

Fully Articulated Expansion Joints

EMFLEX fully articulated expansion joints consist of two bellows connected by a piece of pipe which permits a pipeline to move in any lateral direction, with each bellows moving through an angle of up to +/-6 degrees. These units are pressure restrained, being fitted with tie-rods, so they impose only small forces within the system and light anchors are sufficient. The main applications are where large movements have to be accommodated in the piping system or where it is impossible to fit heavy anchors.



TYPE BLF

For use on steel pipelines and is suitable for steam and hot water for heating. This unit has two stainless steel bellows and inner sleeves with carbon steel intermediate pipe, flanges and tie-rods.

TYPE BLFN

For use on copper pipelines and is suitable for condensate and domestic hot water. This unit has stainless steel internals comprising stainless steel bellows, inner sleeves, intermediate pipe and van-stone ends with carbon steel backing flanges and tie-rods.

Nominal Size	Installed Length for +/- 25mm mvt.	Force required for Maximum Deflection	Additional Length per+/- 25mm mvt. Increase
mm	mm	Newtons	mm
50	510	80	285
65	540	100	285
80	590	150	285
100	670	170	285
125	670	290	285
150	720	700	285
200	740	1400	285
250	780	2500	285

Other lengths and sizes are available. External protective sleeves are available.

Working Pressure: 16 bar (1600 kPa). **Test Pressure:** 1.5 x Working Pressure.

Design Consideration:

For details of layouts, pipe anchors and alignment guides see our design book.

Press./Temp. ratings for carbon steel PN16 Flanges.

Design Temp. (°C) 120 150 200 250 300 Working Press. Bar 16 14 12 11 9

Material Specifications:

Bellows and internal sleeves are stainless steel. For steel service the intermediate pipe, flanges and tie-rods are carbon steel. For copper service the intermediate pipe and van-stone ends are stainless steel, backing flanges and tie-rods are carbon steel