

PENBERTHY

application report

Section 2000
 Application Report 2773
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For: **TUBULAR GLASS – PRESSURE/TEMPERATURE CHART FOR 5/8" AND 3/4" O.D.**

CENTER TO CENTER DISTANCE FOR VESSEL CONNECTIONS	NO CORROSION UP TO 150°F [66°C]			STEAM BOILER SERVICE UP TO 425°F [218°C]		
	High Pressure	Heavy Wall	Red Line	High Pressure	Heavy Wall	Red Line
Inches [mm]	Psig [kPa]			Psig [kPa]		
10 [254]	410 [2830]	600 [4140]	340 [2340]	310 [2140]	345 [2380]	275 [1900]
15 [381]	385 [2650]	600 [4140]	310 [2140]	280 [1930]	325 [2240]	265 [1830]
20 [508]	355 [2450]	600 [4140]	285 [1960]	265 [1830]	315 [2170]	260 [1790]
25 [635]	300 [2070]	580 [4000]	260 [1790]	250 [1720]	300 [2070]	250 [1720]
30 [762]	275 [1900]	550 [3790]	230 [1590]	NOT RECOMMENDED		
35 [889]	240 [1650]	500 [3450]	200 [1380]			
40 [1016]	210 [1450]	420 [2890]	180 [1240]			
45 [1143]	200 [1380]	360 [2480]	170 [1170]			
50 [1270]	180 [1240]	340 [2340]	160 [1100]			
55 [1397]	150 [1030]	N/A	140 [970]			
60 [1524]	140 [970]	N/A	120 [830]			
65 [1651]	125 [860]	N/A	100 [690]			
70 [1778]	100 [690]	N/A	90 [620]			

N/A – Not Available

Using a secured Glass Union and multiple pieces of tubular glass will increase the pressure/temperature rating over that of an equivalent length of single glass. Example: A single 40" [1016mm] long piece of high pressure glass is rated for 210 psig [1450 kPa]. If you used two 20" [508mm] pieces with a glass union, the rating would then be 355 psig [2450 kPa]. When using multiple pieces of glass, always use the pressure rating of the longest piece of glass in your unit.

The packing materials listed below are used in tubular gage assemblies and will equal the pressure range of the gagecocks and tubular glass.

Packing Type	Maximum Temperature Rating °F [°C]
Grafoil® (Standard)	425 [218]
Teflon®	425 [218]
Neoprene®	300 [149]
Viton®	400 [204]