

Gage Assemblies for Process Steam Applications to 1500 WSP

- High Safety Factor
- Less Danger of Mechanical Damage
- Constructed for Long Trouble-Free Service



R-300L with #67 Valves



R-20 with #67 Valves



TM-20 with #67 Valves

Jerguson Process Steam Gage assemblies are designed for use on heat exchangers, steam traps, condensers and similar pressure vessel applications. **They are not for use on boilers for ASME Sec. I code applications.**

On all gages for steam or condensate service over 300 WSP, gage glasses are protected by mica shields. This protects the glass from the corrosive and erosive effects of the boiler or water and extends the service life of the glass.

Pressure to 300 WSP

Series R-300L Gage, No. 67 P/C Valves

Gage Size	Min. A Dim.	Dim. B	Rating
111-R-300L	17.47	10 1/4	
112-R-300L	18.47	11 1/4	
113-R-300L	19.47	12 1/4	300
115-R-300L	21.47	14 1/4	WSP
118-R-300L	24.47	17 1/4	
120-R-300L	26.47	19 1/4	

Pressure to 300 WSP

Series R-20 Gage, No. 67 P/C Valves

Gage Size	Dim. A	Dim. B	Rating
11-R-20	10.75	3 3/4	
12-R-20	11.75	4 3/4	
13-R-20	12.75	5 3/4	
14-R-20	13.75	6 3/4	300
15-R-20	14.88	7 7/8	WSP
16-R-20	16.13	9 1/8	
17-R-20	17.25	10 1/4	
18-R-20	18.88	11 7/8	
19-R-20	19.63	12 5/8	

Pressure to 600 WSP

Series TM-20 Gage, No. 67 P/C Valves

Gage Size	Dim. A	Dim. B	Rating
11-TM-20	10.75	3 3/4	600 WSP
12-TM-20	11.75	4 3/4	600 WSP
13-TM-30	12.75	5 3/4	600 WSP
14-TM-30	13.75	6 3/4	600 WSP
15-TM-30	14.88	7 7/8	550 WSP
16-TM-30	16.13	9 1/8	500 WSP
17-TM-30	17.25	10 1/4	450 WSP
18-TM-30	18.88	11 7/8	400 WSP
19-TM-30	19.63	12 5/8	350 WSP

Liquid Level Gages



Pressure to 600 WSP Series TM-32 Gage, No. 67 P/C Valves

Gage Size	Dim. A	Dim. B	Rating
15-TM-32	14.88	7 7/8	
16-TM-32	16.13	9 1/8	
17-TM-32	17.25	10 1/4	600 WSP
18-TM-32	18.88	11 7/8	
19-TM-32	19.63	12 5/8	

For pressures in the 600 WSP range, most operators prefer to see no threaded connection between the flanged vessel connection and the valve seat. The No. 67 valves are illustrated that have this feature. The vertical rising ballcheck is downstream from the seat providing accessibility without the necessity of disassembling the valve.

When multiple section gages are used, expansion loops are suggested to relieve piping strain.



Pressure to 750 WSP Series TM-32 Gage, No. 74BL Valves

Gage Size	Dim. A	Dim. B	Dim. C	Rating
11-TM-32	13	3 3/4	4 3/8	
12-TM-32	14	4 3/4	4 3/8	
13-TM-32	15	5 3/4	4 3/8	
14-TM-32	16	6 3/4	4 3/8	750 WSP
15-TM-32	17	7 7/8	4 1/4	
16-TM-32	18	9 1/8	4	
17-TM-32	19	10 1/4	3 7/8	
18-TM-32	21	11 7/8	4 1/4	
19-TM-32	22	12 5/8	4 1/2	

The thermal stresses that are prevalent at operating temperatures > 600 WSP make it advisable to furnish a built-in expansion loop. This expansion loop seeks to smooth out the pressure differential in the expansion rate between the vessel and gage glass by eliminating stresses in the assembly.



Pressure to 1500 WSP

Series TM-40 Gage, No. 74H Valves

Gage Size	Dim. A	Dim. B	Dim. C	Rating
11-TM-40	14	3 5/8	4 9/16	
12-TM-40	15	4 5/8	4 9/16	
13-TM-40	16	5 5/8	4 9/16	
14-TM-40	17	6 5/8	4 9/16	
15-TM-40	18	7 3/4	4 7/16	1500 WSP
16-TM-40	20	9	5 3/16	
17-TM-40	21	10 1/8	5 1/16	
18-TM-40	22	11 3/4	4 7/16	
19-TM-40	23	12 1/2	4 11/16	

For this high pressure series Jerguson® recommends a 74H valve which is specially designed for high pressure steam service. The stem has Acme threads to allow easier opening and stem operation, a loose knob construction for the disc and a stellited seat. The special spring washers used under the gage nuts absorb expansion and contraction and maintain the proper clamping load on the cover without retorquing the nuts.

See page 7 for Specifying Information

NOTE: Gages at pressures 600 WSP and above have spiral wound gasketed union gage connections.

STEAM RATINGS

The steam ratings are based on an operating temperature no higher than 25°F above the saturation temperature of the steam pressure at which the gage is rated. It has been determined that although operating temperatures in the shell of the vessel may be much higher, the temperature of the steam rarely goes as high as 25°F over saturation temperature at the point of installation of the gage.

INSTALLATION CONSIDERATIONS

When installing multi-section gages in steam service, it is necessary to allow for differential expansion which may occur

between the vessel and the gage assembly. Expansion, if not compensated for, can cause severe stresses in the equipment and at connections. The use of expansion loops is recommended. On Jerguson Process Steam Gage assemblies for 750 WSP and higher, expansion loops are furnished integral with the gage chamber.