

Product Code	Definition
DB30 - F	Externally Pressurised Expansion Joints Flanged Axial 30mm Expansion
DB60 - F	Externally Pressurised Expansion Joints Flanged Axial 60mm Expansion
DB90 - F	Externally Pressurised Expansion Joints Flanged Axial 90mm Expansion
DB120 - F	Externally Pressurised Expansion Joints Flanged Axial 120mm Expansion

GENERAL

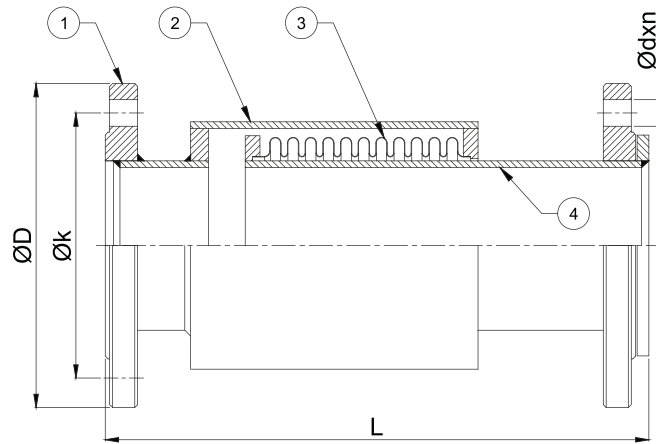
External pressurized axial metal expansion joints are specially designed for use in pipe systems where high amounts of axial compression and elongation occur. Due to the structure of the external pressurized axial metal expansion joints, the flow and pressure of the media is given to the outer surface of the bellows. Outer pressurization of the bellows eliminates pressure instabilities and allows the absorption of large amounts of axial expansion. In this way, the amount of expansion joint used in the system is minimized.



Standard Product Materials		Optional Product Materials
Bellows	1.4301 (AISI 304)	1.4541 / 1.4401 / Titanium / Incoloy 800H / Inconel etc.
Inside / Outside Pipe	1.0038 (St 37-2)	Stainless Steel
Flange	1.0038 (St 37-2)	Stainless Steel

Design Parameters	
Design Pressure	16 Bar (1 Bar...64 Bar Optional)
Design Temperature	+20 °C (-90°C...+550 °C Optional)
Diameters	DN25 (1")...DN2500 (100")
Movements	30mm (-20, +10) / 60mm (-40, +20) / 90mm (-70, +20) / 120mm (-90, +30)
Design Standards	EJMA, EN 14917
Certifications	TSE, CE - Module H (Optional) - EAC

**Please contact our sales team for your special requests.



Part Number	Specifications	
	Name	Material
1	Flange	1.0038 (S235JR / St37-2)
2	Outside Pipe	1.0038 (S235JR / St37-2)
3	Bellows	1.4301 (AISI 304)
4	Inside Pipe	1.0038 (S235JR / St37-2)

Diameters		LENGTH (L = mm)				ØD (mm)	Øk (mm)	Ød x n (mm)	Effective Area (cm ²)	Axial Spring Rate (N/mm)			
		DB30-F	DB60-F	DB90-F	DB120-F					X:30mm	X:60mm	X:90mm	X:120mm
		X:30mm	X:60mm	X:90mm	X:120mm								
DN25	1"	315	415	510	550	115	85	14*4	19,0	183,0	122,0	97,6	86,1
DN32	1 1/4"	325	425	520	550	140	100	18*4	19,0	183,0	122,0	97,6	86,1
DN40	1 1/2"	335	435	535	550	150	110	18*4	24,7	146,5	102,6	73,2	60,3
DN50	2"	340	460	540	560	165	125	18*4	38,7	132,2	80,8	66,1	51,9
DN65	2 1/2"	355	460	555	570	185	145	18*4	58,0	361,8	221,2	165,8	61,3
DN80	3"	355	465	570	590	200	160	18*8	80,5	220,8	138,0	92,0	73,6
DN100	4"	360	465	600	620	220	180	18*8	129,0	233,7	133,5	85,0	66,7
DN125	5"	375	485	600	620	250	210	18*8	191,8	166,2	95,0	66,5	51,1
DN150	6"	385	500	625	645	285	240	22*8	262,7	289,2	165,2	110,1	96,4
DN200	8"	435	560	700	720	340	295	22*12	453,5	157,8	97,1	63,1	60,1
DN250	10"	460	600	750	770	405	355	26*12	698,4	151,7	75,8	50,5	39,9
DN300	12"	350	460	540	670	460	410	26*12	967,0	297,4	185,9	123,9	92,9
DN350	14"	430	530	705	780	520	470	26*16	1149,6	405,4	231,7	147,4	114,8
DN400	16"	455	555	730	805	580	525	30*16	1517,7	356,5	178,2	118,8	89,1
DN450	18"	480	580	755	830	640	585	30*20	1884,2	414,2	207,1	138,0	103,5
DN500	20"	505	605	780	855	715	650	33*20	2282,5	522,4	313,4	195,9	156,7

** X value represents axial movement. Please contact our technical department for different movement requirements.

** Flange diameters are according to PN16 pressure class.