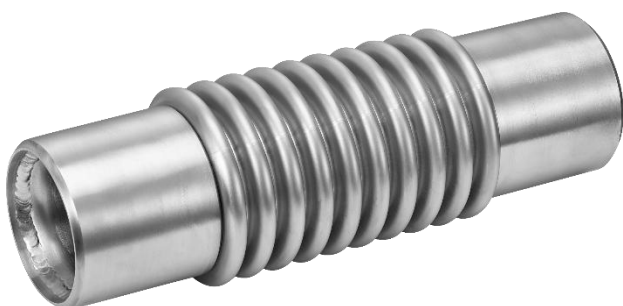
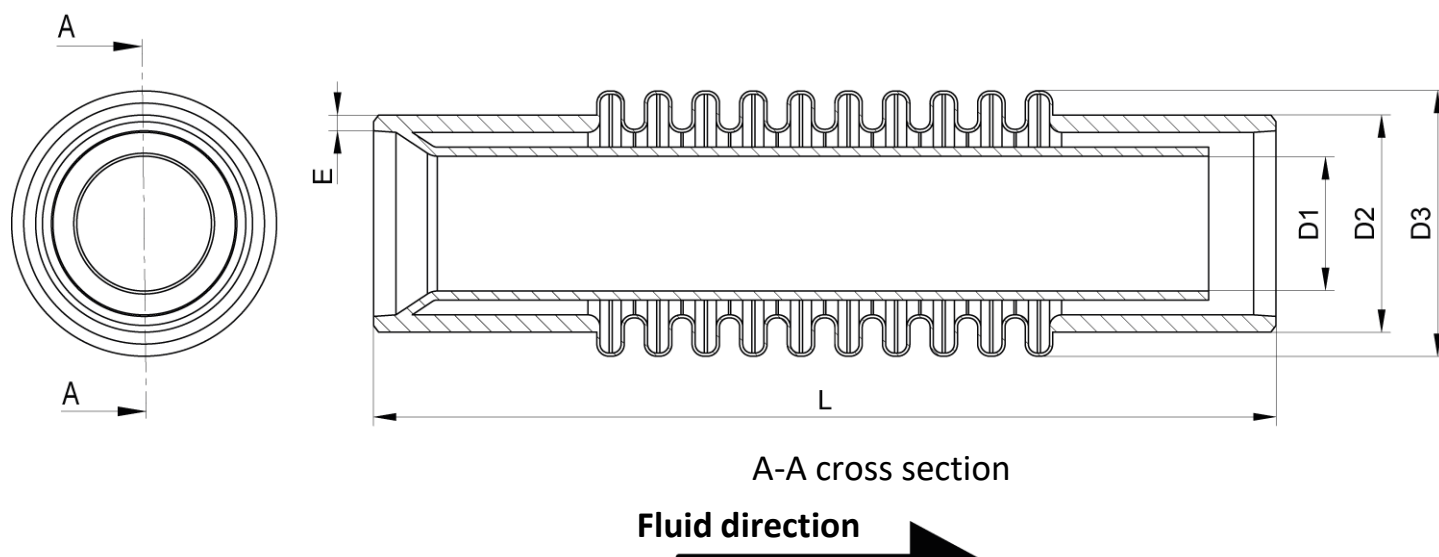


Valve accessories

Model 58882**Expansion joint for butt welding (BW)
304 stainless steel**

Specifications

Dimensions: DN40 to DN100 (1 1/2" to 4")**Connection:** to be welded (butt welding)**Operating pressure:** 10 bar**Max. Temperature:** +300°C**Material:** 304 stainless steel



DN (mm)	NB (inches)	D1 (mm)	D2 (mm)	D3 (mm)	L (mm)	E (mm)	Weight (kg)	Part number
40	1"1/2	30	48.3	58	200	3.5	0.75	258882-40
50	2"	41	60.3	70	275	4	1.50	258882-50
65	2"1/2	53	76.1	88	275	4	1.90	258882-65
80	3"	72	88.9	111	275	4	2.60	258882-80
100	4"	91	114.3	135	300	4	3.70	258882-100

Use

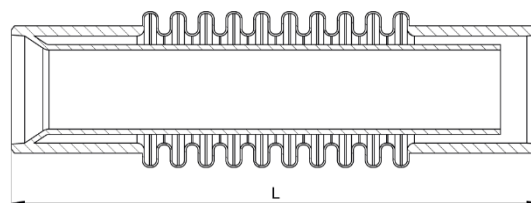
An expansion joint can absorb piping movements to make up for pipe misalignment issues, reduce vibrations and prevent pipes from breaking.

This expansion joint has an inner bellows to avoid excessive pressure losses.

