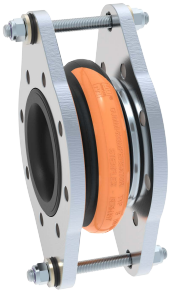
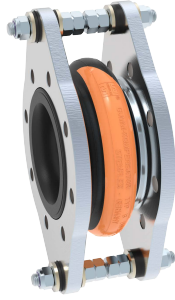


## Rubber Bellow EPSB-2 & EPSB-4 Highly flexible lateral rubber bellows DN32-DN400

EPDM & Perbunan, Tied



Type B-2



Type B-4

### Materials

- Liner: EPDM or Perbunan
- Reinforcement: Synthetic Fibre
- Flanges: Rotating flanges in carbon steel drilled to EN1092 PN10/PN16
  - DN32-150 PN16 Flanges with stabilising collar and through bolts with ears to carry the tie rods
  - DN175-400 Flanges drilled with threaded holes and with segments to carry the tie rods
  - Special turned groove for rubber rim

### Identification

- Colour Code: EPDM-Orange, Perbunan-Red

### Applications

- For compensating large axial & lateral movements
- For reducing thermal & mechanical tension in pipes & their system components, e.g. pumps & compressors
- For muffling vibration & noise at appliances
- For compensating simultaneous movement in cooling water pipes
- To compensate for installation inaccuracies
- Power Generation engineering
- Chemical Industry

### Specification

- Engineered Products & Solutions rubber bellows type EPSB-2 & EPS B-4
- Lateral compensator consisting of a rubber bellows of EPDM, or Perbunan with rotating flanges and tie rods (outer restraints) to absorb reaction force from internal pressure or vacuum (EPSB-4)
- Flanges drilled to EN1092 PN10/16 in carbon steel. From sizes DN200 & above standard drilling is P10, but also available with PN16 flanges upon request
- Highly elasticated moulded bellows with a special high convolution available in various rubber grades
- Synthetic fibre reinforcement
- Wire reinforced self-sealing rubber rim

### Tie Rod Restraints

- DN32-DN150 Tie rods carried on silencing rubber sockets
- DN175-DN400 Tie rods carried on spherical washers and conical seats
- Tie rod materials as standard 8.8. Other materials available: Stainless steel
- Tie rod corrosion protection as standard is electro-galvanized. Also available as hot-dip galvanized.

### Accessories

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

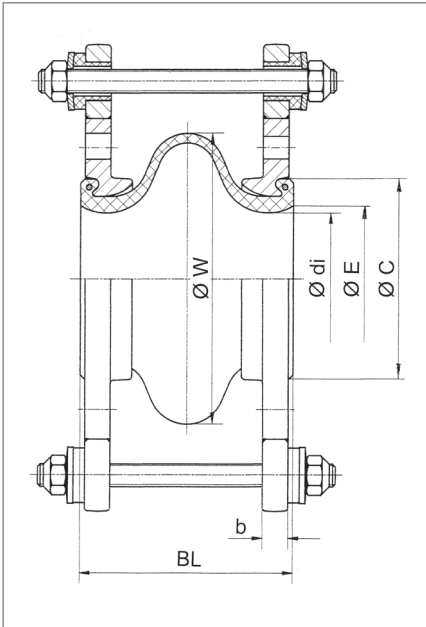
### Technical Data

- Maximum permitted operating pressure - 16 bar\*
- Maximum permitted temperature - +100 C
- Burst pressure - >48 bar
- Vacuum - >0.05 bar absolute with vacuum support ring (from sizes DN65)

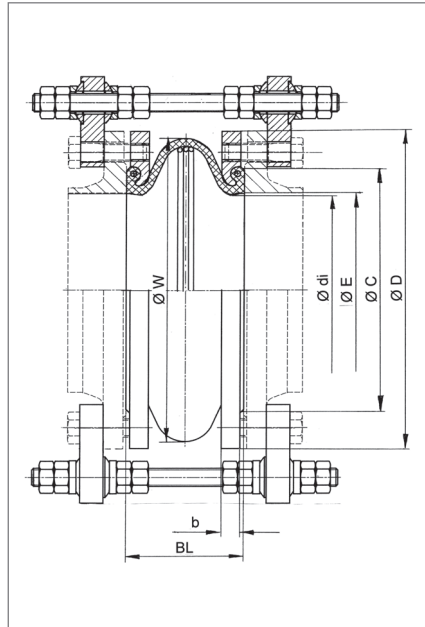
\*Maximum operating pressure to be set 30% lower for shock loads

