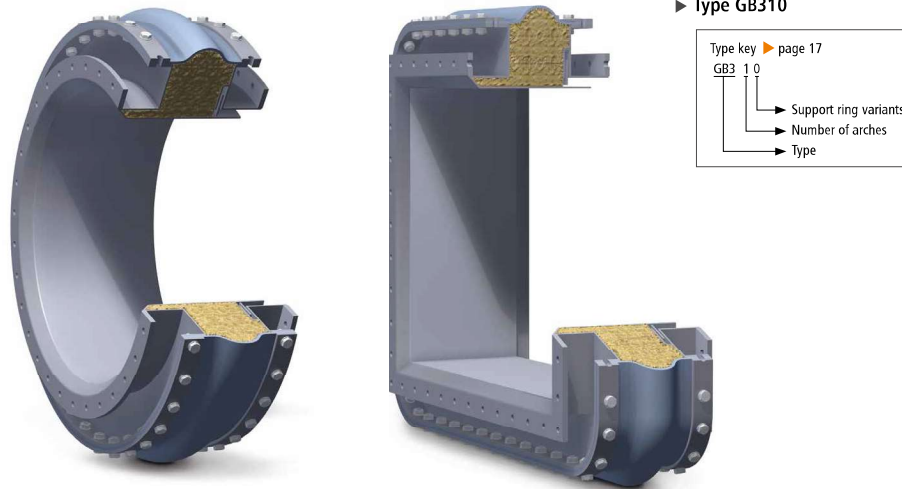


## GB310



### Belt expansion joint on duct angles with pre-insulation, with one or more arches

**Design:** Cylindrical, single or multi-arch elastomer or multilayer expansion joint with sleeve for clamp bar fixing  
Optional expansion joint with installation seam  
Optional external pressure support rings in the arch trough  
Optional vacuum support rings

**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. 0.25 x installation gap  
axial extension = approx. 0.25 x installation gap  
lateral displacement = approx. 0.20 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

**Support rings:** Vacuum support rings inside in the arch apex and/or external pressure support rings in the arch trough

**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 GB310

