

EPSA-10

Axial compensator DN 15 – DN 3400



Specification

- Engineered Products & Solutions steel compensator EPSA-10
- Vacuum-proof axial compensator consisting of a stainless steel bellows and welded pipe ends (welding ends)

Steel bellows PN2,5 / PN6 / PN10 / PN16

- Multiple convolution bellows in various stainless steel grades
- One ply or multi-ply structure

Materials

- Stainless Steel
- Heat Resistant Steel
- Nickel based Alloy (Incoloy 825)

Material Grades*	Material number as per DIN EN	Temperature	Applications
Stainless steel	1.4541, 1.4404, 1.4571	-196 °C up to +550 °C +550 °C	Low temperature, acids, lyes, gases, fertilizers Media containing chloride, oil, soap, drinking water, food stuff, petrol
Heat-resistant steel	1.4828, 1.4878	+900 °C +800 °C	Hot gases, steam, air Hot gases, steam, air
Nickel-based Alloy	2.4858 (Incoloy 825)	+450 °C	Sulphuric acid, phosphoric acid, petrol, öl, gases

Welding Ends

- Welded pipe ends

Dimensions

Standard: see tables

Others: DIN EN, ANSI, BS etc.

Materials

Standard: 1.0305 (St 35.8), 1.0038 (S235JR), 1.4541

Corrosion protection

Standard: anti-corrosion primed

Others: special varnish, etc.

Special designs

Other sizes (DN), lengths or pressure ratings on request.

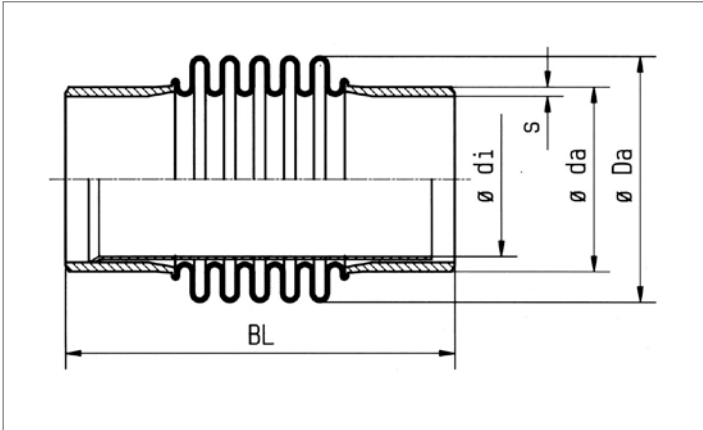
Accessories

- Protective tube
- Internal Guide Sleeve

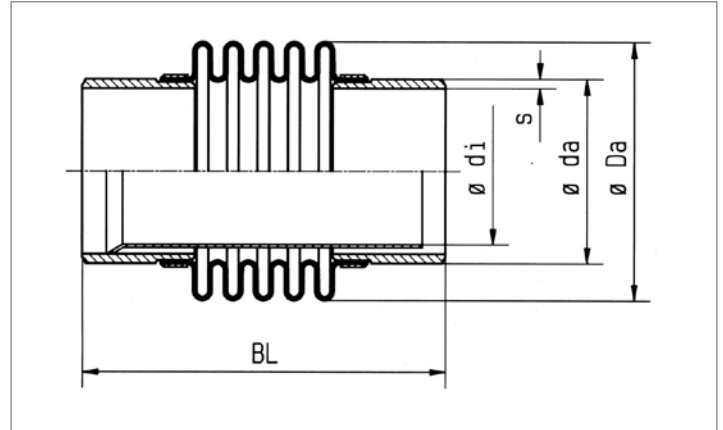
Applications

- For compensating axial movement
- For reducing tension, damping noise and oscillation in pipes and their system components, e.g:
 - Compressors
 - Motors
 - Turbines
 - Machines
 - Process plants
- For installation in:
 - industrial applications
 - exhaust systems
 - heating installations
 - gas supply lines

EPSA-10



DN 15 - DN 100



DN 125 - DN 1000

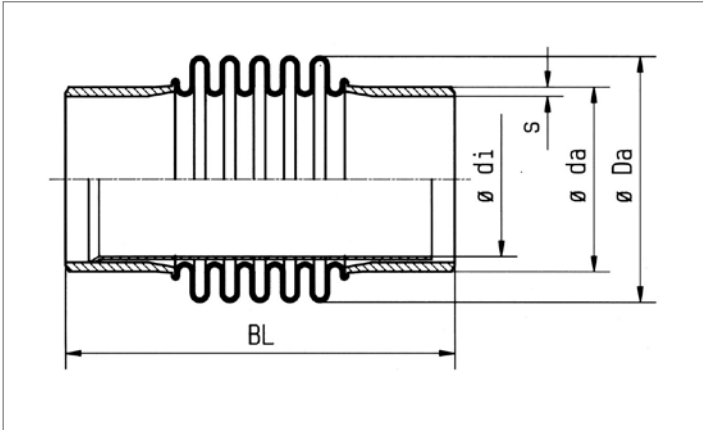
EPSA-10 Pressure rate PN16 standard program

