

Diaphragm Seals

DS/PI-83

DIAPHRAGM SEAL FLANGE RATINGS

Ashcroft flanged diaphragm seals are manufactured in accordance with ASME/ANSI B 16.5.

The chart below indicates maximum allowable pressures for *carbon steel* and *stainless steel* flanged diaphragm seals. This pressure is determined by the flange material, the pressure class of the flange and the temperature the flange will be exposed to.

The full scale range of the instrument should *not* exceed the maximum allowable pressure (psi) of the flange as shown below.

CARBON STEEL FLANGE						
Maximum Allowable Pressure (psi)						
Temperature (°F)	FLANGE CLASS					
	150	300	600	900	1500	2500
<100	285	740	1480	2220	3705	6170
200	260	675	1350	2025	3375	5625
300	230	655	1315	1970	3280	5470
400	200	635	1270	1900	3170	5280
500	170	600	1200	1795	2995	4990
600	140	550	1095	1640	2735	4560
650	125	535	1075	1610	2685	4475
700	110	535	1065	1600	2665	4440
750	95	505	1010	1510	2520	4200
800	80	410	825	1235	2060	3430
850	65	270	535	805	1340	2230
900	50	170	345	515	860	1430
950	35	105	205	310	515	860
1000	20	50	105	155	280	430

STAINLESS STEEL FLANGE						
Maximum Allowable Pressure (psi)						
Temperature (°F)	FLANGE CLASS					
	150	300	600	900	1500	2500
<100	275	720	1440	2160	3600	6000
200	230	600	1200	1800	3000	5000
300	205	540	1075	1615	2690	4480
400	190	495	995	1490	2485	4140
500	170	465	930	1395	2330	3880
600	140	440	885	1325	2210	3680
650	125	430	865	1295	2160	3600
700	110	420	845	1265	2110	3520
750	95	415	825	1240	2065	3440
800	80	405	810	1215	2030	3380
850	65	395	790	1190	1980	3300
900	50	390	780	1165	1945	3240
950	35	380	765	1145	1910	3180
1000	20	355	710	1065	1770	2950