BARNVALE
DESIGN AND INNOVATION

TECHNICAL SPECIFICATION

Fully Articulated Expansion Joint for Steel Pipe Flanged PN16



Working Pressure: 16 Bar (1600kPa)

Test Pressure: 1.5 x Working Pressure

Size	Force To Deflect For +/- 50mm Movement	Installed Length For +/- 50mm Movement
25	TBC	TBC
32	TBC	TBC
40	TBC	TBC
50	1.09	410
65	2.03	450
80	3.89	470
100	3.97	520
125	10.7	570
150	12.9	590
200	20.24	630

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

Material Specifications

Convolutions: 321 Stainless Steel

Internal Sleeves: 321 Stainless Steel

Flanges: Carbon Steel

Hinges: Carbon Steel

Connecting Spool: Carbon Steel

Details

Also available for copper pipe.

Note

Typical Details Only Shown (Made To Order Specifications)

These units are often used when new mains are being connected to existing mains. They allow a lateral movement to occur.

BARNVALE
DESIGN AND INNOVATION

TECHNICAL SPECIFICATION

Angular Expansion Joint for Steel Pipe Flanged PN16



Working Pressure: 16 Bar (1600kPa)

Test Pressure: 1.5 x Working Pressure

Temperature: Up To 200°C

Size	Angular Movement	Installed Length	Force To Deflect
25	Plus / Minus 5°	195	1.27 N/mm
32	Plus / Minus 5°	195	3.04 N/mm
40	Plus / Minus 5°	200	3.04 N/mm
50	Plus / Minus 5°	133	3.34 N/mm
65	Plus / Minus 5°	133	1.47 N/mm
80	Plus / Minus 5°	133	1.47 N/mm
100	Plus / Minus 5°	133	1.27 N/mm
125	Plus / Minus 6.5°	199	3.04 N/mm
150	Plus / Minus 6.5°	199	3.04 N/mm
200	Plus / Minus 7.5°	212	3.34 N/mm
250	Plus / Minus 7.5°	212	3.04 N/mm

Material Specifications

Convolutions: 321 Stainless Steel

Internal Sleeves: 321 Stainless Steel

Flanges: Carbon Steel PN16
(Other Flanges Available)

Hinges: Carbon Steel

Details

Also available for copper and stainless steel pipe.

This type of expansion joint is used for lateral movement on heating systems.

All units are supplied at installation lengths and pre stressed.