Range 58
VALVES

Valve accessories

Model 58884 Expansion joint with galvanised (zinc-coated) steel flanges and NBR bellows

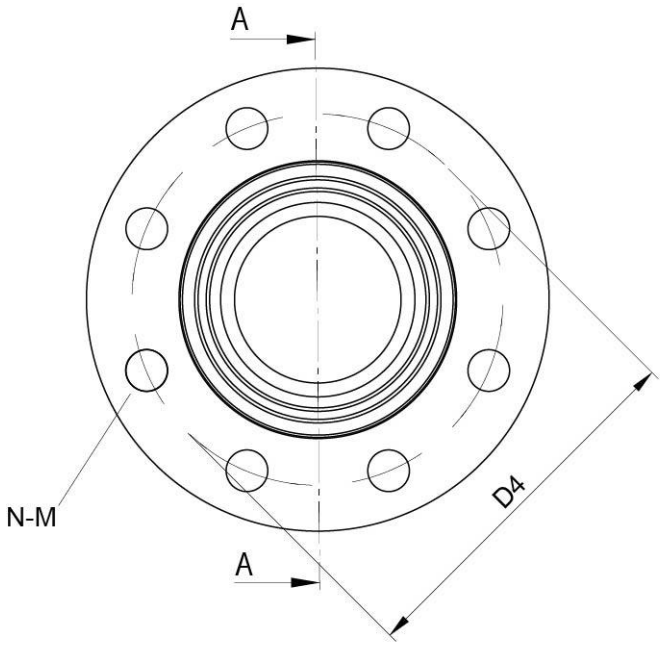
Specifications

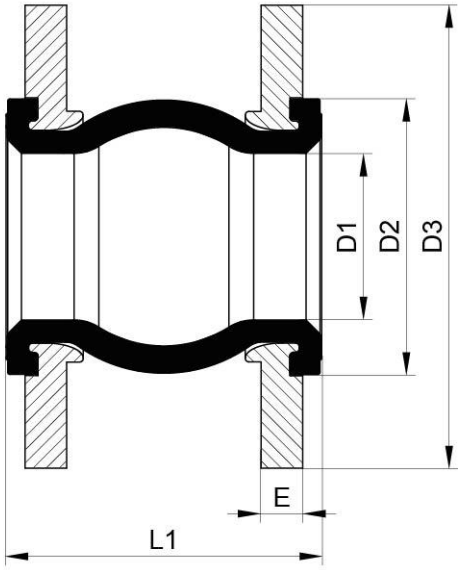
Dimensions: DN32 to DN200 (1"1/4 to 8")
Connection: flanges in accordance with EN 1092-1
Max. pressure: see page **2**
Temperature: +90°C
Material: NBR
(for the parts that can come into contact with the transported fluid)
Galvanised (zinc-coated) steel flanges

