm]:
Ø100 (120) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]	
81	70	56.7	254115153	254115053	
101	70	70.7	254116153	254116053	
121	70	84.7	254117153	254117053	
133	70	93.1	254118153	254118053	
151	70	105.7	254119153	254119053	

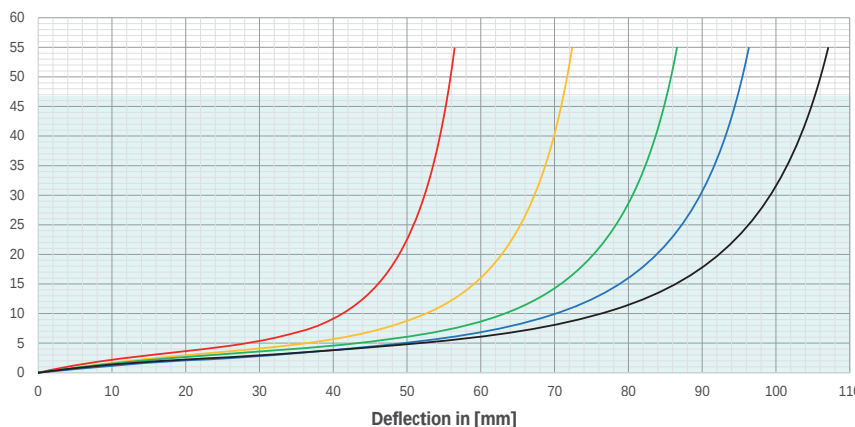
Force in [kN]



DIMENSIONS in [mm]:
Ø100 (120) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]	
81	70	56.7	254115155	254115055	
101	70	70.7	254116155	254116055	
121	70	84.7	254117155	254117055	
133	70	93.1	254118155	254118055	
151	70	105.7	254119155	254119055	

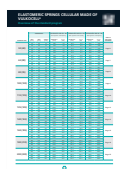
Force in [kN]



DIMENSIONS in [mm]:
Ø100 (120) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]	
81	70	56.7	254115157	254115057	
101	70	70.7	254116157	254116057	
121	70	84.7	254117157	254117057	
133	70	93.1	254118157	254118057	
151	70	105.7	254119157	254119057	

To the load overview



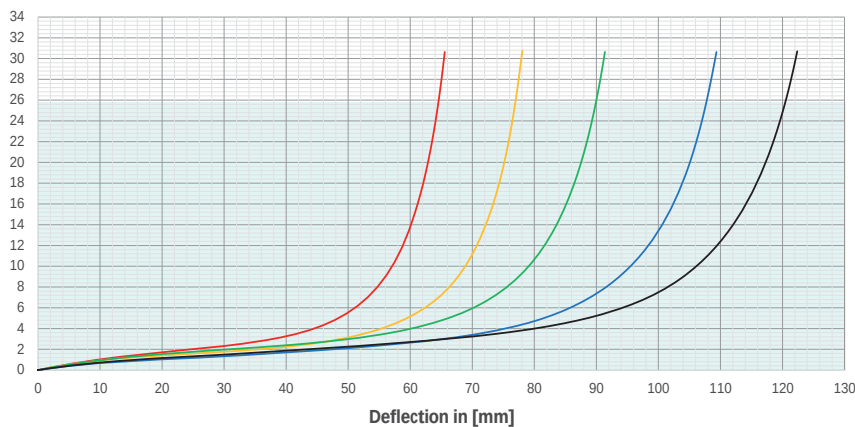
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø112 (135) – VULKOCCELL®

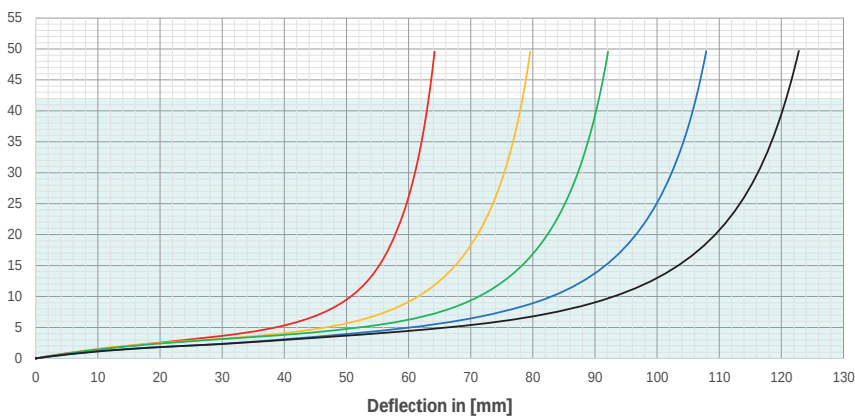
Force in [kN]



DIMENSIONS in [mm]:
Ø112 (135) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]
91	70	63.7	25.8	254120153	254120053
111	70	77.7	25.8	254121153	254121053
131	70	91.7	25.8	254122153	254122053
151	70	105.7	25.8	254123153	254123053
171	70	119.7	25.8	254124153	254124053

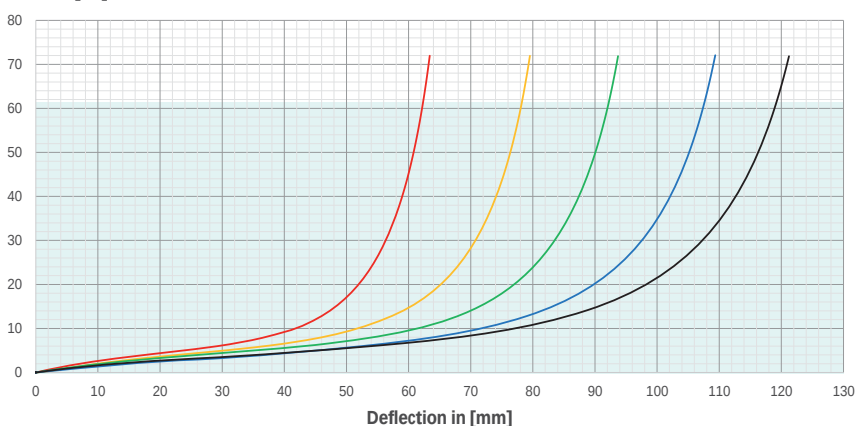
Force in [kN]



DIMENSIONS in [mm]:
Ø112 (135) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]
91	70	63.7	42	254120155	254120055
111	70	77.7	42	254121155	254121055
131	70	91.7	42	254122155	254122055
151	70	105.7	42	254123155	254123055
171	70	119.7	42	254124155	254124055

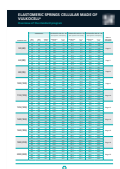
Force in [kN]



DIMENSIONS in [mm]:
Ø112 (135) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M12 x 30]	Inner thread [M12]
91	70	63.7	61.5	254120157	254120057
111	70	77.7	61.5	254121157	254121057
131	70	91.7	61.5	254122157	254122057
151	70	105.7	61.5	254123157	254123057
171	70	119.7	61.5	254124157	254124057

To the load overview



DESIGN RECOMMENDATION:

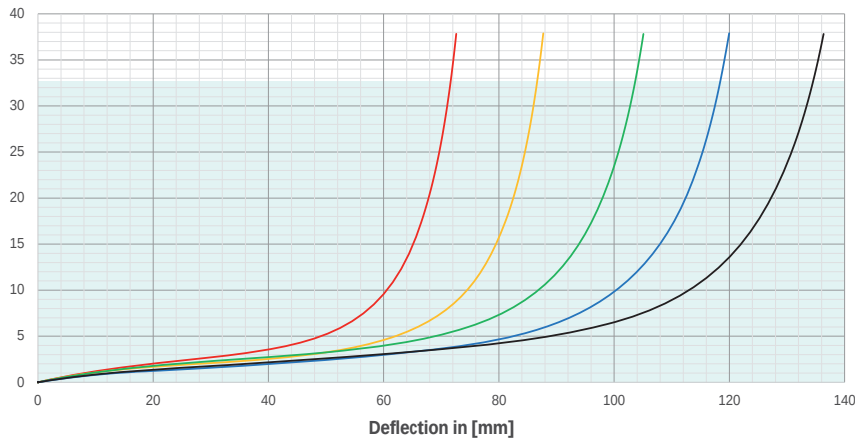
- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø125 (145) – VULKOCCELL®



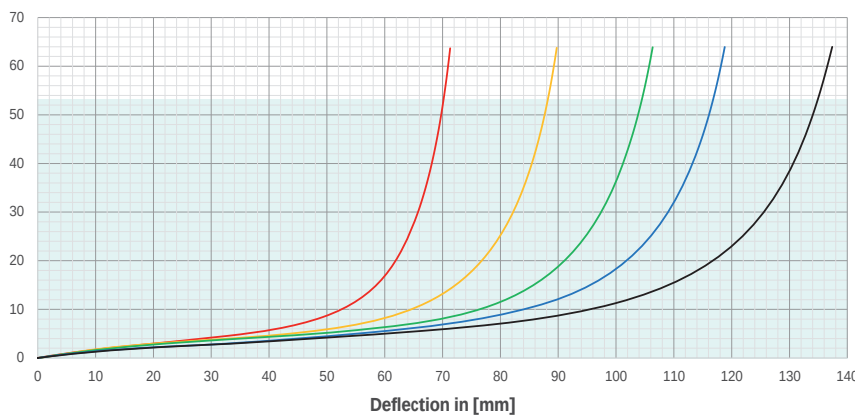
Force in [kN]



DIMENSIONS in [mm]:
Ø125 (145) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]
101	70	70.7	32.7	254125153	254125053
125	70	87.5	32.7	254126153	254126053
151	70	105.7	32.7	254127153	254127053
166	70	116.2	32.7	254128153	254128053
191	70	133.7	32.7	254129153	254129053

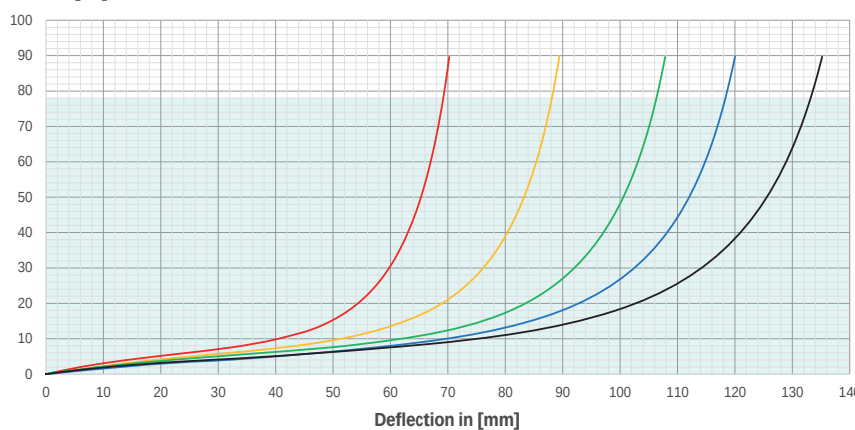
Force in [kN]



