

PRESSURE / TEMPERATURE RATING CHART

MINIMUM TEMPERATURE FOR ALL MATERIALS IS LIMITED, WITHIN SPECIFICATION, TO 0°C/32°F

NOTE: THE PETER SMITH VALVE CO. LTD. RESTRICT THE USE OF CAST IRON VALVES TO 180°C TO ELIMINATE POSSIBLE MISUSE OF VALVES ON STEAM SERVICE.

CAST IRON: BS EN 1092 - 2 MAX PRESSURE/TEMPERATURE RATINGS						
Temp	°C	0/120	150	180	200	220
	°F	32/248	302	356	392	428
PN10	BAR	10.0	9.0	8.4	8.0	7.5
	PSI	145	131	122	116	108
PN16	BAR	16.0	14.4	13.4	12.8	12.0
	PSI	232	209	194	186	174

FOR PN6 USE
PN10 RATING

CAST STEEL: BS EN 1092 - 1 MAX PRESSURE/TEMPERATURE RATINGS								
Temp	°C	0/120	150	200	250	300	350	400
	°F	32/248	302	392	482	572	662	752
PN16	BAR	16.0	15.2	14.5	13.3	12.2	11.3	10.2
	PSI	232	220	210	193	177	164	148
PN25	BAR	25.0	23.8	22.7	20.8	19.1	17.7	16.0
	PSI	363	345	329	302	277	257	232

GUNMETAL: BS EN 1092 - 3 MAX PRESSURE/TEMPERATURE RATINGS								
Temp	°C	0/120	150	180	200	220	250	260
	°F	32/248	302	356	393	428	482	500
PN16	BAR	16.0	16.0	16.0	13.5	11.3	8.0	7.0
	PSI	232	232	232	196	164	116	102
PN25	BAR	25.0	25.0	25.0	21.2	17.5	12.2	10.5
	PSI	363	363	363	307	254	177	152

CAST IRON: ANSI /ASME B16.1 MAX PRESSURE/TEMPERATURE RATINGS									
Temp	°F	32/150	200	250	300	350	400	430	450
	°C	0/66	93	121	149	177	204	221	232
CLASS 125	PSI	200	190	175	165	150	140	130	125
	BAR	13.8	13.1	12.1	11.4	10.3	9.7	9.0	8.6

CAST STEEL: ANSI /ASME B16.5 MAX PRESSURE/TEMPERATURE RATINGS									
Temp	°F	32/150	200	300	400	500	600	700	752
	°C	0/38	93	149	204	260	316	371	400
CLASS 150	PSI	285	260	230	200	170	140	110	94
	BAR	19.6	17.9	15.9	13.8	11.7	9.7	7.6	6.5
CLASS 300	PSI	740	680	655	635	605	570	530	503
	BAR	51.0	46.9	45.2	43.8	41.7	39.3	36.5	34.7

GUNMETAL: ANSI /ASME B16.24 MAX PRESSURE/TEMPERATURE RATINGS								
Temp	°F	32/150	200	250	300	350	400	450
	°C	0/66	93	121	149	177	204	232
CLASS 150	PSI	225	210	195	180	165	150	135
	BAR	15.5	14.5	13.4	12.4	11.4	10.3	9.3

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