J10
Axial Expansion Joint

Product Description

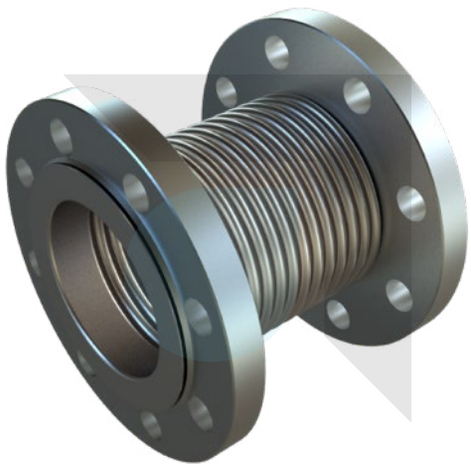
DENZ J10 Axial Expansion Joints are designed to absorb axial movements (extension and compression in its longitudinal axial direction). Axial Expansion Joints with a relatively compact build-in length can absorb the thermal expansion of a straight pipe line section between two fix points. Movement compensation can be achieved in a simple and cost-efficient manner with this method. All types of connectors can be used with J10 joints, including welded or rotatable flanges.

Body	Flange	Liner
1.4301 - AISI 304	1.0037 - ST 37 Steel	1.4301 - AISI 304
1.4401 - AISI 316	1.4301 - AISI 304	1.4401 - AISI 316
1.4541 - AISI 321	1.4401 - AISI 316	1.4541 - AISI 321

Production References	
Size Range	DN80-1000
Pressure Range	PN10-16-25-40
Temperature	550°C
Design	EN 14917 & EJMA
Face to Face	EN 14917
Connection	EN 1092-2 Rotating Flanged, Fixed Flanged, Welding End
Testing	EN12266-1
Marking	EN 19
Expansion Range	30 mm (-20+10), 45 mm (-30+15), 60 mm (-40+20)

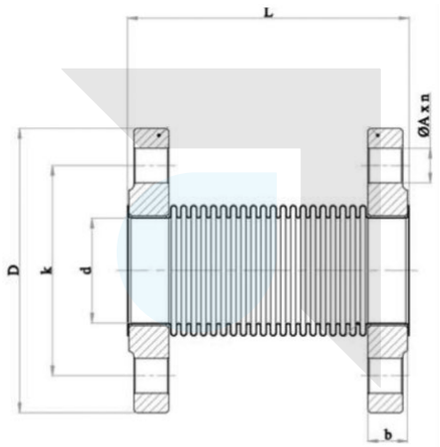
Type No	Product Variations		
J10R30W	Rotating Flanged	ΔL=30mm.	Without Liner
J10R60W	Rotating Flanged	ΔL=60mm.	Without Liner
J10R30L	Rotating Flanged	ΔL=30mm.	With Liner
J10R60L	Rotating Flanged	ΔL=60mm.	With Liner
J10F30W	Fixed Flanged	ΔL=30mm.	Without Liner
J10F60W	Fixed Flanged	ΔL=60mm.	Without Liner
J10F30L	Fixed Flanged	ΔL=30mm.	With Liner
J10F60L	Fixed Flanged	ΔL=60mm.	With Liner
J10W30W	Welding End	ΔL=30mm.	Without Liner
J10W60W	Welding End	ΔL=60mm.	Without Liner
J10W30L	Welding End	ΔL=30mm.	With Liner
J10W60L	Welding End	ΔL=60mm.	With Liner

Product Features



- As well as reducing vibration, reducing noise, relieving stress, and compensating for misalignment, DENZ Axial Expansion Bellows provide a range of other benefits.
- Adapts to thermal differences and absorbs differences.
- The liner option prevents errosion on the bellows that could occur at high flow rates due to vibrations and obrasions.
- Pumps, compressors, and other mechanical equipment will operate more efficiently when metal connectors are used.
- Permits balancing of pipeline lateral and angular movements.
- Due to the rotary flanges, this product is easy to install.
- Reduces the sound transmitted through solids on pumps and compressors caused by mechanical vibrations.
- Provides compensation for thermal movements and vibrations in flue gas ducts of boilers and engines.
- Pumps, fittings and plate heat exchangers may be assembled with the assistance of these tools.
- The use of expansion joints is widespread, particularly in applications that are concerned with safety, health, the environment, durability, and long-term performance.
- Bellows are made from stainless steel strip which is first welded to a thin walled tube and formed to a bellow afterwards.
- There are several types of connection types available, including rotary flanges, welding ends, and fixed flanges.
- A large quantity of stock has been accumulated for quick delivery.

