



# Rubber Bellows

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## Design

Rubber Bellows also commonly known as flexible rubber joints are made from heat resisting synthetic elastomers and moulded in a spherical shape with metal floating flanges. They are commonly found in applications including Air, Water, Sea Water, Hot Water and Weak Acid. They are installed in piping systems to absorb movements in three directions:

1. Axial – movement of elongation and compression along the centre line.
2. Lateral – offset movement from the centre line.
3. Angular – offset bending about the centre line.

## Material

Rubber – EPDM (NBR Bellows available on request)  
Flange – Galvanised Steel/Stainless Steel

## Sizes

Nominal 50mm – 200mm

(Available with galvanised steel flanges in sizes 50mm – 200mm. Available with stainless steel flanges in sizes 50mm – 100mm)

\*Other sizes available on request.

## Flange Configuration

AS2129 Table E

## Temperature Range

EPDM: -30°C + 120°C

## Maximum Pressure Rating

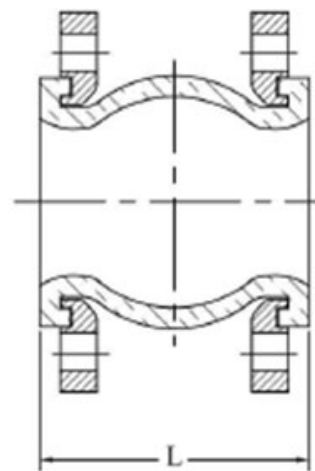
1600 kPa (DN50 – DN200)

# Material Specifications

| Common Name | ASTM Designation<br>D1418-64 | Temperature   | Composition                        | Generally resistant to                                           | Generally affected or attacked by                |
|-------------|------------------------------|---------------|------------------------------------|------------------------------------------------------------------|--------------------------------------------------|
| EPDM        | EPDM                         | -30°C + 120°C | Ethylene-Propylene-Dieneterpolymer | Animal and vegetable oils, ozone, strong and oxidising chemicals | Mineral oils and solvents, aromatic hydrocarbons |

## Dimensions

### Rubber Bellow (Table E)



| Imperial Size | L   | Axial Compression | Axial Stretch | Lateral Displacement | Angular Deflection | Approx. KG/PC |
|---------------|-----|-------------------|---------------|----------------------|--------------------|---------------|
| 2             | 105 | 10                | 7             | 10                   | 15°                | 3             |
| 2 ½           | 115 | 13                | 7             | 11                   | 15°                | 4.1           |
| 3             | 135 | 15                | 8             | 12                   | 15°                | 5.2           |
| 4             | 135 | 19                | 10            | 13                   | 15°                | 6             |
| 5             | 165 | 19                | 12            | 14                   | 15°                | 10.3          |
| 6             | 180 | 20                | 12            | 22                   | 15°                | 11.6          |
| 8             | 190 | 25                | 16            | 22                   | 15°                | 16            |



**Contact us to discuss your pipeline project 0800 387 677**



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