ISO 9001 BUREAU VERITAS Certification

CE

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



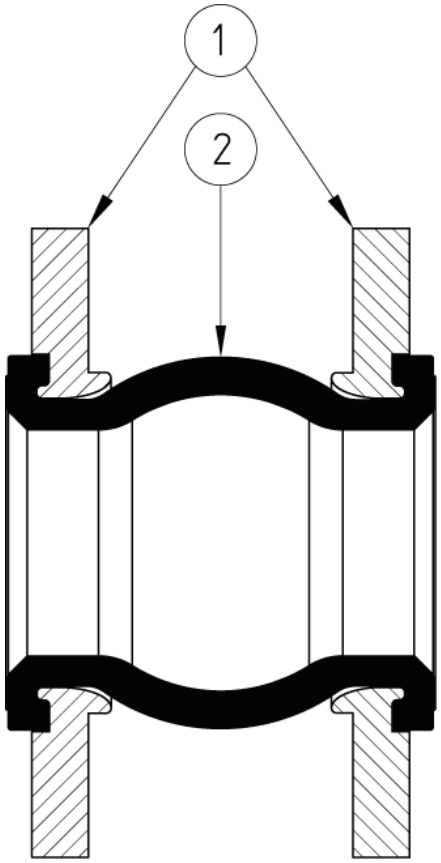


A-A cross section

DN (mm)	NB (inches)	Max. Pressure	PN flanges	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	L1 (mm)	E (mm)	M (mm)	N (Qty)	Weight (kg)	Part number
32	1"1/4	16	PN10/40	31	72	140	100	130	16	18	4	3.3	**858884-32**
40	1"1/2	16	PN10/40	39	81	150	110	130	16	18	4	3.8	**858884-40**
50	2"	16	PN10/16	49	95	165	125	130	16	18	4	4.5	**858884-50**
65	2"1/2	16	PN10/16	65	115	185	145	130	16	18	8	5.2	**858884-65**
80	3"	16	PN10/16	77	127	200	160	130	18	18	8	7.1	**858884-80**
100	4"	16	PN10/16	100	151	220	180	130	20	18	8	8.0	**858884-100**
125	5"	16	PN10/16	127	178	250	210	130	22	18	8	10.5	**858884-125**
150	6"	16	PN10/16	153	206	285	240	130	22	22	8	12.8	**858884-150**
200	8"	10	PN10	202	260	340	295	130	25	22	8	18.2	**858884-200**

Warning: the expansion joint's PN is not the same as the PN of its flanges. The maximum pressure for the expansion joint is 16 bar, except for expansion joint model **858884-200** which has a maximum pressure of 10 bar.

