

DILATATION EXPANSION JOINT

FAF5400

5400



Features

- Consisting of two bellows are separated by an intermediate pipeline universal compensator.
- Used for absorbing large lateral movements.
- In general, after crossing points on the basis of buildings with different floor exercises and building collapses it is used to prevent damage to the existing pipeline.
- The expansion joint allows large lateral movement in all planes, this movement can be increased by increasing the length of the central pipe.
- Can take greater axial, lateral and angular movements than a single tied expansion joint.
- If the universal tied expansion joint is designed with only two tie rods, equally spaced @ 180 degree, the expansion joint will take both lateral and angular movements.
- To restrict the angular movement, four tie rods are provided at interval of 90 degrees, around the circumference of the expansion joint.
- If more than two tie rods are used then this kind of expansion joint will only take lateral movement.
- Generally used in transition points of the buildings which has different base levels, in ground movements and to avoid pipeline damages after building collapses.
- Usually are provided with control rods to distribute the movement equally between the two bellows. Control rods are not designed to withstand pressure thrust.
- Can be manufactured in flanged type (FAF5410) and welding ne-type (FAF5420)
- 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
Corrosion Protection	Electrostatic Epoxy

Product Description

FAF5400 Dilatation Expansion Joints also named as universal expansion joints are made of two bellows separated by an intermediary pipe relieves the stress that may occur on the pipeline by absorbing wide lateral movements.

Advantages

- Simple and robust construction
- Absorbs large amount of lateral, angular and axial movements
- Inexpensive
- Easy to install
- Low maintenance

Versions

- Type: universal, lateral and angular expansion joints
- Pipe connection type: flanged, threaded
- Rubber quality of the bellows: rated to the media transported in the pipes
- Bellows structure: rated to the pressure and temperature load

Scope of Application

- Dilatation
- Fire fighting installations
- Pipelines
- Storage tanks
- Heat exchangers
- Pumps & compressors



DILATATION EXPANSION JOINT

FAF5400

5400

PRODUCTS MODEL CODES	
FAF5411	Dilatation Expansion Joint, Flanged, A:30mm, L:25mm
FAF5412	Dilatation Expansion Joint, Flanged, A:30mm, L:50mm
FAF5413	Dilatation Expansion Joint, Flanged, A:30mm, L:75mm
FAF5414	Dilatation Expansion Joint, Flanged, A:30mm, L:100mm
FAF5415	Dilatation Expansion Joint, Flanged, A:60mm, L:25mm
FAF5416	Dilatation Expansion Joint, Flanged, A:60mm, L:50mm
FAF5417	Dilatation Expansion Joint, Flanged, A:60mm, L:75mm
FAF5418	Dilatation Expansion Joint, Flanged, A:60mm, L:100mm
FAF5421	Dilatation Expansion Joint, Welded, A:30mm, L:25mm
FAF5422	Dilatation Expansion Joint, Welded, A:30mm, L:50mm
FAF5423	Dilatation Expansion Joint, Welded, A:30mm, L:75mm
FAF5424	Dilatation Expansion Joint, Welded, A:30mm, L:100mm
FAF5425	Dilatation Expansion Joint, Welded, A:60mm, L:25mm
FAF5426	Dilatation Expansion Joint, Welded, A:60mm, L:50mm
FAF5427	Dilatation Expansion Joint, Welded, A:60mm, L:75mm
FAF5428	Dilatation Expansion Joint, Welded, A:60mm, L:100mm
FAF5000	RUBBER EXPANSION JOINT - LONG TYPE
FAF5100	AXIAL EXPANSION JOINT
FAF5200	EXTERNALLY PRESSURIZED EXPANSION JOINT
FAF5300	EXTERNAL PRESSURIZED EXPANSION JOINT
FAF5500	VIBRATION EXPANSION JOINT
FAF5600	DECORATIVE EXPANSION JOINT

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

VALVE TEST PRESSURE (Bar)

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

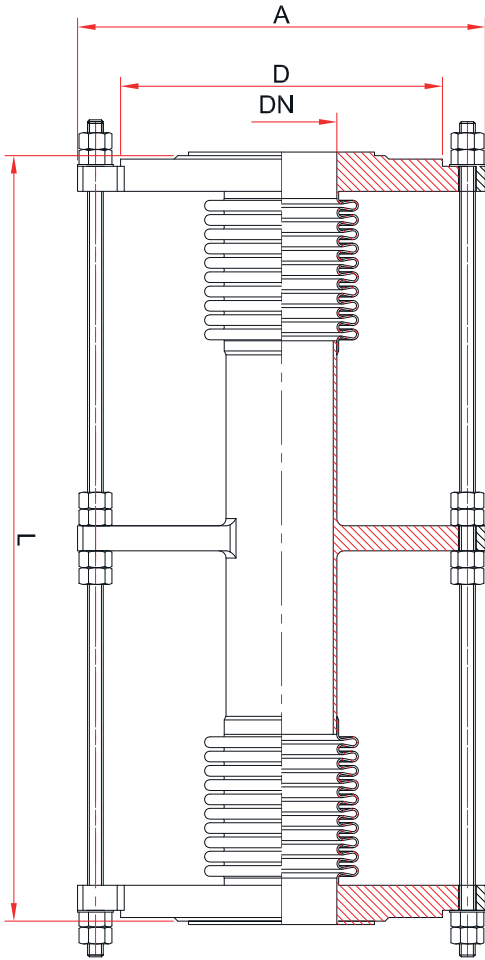
100% of the valves are subjected to hydrostatic tests at FAF facilities.

Note

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

DILATATION EXPANSION JOINT FAF5400

Technical Details & Drawing, Dimensions



DN	WELDING END ANGULAR EXPANSION JOINT						
	DIMENSION						
	A	d	Expansion Range and Length (L +/- 5)				
X			Y,Z:+/-25	Y,Z+/-50	Y,Z+/-75	Y,Z+/-100	
mm							
32	130	42,4	30	520	620	720	820
40	135	48,3	30	530	630	730	830
50	160	60,3	30	580	680	780	880
65	185	76,1	60	590	690	790	890
80	220	88,9	60	630	730	830	930
100	255	114,3	60	630	730	830	930
125	280	139,7	60	680	850	950	1050
150	335	165,1	60	680	850	950	1050
200	410	219,1	60	750	920	1020	1120
250	490	273	60	820	1000	1100	1200

FLANGED DILATATION EXPANSION JOINT							
DIMENSION							Effective Area cm ²
D	A	Expansion Range and Length (L +/- 5)					
		X	Y:+/-25	Y:+/-50	Y:+/-75	Y:+/-100	
140	200	30	250	350	450	550	21
150	210	30	260	360	460	560	24
165	235	30	320	420	520	620	36
185	255	60	330	430	530	630	57
200	290	60	370	470	570	670	77
220	310	60	370	470	570	670	126
250	340	60	430	600	700	800	180
285	395	60	430	600	700	800	263
340	470	60	500	670	770	870	434
405	555	60	570	750	850	950	670

* Valves can be produced with bigger sizes when requested.