DIMENSIONS in [mm]:
Ø125 (145) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]
101	70	70.7	53.2	254125155	254125055
125	70	87.5	53.2	254126155	254126055
151	70	105.7	53.2	254127155	254127055
166	70	116.2	53.2	254128155	254128055
191	70	133.7	53.2	254129155	254129055

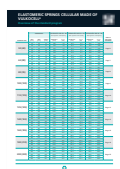
Force in [kN]



DIMENSIONS in [mm]:
Ø125 (145) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]
101	70	70.7	77.9	254125157	254125057
125	70	87.5	77.9	254126157	254126057
151	70	105.7	77.9	254127157	254127057
166	70	116.2	77.9	254128157	254128057
191	70	133.7	77.9	254129157	254129057

To the load overview



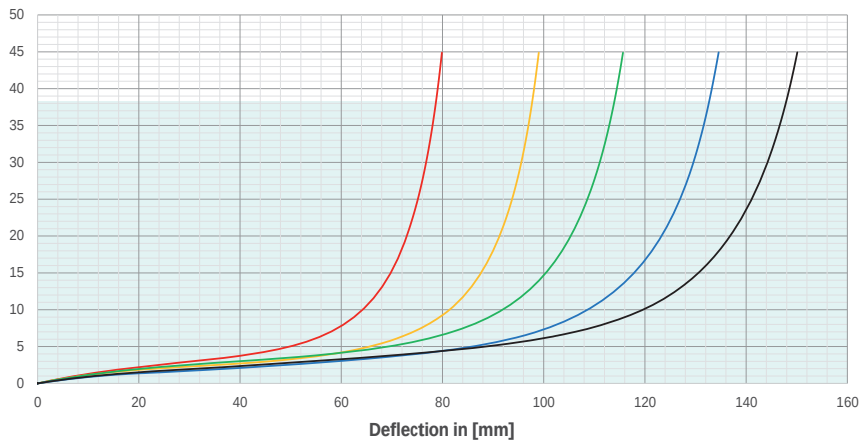
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø140 (165) – VULKOCCELL®

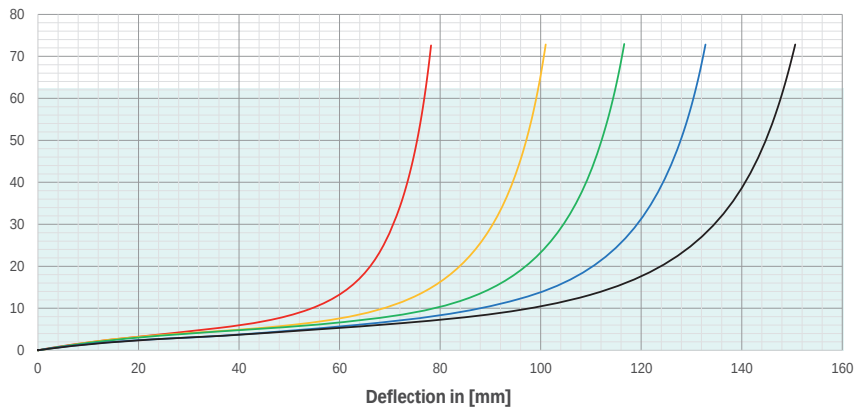
Force in [kN]



DIMENSIONS in [mm]:
Ø140 (165) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]	
111	70	77.7	254130153	254130053	
141	70	98.7	254131153	254131053	
166	70	116.2	254132153	254132053	
186	70	130.2	254133153	254133053	
210	70	147.0	254134153	254134053	

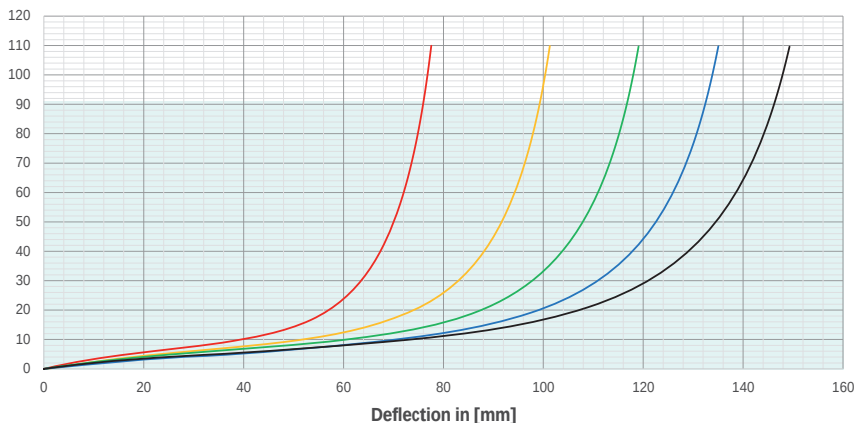
Force in [kN]



DIMENSIONS in [mm]:
Ø140 (165) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]	
111	70	77.7	254130155	254130055	
141	70	98.7	254131155	254131055	
166	70	116.2	254132155	254132055	
186	70	130.2	254133155	254133055	
210	70	147.0	254134155	254134055	

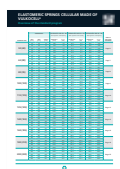
Force in [kN]



DIMENSIONS in [mm]:
Ø140 (165) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M14 x 35]	Inner thread [M14]	
111	70	77.7	254130157	254130057	
141	70	98.7	254131157	254131057	
166	70	116.2	254132157	254132057	
186	70	130.2	254133157	254133057	
210	70	147.0	254134157	254134057	

To the load overview



DESIGN RECOMMENDATION:

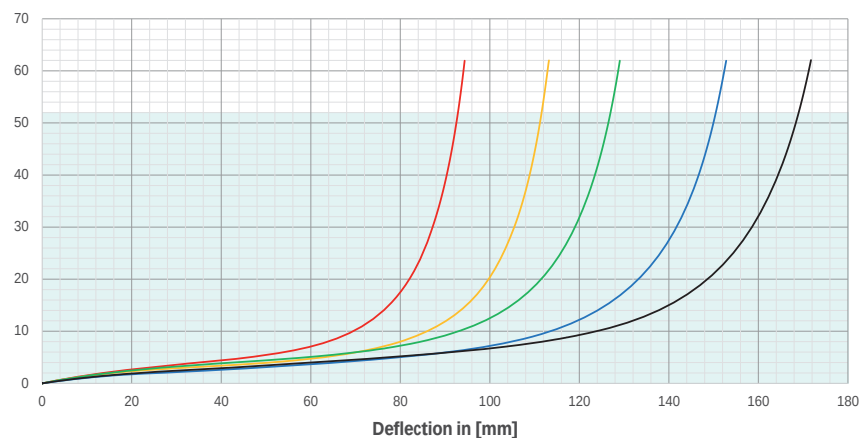
- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø160 (185) – VULKOCCELL®



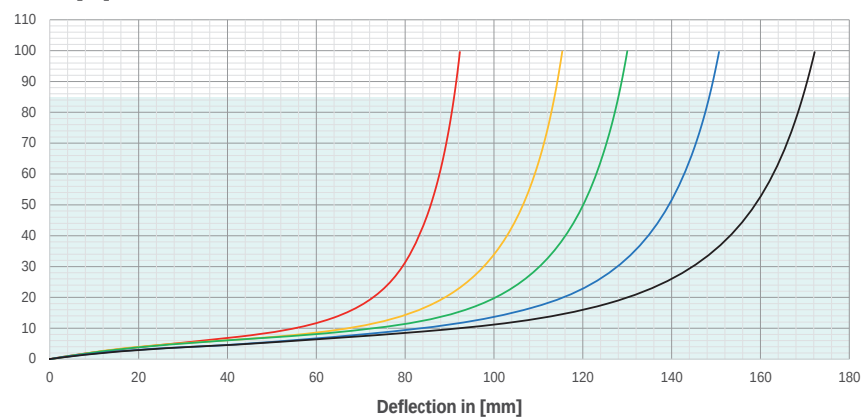
Force in [kN]



DIMENSIONS in [mm]:
Ø160 (185) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M16 x 40]	Inner thread [M16]	
131	70	91.7	254135153	254135053	
161	70	112.7	254136153	254136053	
185	70	129.5	254137153	254137053	
211	70	147.7	254138153	254138053	
241	70	168.7	254139153	254139053	

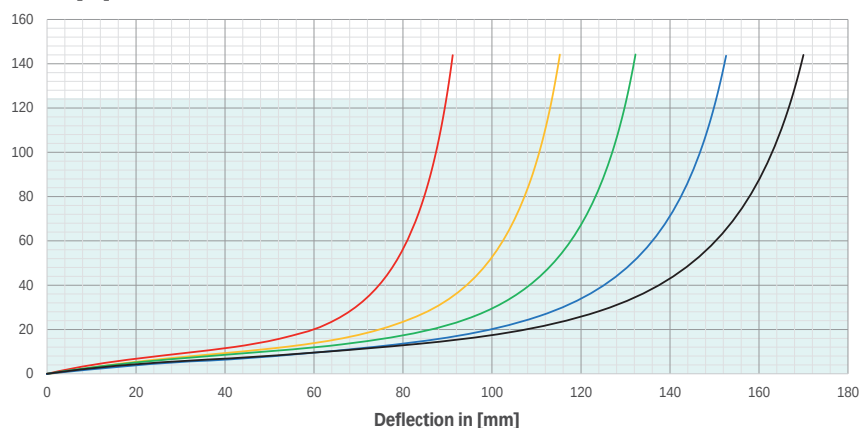
Force in [kN]



DIMENSIONS in [mm]:
Ø160 (185) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M16 x 40]	Inner thread [M16]	
131	70	91.7	254135155	254135055	
161	70	112.7	254136155	254136055	
185	70	129.5	254137155	254137055	
211	70	147.7	254138155	254138055	
241	70	168.7	254139155	254139055	

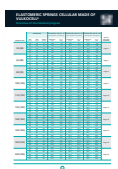
Force in [kN]



DIMENSIONS in [mm]:
Ø160 (185) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M16 x 40]	Inner thread [M16]	
131	70	91.7	254135157	254135057	
161	70	112.7	254136157	254136057	
185	70	129.5	254137157	254137057	
211	70	147.7	254138157	254138057	
241	70	168.7	254139157	254139057	

To the load overview



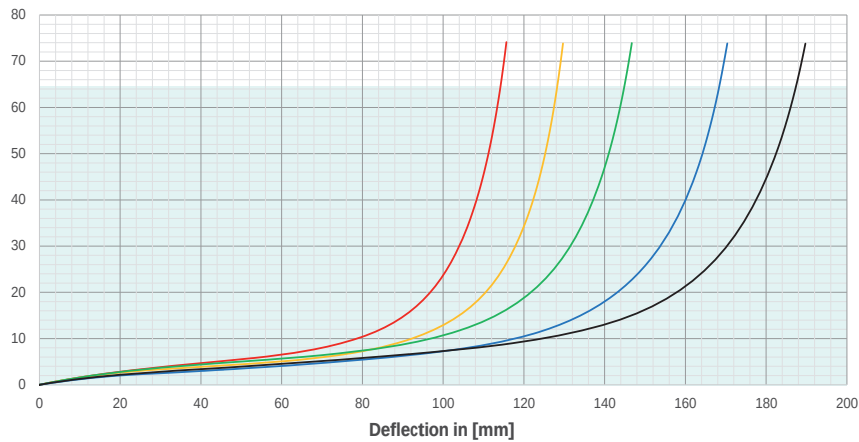
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø180 (210) – VULKOCCELL®

