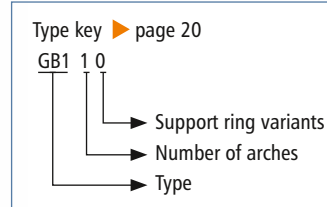


## GB110



### ► Type GB110



## Belt expansion joint with one or more arches

**Design:** Cylindrical, single or multi-arch elastomer or multilayer expansion joint with sleeves for clamped fixing, ideally only for round or oval duct cross sections  
Optional expansion joint with installation seam  
Optional external pressure support rings in the arch trough  
Optional vacuum support rings

**Installation method:** Clamped fixing at duct level

**Dimensions:** For round and oval duct cross sections of up to approx.  $\varnothing$  1500 mm

**Installation length:** = Installation gap + 2x fixing width  
Individually according to customer specifications

**Fixing width:** Depends on pressure, nominal diameter and clamp design at least 40 mm

**Media temperature:** Suitable for up to 400 °C

**Pressure:** Up to  $\pm 0.25$  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  
In the event of axial extension or vacuum, the expansion joint can be pulled from the pipeline (provide groove at end of pipeline if needed)  
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 joint variants

	Elastomer expansion joint	Multilayer expansion joint
<b>Temperature:</b>	up to 200 °C	up to 400 °C
<b>Design:</b>	Single-layer elastomer expansion joint fully joined with one or more fabric reinforcement inserts	Multilayer fabric expansion joint consisting of interior insulating layers, embedded sealing films and exterior pressure carrier fabrics.
<b>Material:</b>	<p><b>Rubber grades:</b>                      up to 100 °C: EPDM, IIR, CSM, NBR                      up to 180 °C: FPM                      up to 200 °C: Silicon (Q)</p> <p><b>PTFE lining:</b>                      Permanently embedded on the inside at the rubber bellows in order to withstand corrosive chemical attack, available starting at NB 300</p> <p><b>Inserts:</b>                      Nylon, polyester, Kevlar, glass fibre, and steel mesh</p>	<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>

## Fastening clamps

<b>Design:</b>	Depending on pressure and nominal diameter, endless clamp belt or hinge bolt clamps At higher pressures, 2 adjacent clamps per fastening side	
<b>Width:</b>	Endless clamp belt: $\frac{3}{4}$ " Hinge bolt clamp: depending on $\varnothing$ : 18–30 mm	
<b>Materials:</b>	Endless clamp belt with screw lugs (tongs):	1.7300
	Hinge bolt clamp, belt and housing:	1.4016 (Screw steel galvanised)

## Optional accessories

<b>Support rings:</b>	Vacuum support rings inside in the arch apex and/or external pressure support rings in the arch trough
<b>Installation set:</b>	Tools and aids for punching and closing the expansion joint seam