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

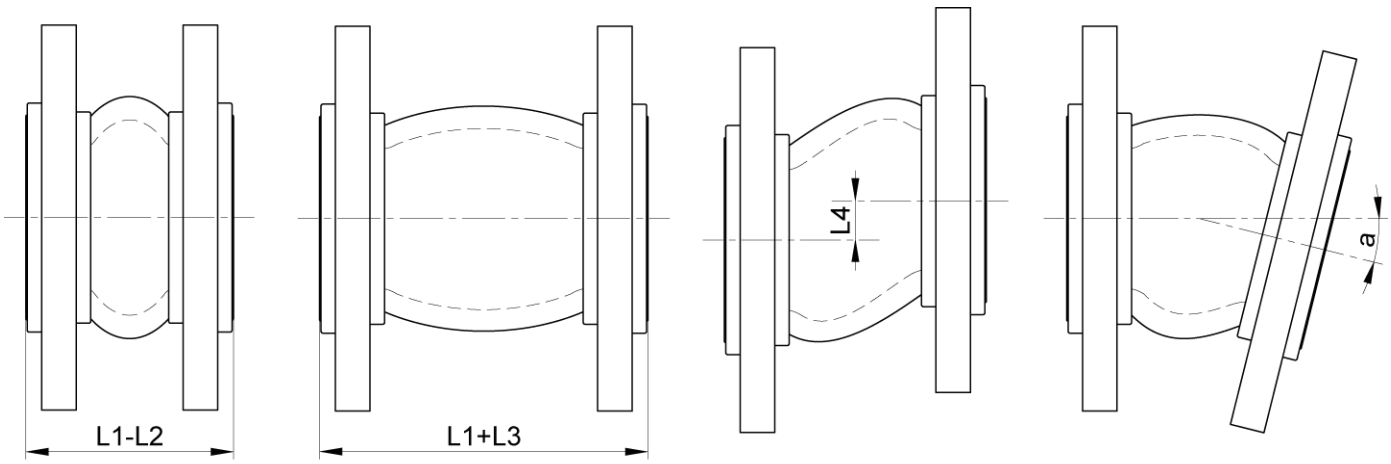


N°	Part Name	Material
1	FLANGES	GALVANISED (ZINC-COATED) STEEL
2	BELLOWS	NBR

Use

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

Compensation



Axial displacement
Compression

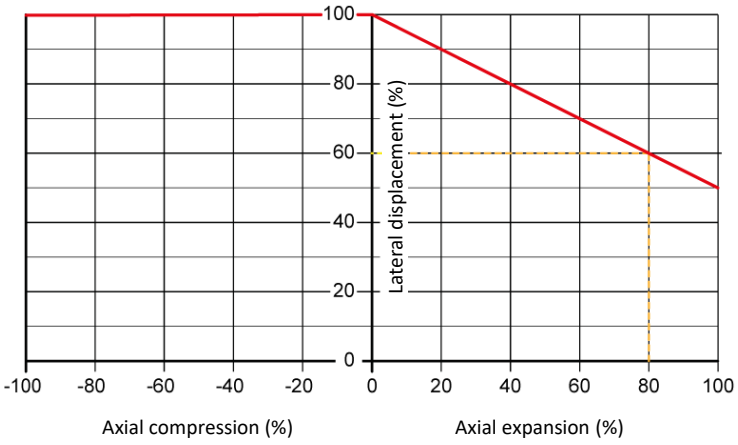
Axial displacement
Expansion

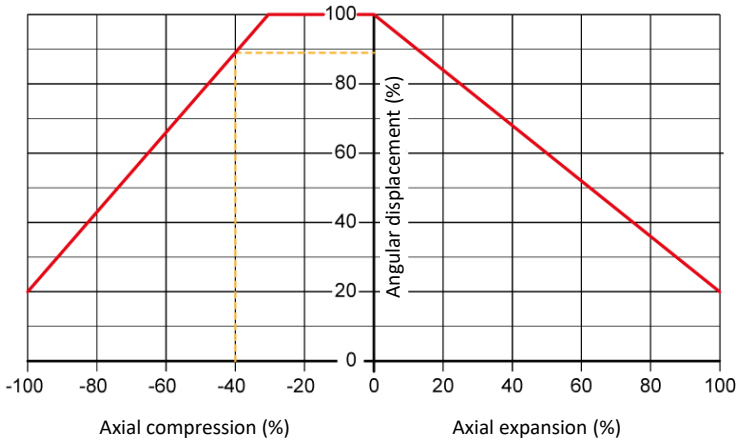
Lateral displacement
Shearing

Angular displacement

DN (mm)	NB (inches)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	a (°)	Part number
32	1"1/4	130	35	10	15	25	**858884-32**
40	1"1/2	130	35	10	15	25	**858884-40**
50	2"	130	35	10	15	25	**858884-50**
65	2"1/2	130	35	10	15	25	**858884-65**
80	3"	130	40	10	15	20	**858884-80**
100	4"	130	40	10	15	15	**858884-100**
125	5"	130	40	10	15	15	**858884-125**
150	6"	130	40	10	15	12	**858884-150**
200	8"	130	45	15	15	8	**858884-200**

If the expansion joint is affected by axial and lateral movements or axial and angular movements at the same time then the maximum displacement it can compensate for will be reduced, see the graphs below.





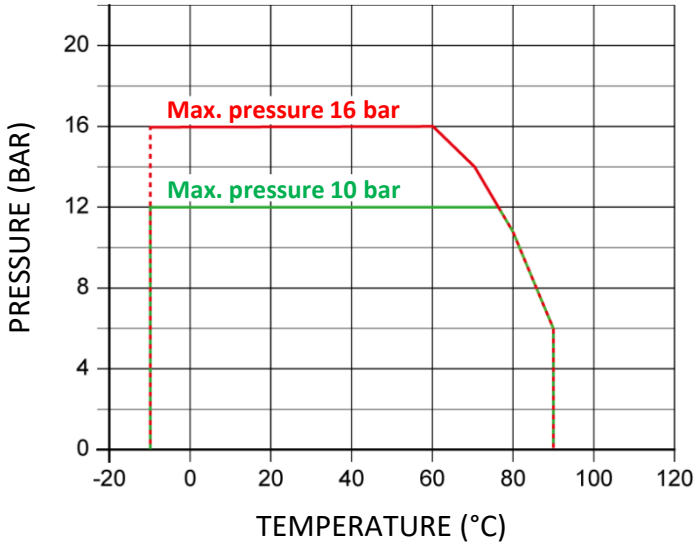
Example: **858884-32**

- Maximum expansion 10mm
- Maximum compression 35mm
- Maximum lateral displacement 15mm
- Maximum angular displacement 25mm

For an 8mm expansion, that is to say 80% of the joint's maximum expansion, the maximum simultaneous lateral displacement that can be compensated for is 60% of the expansion joint's maximum lateral displacement, i.e. 9mm.
For a 14mm compression, that is to say 40% of the joint's maximum compression, the maximum simultaneous angular displacement that can be compensated for is 89% of the expansion joint's maximum angular displacement, i.e. 22.25mm.

Pressure and temperature

For pressure/temperature ratings, see the graph below.



Fluids

This expansion joint is suitable for non-abrasive and non-coagulable fluids, as long as the fluids are chemically compatible with the bellows **2**.

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.
The expansion joint's bellows seal the flanges, so there is no need for any additional gaskets.

Check that the installation is clean and free from foreign bodies that could damage the bellows.
Clean the installation so that there are no foreign bodies in the piping.

Install the flange bolts with their head on the same side as the bellows. Tighten the bolts in a criss-cross pattern.

Do not paint the bellows or add any insulation around 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.

You may need to change the expansion joint due to wear and tear, or if a fluid has damaged it and caused a leak or malfunction.

Standards and compliance

- Connection: flanges in accordance with NF EN 1092-1.