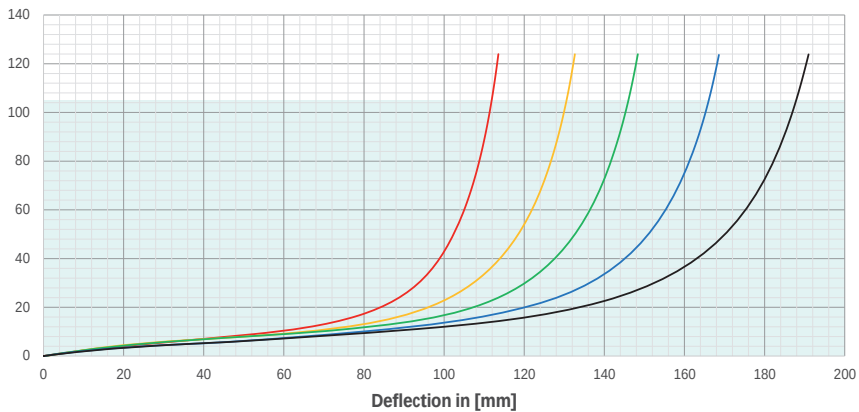
Force in [kN]



DIMENSIONS in [mm]:
Ø180 (210) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]
161	70	112.7	64.5	254140153	254140053
185	70	129.5	64.5	254141153	254141053
211	70	147.7	64.5	254142153	254142053
236	70	165.2	64.5	254143153	254143053
266	70	186.2	64.5	254144153	254144053

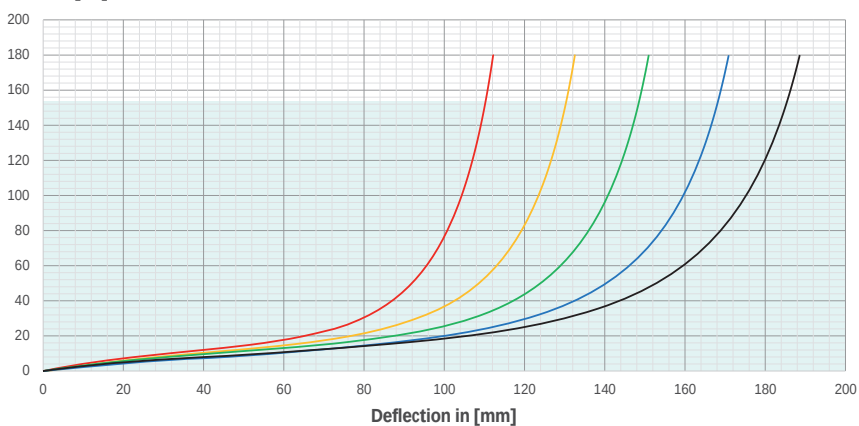
Force in [kN]



DIMENSIONS in [mm]:
Ø180 (210) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]
161	70	112.7	105	254140155	254140055
185	70	129.5	105	254141155	254141055
211	70	147.7	105	254142155	254142055
236	70	165.2	105	254143155	254143055
266	70	186.2	105	254144155	254144055

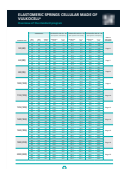
Force in [kN]



DIMENSIONS in [mm]:
Ø180 (210) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Deflection [mm]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]
161	70	112.7	153.6	254140157	254140057
185	70	129.5	153.6	254141157	254141057
211	70	147.7	153.6	254142157	254142057
236	70	165.2	153.6	254143157	254143057
266	70	186.2	153.6	254144157	254144057

To the load overview



DESIGN RECOMMENDATION:

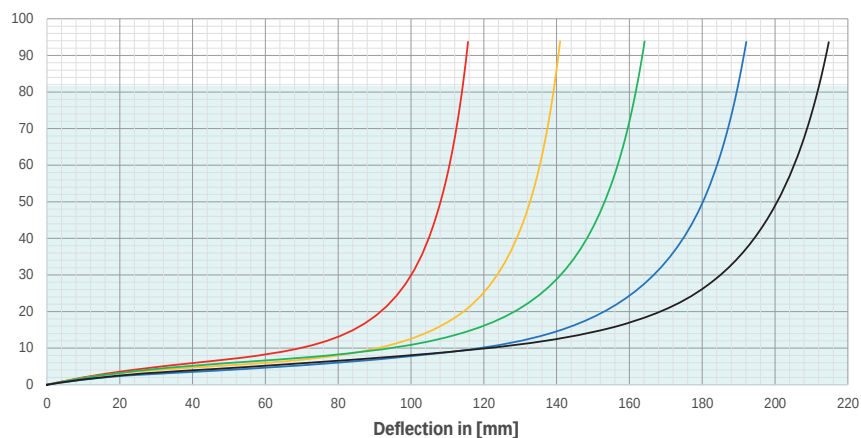
- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING CELLULAR STANDARD PROGRAM

Nominal size Ø200 (230) – VULKOCCELL®



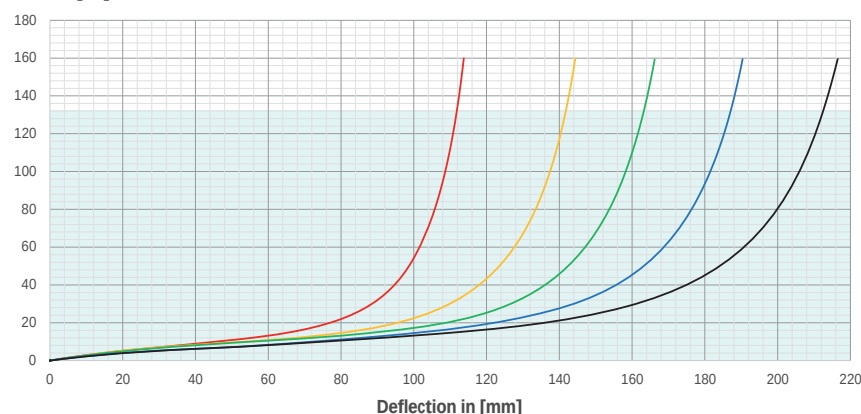
Force in [kN]



DIMENSIONS in [mm]:
Ø200 (230) x height
VULKOCCELL® NH 24 - 40

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]	
161	70	112.7	254145153	254145053	
201	70	140.7	254146153	254146053	
236	70	165.2	254147153	254147053	
266	70	186.2	254148153	254148053	
301	70	210.7	254149153	254149053	

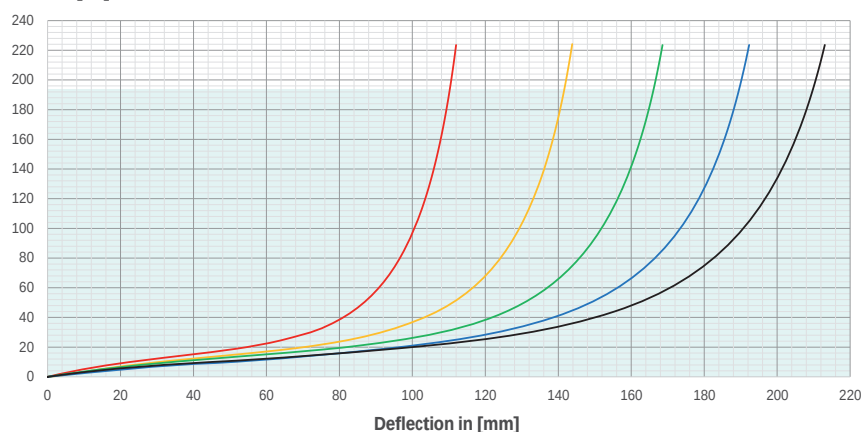
Force in [kN]



DIMENSIONS in [mm]:
Ø200 (230) x height
VULKOCCELL® NH 24 - 50

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]	
161	70	112.7	254145155	254145055	
201	70	140.7	254146155	254146055	
236	70	165.2	254147155	254147055	
266	70	186.2	254148155	254148055	
301	70	210.7	254149155	254149055	

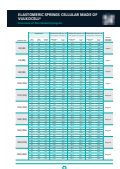
Force in [kN]



DIMENSIONS in [mm]:
Ø200 (230) x height
VULKOCCELL® NH 24 - 60

HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.	
	Deflection [%]	Force [kN]	External thread [M20 x 50]	Inner thread [M20]	
161	70	112.7	254145157	254145057	
201	70	140.7	254146157	254146057	
236	70	165.2	254147157	254147057	
266	70	186.2	254148157	254148057	
301	70	210.7	254149157	254149057	

To the load overview



DESIGN RECOMMENDATION:

- Static compression up to a maximum of 33% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic compression up to 70% of the respective nominal height. Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRINGS COMPACT MADE OF DIEPOTHAN®

