



## TIED DOUBLE 3.5-25 BAR

### Specification

Bellows : Austenitic Stainless Steel  
Weld End : Carbon Steel or Stainless Steel  
Standard : JIS, ANSI, DIN

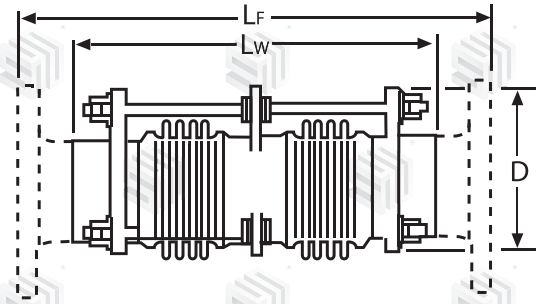
**Notes**

- Unit weights are estimated and referred to weld end unit.
- To increase lateral movement capability, the overall length of the unit must be increased. New length of unit = Original length + NX

**Where**

N is member of additions ± 25mm increments of lateral movement required.

X is tabulated below. New lateral spring rate =  $\frac{1 \times \text{Original lateral rate}}{(N + 1)^2}$



N.B.	Press	Movement		Overall length		Pipe O.D.	Thick	Weld end	Flange end	X Length	Angl'r mvt./ bellow	Lat'l spring rate	Angl'r spring rate	Approx. Wt.
		Total Lat'l mm	3 Lat'l mm	Weld end Lw mm	Flange end LF mm									
mm	Bar g					mm	mm	Dw mm	DF mm	mm	3 Deg	N/mm	NM/'"	Kg
80	6	50	25	555	575	88.9	To be Specified by Purchaser	230	280	197	10	4.3	1.6	13
	10	50	25	555	575	88.9		230	280	197	10	4.3	1.6	13
	16	50	25	570	590	88.9		260	335	200	10	6.2	1.6	14
	25	50	25	560	580	88.9		260	335	200	10	12.3	4.3	18
100	6	50	25	630	650	114.3		255	310	224	10	4.9	3	15
	10	50	25	630	650	114.3		255	310	224	10	4.9	3	17
	16	50	25	650	680	114.3		310	410	235	10	6.7	3	21
	25	50	25	620	640	114.3		310	410	220	10	16.1	6.8	32
125	6	50	25	630	650	141.3		280	360	224	10	8.3	5.1	24
	10	50	25	630	650	141.3		280	360	224	10	8.3	5.1	25
	16	50	25	650	670	141.3		330	435	235	10	11.4	5.1	30
	25	50	25	620	640	141.3		330	435	220	10	25.2	10.6	39
150	6	50	25	680	700	168.3		340	385	221	10	20.3	8.7	30
	10	50	25	680	700	168.3		340	385	221	10	20.3	8.7	32
	16	50	25	700	720	168.3		385	485	231	10	27.8	8.7	43
	25	50	25	680	700	168.3		385	485	220	10	44.6	18.9	46
200	6	50	25	700	720	219.1	410	480	221	10	40.6	17.2	45	
	10	50	25	700	720	219.1	410	480	221	10	40.6	17.2	47	
	16	50	25	720	740	219.1	460	630	231	10	55.5	17.2	56	
	25	50	25	700	740	219.1	460	630	220	10	88.9	37.6	60	
250	6	50	25	740	760	273	480	535	221	10	74	31.4	80	
	10	50	25	740	760	273	480	585	221	10	74	31.4	85	
	16	50	25	760	780	273	540	685	231	10	101	31.4	90	
	25	50	25	740	760	273	540	685	220	10	162	68.5	130	



