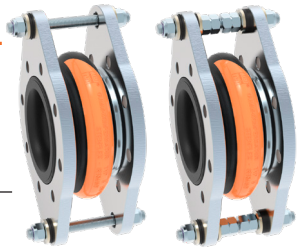
STENFLEX®

RUBBER EXPANSION JOINT TYPE B-2, B-4

HIGHLY FLEXIBLE LATERAL EXPANSION JOINT DN 32 – DN 400



STRUCTURE TYPE B-2, B-4 / RUBBER BELLOWS PN 16

- **Type B-2:** Lateral expansion joint consisting of a rubber bellows with rotable flanges and tie rods (external restraints) to absorb reaction force from internal pressure
- **Type B-4:** Lateral expansion joint consisting of a rubber bellows with rotable flanges and tie rods (external and internal restraints) to absorb reaction force from internal pressure or vacuum
- Very elastic molded bellows with specially high 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 flanges with stabilizing collar and through bolts and with ears to carry the tie rods
- DN 175 – DN 400 flanges drilled with threaded holes and with segments to carry the tie rods
- 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
- to compensate for installation inaccuracies
- power engineering
- chemical industry

TIE ROD RESTRAINTS

- DN 32 – DN 150 Tie rods carried on silencing rubber sockets
- DN 175 – DN 400 Tie rods carried on spherical washers and conical seats

Materials

Standard: tie rods 8.8
Others: stainless steel

Corrosion protection

Standard: electrogalvanized
Others: hot-dip galvanized

CERTIFICATES

- CE (PED 2014/68/EU)

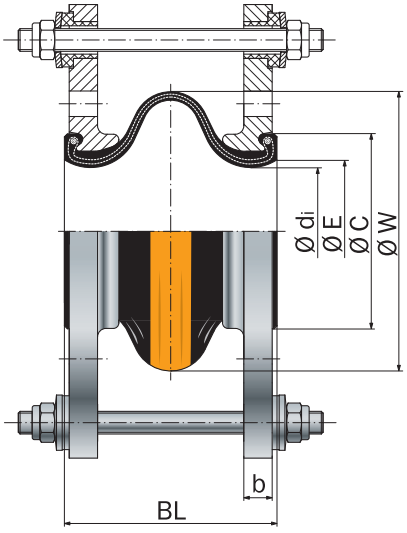
ACCESSORIES

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

DIMENSIONS STANDARD PROGRAM

DN	BL mm	Pressure rate bar	Ø dj Bellows inner Ø mm	Ø C Raised face outer Ø mm	Ø E Raised face inner Ø mm	Ø W* Convolution Ø mm	PN Flange connection EN 1092	Ø D Flange outer Ø mm	b Flange thickness mm	H Flange height mm
32	125	16	30 ± 3	75	42	100	16	150	16	230
40	125	16	30 ± 3	75	42	100	16	150	16	230
50	125	16	40 ± 3	86	61	115	16	165	16	240
65	125	16	61 ± 3	105	71	144	16	185	18	260
80	150	16	74 ± 3	118	82	167	16	200	20	300
100	150	16	92 ± 3	137	101	197	16	220	20	350
125	150	16	116 ± 3	166	130	230	16	250	22	385
150	150	16	139 ± 3	191	150	266	16	285	22	420
175	100	16	177 ± 3	217	183	282	16	315	22	437
200	125	10	201 ± 3	264	207	320	10	340	22	462
250	125	10	251 ± 3	314	260	374	10	395	23	517
300	150	10	302 ± 3	370	313	443	10	445	28	619
350	150	10	347 ± 3	424	354	485	10	505	28	679
400	150	10	392 ± 3	474	407	535	10	565	30	739

*unpressurized
Please contact us for further flange dimensions.



DN 32 – DN 150

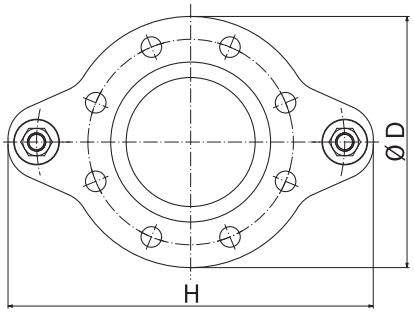
Type B-2

DN 32 – DN 150 Tie rods, external restraints, carried in silencing sockets

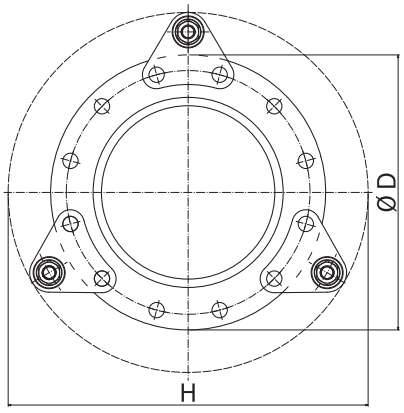
DN 175 – DN 400 Tie rods, external restraints, carried in segments, on spherical washers and conical seats

MOVEMENT COMPENSATION / FLANGE VERSIONS

DN	Δ lat Lateral movement ± mm	Weight type B-2 approx. kg
32	15	6.2
40	15	6.2
50	15	6.2
65	15	7.7
80	20	10.6
100	20	13.3
125	25	18.5
150	25	22.5
175	25	24.0
200	35	25.1
250	35	25.9
300	35	48.1
350	35	57.5
400	35	69.4

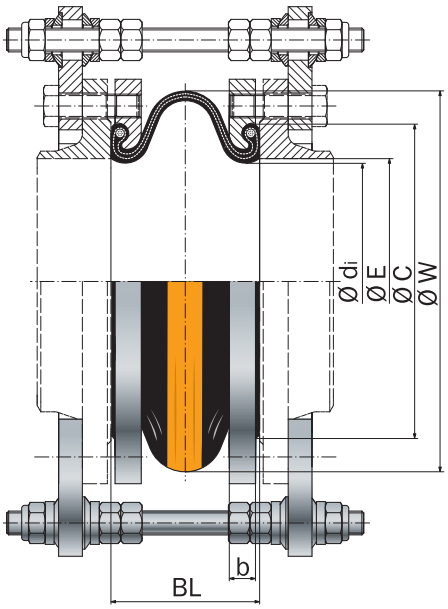


DN 32 – DN 150



DN 175 – DN 400

Number of tie rods depending on pressure



DN 175 – DN 400

Type B-4

DN 32 – DN 150 Tie rods, external and internal restraints, carried in silencing sockets

DN 175 – DN 400 Tie rods, external and internal restraints, carried in segments, on spherical washers and conical seats