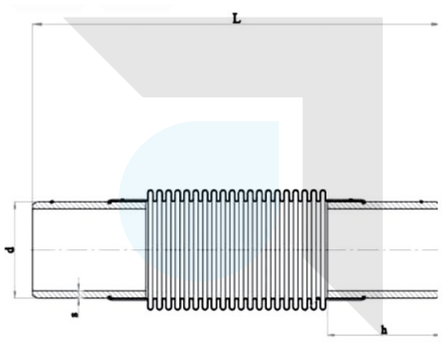
Dimensions



Nominal Size		L (mm.) Expansion Range (mm.)			D	d	k	b	n	A	Effective Area (cm²)	Pressure (bar)
DN	Inch	30	45	60								
25	1”	110	-	-	115	43	85	18	4	14	18	
32	1 1/4”	110	-	-	140	43	100	18	4	18	18	
40	1 1/2”	120	150	-	150	49	110	18	4	18	22	
50	2”	120	150	180	165	61	125	18	4	18	36	
65	2 1/2”	120	150	180	185	77	145	18	4	18	58	
80	3”	120	150	180	200	89	160	20	8	18	78	16
100	4”	120	150	185	220	115	180	20	8	18	124	
125	5”	125	155	190	250	140	210	22	8	18	180	
150	6”	130	155	200	285	169	240	22	8	22	252	
200	8”	150	190	230	340	220	295	24	12	22	430	
250	10”	165	205	245	405	274	355	26	12	26	660	
300	12”	165	205	245	445	324	400	26	12	22	910	
350	14”	170	215	255	505	356	460	26	16	22	1060	
400	16”	170	210	255	565	407	515	26	16	26	1420	10
450	18”	185	230	270	615	458	565	28	20	26	1750	
500	20”	195	235	285	670	509	620	28	20	26	2180	
600	24”	170	215	240	755	611	705	24	20	26	3110	
700	28”	190	245	270	860	712	810	24	24	26	4250	
800	32”	170	200	230	975	815	920	24	24	30	5510	6
900	36”	190	225	255	1075	916	1020	26	24	30	6900	
1000	40”	165	205	205	1175	1018	1120	26	28	30	8580	

Units: mm / indicative dimensions & weights

Dimensions



Nominal Size		L (mm.) Expansion Range (mm.)			D	d	k	Effective Area (cm²)	Bar)
DN	Inch	30	45	60					
25	1”	180	-	-	33.7	2.6	50	18	
32	1 1/4”	180	-	-	42.4	3.2	50	18	
40	1 1/2”	190	220	-	48.3	3.2	50	22	
50	2”	185	215	240	60.3	3.6	50	36	
65	2 1/2”	185	215	240	76.1	3.6	50	58	
80	3”	185	215	245	88.9	4	50	78	16
100	4”	200	230	265	114.3	4.5	60	124	
125	5”	200	230	265	139.7	5	60	180	
150	6”	245	270	315	165	5	80	252	
200	8”	265	305	340	219.1	4.5	80	430	
250	10”	310	360	395	273	5.6	100	660	
300	12”	310	360	395	323.9	5.6	100	910	
350	14”	320	370	405	355.6	6.3	100	1060	
400	16”	320	360	400	406.4	7.1	100	1420	10
450	18”	330	375	420	457	8	100	1750	
500	20”	340	385	430	508	8	100	2180	
600	24”	320	360	390	610	g	100	3110	
700	28”	340	385	425	711	8	100	4250	
800	32”	320	340	380	813	8	100	5510	6
900	36”	335	360	405	914	8	100	6900	
1000	40”	315	305	350	1016	8	100	8580	

Units: mm / indicative dimensions & weights