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		Total Lat'l mm	3 Lat'l mm	Weld end Lw mm	Flange end LF mm									
300	3.5	50	25	755	790	323.9		525	620	218	9.5	183	36.9	65
	6	50	25	770	790	323.9		565	660	224	9.5	168	73.8	85
	10	50	25	770	790	323.9		565	660	224	9.5	168	73.8	95
	16	50	25	805	825	323.9		610	710	242	9.5	211	110.7	105
	25	50	25	895	915	323.9		610	710	286	9.5	320	229	160
350	3.5	50	25	755	610	355.6		630	630	218	8.5	192	48.5	70
	6	50	25	820	630	355.6		670	790	224	8.5	221	96.9	130
	10	50	25	820	630	355.6		670	790	224	8.5	221	96.9	185
	16	50	25	905	735	355.6		695	855	242	8.5	285	145	225
	25	50	25	1045	735	355.6		745	895	286	8.5	418	298	385
400	3.5	50	25	810	630	406.4		685	740	218	7.5	217	70.5	105
	6	50	25	870	655	406.4		730	870	224	7.5	321	141	190
	10	50	25	870	655	406.4		730	870	224	7.5	321	141	255
	16	50	25	995	760	406.4		755	940	242	7.5	413	211	320
	25	50	25	1095	760	406.4		810	990	286	7.5	611	436	505
450	3.5	50	25	865	650	457.2		760	785	224	6.5	217	94.5	135
	6	50	25	820	680	457.2		815	965	224	6.5	430	189	250
	10	50	25	820	680	457.2		815	965	224	6.5	430	189	310
	16	50	25	1005	775	457.2		835	1020	242	6.5	556	283	385
	25	50	25	1145	775	457.2		865	1090	286	6.5	843	601	660
500	3.5	50	25	930	670	508		845	870	242	6	262	134	170
	6	50	25	990	690	508		870	1070	242	6	528	268	315
	10	50	25	990	690	508		870	1070	242	6	528	268	340
	16	50	25	1055	790	508		910	1125	242	6	794	401	405
	25	50	25	1190	790	508		960	1160	286	6	1162	830	795
600	3.5	50	25	930	690	609.6		945	1020	290	5	306	226	240
	6	50	25	985	705	609.6		945	1020	290	5	612	451	430
	10	50	25	985	705	609.6		990	1220	290	5	612	451	455
	16	50	25	1100	805	609.6		1045	1305	290	5	918	677	760
	25	50	25	1154	805	609.6		1120	1120	290	5	1898	1395	870
700	3.5	50	25	1030	710	711.2		1070	1150	32.3	4.5	481	438	355
	6	50	25	1090	750	711.2		1070	1150	32.3	4.5	692	876	580
	10	50	25	1090	750	711.2		1125	1360	32.3	4.5	692	876	635
	16	50	25	1205	1360	711.2		1200	1470	32.3	4.5	1445	1314	945
	25	50	25	1205	1360	711.2		1200	1470	32.3	4.5	1445	1314	945
750	3.5	50	25	1030	730	762		1120	1230	32.3	4.5	566	515	390
	6	50	25	1090	780	762		1120	1320	32.3	4.5	1130	1030	685
	10	50	25	1090	780	762		1205	1480	32.3	4.5	1130	1030	735
	16	50	25	1205	1390	762		1315	1315	32.3	4.5	1696	1545	1100
	25	50	25	1205	1390	762		1315	1315	32.3	4.5	1696	1545	1100
800	3.5	50	25	1120	750	812.8		1175	1310	36.3	4	557	643	475
	6	50	25	1090	855	812.8		1195	1370	36.3	4	1114	1286	810
	10	50	25	1090	855	812.8		1275	1550	36.3	4	1114	1286	915
	16	50	25	1295	1420	812.8		1375	1375	36.3	4	1673	1930	1175
	25	50	25	1295	1420	812.8		1375	1375	36.3	4	1673	1930	1175
900	3.5	50	25	1170	780	914.4		1250	1415	415	3.5	578	903	510
	6	50	25	1185	890	914.4		1320	1510	415	3.5	1198	1805	1150
	10	50	25	1185	890	914.4		1405	1695	415	3.5	1198	1805	1100
	16	50	25	1345	1510	914.4		1515	1515	415	3.5	1802	2703	1525
	25	50	25	1345	1510	914.4		1515	1515	415	3.5	1802	2703	1525
1000	3.5	50	25	1220	840	1016		1390	1580	415	3	1925	2897	705
	6	50	25	1235	915	1016		1470	1580	415	3	1623	2443	1370
	10	50	25	1235	1370	1016		1525	1580	415	3	1623	2443	1165
	25	50	25	1235	1370	1016		1525	1580	415	3	1623	2443	1165
1050	3.5	50	25	1290	870	1065		1485	1640	485	3	1514	3114	950
	6	50	25	1305	940	1065		1525	1805	485	3	1278	2631	1590
	10	50	25	1305	1490	1065		1630	1940	485	3	1278	2631	1275
	25	50	25	1305	1490	1065		1630	1940	485	3	1278	2631	1275
1100	3.5	50	25	1340	900	1120		1525	1725	485	3	1854	3817	1140
	6	50	25	1355	965	1120		1595	1805	485	3	1563	3217	1845
	10	50	25	1355	1520	1120		1705	1705	485	3	1563	3217	1420
	25	50	25	1355	1520	1120		1705	1705	485	3	1563	3217	1420
1200	3.5	50	25	1435	920	1220		1625	1850	581	2.5	670	4935	1285
	6	50	25	1450	1025	1220		1730	1910	581	2.5	1408	4161	2055
	10	50	25	1450	1540	1220		1830	1830	581	2.5	1408	4161	1680
	25	50	25	1450	1540	1220		1830	1830	581	2.5	1408	4161	1680

To be Specified by Purchaser