

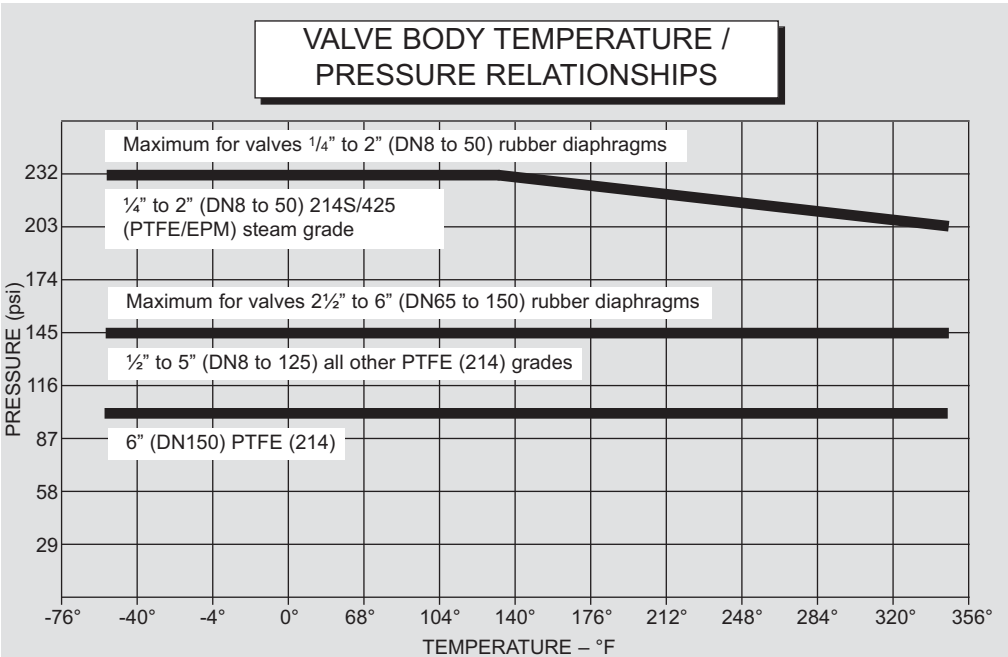
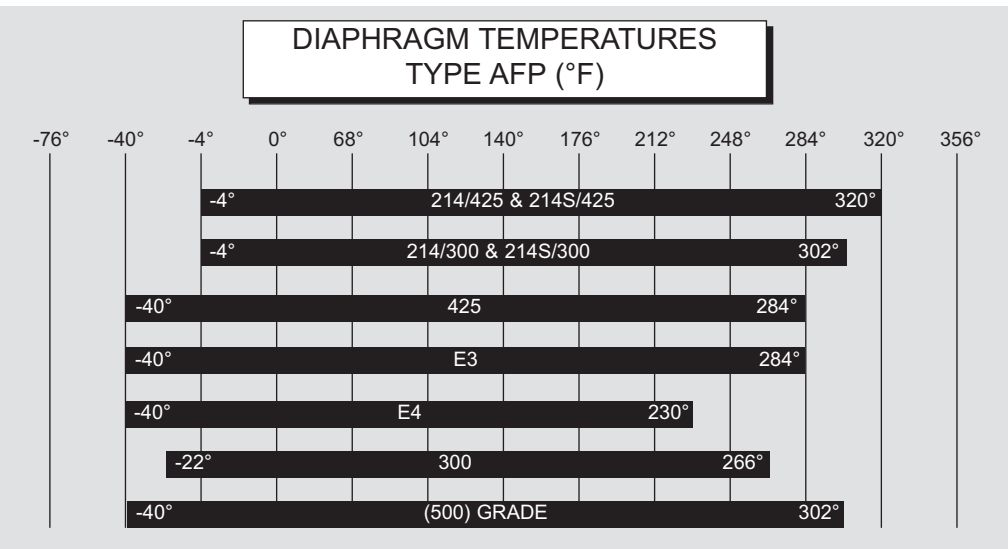
## Diaphragm/Valve Performance (Temp/Press Relationships) Type AFP

### HC4 Diaphragm Valves

Temperature and pressure are the major limitations of valve operating capability; although there can be many other aspects of a process specification that could affect both valve and diaphragm life. It is therefore essential with any valve selection to provide the fullest process and operating details such as operating cycles, speed of temperature fluctuations, sterilizing fluids, steam sterilization temperatures or any other parameter that may be present.

Temperature bands for diaphragms are shown as a guide only. Many aspects of service conditions will determine the highest working temperature.

HC4/011/01/11.02



Type AFP – Maximum rated Working Pressure - psi(bar)

Diaphragm size (DN)	¼"(8)	⅜"(10)	½"(15)	¾"(20)	1"(25)	1½"(40)	2"(50)	2½"(65)	3"(80)	4"(100)	5"(125)	6"(150)
Steam grade 214S/425 (PTFE/EPM)	232(16)	232(16)	232(16)	232(16)	232(16)	232(16)	232(16)	145(10)	145(10)	145(10)	145(10)	101(7)
All rubber types	232(16)	232(16)	232(16)	232(16)	232(16)	232(16)	232(16)	145(10)	145(10)	145(10)	145(10)	145(10)
All other PTFE	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	145(10)	101(7)

Pressure – Temperature equivalents (for saturated steam only)

Gauge Pressure			Approx temperature	
lb/in <sup>2</sup>	Kg/cm <sup>2</sup>	HPa	°F	°C
0	0	0	212	100
5	0.4	0.034	227	109
10	0.7	0.069	239	115
15	1.1	0.103	250	121
20	1.4	0.138	259	126
25	1.8	0.172	267	131
30	2.1	0.207	274	135
35	2.5	0.241	281	138
40	2.8	0.276	287	142
45	3.2	0.310	292	145
50	3.5	0.345	298	148
55	3.9	0.379	303	150
60	4.2	0.414	307	153
65	4.6	0.448	312	156
70	4.9	0.483	316	158
75	5.3	0.517	320	160
80	5.6	0.552	324	162
85	6.0	0.586	328	164
90	6.3	0.621	331	166
95	6.6	0.655	335	168
100	7.0	0.689	338	170
110	7.7	0.758	344	173
120	8.5	0.627	350	177
130	9.1	0.896	356	180
140	9.8	0.965	361	183
150	10.6	1.034	366	186

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