Overview of the standard program

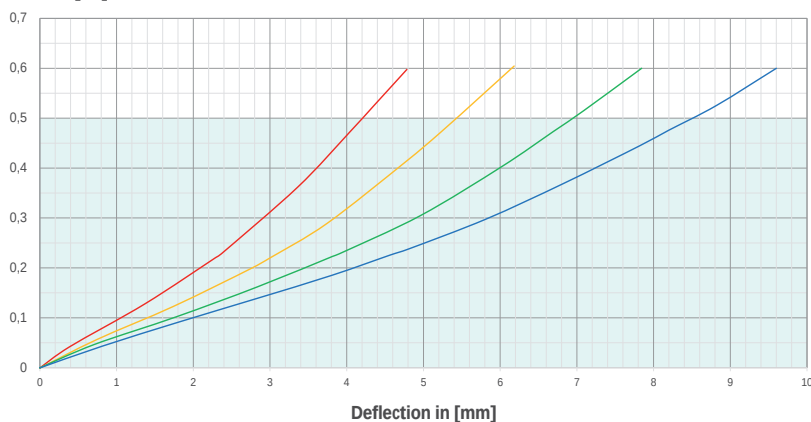
NOMINAL SIZE	DIMENSIONS			DIEPOTHAN 70° SHORE A		DIEPOTHAN 80° SHORE A		DIEPOTHAN 90° SHORE A		LINK TO THE LOAD DIAGRAM
	ØD1 [mm]	ØD2 [mm]	Height [mm]	Max. dynamic load capacity		Max. dynamic load capacity		Max. dynamic load capacity		
				Deflection [mm]	Force [kN]	Deflection [mm]	Force [kN]	Deflection [mm]	Force [kN]	
16 x 6.5	16	6.5	12.5	4.38	0.50	4.38	0.90	3.13	1.30	Page 17
	16	6.5	16.0	5.50	0.50	5.50	0.90	4.00	1.30	
	16	6.5	20.0	7.00	0.50	7.00	0.90	5.00	1.30	
	16	6.5	25.0	8.50	0.50	8.50	0.90	6.25	1.30	
20 x 8.5	20	8.5	16.0	5.50	0.80	5.50	1.40	4.00	2.00	Page 18
	20	8.5	20.0	7.00	0.80	7.00	1.40	5.00	2.00	
	20	8.5	25.0	8.50	0.80	8.50	1.40	6.25	2.00	
	20	8.5	32.0	11.00	0.80	11.00	1.40	8.00	2.00	
25 x 10.5	25	10.5	20.0	7.00	1.30	7.00	2.15	5.00	3.20	Page 19
	25	10.5	25.0	8.50	1.30	8.50	2.15	6.25	3.20	
	25	10.5	32.0	11.00	1.30	11.00	2.15	8.00	3.20	
	25	10.5	40.0	14.00	1.30	14.00	2.15	10.00	3.20	
32 x 13.5	32	13.5	32.0	11.00	2.10	11.00	3.65	8.00	5.30	Page 20
	32	13.5	40.0	14.00	2.10	14.00	3.65	10.00	5.30	
	32	13.5	50.0	17.50	2.10	17.50	3.65	12.50	5.30	
	32	13.5	63.0	22.00	2.10	22.00	3.65	15.75	5.30	
40 x 13.5	40	13.5	32.0	11.00	3.50	11.00	6.10	8.00	8.40	Page 21
	40	13.5	40.0	14.00	3.50	14.00	6.10	10.00	8.40	
	40	13.5	50.0	17.50	3.50	17.50	6.10	12.50	8.40	
	40	13.5	63.0	22.00	3.50	22.00	6.10	15.75	8.40	
	40	13.5	80.0	28.00	3.50	28.00	6.10	20.00	8.40	
50 x 17.0	50	17.0	32.0	11.00	5.40	11.00	9.40	8.00	12.50	Page 22
	50	17.0	40.0	14.00	5.40	14.00	9.40	10.00	12.50	
	50	17.0	50.0	17.50	5.40	17.50	9.40	12.50	12.50	
	50	17.0	63.0	22.00	5.40	22.00	9.40	15.75	12.50	
	50	17.0	80.0	28.00	5.40	28.00	9.40	20.00	12.50	
	50	17.0	100.0	35.00	5.40	35.00	9.40	25.00	12.50	
63 x 17.0	63	17.0	32.0	11.00	9.40	11.00	14.20	8.00	20.00	Page 23
	63	17.0	40.0	14.00	9.40	14.00	14.20	10.00	20.00	
	63	17.0	50.0	17.50	9.40	17.50	14.20	12.50	20.00	
	63	17.0	63.0	22.00	9.40	22.00	14.20	15.75	20.00	
	63	17.0	80.0	28.00	9.40	28.00	14.20	20.00	20.00	
	63	17.0	100.0	35.00	9.40	35.00	14.20	25.00	20.00	
80 x 21.0	80	21.0	32.0	11.00	15.00	11.00	25.00	8.00	33.00	Page 24
	80	21.0	40.0	14.00	15.00	14.00	25.00	10.00	33.00	
	80	21.0	50.0	17.50	15.00	17.50	25.00	12.50	33.00	
	80	21.0	63.0	22.00	15.00	22.00	25.00	15.75	33.00	
	80	21.0	80.0	28.00	15.00	28.00	25.00	20.00	33.00	
	80	21.0	100.0	35.00	15.00	35.00	25.00	25.00	33.00	
	80	21.0	125.0	43.50	15.00	43.50	25.00	31.25	33.00	
100 x 21.0	100	21.0	32.0	11.00	24.00	11.00	42.00	8.00	58.00	Page 25
	100	21.0	40.0	14.00	24.00	14.00	42.00	10.00	58.00	
	100	21.0	50.0	17.50	24.00	17.50	42.00	12.50	58.00	
	100	21.0	63.0	22.00	24.00	22.00	42.00	15.75	58.00	
	100	21.0	80.0	28.00	24.00	28.00	42.00	20.00	58.00	
	100	21.0	100.0	35.00	24.00	35.00	42.00	25.00	58.00	
	100	21.0	125.0	43.50	24.00	43.50	42.00	31.75	58.00	
125 x 27.0	125	27.0	32.0	11.00	39.00	11.00	67.00	8.00	88.00	Page 26
	125	27.0	40.0	14.00	39.00	14.00	67.00	10.00	88.00	
	125	27.0	50.0	17.50	39.00	17.50	67.00	12.50	88.00	
	125	27.0	63.0	22.00	39.00	22.00	67.00	15.75	88.00	
	125	27.0	80.0	28.00	39.00	28.00	67.00	20.00	88.00	
	125	27.0	100.0	35.00	39.00	35.00	67.00	25.00	88.00	
	125	27.0	125.0	43.50	39.00	43.50	67.00	31.75	88.00	
	125	27.0	160.0	56.00	39.00	56.00	67.00	40.00	88.00	

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø16 x Ø6.5 – DIEPOTHAN®



Force in [kN]



DIMENSIONS in [mm]:

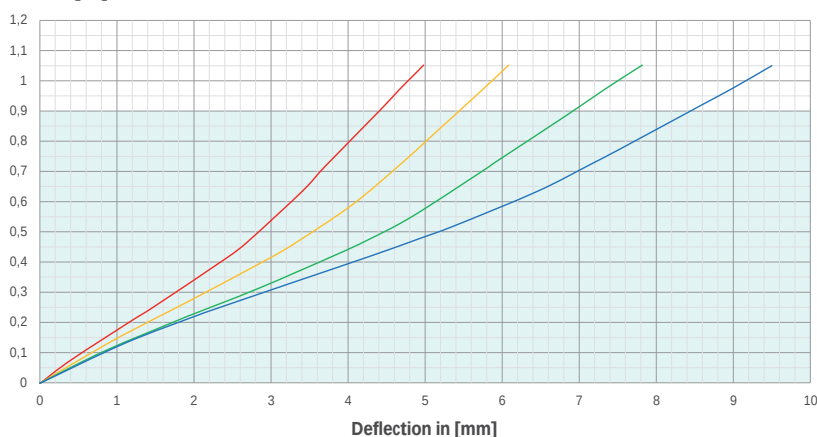
Ø16 x Ø6.5 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
12.5	35	4.38	0.5	730161970
16	35	5.60	0.5	730162970
20	35	7.00	0.5	730163970
25	35	8.75	0.5	730164970

Force in [kN]



DIMENSIONS in [mm]:

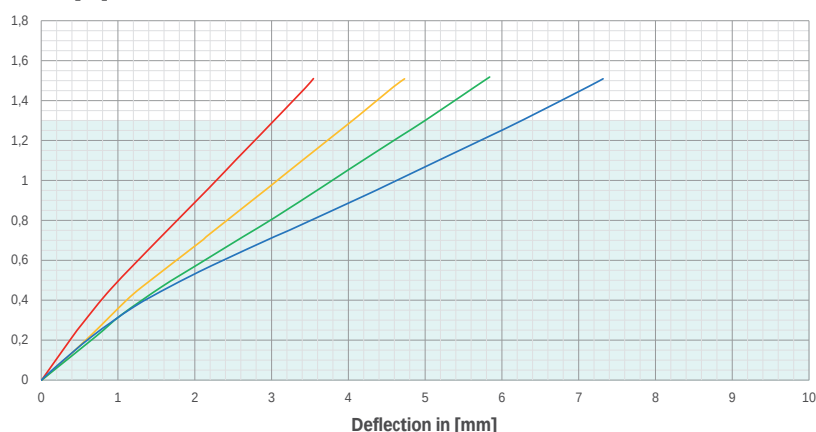
Ø16 x Ø6.5 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
12.5	35	4.38	0.9	730161980
16	35	5.60	0.9	730162980
20	35	7.00	0.9	730163980
25	35	8.75	0.9	730164980

Force in [kN]



DIMENSIONS in [mm]:

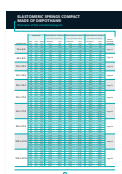
Ø16 x Ø6.5 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
12.5	25	3.13	1.3	730161990
16	25	4.00	1.3	730162990
20	25	5.00	1.3	730163990
25	25	6.25	1.3	730164990

To the load overview



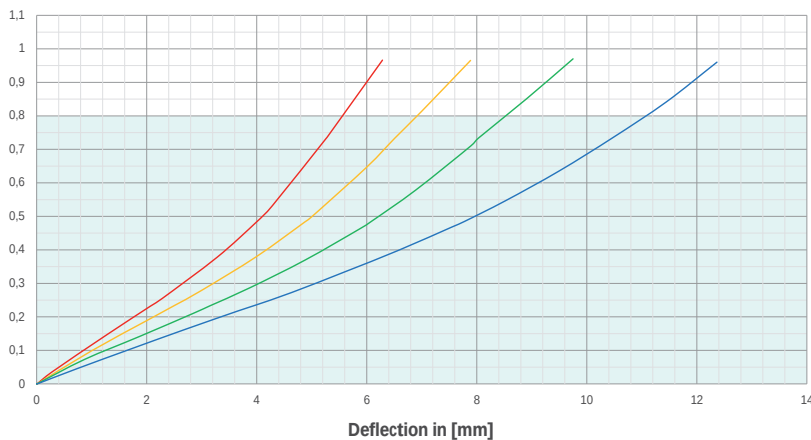
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø20 x Ø8.5 – DIEPOTHAN®

Force in [kN]



DIMENSIONS in [mm]:

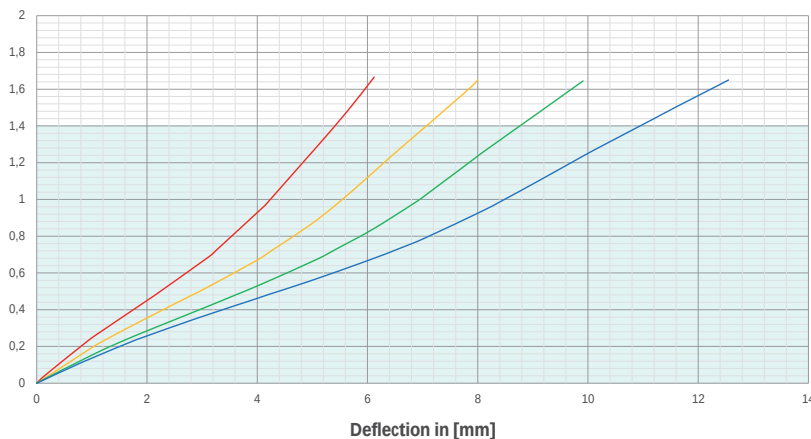
Ø20 x Ø8.5 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
16	35	5.60	0.8	730201970
20	35	7.00	0.8	730202970
25	35	8.75	0.8	730203970
32	35	11.20	0.8	730204970

Force in [kN]



DIMENSIONS in [mm]:

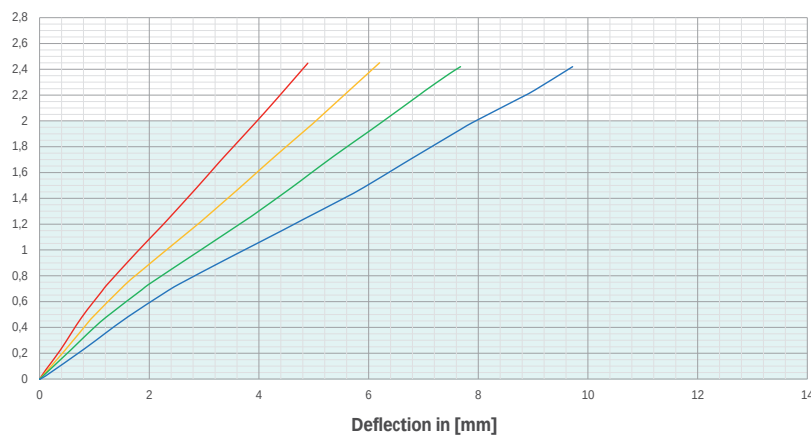
Ø20 x Ø8.5 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
16	35	5.60	1.4	730201980
20	35	7.00	1.4	730202980
25	35	8.75	1.4	730203980
32	35	11.20	1.4	730204980

Force in [kN]



DIMENSIONS in [mm]:

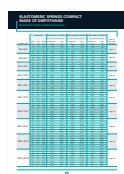
Ø20 x Ø8.5 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
16	25	4.00	2	730201990
20	25	5.00	2	730202990
25	25	6.25	2	730203990
32	25	8.00	2	730204990

To the load overview



DESIGN RECOMMENDATION:

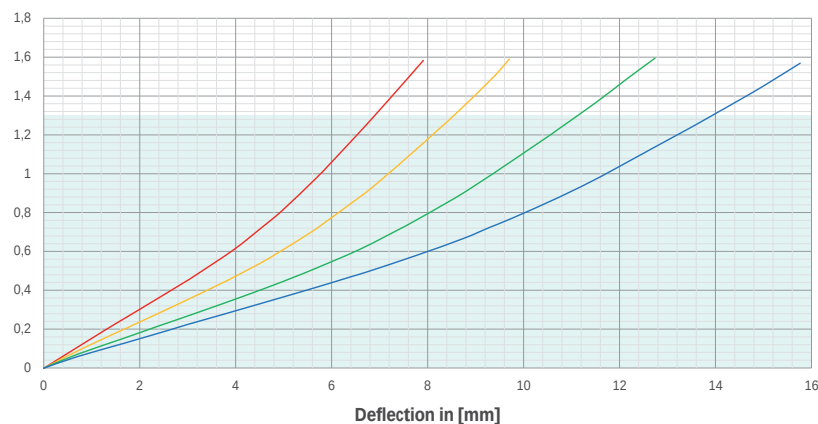
- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø25 x Ø10.5 – DIEPOTHAN®



Force in [kN]



DIMENSIONS in [mm]:

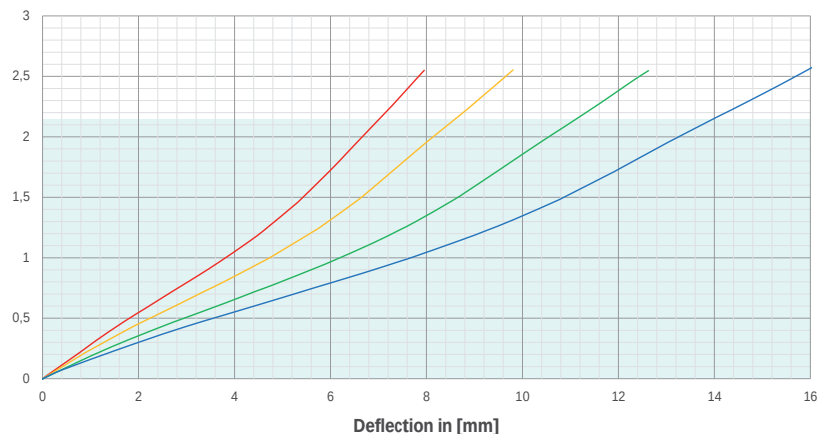
Ø25 x Ø10.5 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
20	35	7.00	1.3	730251970
25	35	8.75	1.3	730252970
32	35	11.20	1.3	730253970
40	35	14.00	1.3	730254970

Force in [kN]



DIMENSIONS in [mm]:

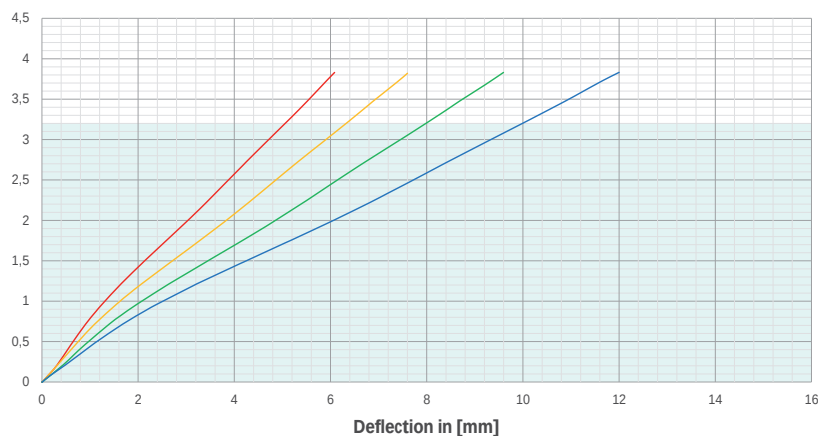
Ø25 x Ø10.5 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
20	35	7.00	2.15	730251980
25	35	8.75	2.15	730252980
32	35	11.20	2.15	730253980
40	35	14.00	2.15	730255980

Force in [kN]



DIMENSIONS in [mm]:

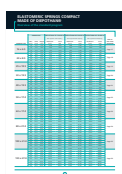
Ø25 x Ø10.5 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
20	25	5.00	3.2	730251990
25	25	6.25	3.2	730252990
32	25	8.00	3.2	730253990
40	25	10.00	3.2	730254990

To the load overview



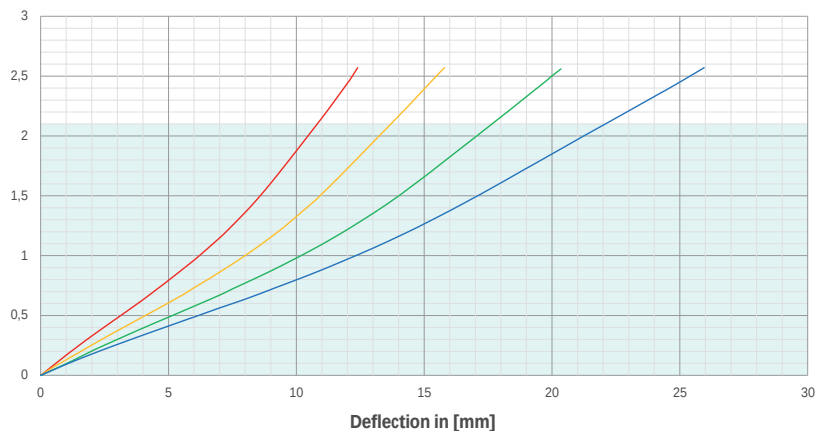
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø32 x Ø13.5 – DIEPOTHAN®

Force in [kN]



DIMENSIONS in [mm]:

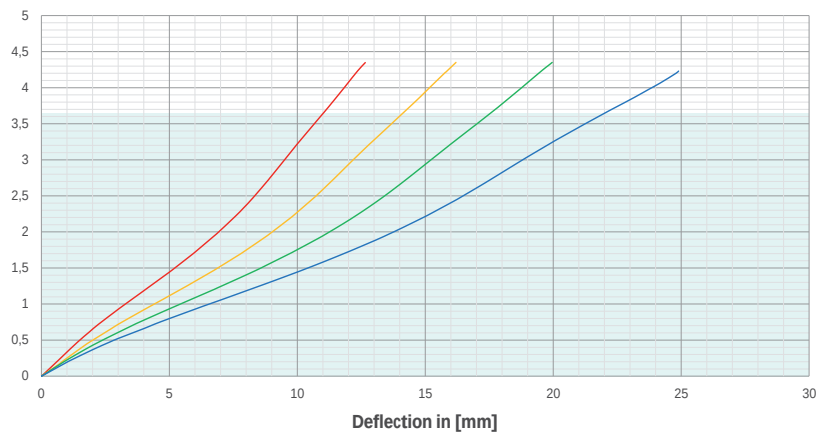
Ø32 x Ø13.5 x height

DIEPOTHAN® 70° Shore A black



HEIGHT		MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
[mm]		Deflection		Force	
		[%]	[mm]	[kN]	
 32	35	11.20	2.1	730321970	
 40	35	14.00	2.1	730322970	
 50	35	17.50	2.1	730323970	
 63	35	22.05	2.1	730327970	

Force in [kN]



DIMENSIONS in [mm]:

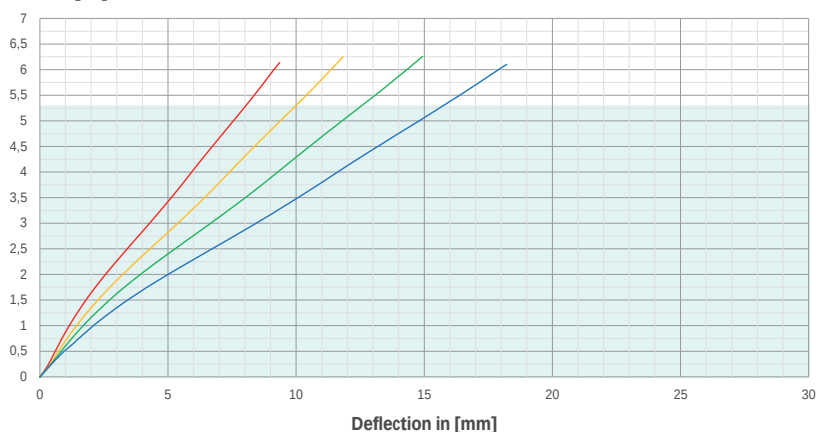
Ø32 x Ø13.5 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT		MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
[mm]		Deflection		Force	
		[%]	[mm]	[kN]	
	32	35	11.20	3.65	730321980
	40	35	14.00	3.65	730322980
	50	35	17.50	3.65	730323980
	63	35	22.05	3.65	730327980

Force in [kN]



DIMENSIONS in [mm]:

Ø32 x Ø13.5 x height

DIEPOTHAN® 90° Shore A red



HEIGHT		MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
[mm]		Deflection		Force	
		[%]	[mm]	[kN]	
 32	25	8.00	5.3	730321990	
 40	25	10.00	5.3	730322990	
 50	25	12.50	5.3	730323990	
 63	25	15.75	5.3	730327990	

To the load overview



DESIGN RECOMMENDATION:

