

RELY ON EXCELLENCE

Flexgen expansion joints

Expansion Joints | Fabric expansion joints



Features

- Multi layer design (Flexgen 2002: single layer construction)
- Compensates for movements in several directions simultaneously
- Can be delivered as fabric only or as preassembled unit
- For dry condition
- Custom made to fit actual working conditions

Functional description

Flexgen expansion joints safely absorb thermal expansion and misalignments of pipe and duct systems in dry and medium temperature area. Flexgen products compensate for movements in multiple directions simultaneously.

Advantages

- Excellent flexibility
- High chemical resistance
- Reduced heat loss
- Minimal reaction forces

Operating range

Temperature: -35 °C ... +575 °C (-31 °F ... +1,070 °F)

Pressure: -0.14 bar ... 0.14 bar (-2 PSI ... 2 PSI)

Maximal axial movements: ... 200 mm (8")

Maximal lateral movements: ... 80 mm (3")

Standards and approvals

Documentation:

- EN 10204-2.2 certificate
- Safety Data Sheets (SDS) for individual materials

Recommended applications

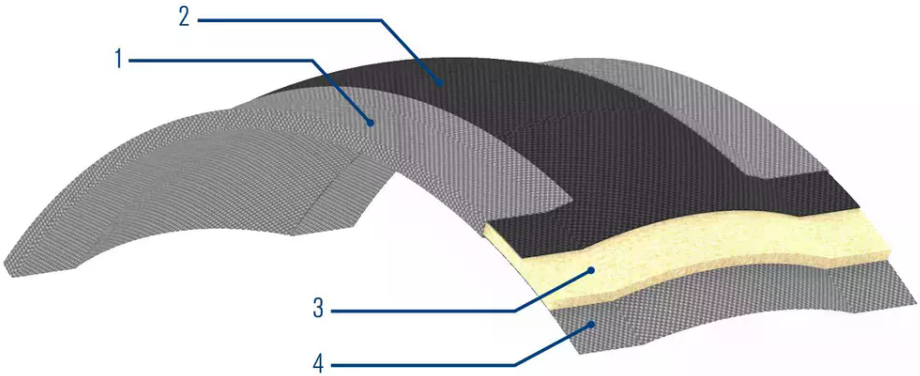
- Process industry
- Oil and gas industry
- Refining technology
- Power plant technology
- Pulp and paper industry
- Metal production and processing
- Cement industry

- Flue gas duct systems

- Boiler inlets and boiler outlets
- Penetration seals
- Process lines
- Stack connections

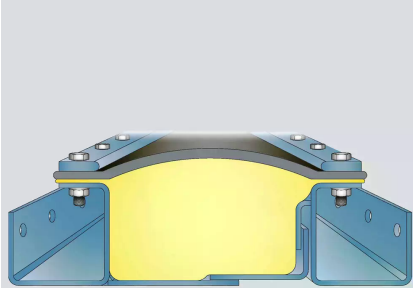
RELY ON EXCELLENCE

| Item | Description |
|------|--|
| 1 | Flange reinforcement |
| 2 | Pressure carrying layer / gas seal layer |
| 3 | Insulation layer |
| 4 | Support layer |



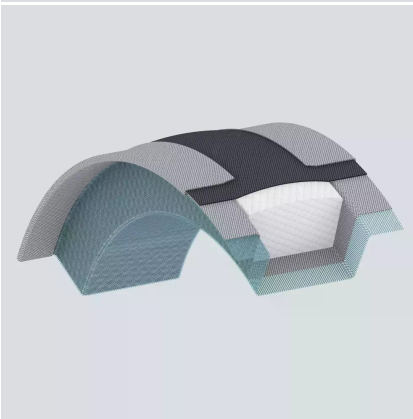
RELY ON EXCELLENCE

Installation, details, options



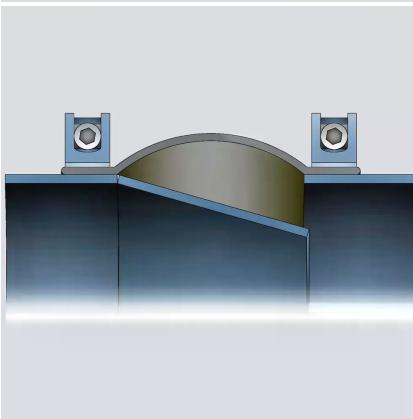
P-Flanges Floating ring

Temperature: ... 550 °C (1,022 °F)
Media with high dust content.



