

## GB300



### Belt expansion joint on duct angles with pre-insulation, without arch

- Design:** Straight or conical elastomer or multilayer expansion joint with sleeve for clamp bar fixing  
Optional expansion joint with installation seam
- Installation method:** Clamp bar fixing on duct angles
- Dimensions:** For round and rectangular duct cross sections
- Installation length:** = Installation gap + 2x fixing width  
Individually according to customer specifications
- Fixing width:** Depends on pressure and nominal diameter between 60 and 100 mm
- Media temperature:** Depending on the height of the duct angle and duct lining, suitable for up to 1200 °C
- Pressure:** Up to ± 0.25 bar  
Higher pressures on request
- Movement:** For axial, lateral and angular movements  
Benchmarks:  
axial compression = approx. 0.20 x installation gap  
axial extension = approx. 0.20 x installation gap  
lateral displacement = approx. 0.15 x installation gap  
In the event of axial extension and simultaneous lateral displacement, movements are reduced  
For large lateral movements, we recommend presetting the duct against the direction of movement

**Application:**  
Power plants, waste incineration plants, gas turbines, cement factories, paper industry, steel industry e.g. in exhaust pipes, in ventilators, in air ducts, in ash lines, in filter systems

## Expansion joints

Multilayer expansion joint	
<b>Temperature:</b>	Depending on the duct angle height and lining, up to 1200 °C
<b>Design:</b>	Multilayer fabric expansion joint consisting of interior insulating layers, embedded sealing films and exterior pressure carrier fabrics.
<b>Material:</b>	<p><b>Internal layers:</b> PTFE glass fibre fabric laminate, glass fibre fabric, glass mat, silicate fabric</p> <p><b>Sealing films:</b> PTFE film, stainless steel film</p> <p><b>External layer:</b> Silicon coated glass fibre fabric, PTFE-glass fibre fabric laminate</p>

## Pre-insulation

- Design:** Insulation layers, cut to the installation gap, consisting of heat-resistant wire mesh  
Insulation layers made from glass, ceramic, silicate or mineral wool  
Optional installation-ready, fabric-sheathed insulation pillow  
Duct lining necessary for high medium temperatures

## Clamp bar

- Design:** Multi-part clamp bar with slotted holes
- Materials:** Carbon steel: 1.0038 (S235JRG2)  
Stainless steel: 1.4301 (X5CrNi18-10)  
1.4571 (X6CrNiMoTi17-12-2)  
Other materials on request
- Coating:** Primed, hot-dip galvanised, special paint

## Optional accessories

- Fixing:** Screws, nuts, washers, disc springs
- Installation unit:** Installation-ready installation unit complete with pre-mounted expansion joint, flow liner and connecting ends for welding or screwing into the duct (► page 25)
- Installation set:** Tools and aids for punching and closing the expansion joint seam

Planning help GB300