Compensation

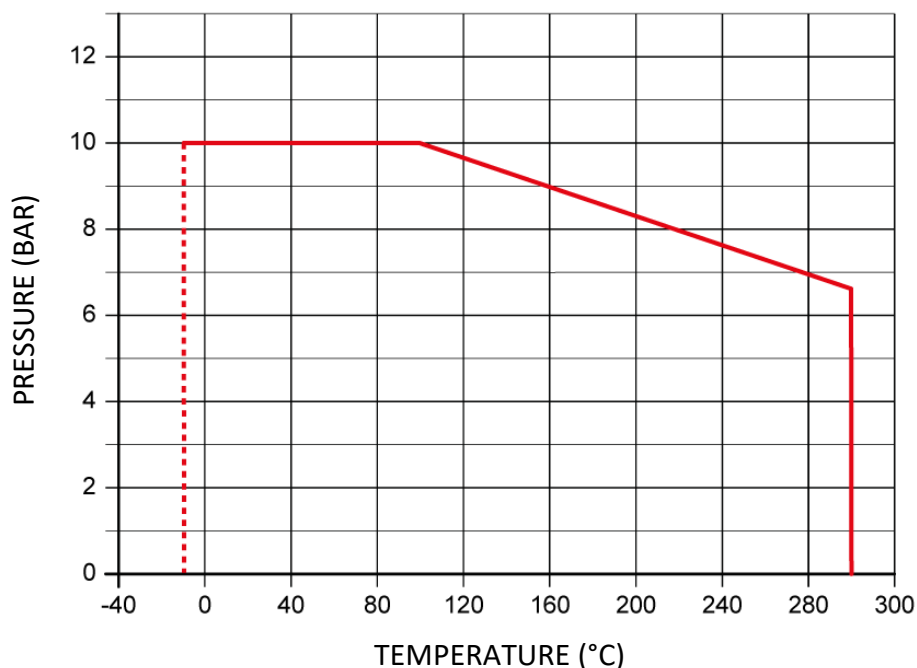
See the table below for axial compensation according to the number of cycles and the DN.

DN (mm)	NB (inches)	L (mm)	Axial compensation according to the number of cycles (mm)			Axial rigidity (N/mm)
			≤ 1000 cycles	≤ 5000 cycles	≤ 10000 cycles	
40	1"1/2	200	± 11	± 7	± 6	83
50	2"	275	± 19	± 11	± 10	97
65	2"1/2	275	± 22	± 12	± 11	140
80	3"	275	± 25	± 14	± 12	87
100	4"	300	± 42	± 24	± 21	182



Pressure and temperature

For pressure/temperature ratings, see the graph below.



Warning: If the expansion joint is used with fluids that have a temperature above 60°C then people could burn themselves if they touch it.

Béné Inox – 11 chemin de la Pierre Blanche – 69800 SAINT-PRIEST – S.A.S with 240 000 € share capital – SIREN N° 311 810 287
Tel. N°: +33 (0)4 78 90 48 22 – Fax N°: +33 (0)4 78 90 69 59 – www.bene-inox.com – bene@bene-inox.com

Technical information, illustrations and photographs are provided for information only, they are not contractual. Some may vary according to the tolerances accepted in the profession and the applicable standards. All instructions for use, disassembly and maintenance are recommendations only. These could also vary depending on product usage conditions, its installation environment and purchaser requirements – of which the purchaser alone is responsible for their definition.

Flow coefficient and pressure loss

Dimensions	DN40	DN50	DN65	DN80	DN100
	1"1/2	2"	2"1/2	3"	4"
Kv (m³/h)	63	114	248	445	748

The flow coefficient Kv defines water flow rate through a device (valve, check valve etc.) for a pressure loss (ΔP) of 1 bar. Kv is expressed mathematically as:

$$\Delta P = \frac{Q^2}{K_v^2} \quad \text{so:} \quad K_v = \frac{Q}{\sqrt{\Delta P}} \quad \begin{array}{l} Q \text{ in m}^3/\text{h} \\ \Delta P \text{ in bar} \end{array} \quad \begin{array}{l} K_v \text{ in m}^3/\text{h} \\ C_v \text{ in GPM (Gallons} \\ \text{per minute - US)} \end{array} \quad C_v = 1.16 \times K_v$$

Fluids

This expansion joint is suitable for non-abrasive and non-coagulable fluids, as long as the fluids are chemically compatible with the parts that they can come into contact with.

Assembly and maintenance instructions

Installation

You can install the expansion joint in any position.

Check that the piping support structure is dimensioned correctly and that there is enough space for the expansion joint's movements where you are planning to install it.

Check that the installation is clean and free from foreign bodies that could damage the valve.

Clean the installation so that there are no foreign bodies in the piping.

When you weld the expansion joint into place make sure that the arrow on it is pointing in the direction in which fluids will pass through it.

Check the expansion joint is operating correctly.

Pressure test the installation according to the relevant standards, but do not exceed the expansion joint's specifications.

Maintenance

An expansion joint does not require any specific maintenance if it is used in normal operating conditions.