STENFLEX

SF-11/1-E09

Steel compensator ▪ Type SF-11

Axial compensator DN 15 – DN 500

Applications

- **for compensating axial movement**
- **for reducing tension, damping noise and oscillation in pipes and their system components, e.g.**
  - **pumps**
  - **compressors**
  - **motors**
  - **turbines**
  - **machines**
  - **process plants**
- **for installation in**
  - **industrial applications**
  - **gas and water supply**
  - **exhaust systems**
  - **heating installations**
- **to compensate for installation inaccuracies**

Structure type SF-11

☐ Vacuum-proof axial compensator consisting of a stainless steel bellows and welded flanges

Steel bellows PN 16

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

Material grade *	Material No. as per DIN EN	Temperature**	Possible uses
Stainless steel	**1.4541**	**-196 °C up to +550 °C**	**Low temperature, acids, lyes, gases, fertilizers**
	1.4404, 1.4571	**+550 °C**	**Media containing chloride, oil, soap, drinking water, food stuff, petrol**

* Check or inquire about the resistance of material grades to temperature and medium.
** Check or inquire about reduction in pressure by temperature.

Special designs

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

Accessories

☐ Internal guide sleeve
☐ Protective tube
☐ Gas sealings for DVGW-application

Flanges

Version

☐ Welded flanges with turned seal
☐ Flange drilling for through bolts

Dimensions

Standard: DN 15 - DN 500 (PN 16) according to EN 1092
Others: DIN EN, ANSI, BS etc.
Connection dimensions see technical annex

Materials

Standard: 1.0038 (S235JR), 1.0460 (P250GH)
Others: stainless steel, etc.

Corrosion protection

Standard: anti-corrosion primed
Others: special varnish, etc.

Certificates

☐ CE (DGR 97/23/EG)
☐ American Bureau of Shipping
☐ Bureau Veritas
☐ DVGW (DN 32 - DN 200)
☐ Germanischer Lloyd
☐ Lloyd´s Register of Shipping
☐ RMRS

Note

Please comply with the general technical instructions regarding reaction force, moving force, fixed point load, installation instructions, etc.

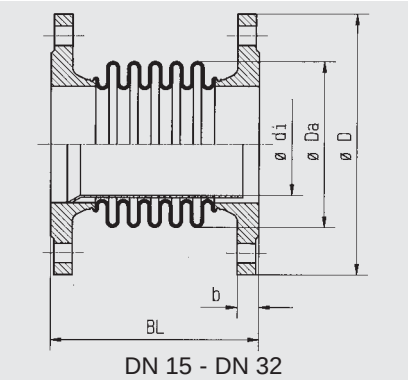
Subject to technical alterations and deviations resulting from the manufacturing process.

Pressure rate PN 16 standard program

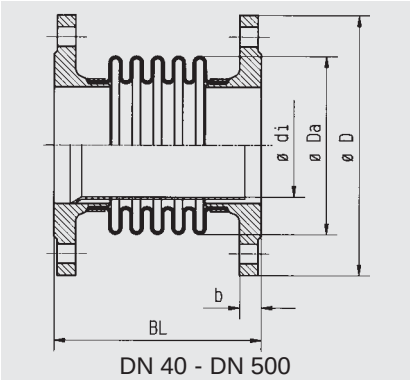
DN	BL mm	Δ ax_{tot} Axial movement mm	C_{ax} Axial spring rate N/mm	A* Effective bellows cross sectional area cm^2	ø D_a Bellows outer ø mm	ø d_i Internal guide sleeve inner ø mm	PN Flange connec-tion EN 1092	ø D Flange outer ø mm	b Flange thickness mm	Weight approx. kg
15	100	20	30	7	36	14	16	95	14	1.5
20	100	20	30	7	36	18	16	105	16	2.0
25	105	25	28	10	42	24	16	115	16	2.4
32	150	20	50	16	54	32	16	140	18	3.2
40	175	26	73	25	66	38	16	150	18	3.5
50	205	32	114	35	78	49	16	165	18	5.2
65	210	36	118	55	96	64	16	185	18	6.6
80	225	38	100	79	115	77	16	200	20	8.2
100	235	42	115	115	137	98	16	220	20	9.8
125	265	50	79	178	171	123	16	250	22	12.4
150	290	50	135	245	197	150	16	285	22	15.2
200	310	70	164	423	253	199	16	340	24	26.0
250	335	72	237	622	302	251	16	405	26	35.0
300	270	22	1319	998	388	296	16	460	28	49.0
	420	56	527				16			57.0
350	280	22	1438	1185	420	326	16	520	30	68.0
	430	55	575				16			76.0
400	285	21	1636	1516	471	376	16	580	32	85.0
	435	54	654				16			94.0
450	290	21	1833	1888	522	427	16	640	40	147.0
	440	54	733				16			158.0
500	295	21	2025	2293	572	480	16	715	44	168.0
	445	53	810				16			180.0

For larger sizes (DN) please see type SF-16. Also available with PN 10 flange connection.
Table values refer to +20 °C, bellows material 1.4541, 1000 cycles. Please inquire for deviating values.
*Effective bellows cross sectional area is a theoretical value.

Versions



DN 15 - DN 32



DN 40 - DN 500

Type SF-11