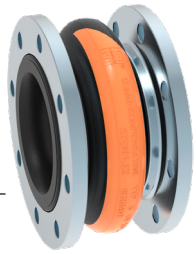
STENFLEX®

RUBBER EXPANSION JOINT TYPE B-1

HIGHLY FLEXIBLE UNIVERSAL EXPANSION JOINT DN 32 – DN 400



STRUCTURE TYPE B-1 / RUBBER BELLOWS PN 16

- Universal expansion joint consisting of a rubber bellows and rotable flanges
- Very elastic molded bellows with specially deep convolution in various rubber grades
- Synthetic fibre reinforcement
- Wire-reinforced self-sealing rubber rim
- Electrical impedance 10^3 to 10^6 Ohm (DIN IEC 93, VDE 0303-30)

Rubber grade*	EPDM	NBR**
Colour code	orange	red
Possible uses	Hot water, acids, lyes	hydrocarbon containing liquids

*Check or inquire about the resistance of the rubber grade to temperature and medium.
**Only available in large lots.

Technical design	
Max. perm. operating pressure	16 bar*
Max. perm. temperature	+100 °C
Bursting pressure	≥ 48 bar
Vacuum operation	DN 32 – 40 without vacuum supporting ring, DN 50 – 400 with vacuum supporting ring

Max. operating pressure to be set 30 % lower for shock loads.
*Please consider a decrease of pressure due to temperature (see technical annex).

FLANGES / VERSIONS

- DN 32 – DN 150 rotable flanges with stabilizing collar and drilling for through bolts
- DN 175 – DN 400 rotable flanges drilled with threaded holes
- Special machined groove for rubber rim

	Standard	**Others**
Dimensions	EN 1092	ANSI, BS etc. Connection dimensions see technical annex page 213 – 215
Materials	1.0038 (S235JR)	1.4541, 1.4571 etc.
Corrosion protection	electrogalvanized	hot-dip galvanized, special varnish and coating, etc.

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.

APPLICATIONS

- for compensating large axial and lateral movements
- for reducing thermal and mechanical tension in pipes and their system components, e.g.
  - pumps
  - compressors
- for muffling vibration and noise at appliances
- for compensating simultaneous movement in cooling water pipes
- to compensate for installation inaccuracies
- power station technology
- chemical industry

CERTIFICATES

- CE (PED 2014/68/EU)

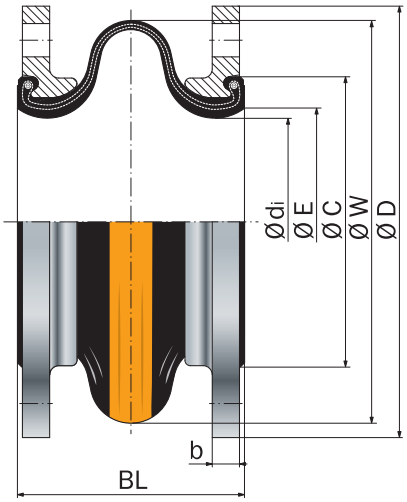
ACCESSORIES

- Vacuum supporting ring
- Internal guide sleeve
- Flame-proof protective cover
- Protective hood
- Protective tube

DIMENSIONS STANDARD PROGRAM

DN	BL mm	Pres-sure rate bar	Ø d_j Bellows inner Ø mm	Ø C Raised face outer Ø mm	Ø E Raised face inner Ø mm	Ø W* Con-volution Ø mm	PN Flange connec-tion EN 1092	Ø D Flange outer Ø mm	b Flange thick-ness mm
32	125	16	30 ± 3	75	42	100	16	150	16
40	125	16	30 ± 3	75	42	100	16	150	16
50	125	16	40 ± 3	86	61	115	16	165	16
65	125	16	61 ± 3	105	71	144	16	185	16
80	150	16	74 ± 3	118	82	167	16	200	18
100	150	16	92 ± 3	137	101	197	16	220	18
125	150	16	116 ± 3	166	130	230	16	250	18
150	150	16	139 ± 3	191	150	266	16	285	18
175	100	16	177 ± 3	217	183	282	16	315	18
200	125	10	201 ± 3	264	207	320	10	340	22
250	125	10	251 ± 3	314	260	374	10	395	23
300	150	10	302 ± 3	370	313	443	10	445	28
350	150	10	347 ± 3	424	354	485	10	505	28
400	150	10	392 ± 3	474	407	535	10	565	30

*unpressurized
From DN 200 pressure rate 16 bar also available with flanges PN 16.
Please contact us for further flange dimensions.



DN 32 – DN 150

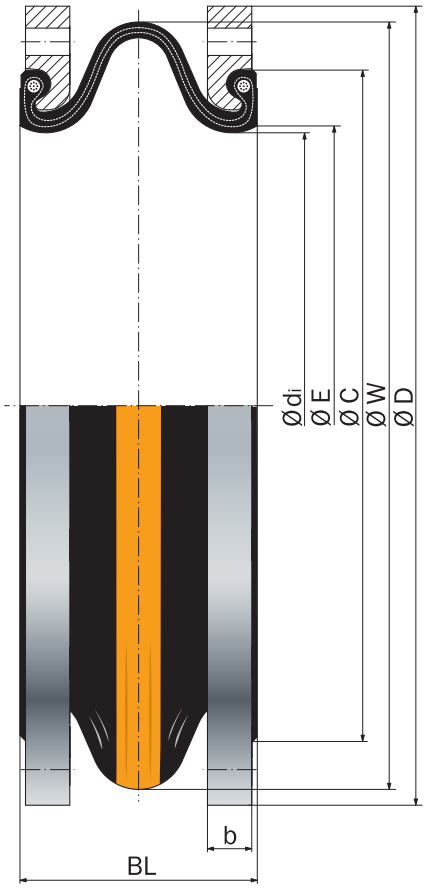
Type B-1

Universal expansion joint without restraint, flanges with drilling for through bolts

MOVEMENT COMPENSATION

DN	Δ ax Axial movement Compression - mm	 Elongation + mm	Δ lat Lateral movement ± mm	A* Effective bellows cross sectional area at 16 bar cm^2	Weight approx. kg
32	25	15	15	21	4.0
40	25	15	15	21	4.4
50	30	15	15	30	4.3
65	35	20	15	55	4.9
80	45	20	20	90	5.7
100	45	25	20	150	7.2
125	45	35	25	220	9.5
150	45	35	25	330	10.4
175	25	40	25	432	13.6
200	35	40	35	553	17.0
250	35	40	35	730	21.3
300	45	50	35	975	29.5
350	45	50	35	1242	36.8
400	45	50	35	1600	47.9

*Effective bellows cross sectional area is a theoretical value.
Please inquire for simultaneous (different) movement.



DN 175 – DN 400

Type B-1

Universal expansion joint without restraint, flanges drilled with threaded holes