## Data Table and Version Drawings

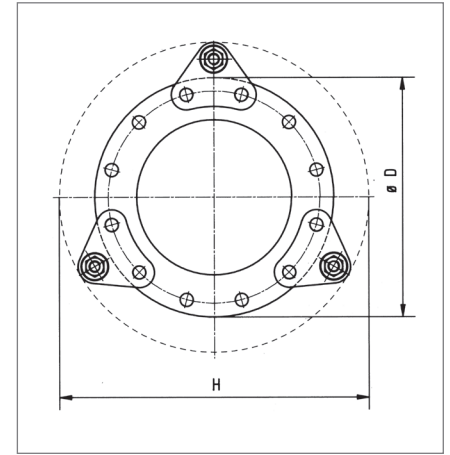
### Type B-2 & B-4



Type B-2 DN32 - 150



B-4 Strich



FL B-4 250

### EPSP-B2 & B4 Pressure rate PN16 standard program

| Size | Length | Lateral Movement | Ø di Bellows | Ø C Raised face | Ø E Raised face | Ø W convolution    | Pressure   | PN Flange  | ØD Flange  | b Flange     | H Flange  | Weight B-2 |
|------|--------|------------------|--------------|-----------------|-----------------|--------------------|------------|------------|------------|--------------|-----------|------------|
| DN   | BL mm  | mm +/-           | inner Ø (mm) | outer Ø mm      | inner Ø mm      | Ø unpressurised mm | Rating bar | connection | Outer Ø mm | thickness mm | height mm | approx.kg  |
| 32   | 125    | 15               | 34 +/-3      | 74              | 41              | 95                 | 16         | 16         | 150        | 16           | 220       | 6.0        |
| 40   | 125    | 15               | 34+/-3       | 74              | 41              | 95                 | 16         | 16         | 150        | 16           | 220       | 6.0        |
| 50   | 125    | 15               | 43+/-3       | 85              | 51              | 110                | 16         | 16         | 165        | 16           | 230       | 6.6        |
| 65   | 125    | 15               | 63+/-3       | 104             | 69              | 140                | 16         | 16         | 185        | 16           | 260       | 8.2        |
| 80   | 150    | 20               | 75+/-4       | 117             | 81              | 165                | 16         | 16         | 200        | 18           | 280       | 8.9        |
| 100  | 150    | 20               | 95+/-4       | 136             | 101             | 195                | 16         | 16         | 220        | 18           | 320       | 10.9       |
| 125  | 150    | 25               | 120+/-5      | 164             | 126             | 230                | 16         | 16         | 250        | 18           | 350       | 13.9       |
| 150  | 150    | 25               | 145+/-5      | 190             | 151             | 265                | 16         | 16         | 285        | 18           | 400       | 17.1       |
| 175  | 100    | 25               | 170+/-5      | 215             | 176             | 280                | 16         | 16         | 315        | 18           | 425       | 24.0       |
| 200  | 125    | 35               | 200+/-5      | 265             | 207             | 320                | 10         | 10         | 340        | 20           | 460       | 26.0       |
| 250  | 125    | 35               | 250+/-6      | 311             | 258             | 375                | 10         | 10         | 395        | 22           | 510       | 31.0       |
| 300  | 150    | 35               | 300+/-6      | 368             | 309             | 440                | 10         | 10         | 445        | 26           | 575       | 43.0       |
| 350  | 150    | 35               | 350+/-6      | 422             | 355             | 485                | 10         | 10         | 505        | 28           | 635       | 50.0       |
| 400  | 150    | 35               | 400+/-6      | 472             | 404             | 535                | 10         | 10         | 565        | 32           | 685       | 60.0       |

From DN200 pressure rating 16 bar is also available with PN16 Flanges  
 Effective bellows cross sectional area is a theoretical value