

Pressure Temperature Ratings

Pressure Temperature Ratings against ASME B16.34 & B16.24

Standard Class

150Lb	Test Information - Pressure Temperature Ratings B16.34 / 24						Maximum Shaft Material Working Temperatures against Body Material Pressure Temperature Ratings B16.34 / 24			
	150Lb Maximum Working Pressure (bar)	150Lb Shell Test @ 1.5x Design Pressure (bar)	150Lb Seat Test @ 1.1x Design Pressure (bar)	150Lb Air Test (bar)	Maximum Working Temperature (°C)	Max. Working Pressure @ Max. Temp. (bar)	17/4 PH Stainless	Duplex S32760	Inconel 718	Monel K500
Material Grade										
ASTM A216 WCB	19.6	29.4	21.6	6	427	5.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	5.4 Bar @ 427°C	N/A
ASTM A216 WCC	19.8	29.7	21.8	6	425	5.5	8.6 Bar @ 345°C	11.7 Bar @ 260°C	5.5 Bar @ 425°C	N/A
ASTM A217 WC6	19.8	29.7	21.8	6	538	1.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	1.4 Bar @ 538°C	N/A
ASTM A217 WC9	19.8	29.7	21.8	6	538	1.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	1.4 Bar @ 538°C	N/A
ASTM A352 LCC	19.8	29.7	21.8	6	345	8.6	8.6 Bar @ 345°C	11.7 Bar @ 260°C	8.6 Bar @ 345°C	N/A
ASTM A352 LCB	18.4	27.6	20.2	6	345	8.6	8.6 Bar @ 345°C	11.7 Bar @ 260°C	8.6 Bar @ 345°C	N/A
ASTM A351 CF8M	19	28.5	20.9	6	538	1.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	1.4 Bar @ 538°C	N/A
ASTM A351 CF8	19	28.5	20.9	6	538	1.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	1.4 Bar @ 538°C	N/A
ASTM A351 CK3MCuN	20	30	22	6	315	9.6	9.6 Bar @ 315°C	11.7 Bar @ 260°C	9.6 Bar @ 315°C	N/A
ASTM A351 CF3M	19	28.5	20.9	6	455	4.4	8.6 Bar @ 345°C	11.7 Bar @ 260°C	4.4 Bar @ 455°C	N/A
ASTM A890 4A	20	30	22	6	260	11.7	N/A	11.7 Bar @ 260°C	11.7 Bar @ 260°C	N/A
ASTM A890 6A	20	30	22	6	260	11.7	N/A	11.7 Bar @ 260°C	11.7 Bar @ 260°C	N/A
CC333G / AB2	13.4	20.7	14.7	6	260	9.65	N/A	N/A	9.65 Bar @ 260°C	9.65 Bar @ 260°C

300Lb	Test Information - Pressure Temperature Ratings B16.34 / 24						Maximum Shaft Material Working Temperatures against Body Material Pressure Temperature Ratings B16.34 / 24			
	300Lb Maximum Working Pressure (bar)	300Lb Shell Test @ 1.5x Design Pressure (bar)	300Lb Seat Test @ 1.1x Design Pressure (bar)	300Lb Air Test (bar)	Maximum Working Temperature (°C)	Max. Working Pressure @ Max. Temp. (bar)	17/4 PH Stainless	Duplex S32760	Inconel 718	Monel K500
Material Grade										
ASTM A216 WCB	51.1	76.7	56.2	6	427	28.3	37.8 Bar @ 345°C	41.5 Bar @ 260°C	28.3 Bar @ 427°C	N/A
ASTM A216 WCC	51.7	77.6	56.9	6	425	28.8	40.3 Bar @ 345°C	45.6 Bar @ 260°C	28.8 Bar @ 425°C	N/A
ASTM A217 WC6	51.7	77.6	56.9	6	538	14.9	40.3 Bar @ 345°C	45.6 Bar @ 260°C	14.9 Bar @ 538°C	N/A
ASTM A217 WC9	51.7	77.6	56.9	6	538	18.4	40.3 Bar @ 345°C	45.6 Bar @ 260°C	18.4 Bar @ 538°C	N/A
ASTM A352 LCC	51.7	77.6	56.9	6	345	40.3	40.3 Bar @ 345°C	45.6 Bar @ 260°C	40.3 Bar @ 345°C	N/A
ASTM A352 LCB	48	72	52.8	6	345	36.6	40.3 Bar @ 345°C	40.4 Bar @ 260°C	40.3 Bar @ 345°C	N/A
ASTM A351 CF8M	49.6	74.4	54.6	6	538	25.2	30.4 Bar @ 345°C	33.0 Bar @ 260°C	25.2 Bar @ 538°C	N/A
ASTM A351 CF8	49.6	74.4	54.6	6	538	24.4	29.7 Bar @ 345°C	32.2 Bar @ 260°C	24.4 Bar @ 538°C	N/A
ASTM A351 CK3MCuN	51.7	77.6	56.9	6	315	38.5	38.5 Bar @ 315°C	32.2 Bar @ 260°C	38.5 Bar @ 315°C	N/A
ASTM A351 CF3M	49.6	74.4	54.6	6	455	28.7	30.4 Bar @ 345°C	33.0 Bar @ 260°C	28.7 Bar @ 455°C	N/A
ASTM A890 4A	51.7	77.6	56.9	6	260	40.2	N/A	40.2 Bar @ 260°C	40.2 Bar @ 260°C	N/A
ASTM A890 6A	51.7	77.6	56.9	6	260	40.2	N/A	40.2 Bar @ 260°C	40.2 Bar @ 260°C	N/A
CC333G / AB2	35.5	53.4	38.5	6	260	24.8	N/A	N/A	24.8 Bar @ 260°C	24.8 Bar @ 260°C

The above indicates a selection of materials of construction. Please contact the Sales office if your requirements are not shown.

Please contact the Sales office for temperatures outside of the standard temperature range as detailed in the above tables.

If necessary Inconel 718 is used to increase your maximum allowable working temperatures and to increase safety factor of the required seating torque against the maximum allowable shaft torque.