All expansion joints can be combined with a bolster/
internal insulation to enhance the design in respect
to:

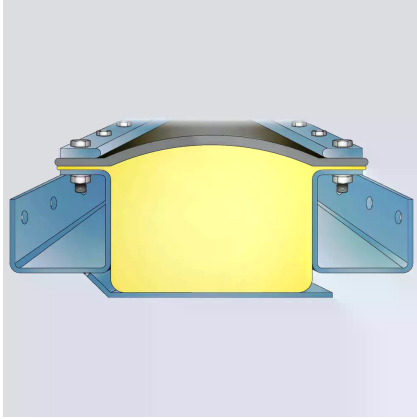
- Dust accumulation
- Heat loss
- Surface temperature/low risk
- Flutter/pressure fluctuations
- Noise reduction
- Extended life



P-Flanges with single sleeve and clamping bands

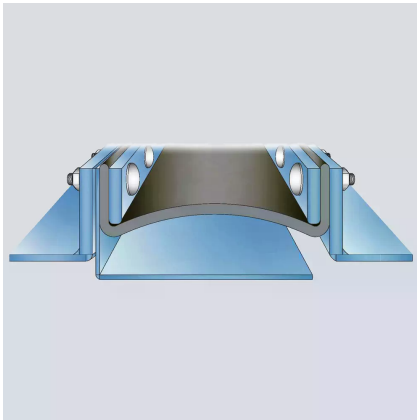
Temperature: ... 450 °C (842 °F)
Media with low dust content.

RELY ON EXCELLENCE



P-Flanges with inner sleeve

Temperature: ... 550 °C (1,022 °F)
Media with medium dust content.



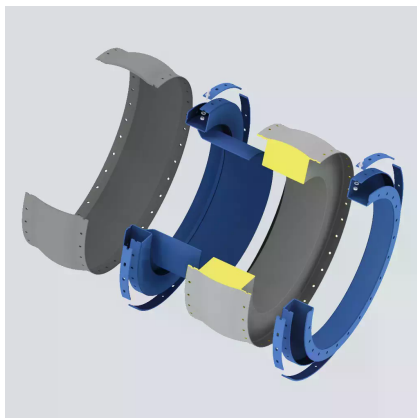
V-Flanges single sleeve

Temperature: ... 450 °C (842 °F)
Media with low dust content.

RELY ON EXCELLENCE

Product variants

| Type | Agressivemedia | Non-aggressivemedia | Max. temperatureP-Flange | Max. temperatureV-Flange | Max. temperaturePFH-100 | Min. temperature | Max. pressure | Min. pressure | Axialflexibility | L |
|------|----------------|---------------------|--------------------------|--------------------------|-------------------------|------------------|--------------------|----------------------|------------------|---|
| 2002 | Dry | Dry | 300 °C(572 °F) | 300 °C(572 °F) | 400 °C(752°F) | -35 °C(-31 °F) | 0.14 bar(2.03 PSI) | -0.14 bar(-2.03 PSI) | 50 % | 2 |
| 2003 | Dry | Dry | 300 °C(572 °F) | 300 °C(572 °F) | 450 °C(842 °F) | -35 °C(-31 °F) | 0.14 bar(2.03 PSI) | -0.14 bar(-2.03 PSI) | 40 % | 2 |
| 2004 | Dry | Dry | 500 °C(932 °F) | 425 °C(797°F) | 500 °C(932°F) | -35 °C(-31 °F) | 0.14 bar(2.03 PSI) | -0.14 bar(-2.03 PSI) | 40 % | 2 |
| 2005 | Dry | Dry | 575 °C(1067 °F) | 450 °C(842 °F) | 575 °C(1067 °F) | -35 °C(-31 °F) | 0.14 bar(2.03 PSI) | -0.14 bar(-2.03 PSI) | 40 % | 2 |



Pre-assembled units

Pre-assembled expansion joint units consist of:

- Fabric expansion joint
- Metal frames/inner sleeves
- Gasket (optional)
- Fasteners

Frame material:

- Carbon steel
- Stainless steel
- Heat resistant steel

Pre-assembled expansion joint units can be supplied with surface treatment that is corrosion resistant (standard) and resistant to high temperatures.

EagleBurgmann KE offers any RAL color code for the units. Units can be delivered with seaworthy packing or standard packing for road transportation.

RELY ON EXCELLENCE



eFlexgen

The main features of our new eFlexgen are lower emissions as well as increased robustness and performance. The multi-layer design that can withstand temperatures up to 575° C, have the ability to compensate for movements in all directions, and suitability for dry conditions. It can be delivered either as fabric only or as a preassembled unit. Additionally, it can be custom-made to fit the specific working conditions you have.

- Up to 90% lower emissions
- Improved safety
- Longer lifetime
- Saves energy in specific applications due to increased tightness
- Verified by Bureau Veritas