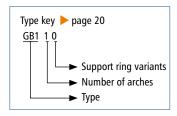


#### **GB110**



#### ► 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. ø 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

Suitable for up to 400°C (depending on the material) Media temperature:

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**

Tomporaturo	Elastomer expansion joint up to 200°C	Multilayer expansion joint up to 400°C
Temperature: Design:	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.
Material:	Rubber grades: up to 100 °C: EPDM, IIR, CSM, NBR up to 180 °C: FPM up to 200 °C: Silicon (Q)  PTFE lining: Permanently embedded on the inside at the rubber bellows in order to withstand corrosive chemical attack, available starting at NB 300  Inserts: Nylon, polyester, Kevlar, glass fibre, and steel mesh	Internal layers: PTFE glass fibre fabric laminate, glass fibre fabric, glass mat, silicate fabric  Sealing films: PTFE film, stainless steel film  External layer: Silicon coated glass fibre fabric PTFE-glass fibre fabric laminate

#### **Fastening clamps**

**Design:** Depending on pressure and nominal diameter, endless clamp belt or hinge bolt clamps

At higher pressures, 2 adjacent clamps per fastening side

Width: Endless clamp belt: 3/4"

Hinge bolt clamp: depending on Ø: 18–30 mm

Materials: Endless clamp belt with screw lugs (tongs): 1.7300

Hinge bolt clamp, belt and housing: 1.4016 (Screw steel galvanised)

## **Optional accessories**

**Support rings:** Vacuum support rings inside in the arch

apex and/or external pressure support

rings in the arch trough

**Installation set:** Tools and aids for punching and closing

the expansion joint seam