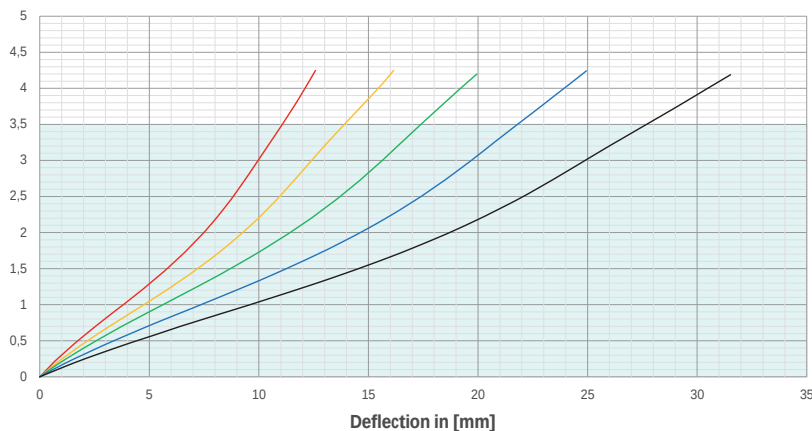
- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø40 x Ø13.5 – DIEPOTHAN®



Force in [kN]



DIMENSIONS in [mm]:

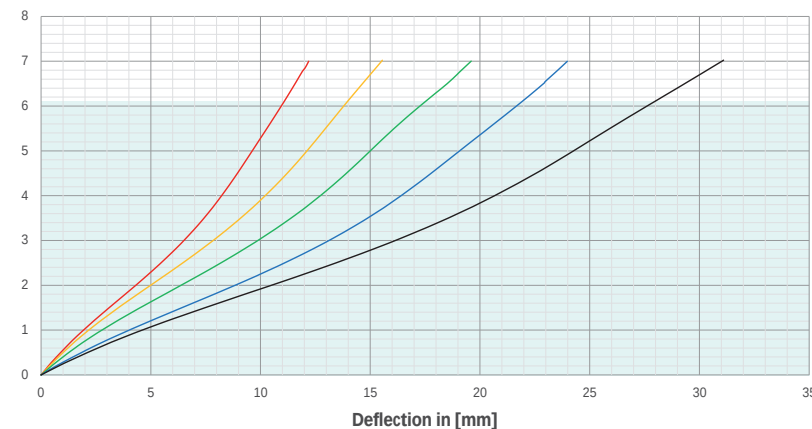
Ø40 x Ø13.5 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Force [kN]	Deflection [mm]	
32	35	11.20	3.5	730401970
40	35	14.00	3.5	730402970
50	35	17.50	3.5	730403970
63	35	22.05	3.5	730404970
80	35	28.00	3.5	730405970

Force in [kN]



DIMENSIONS in [mm]:

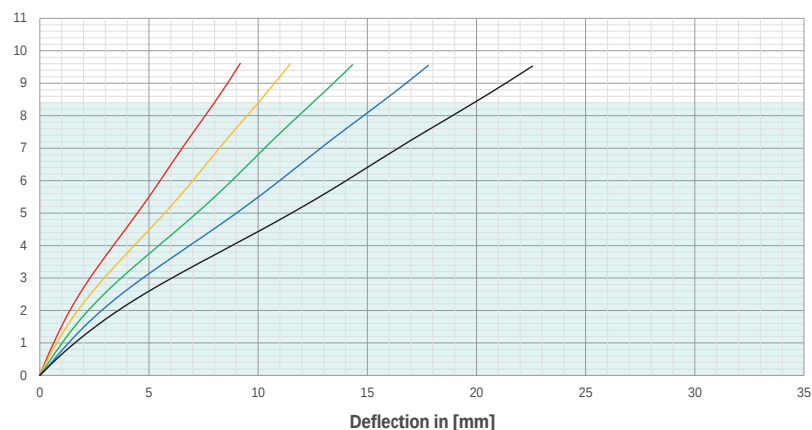
Ø40 x Ø13.5 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Force [kN]	Deflection [mm]	
32	35	11.20	6.1	730401980
40	35	14.00	6.1	730402980
50	35	17.50	6.1	730403980
63	35	22.05	6.1	730404980
80	35	28.00	6.1	730405980

Force in [kN]



DIMENSIONS in [mm]:

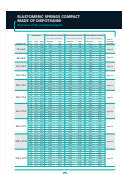
Ø40 x Ø13.5 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Force [kN]	Deflection [mm]	
32	25	8.00	8.4	730401990
40	25	10.00	8.4	730401990
50	25	12.50	8.4	730401990
63	25	15.75	8.4	730401990
80	25	20.00	8.4	730401990

To the load overview



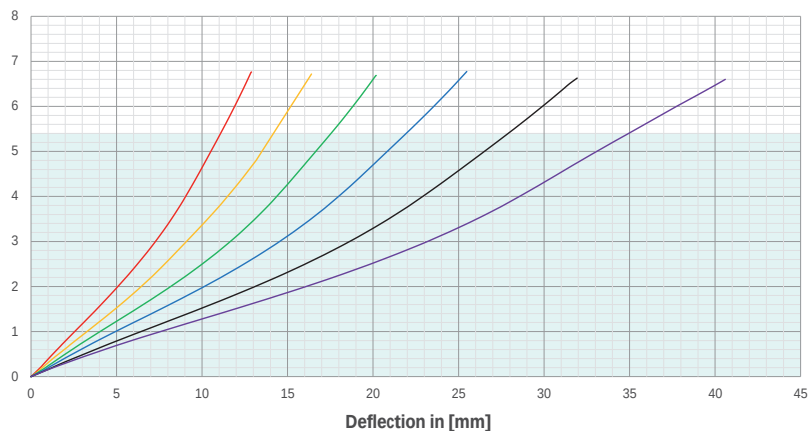
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø50 x Ø17 – DIEPOTHAN®

Force in [kN]



DIMENSIONS in [mm]:

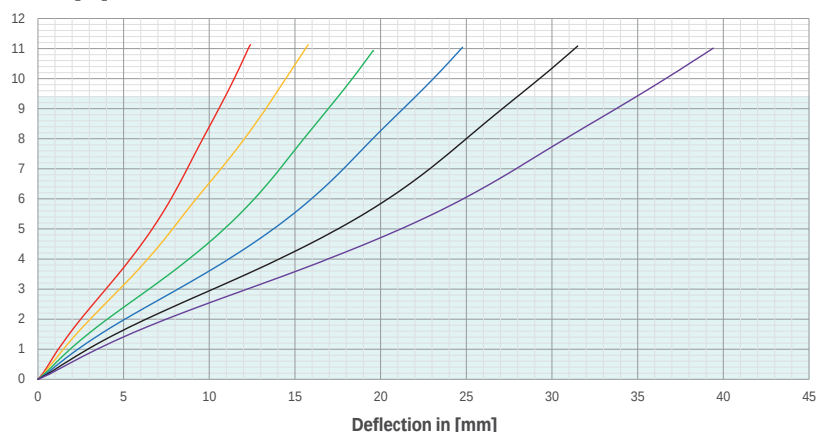
Ø50 x Ø17 x height

DIEPOTHAN® 70° Shore A black



HEIGHT		MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
		Deflection		Force	
	[mm]	[%]	[mm]	[kN]	
	32	35	11.20	5.4	730501970
	40	35	14.00	5.4	730502970
	50	35	17.50	5.4	730503970
	63	35	22.05	5.4	730504970
	80	35	28.00	5.4	730505970
	100	35	35.00	5.4	730506970

Force in [kN]



DIMENSIONS in [mm]:

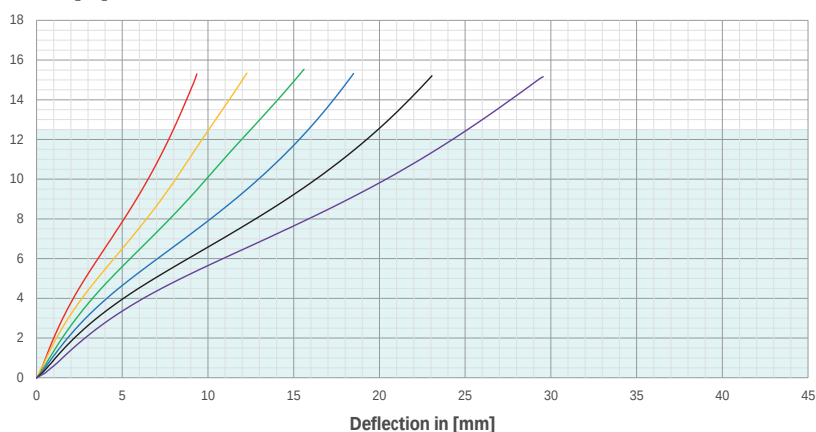
Ø50 x Ø17 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT	MAXIMUM DYNAMIC LOAD CAPACITY				ITEM NO.
	Deflection		Force		
	[mm]	[%]	[mm]	[kN]	
 32	35	11.20	9.4	730501980	
 40	35	14.00	9.4	730502980	
 50	35	17.50	9.4	730503980	
 63	35	22.05	9.4	730504980	
 80	35	28.00	9.4	730505980	
 100	35	35.00	9.4	730506980	

Force in [kN]



DIMENSIONS in [mm]:

Ø50 x Ø17 x height

DIEPOTHAN® 90° Shore A red



HEIGHT		MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
		Deflection		Force	
	[mm]	[%]	[mm]	[kN]	
	32	25	8.00	12.5	730501990
	40	25	10.00	12.5	730502990
	50	25	12.50	12.5	730503990
	63	25	15.75	12.5	730504990
	80	25	20.00	12.5	730505990
	100	25	25.00	12.5	730506990

To the load overview



DESIGN RECOMMENDATION:

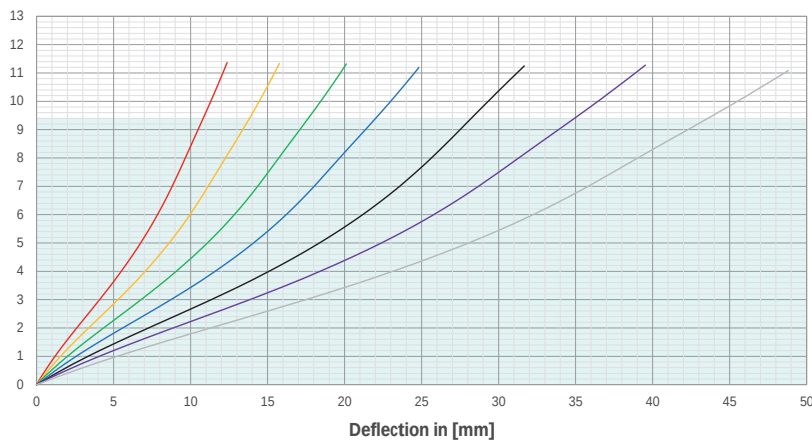
- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø63 x Ø17 – DIEPOTHAN®



Force in [kN]



DIMENSIONS in [mm]:

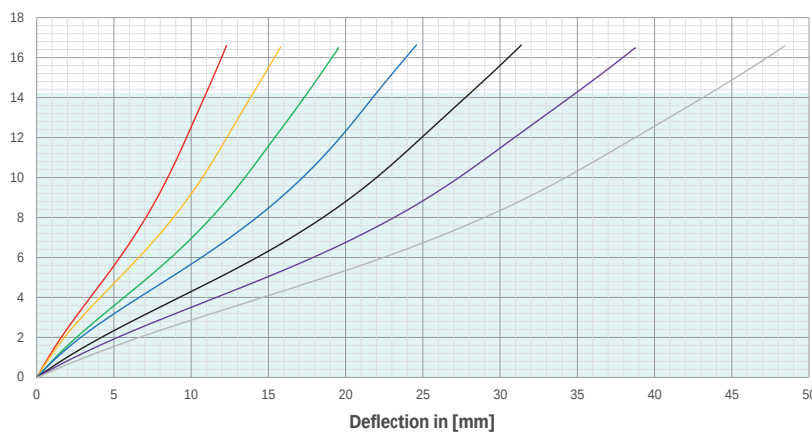
Ø63 x Ø17 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	9.4	730631970
40	35	14.00	9.4	730632970
50	35	17.50	9.4	730633970
63	35	22.05	9.4	730634970
80	35	28.00	9.4	730635970
100	35	35.00	9.4	730636970
125	35	43.75	9.4	730637970

Force in [kN]



DIMENSIONS in [mm]:

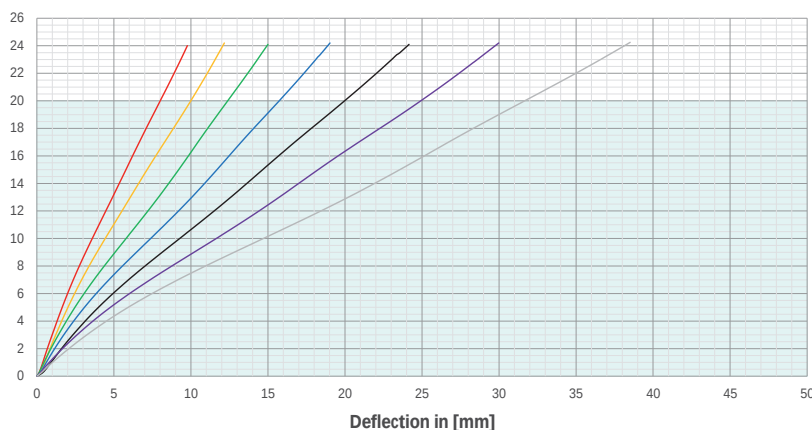
Ø63 x Ø17 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	14.2	730631980
40	35	14.00	14.2	730632980
50	35	17.50	14.2	730633980
63	35	22.05	14.2	730634980
80	35	28.00	14.2	730635980
100	35	35.00	14.2	730636980
125	35	43.75	14.2	730637980

Force in [kN]



DIMENSIONS in [mm]:

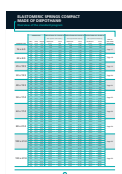
Ø63 x Ø17 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	25	8.00	20	730631990
40	25	10.00	20	730632990
50	25	12.50	20	730633990
63	25	15.75	20	730634990
80	25	20.00	20	730635990
100	25	25.00	20	730636990
125	25	31.25	20	730637990

To the load overview



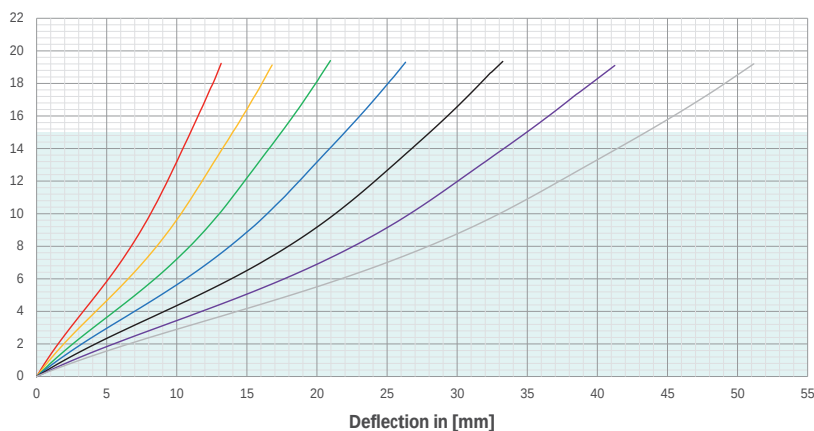
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø80 x Ø21 – DIEPOTHAN®

Force in [kN]



DIMENSIONS in [mm]:

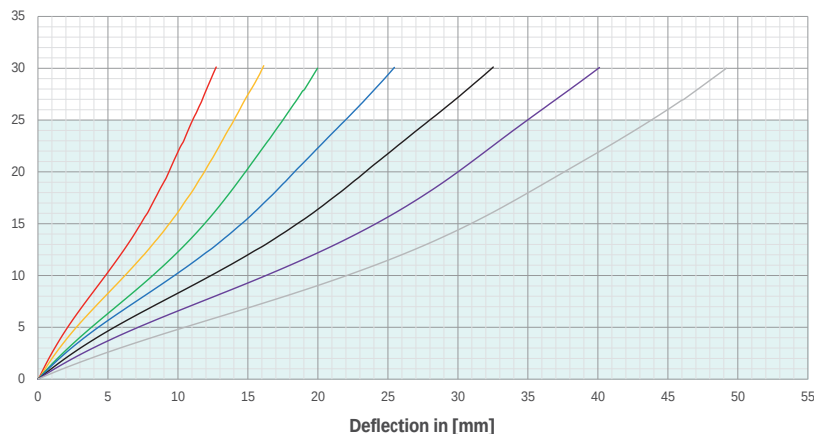
Ø80 x Ø21 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	15	730801970
40	35	14.00	15	730802970
50	35	17.50	15	730803970
63	35	22.05	15	730804970
80	35	28.00	15	730805970
100	35	35.00	15	730806970
125	35	43.75	15	730807970

Force in [kN]



DIMENSIONS in [mm]:

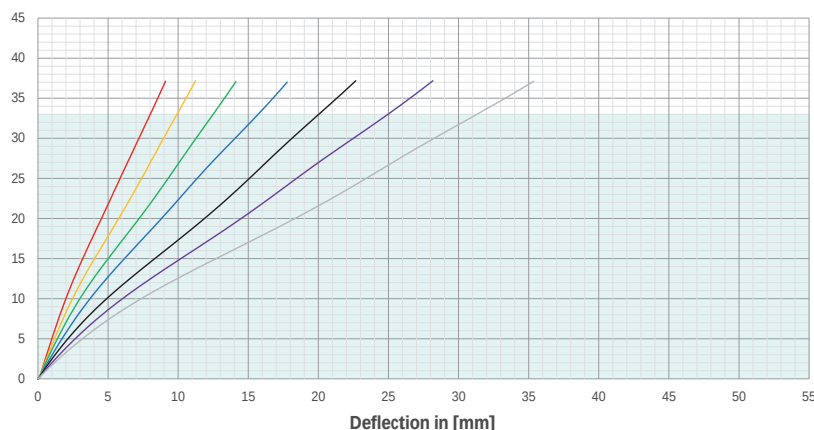
Ø80 x Ø21 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	25	730801980
40	35	14.00	25	730802980
50	35	17.50	25	730803980
63	35	22.05	25	730804980
80	35	28.00	25	730805980
100	35	35.00	25	730806980
125	35	43.75	25	730807980

Force in [kN]



DIMENSIONS in [mm]:

Ø80 x Ø21 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	25	8.00	33	730801990
40	25	10.00	33	730802990
50	25	12.50	33	730803990
63	25	15.75	33	730804990
80	25	20.00	33	730805990
100	25	25.00	33	730806990
125	25	31.25	33	730807990

To the load overview



DESIGN RECOMMENDATION:

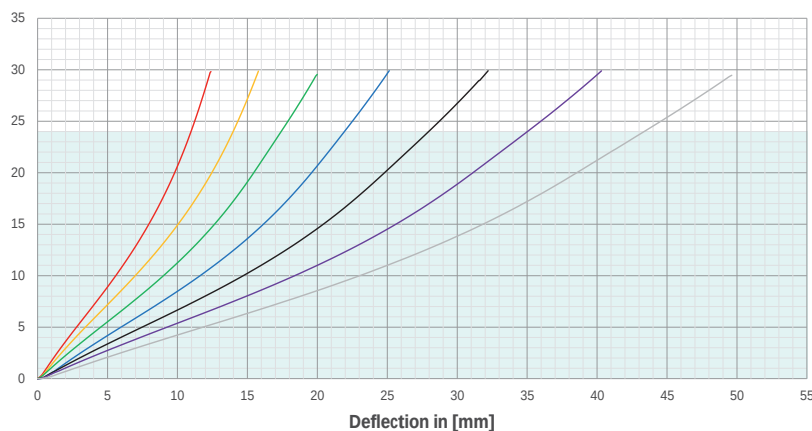
- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø100 x Ø21 – DIEPOTHAN®



Force in [kN]



DIMENSIONS in [mm]:

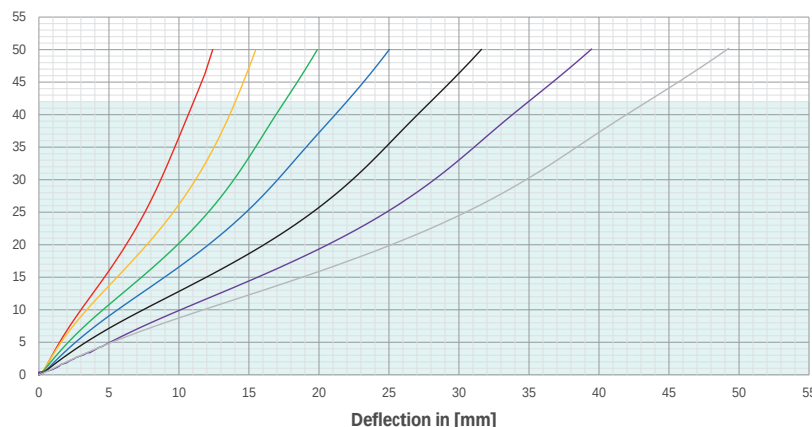
Ø100 x Ø21 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	24	731001970
40	35	14.00	24	731002970
50	35	17.50	24	731003970
63	35	22.05	24	731004970
80	35	28.00	24	731005970
100	35	35.00	24	731006970
125	35	43.75	24	731007970

Force in [kN]



DIMENSIONS in [mm]:

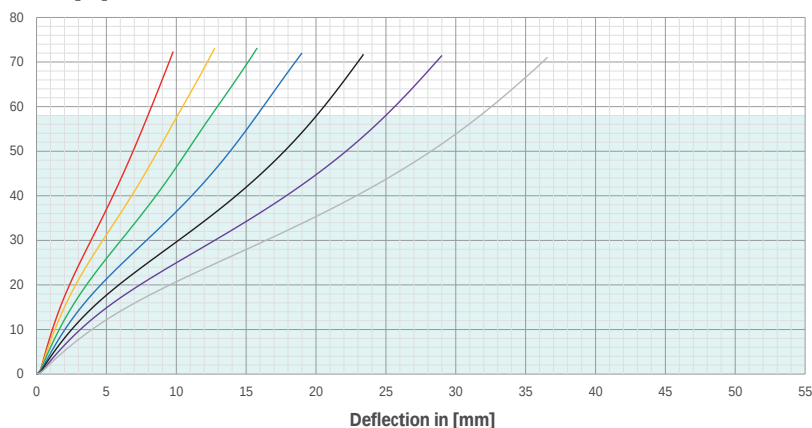
Ø100 x Ø21 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	42	731001980
40	35	14.00	42	731002980
50	35	17.50	42	731003980
63	35	22.05	42	731004980
80	35	28.00	42	731005980
100	35	35.00	42	731006980
125	35	43.75	42	731007980