		Δ Xtot Axial Movement	Cax Axial Spring Rate	A* Effective Bellows Cross Sectional Area	ϕ Da Bellows Outer Flared End	ϕ di Guide Sleeve Inner ϕ mm Bellows Outer	ϕ da x s Pipe Connection	Weight Approx.
DN	BL (mm)	(mm)	N/mm	(cm ²)	ϕ mm	ϕ mm	mm	Kg
15	175	24	49	7	38	14	21.3 x 2.0	0.4
20	175	24	49	7	38	18	26.9 x 2.3	0.4
25	185	20	49	16	54	24	33.7 x 2.6	0.6
32	185	20	49	16	54	32	42.4 x 2.9	0.5
40	190	26	67	25	66	37	48.3 x 2.6	0.6
50	205	34	87	36	79	51	60.3 x 2.9	0.8
65	230	36	102	54	96	64	76.1 x 2.9	1.4
80	230	40	80	78	116	78	88.9 x 3.2	1.9
100	240	40	91	115	136	99	114.3 x 4.0	2.1
125	270	50	79	173	168	123	139.7 x 4.0	3.6
150	300	50	156	243	196	150	168.3 x 4.5	4.8
200	300	38	237	422	253	199	219.1 x 6.3	6.8
250	300	38	624	620	302	251	273.0 x 6.3	8.3
300	260	22	863	995	388	294	323.9 x 8.0	16
300	410	52	379	990	386	294	323.9 x 8.0	22
350	260	21	946	1182	420	326	355.6 x 8.0	17
350	410	54	379	1182	420	326	355.6 x 8.0	25
400	260	21	1078	1514	471	376	406.4 x 8.0	20
400	410	54	431	1514	471	376	406.4 x 8.0	28
450	260	21	1210	1886	522	427	457.0 x 8.0	22
450	410	53	484	1886	522	427	457.0 x 8.0	32

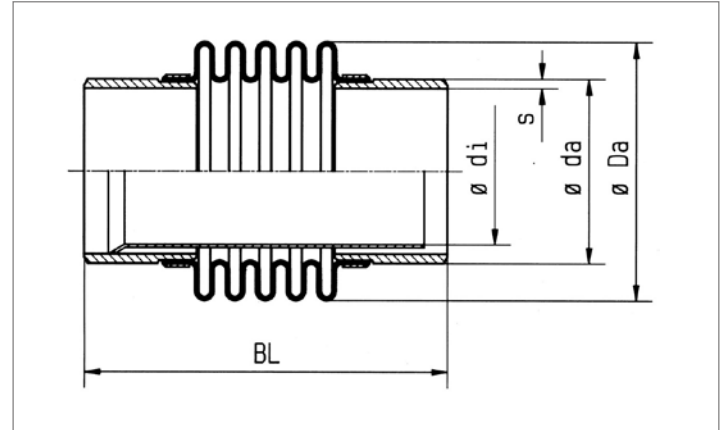
Table values refer to +20°C bellows material 1.4541, 1000 cycles. Please inquire for deviating values.

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EPSA-10



DN 15 - DN 100



DN 125 - DN 1000

EPSA-10 Pressure rate PN16 standard program

		Δ Axtot Axial Movement	Cax Axial Spring Rate	A* Effective Bellows Cross Sectional Area	ϕ Da Bellows Outer Flared End	ϕ di Guide Sleeve Inner ϕ mm Bellows Outer	ϕ da x s Pipe Connection	Weight Approx.
DN	BL (mm)	(mm)	N/mm	(cm ²)	ϕ mm	ϕ mm	mm	Kg
500	260	21	1338	2290	572	478	508.0 x 8.0	25
500	410	53	535	2290	572	478	508.0 x 8.0	36
600	260	21	1600	3237	674	580	610.0 x 8.0	30
600	410	52	640	3237	674	580	610.0 x 8.0	43
700	260	20	1860	4347	776	681	711.0 x 8.0	35
700	410	52	744	4347	776	681	711.0 x 8.0	50
800	260	20	2115	5608	877	783	813.0 x 8.0	40
800	410	52	846	5608	877	783	813.0 x 8.0	58
900	270	22	3486	7044	980	880	914.0 x 10.0	53
900	430	56	1394	7044	980	880	914.0 x 10.0	83
1000	270	22	3860	8643	1082	982	1016.0 x 10.0	59
1000	430	56	1544	8643	1082	982	1016.0 x 10.0	92

Table values refer to +20°C bellows material 1.4541, 1000 cycles. Please inquire for deviating values.