

# V601

## AXIAL EXPANSION JOINT



### Product Description

TVN V601 Metallic pipe expansion joints can withstand the design temperatures, pressures, as well as, providing the capacity which is necessary to absorb thermal growth or distraction of the piping system.



Technical Data	
Size range	DN25 - DN1000
Pressure range	PN10 - 16 - 25 - 40
Temperature	-10°C to +550 °C
Design	EN 14917 & EJMA
Face to Face	EN 14917
Connection Standard	EN 1092-2 / ISO 7005-2 Rotating Flanged, Fixed Flanged, Welding End
Testing	EN 12266-1
Marking	EN 19
Expansion Range	30 mm. ( -20 + 10 ), 45 mm. ( -30+15 ) 60 mm. ( -40+20 )

### Application Range

- Hot & Cold Water
- Superheated water, Steam
- Industrial Applications
- Marine & Exhaust systems
- HVAC lines

### Related Products

- V801 Globe Valve
- V802 Bellow Seal Globe Valve



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### Product Features

- Can absorb axial, lateral or angular movements due to thermal differences or pipe misalignment, helps to absorb vibrations
- Highly flexible, short installation length
- High movement capacity and resistance high temperatures and chemicals
- Axial type is the common one through all industries
- Default type is unrestrained type. Restrained type is also available
- Designed for high temperature usage
- Rotating flange, Fixed flange or Welding Neck connection type are available
- It consists SS bellows and accompanying flanges or welded pipes with or without inner liner

### Material Variations :

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

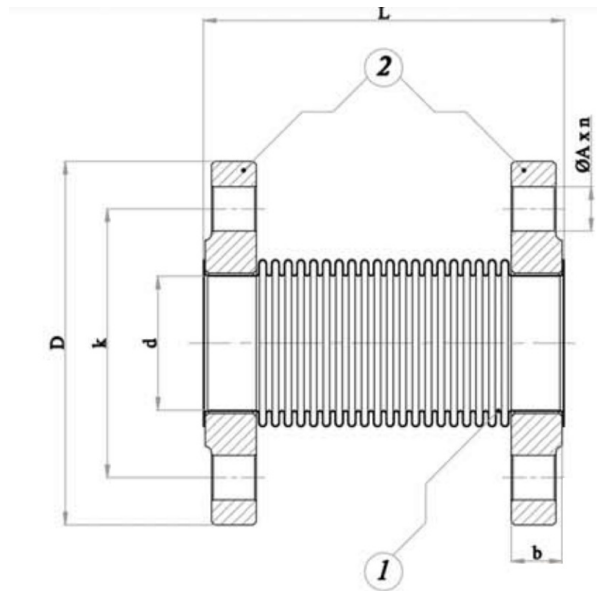
Type No	Product Variations		
R30W	Rotating Flanged	$\Delta L=30mm.$	Without Liner
R60W	Rotating Flanged	$\Delta L=60mm.$	Without Liner
R30L	Rotating Flanged	$\Delta L=30mm.$	With Liner
R60L	Rotating Flanged	$\Delta L=60mm.$	With Liner
F30W	Fixed Flanged	$\Delta L=30mm.$	Without Liner
F60W	Fixed Flanged	$\Delta L=60mm.$	Without Liner
F30L	Fixed Flanged	$\Delta L=30mm.$	With Liner
F60L	Fixed Flanged	$\Delta L=60mm.$	With Liner
W30W	Welding End	$\Delta L=30mm.$	Without Liner
W60W	Welding End	$\Delta L=60mm.$	Without Liner
W30L	Welding End	$\Delta L=30mm.$	With Liner
W60L	Welding End	$\Delta L=60mm.$	With Liner

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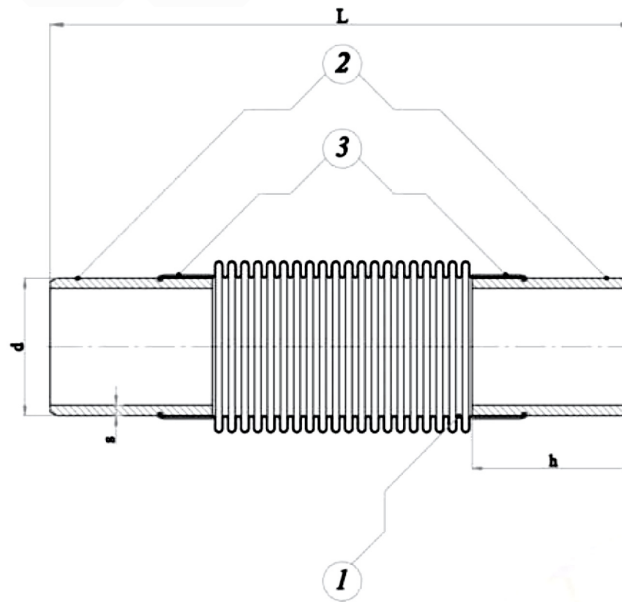


### Dimensions Table - Flanged Type



Nominal Size		L (mm.)			D	d	k	b	n	A	Effective Area (cm <sup>2</sup> )	Pressure (bar)
		Expansion Range (mm.)										
DN	Inch	30	45	60								
25	1"	110	-	-	115	43	85	18	4	14	18	16
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	
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	10
350	14"	170	215	255	505	356	460	26	16	22	1060	
400	16"	170	210	255	565	407	515	26	16	26	1420	
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	6
700	28"	190	245	270	860	712	810	24	24	26	4250	
800	32"	170	200	230	975	815	920	24	24	30	5510	
900	36"	190	225	255	1075	916	1020	26	24	30	6900	
1000	40"	165	205	205	1175	1018	1120	26	28	30	8580	

### Dimensions Table - Welded Type



Nominal Size		L (mm.)			d	s	h	Effective Area (cm <sup>2</sup> )	Pressure (bar)
		Expansion Range (mm.)							
DN	Inch	30	45	60					
25	1"	180	-	-	33.7	2.6	50	18	16
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	
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	10
350	14"	320	370	405	355.6	6.3	100	1060	
400	16"	320	360	400	406.4	7.1	100	1420	
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	6
700	28"	340	385	425	711	8	100	4250	
800	32"	320	340	380	813	8	100	5510	
900	36"	335	360	405	914	8	100	6900	
1000	40"	315	305	350	1016	8	100	8580	