Force in [kN]



DIMENSIONS in [mm]:

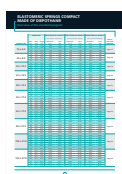
Ø100 x Ø21 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	25	8.00	58	731001990
40	25	10.00	58	731002990
50	25	12.50	58	731003990
63	25	15.75	58	731004990
80	25	20.00	58	731005990
100	25	25.00	58	731006990
125	25	31.25	58	731007990

To the load overview



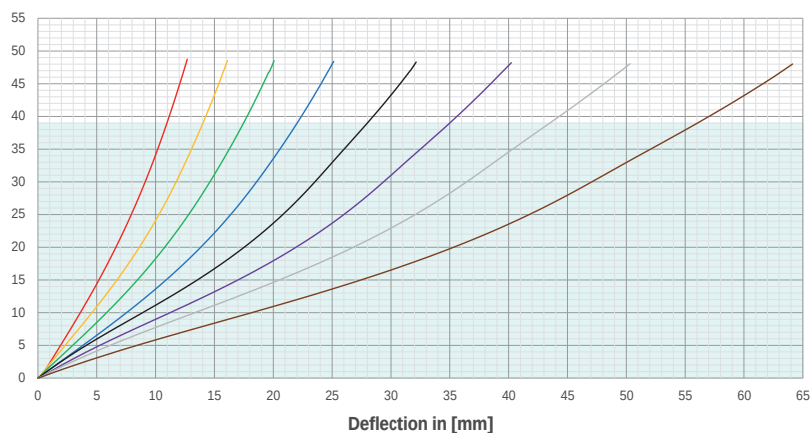
DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

ELASTOMERIC SPRING COMPACT STANDARD PROGRAM

Nominal size Ø125 x Ø27 – DIEPOTHAN®

Force in [kN]



DIMENSIONS in [mm]:

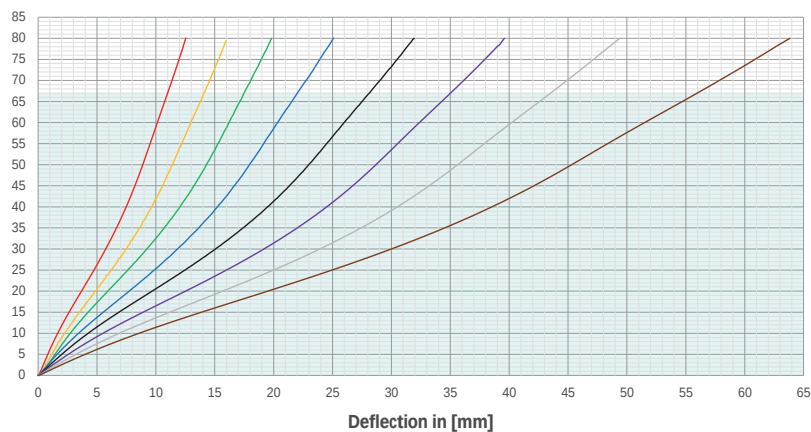
Ø125 x Ø27 x height

DIEPOTHAN® 70° Shore A black



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	39	731251970
40	35	14.00	39	731252970
50	35	17.50	39	731253970
63	35	22.05	39	731254970
80	35	28.00	39	731255970
100	35	35.00	39	731256970
125	35	43.75	39	731257970
160	35	56.00	39	731258970

Force in [kN]



DIMENSIONS in [mm]:

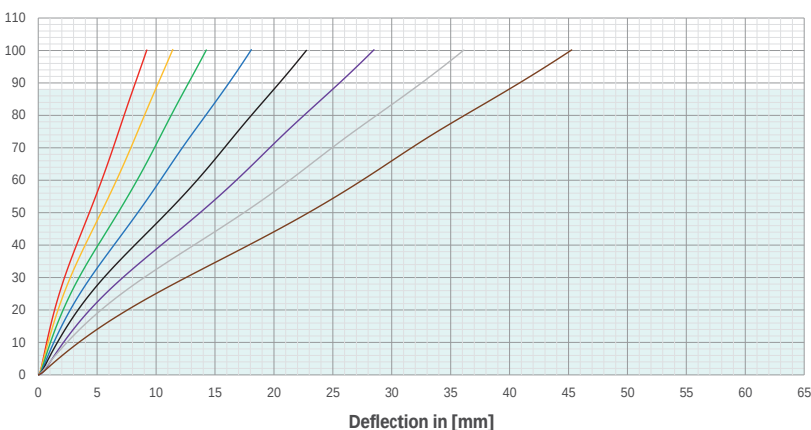
Ø125 x Ø27 x height

DIEPOTHAN® 80° Shore A yellow



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	35	11.20	67	731251980
40	35	14.00	67	731252980
50	35	17.50	67	731253980
63	35	22.05	67	731254980
80	35	28.00	67	731255980
100	35	35.00	67	731256980
125	35	43.75	67	731257980
160	35	56.00	67	731258980

Force in [kN]



DIMENSIONS in [mm]:

Ø125 x Ø27 x height

DIEPOTHAN® 90° Shore A red



HEIGHT [mm]	MAXIMUM DYNAMIC LOAD CAPACITY			ITEM NO.
	Deflection [%]	Deflection [mm]	Force [kN]	
32	25	8.00	88	731251990
40	25	10.00	88	731252990
50	25	12.50	88	731253990
63	25	15.75	88	731254990
80	25	20.00	88	731255990
100	25	25.00	88	731256990
125	25	31.25	88	731257990
160	25	40.00	88	731258990

To the load overview



DESIGN RECOMMENDATION:

- Static compression up to a maximum of 10% of the respective nominal height, as higher static loads may lead to permanent deformation (setting behavior).
- Dynamic deflection within the specified ranges (35% at 70° + 80° Shore A / 25% at 90° Shore A). Higher dynamic loads are feasible but may reduce the lifespan.

SPRING ELEMENTS AND CUSTOMIZED SOLUTIONS CELLULAR AND COMPACT

Customized Solutions / design principles



BASIC DESCRIPTION:

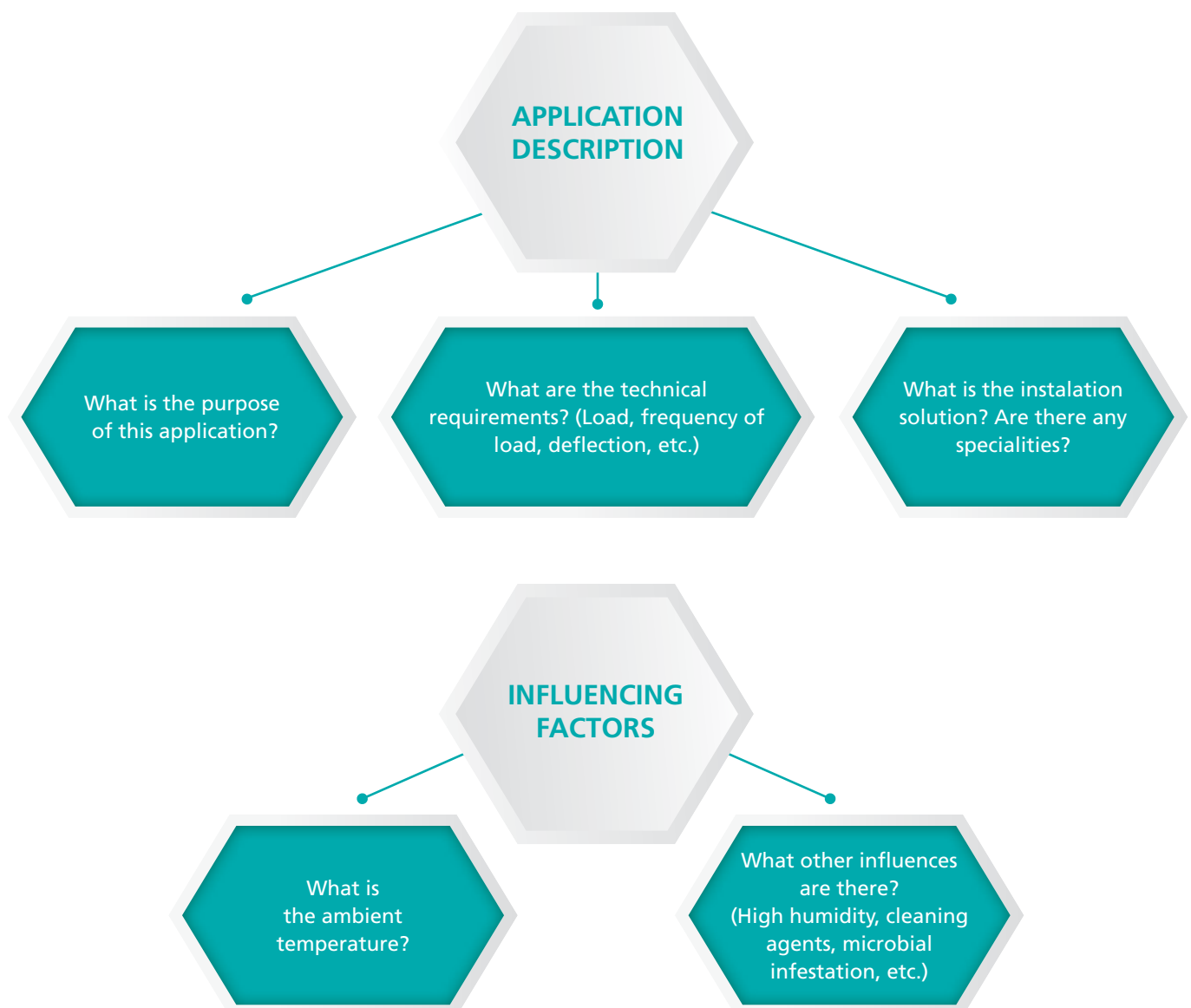
P+S elastomeric springs are suitable for a wide range of applications and have an excellent load profile. These have been in use for many years in many different industries worldwide. Our standard program comprises a broad selection of sizes and hardnesses that are designed for different loads and can already accommodate many applications.

Nevertheless, we do understand that not all problems can be solved with a standard component. Which is why we would be happy to provide you with support for specific solutions. Our project department is on hand to work with you to create designs, develop

component constructions and assess environmental influences. Our many years of experience and specialised expertise enable us to assist and support you from design and toolmaking through to the creation of samples with precise approval processes.

We pride ourselves in providing not only high-quality products, but also a comprehensive service. Please do not hesitate to contact us to discuss your individual requirements. We would be delighted to assist you with our expertise and work with you to find the best solution for your application.

INFORMATION REQUIRED FOR DESIGN:



P+S

POLYURETHAN-ELASTOMERE GMBH & CO. KG

Kielweg 17 · D-49356 Diepholz · www.pus-polyurethan.de

