

ANGULAR EXPANSION JOINT

FAF5300

5300



Features

- FAF External Pressurized Expansion Joints are preferred in long pipe-lines in order to use less number of expansion joints used and to reduce number of fixed points and roller bearing that increase installation costs.
- Rotary Flange or welding neck is produced in the joints.
- Absorbs high amounts of expansion consists of thermal difference.
- With the help of pressure balance maintained through fluid pressure affecting the outer bellow, sprain possibility on the bellow is prevented.
- Since bellow is isolated from environment is not affected by external forces.
- Twists that may occur is eliminated via pressure balance which is provided by fluid pressure to influence the outer surface of the bellows.
- Due to isolated from external environment the risk of impairment is put away because of external factors.
- Additionally they are favourable to be used for fluids like boiling oil in which high safety factors are preferred.
- Large amounts of axial movement can now be absorbed using a long bellows that would have otherwise squirmed.
- As assembly aids for pumps, fittings and plate heat exchangers.
- Expansion joints are used in lots of applications, where it concerns safety, health, environment, durability and lifetime. Bellows are made from stainless steel strip which is first welded to a thin walled tube and formed to a bellow afterwards.
- It can be manufactured as rotary flanges (FAF5210), welding ends (FAF5220)
- Stock piled for quick delivery.

Temperature

- -20, +430 °C

PRODUCTION STANDARTS

DN32 → DN250
PN 16

Design	DIN 30681
Connection	Flanged End EN 1092-1 / ISO 7005-1 Welding End EN 12627
Face to Face	DIN 30681
Marking	EN 19 / DIN 30681
Tests	DIN 30681

Product Description

FAF5200 External Pressurized Expansion Joint is preferred in pipe-lines that expansion arising from temperature differences.

Purpose

- Absorbs large amounts of axial compression and extension.
- Eliminates pressure instability.
- Does not restrain the pressure thrust
- Also absorbs pipeline expansion, compensates for misalignment, eliminates piping stresses.
- Ends costly failure and downtime caused by pipeline vibration transmissions
- Customized to solve your vibration problem

Versions

- Type: universal, lateral and angular expansion joints
- Pipe connection type: flanged, threaded
- Bellows structure: rated to the pressure and temperature load
- The externally pressurised expansion joints are customised solutions and are available in all dimensions, all sizes and all materials.

Scope of Application

- Steam
- Hot & cold water
- Potable Water
- Superheated Water
- Gas Networks
- Chemicals
- Pressurized Air
- Central heating
- Pumps & compressors

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MATERIAL SELECTION

Bellow 1.4301 - AISI 304 Stainless Steel
1.4401 - AISI 316 Stainless Steel
1.4541 - AISI 321 Stainless Steel

Body 1.0037 - ST 37 Steel
1.4301 - AISI 304 Stainless Steel
1.4401 - AISI 316 Stainless Steel

Flange 1.0037 - ST 37 Steel
1.4301 - AISI 304 Stainless Steel
1.4401 - AISI 316 Stainless Steel

PRODUCTS MODEL CODES

FAF5311	Angular Expansion Joint, Flanged, 50-100mm
FAF5312	Angular Expansion Joint, Flanged, 100-100mm
FAF5313	Angular Expansion Joint, Flanged, 100-150mm
FAF5314	Angular Expansion Joint, Flanged, 100-200mm
FAF5321	Angular Expansion Joint, Welding End, 50-100mm
FAF5322	Angular Expansion Joint, Welding End, 100-100mm
FAF5323	Angular Expansion Joint, Welding End, 100-150mm
FAF5324	Angular Expansion Joint, Welding End, 100-200mm
FAF5000	RUBBER EXPANSION JOINT - LONG TYPE
FAF5100	AXIAL EXPANSION JOINT
FAF5200	EXTERNAL PRESSURIZED EXPANSION JOINT
FAF5400	DILATATION EXPANSION JOINT
FAF5500	VIBRATION EXPANSION JOINT
FAF5600	DECORATIVE EXPANSION JOINT

VALVE TEST PRESSURE (Bar)

MAX. OPERATING PRESSURE	BODY / SHELL TEST	SEAT TEST
16	24	17,6

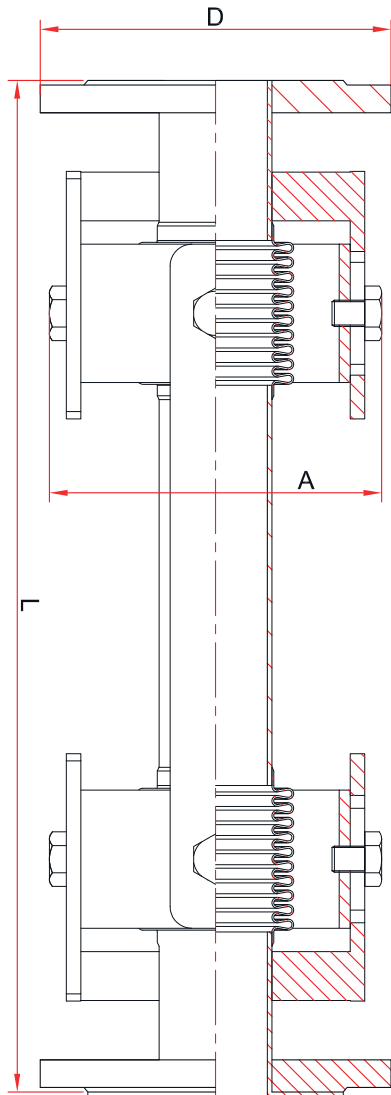
100% of the valves are subjected to hydrostatic tests at FAF facilities.

Note

- For proper use and safety precautions please follow the installation and operating instructions.

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Technical Details & Drawing, Dimensions



DN	WELDING END ANGULAR EXPANSION JOINT						
	DIMENSION						
	A	d	Expansion Range and Length (L +/-5)				
X			Y,Z: +/- 50	Y,Z +/- 100	Y,Z +/- 150	Y,Z +/- 200	
mm							
32	135	42,4	100	715	915	1115	1315
40	135	48,3	100	715	915	1115	1315
50	150	60,3	100	780	980	1180	1380
65	165	76,1	100	780	980	1230	1480
80	205	88,9	100	830	1030	1280	1530
100	255	114,3	100	830	1030	1280	1530
125	285	139,7	100	960	1160	1460	1760
150	370	165,1	100	960	1160	1460	1760
200	405	219,1	100	1150	1350	1700	2050
250	455	273	100	1150	1350	1700	2050

FLANGED ANGULAR EXPANSION JOINT							Effective Area cm ²
DIMENSION							
D	A	Expansion Range and Length (L +/-5)					
		X	Y,Z: +/- 50	Y,Z +/- 100	Y,Z +/- 150	Y,Z +/- 200	
140	135	100	725	925	1125	1325	21
150	135	100	725	925	1125	1325	24
165	150	100	790	990	1190	1390	36
185	165	100	790	990	1240	1490	57
200	205	100	840	1040	1290	1540	77
220	255	100	840	1040	1290	1540	126
250	285	100	970	1170	1470	1770	180
285	370	100	970	1170	1470	1770	263
340	405	100	1160	1360	1710	2060	434
405	455	100	1160	1360	1710	2060	670

* Valves can be produced with bigger sizes when requested.