JERGUSON®
A Division Of The Clark-Reliance Corporation

Specialists in Liquid Level Indication

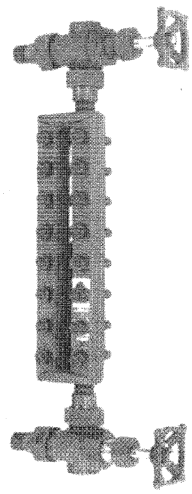
GLASS LIQUID LEVEL GAGES SERIES 20 MEDIUM PRESSURE

Section: J100
Bulletin: J100.09
Date: 1/1/99
Supercedes: 20

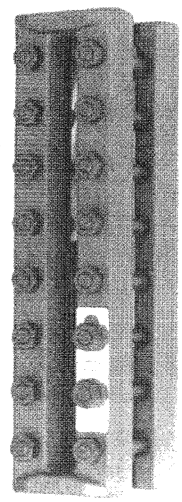
A RUGGED FLAT GLASS GAGE FOR MEDIUM PRESSURE APPLICATIONS

- Tempered Borosilicate Glass conforming to BS3463, JIS B8211, DIN 7080 and DIN 7081
- All Gages are Hydrostatically Tested to 1 ½ times the rated pressure at 100° F (38° C)
- Wetted Parts Conform to NACE MR-01-75
- All Parts are ASTM Grade and listed in ASME 31.3
- Recessed Gasket Seat in Chamber and Cover
- Covers are Shrouded to Protect the Glass Edges

Standard construction includes a one-piece chamber machined from bar, forged steel covers, tempered glass, alloy steel bolts and nuts. The recessed gasket seats aid in positioning and retaining the gasket. Series 20 gages are available in a wide variety of materials to meet specific applications. Accessories available include: illuminators, non-frosting extensions, support brackets and insulation jackets.



Series R-20, shown with Jerguson gage valves



Series T-20

PRESSURE / TEMPERATURE RATINGS (PSIG) Note: Flanged gages are derated to flange rating.

REFLEX GAGE										
Temperature		Glass Size								
°F	°C	1	2	3	4	5	6	7	8	9
100	38	3270	3140	3000	2880	2750	2630	2510	2390	2250
200	93	3090	2970	2860	2740	2620	2500	2380	2260	2150
300	149	2900	2790	2670	2560	2450	2340	2220	2110	2000
400	204	2700	2600	2490	2380	2270	2170	2060	1950	1850
500	260	2510	2410	2305	2205	2100	2000	1900	1800	1700
600	316	2285	2190	2100	2010	1915	1820	1730	1640	1550
700	371	2080	1990	1910	1820	1740	1650	1570	1480	1400
800	427	1870	1790	1720	1640	1560	1480	1410	1330	1250
SATURATED STEAM RATING 300 WSP										

TRANSPARENT GAGE										
Temperature		Glass Size								
°F	°C	1	2	3	4	5	6	7	8	9
100	38	2000	1850	1750	1600	1500	1350	1250	1100	1000
200	93	1900	1780	1660	1550	1440	1300	1175	1060	950
300	149	1770	1660	1550	1450	1330	1220	1100	1000	900
400	204	1675	1575	1470	1350	1250	1150	1050	925	850
500	260	1530	1450	1350	1250	1150	1050	950	850	750
600	316	1350	1275	1180	1100	1010	925	850	750	675
700	371	1220	1140	1070	990	920	840	760	690	610
800	427	1100	1030	960	890	820	750	690	620	550
SATURATED STEAM RATING WITH MICA										
		600	600	600	600	550	500	450	400	350

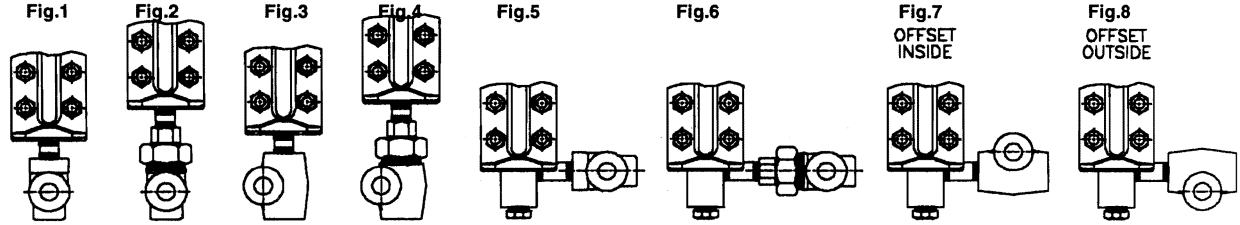
For Temperature above 600° F (316° C) Aluminosilicate Glass*must* be used.

% of Rating	100%	90%	50%
Chamber Material	Carbon Steel, Stainless Steel Series 316 or 316L	Monel	Brass
Gasketing	Bonded Compressed Fibers or Teflon Glass Filled		Pure Teflon Neoflon CTFE (Shields)

FM
APPROVED MODELS AVAILABLE.

