

## Rubber Bellow EPSB-1

Highly flexible universal rubber bellows DN32-DN400

EPDM & Perbunan, Untied



DN 32 -  
DN 150



DN 175 -  
DN 400

### Specification

- Engineered Products & Solutions rubber bellows type EPSB-1
- Universal compensator consisting of a rubber bellows of EPDM, or Perbunan with rotating flanges
- 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 deep convolution available in various rubber grades
- Synthetic fibre reinforcement
- Wire reinforced self-sealing rubber rim

### Materials

- Liner: EPDM or Perbunan
- Reinforcement: Synthetic Fibre
- Flanges: Rotating flanges in carbon steel drilled to EN1092 PN10/PN16

### 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 Station technology
- Chemical Industry

### 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)

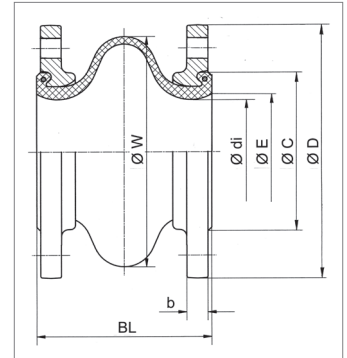
\*Maximum operating pressure to be set 30% lower for shock loads.

# STENFLEX TYPE B-1

## EPSB-1

EPSF-B1 Pressure rate PN16 standard program

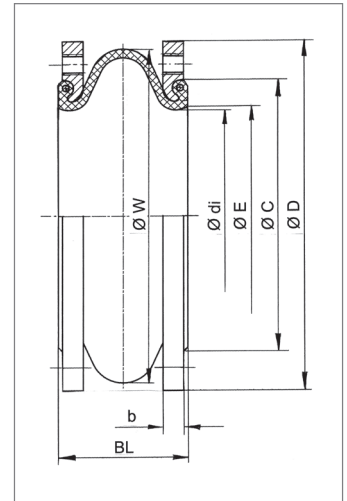
| Size | Length  | Axial Movement   | Axial Movement  | Lateral Movement | Effective bellows cross                    | Ø di Bellows | Ø C Raised face |
|------|---------|------------------|-----------------|------------------|--|--------------|-----------------|
| DN   | BL (mm) | Compression (mm) | Elongation (mm) | mm +/-           | Sectional area at 16 bar(cm <sup>2</sup> ) | inner Ø (mm) | outer Ø mm      |
| 32   | 125     | 25               | 15              | 15               | 21   | 34 +/-3      | 74              |
| 40   | 125     | 25               | 15              | 15               | 21   | 34 +/-3      | 74              |
| 50   | 125     | 30               | 15              | 15               | 30   | 43 +/-3      | 85              |
| 65   | 125     | 35               | 20              | 15               | 55   | 63 +/-3      | 104             |
| 80   | 150     | 45               | 20              | 20               | 90   | 75 +/-4      | 117             |
| 100  | 150     | 45               | 25              | 20               | 150  | 95 +/-4      | 138             |
| 125  | 150     | 45               | 35              | 25               | 220  | 120 +/-5     | 164             |
| 150  | 150     | 45               | 35              | 25               | 330  | 145 +/-5     | 190             |
| 175  | 100     | 25               | 40              | 25               | 432  | 175 +/-5     | 215             |
| 200  | 125     | 35               | 40              | 35               | 553  | 200 +/-5     | 265             |
| 250  | 125     | 35               | 40              | 35               | 730  | 250 +/-6     | 311             |
| 300  | 150     | 45               | 50              | 35               | 975  | 300 +/-6     | 368             |
| 350  | 150     | 45               | 50              | 35               | 1242                                       | 350 +/-6     | 422             |
| 400  | 150     | 45               | 50              | 35               | 1600                                       | 400 +/-6     | 472             |



EPSB-1  
DN 32 - DN 150

Universal bellows without restraint, flanges with drilling for through bolts.

| Size | Ø E Raised face | Ø W convolution    | Pressure   | PN Flange  | ØD Flange  | b Flange     | Weight    |
|------|-----------------|--------------------|------------|------------|------------|--------------|-----------|
| DN   | inner Ø mm      | Ø unpressurised mm | Rating Bar | connection | Outer Ø mm | thickness mm | approx.kg |
| 32   | 41              | 95                 | 16         | 16         | 150        | 16           | 4.0       |
| 40   | 41              | 95                 | 16         | 16         | 150        | 16           | 4.4       |
| 50   | 51              | 110                | 16         | 16         | 165        | 16           | 4.3       |
| 65   | 69              | 140                | 16         | 16         | 185        | 16           | 4.9       |
| 80   | 81              | 165                | 16         | 16         | 200        | 18           | 5.7       |
| 100  | 101             | 195                | 16         | 16         | 220        | 18           | 7.2       |
| 125  | 126             | 230                | 16         | 16         | 250        | 18           | 9.5       |
| 150  | 151             | 265                | 16         | 16         | 285        | 18           | 10.4      |
| 175  | 176             | 280                | 16         | 16         | 315        | 18           | 14.0      |
| 200  | 207             | 320                | 10         | 10         | 340        | 20           | 15.0      |
| 250  | 258             | 370                | 10         | 10         | 395        | 22           | 17.0      |
| 300  | 309             | 440                | 10         | 10         | 445        | 26           | 26.0      |
| 350  | 355             | 485                | 10         | 10         | 505        | 28           | 33.0      |
| 400  | 404             | 535                | 10         | 10         | 565        | 32           | 37.0      |



EPSB-1  
DN 175 - DN 400

Universal bellows without restraint, flanges with threaded holes.

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