

SERIES 550 BELLOWS TYPE PUMP CONNECTORS

D.M.E. Series 550 Multi-Ply Bellows Type Pump Connectors are the solution to vibration and motion isolation when space is at a premium.

Series 550 Bellows Pump Connectors short overall length to motion ratio makes them ideal solutions for pump and machinery isolation in piping systems.

The 550 Series was designed with mechanical equipment protection in mind. Compact and very flexible, the Series 550 Bellows Type Pump Connector reduces noise and vibration transmission while reducing stresses set up between the mechanical equipment and adjacent piping systems.

The convoluted bellows element of the 550 Series is constructed of multiple laminations of type 321 stainless steel, permitting use in high pressure, high temperature application.

Flanges are carbon steel with drilling conforming to ANSI 150#. Tie rods are designed to prevent overtravel and react to full thrust loads resulting from internal pressure.

Type 321 Stainless Steel Flow Liner is available as an option for applications involving severe flow turbulence.

Isolation of the carbon steel flanges from the flow media can be achieved by the use of Vanstone Flanges incorporated in Series 552-R Design.

150 P.S.I. WORKING PRESSURE 225 P.S.I. TEST PRESSURE

Nominal Size (i.p.s.)	Size Designation	Overall Length (Inches)		Weight (approx.-Lbs)	
		(551R-552R)	(553R)	(551R-552R)	(553R)
3	3	4.0	8.0	28	32
3 ½	3.5	4.0	8.0	33	37
4	4	4.5	8.0	36	42
5	5	4.5	9.0	43	50
6	5	5.0	9.0	48	60
8	8	5.0	9.0	70	85
10	10	6.0	10.0	94	114
12	12	6.0	10.0	123	148

Allowable Movements (inches)		
Sizes	3" – 8"	10" – 12"
Axial Compression	0.50	0.75
Axial Extension	0.25	0.25
Lateral Offset	0.13	0.13

Pressure Thrust						
Pipe Size (i.p.s.)	Effective Area (sq. inches)	50 P.S.I.	75 P.S.I.	100 P.S.I.	125 P.S.I.	150 P.S.I.
3	12.06	603	905	1206	1508	1809
3 ½	15.34	767	1151	1534	1918	2301
4	19.71	986	1478	1971	2464	2957
5	29.78	1498	2978	3723	4467	
6	40.94	2047	3071	4094	5118	6141
8	66.76	3338	5007	6676	8345	10014
10	106.04	5302	7953	10604	13255	15906
12	145.69	7285	14569	18211	21845	

Notes:
 Flanges are Carbon Steel Plate with Drilling Conforming to ANSI B16.5 Class 150.
 Weld Ends are Standard Wall Carbon Steel Pipe 37 ½ Degree Bevel.
 Bellows are 321 Stainless Steel Multi-Ply Construction.
 Working Pressure of 150 P.S.I. is at 800 Degree Fahrenheit.
 Optional Flow Liner is available.