Specify Gage Assemblies by the Figures Below

Fig.1 Fig.2 Fig.3 Fig.4 Fig.5 Fig.6 Fig.7 OFFSET INSIDE Fig.8 OFFSET OUTSIDE

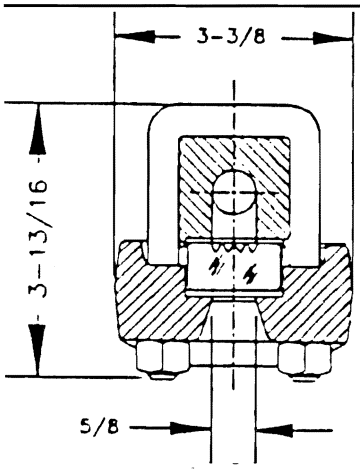


Nos. 63,143, 73BL,(93) | Nos. 64,144, 74BL,(94) | Nos. 66,146, 76BL | Nos. 67,147, 77BL | Nos. 63,143, 73BL,(93) | Nos. 64,144, 74BL,(94) | Nos. 146, 66 & 76BL Nos. 147, 67 & 77BL

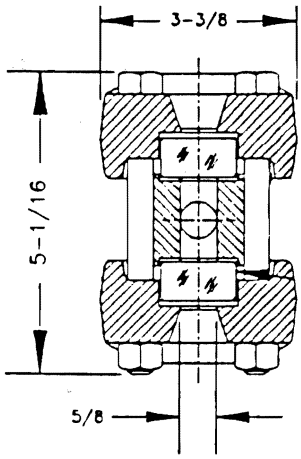
Specify Jerguson - All Gages are *NOT* Created Equal!

Liquid Level Gages and Valves for the Power and Process Industries

Glass Liquid Gages Series 20 Medium Pressure



Series R-20



Series T-20

Sect. X Size	Visible Range		Overall Length		Approximate Weight			
					Reflex, R-20		Transp., T-20	
	in	mm	in	mm	lbs	Kgs	lbs	Kgs
11	3 3/4	95	5 1/4	133	8	3.6	10	4.5
12	4 3/4	121	6 1/4	159	9	4.1	14	6.4
13	5 3/4	146	7 1/4	184	11	5.0	17	7.7
14	6 3/4	171	8 1/4	210	12	5.5	19	8.6
15	7 7/8	200	9 3/8	238	14	6.4	21	9.5
16	9 1/8	232	10 5/8	270	16	7.3	24	10.9
17	10 1/4	260	11 3/4	298	18	8.2	27	12.3
18	11 7/8	302	13 3/8	340	20	9.1	30	13.6
19	12 5/8	321	14 1/8	359	21	9.5	32	14.5
23	13	330	14 1/2	368	22	10.0	33	15.0
24	15	381	16 1/2	419	25	11.4	38	17.3
25	17 1/4	438	18 3/4	476	28	12.7	43	19.5
26	19 3/4	502	21 1/4	540	32	14.5	49	22.3
27	22	559	23 1/2	597	35	15.9	54	24.5
28	25 1/4	641	26 3/4	679	40	18.2	61	27.7
29	26 3/4	679	28 1/4	718	43	19.5	64	29.1
36	30 3/8	772	31 7/8	810	48	21.8	73	33.2
37	33 3/4	857	35 1/4	895	53	24.1	80	36.4
38	38 5/8	981	40 1/8	1019	60	27.3	92	41.8
39	40 7/8	1038	42 3/8	1076	64	29.1	97	44.1
47	45 1/2	1156	47	1194	71	32.3	107	48.6
48	52	1321	53 1/2	1359	80	36.4	122	55.5
49	55	1397	56 1/2	1435	85	38.6	129	58.6
57	57 1/4	1454	58 3/4	1492	88	40.0	134	60.9
58	65 3/8	1661	66 7/8	1699	100	45.5	152	69.1
59	69 1/8	1756	70 5/8	1794	106	48.2	161	73.2
68	78 3/4	2000	80 1/4	2038	120	54.5	187	85.0
69	83 1/4	2115	84 3/4	2153	127	57.7	196	89.1
78	92 1/8	2340	93 5/8	2378	140	63.6	221	100.5
79	97 3/8	2473	98 7/8	2511	148	67.3	230	104.5
88	105 1/2	2680	107	2718	160	72.7	254	115.5
89	111 1/2	2832	113	2870	169	76.8	265	120.5

SERIES 20 SPECIFICATIONS

SECTION LENGTHS:
Gage sections are available in nine standard glass sizes. Longer sizes are constructed with multiple vision slots in a continuous solid bar chamber.

CONNECTIONS:
Standard connections are at top and bottom and are ½ or ¾ NPT female. Optional connections are available, such as socket weld, flanged or close hook-up (side/side).

LIQUID CHAMBER:
Machined from bar stock. The gasket seat is recessed to allow lateral support and facilitate positioning.

COVERS:
Forged carbon steel is standard. Optional materials are available. The cushion gasket seat is recessed.

BOLTS & NUTS
Alloy steel is standard, A193 B7 and A194 2H. Optional materials are available. All steel fasteners are "black oxide" treated to prevent rust.

GLASS:
Tempered Borosilicate is used to 600° F (316°). Aluminosilicate is used to 800° (427° C). Transparent glass may be protected from corrosive media with mica or Neoflon CTFE shields.

GASKETS:
Standard gaskets are precision die cut in proprietary Jerguson dies.

FINISH:
All steel parts are finish coated prior to assembly. Stainless steel is not coated.

VALVES:
Use of Jerguson gage valves is strongly recommended. Standard features include safety ball checks which help prevent loss of product and physical injury in the event of failure.