

Reflex
R-300L



Transparent
T-300L

For Pressures Up to 300# ANSI

Series 300L

Features

- Recessed Gasket Seat in Chamber and Cover
- 25mm Glass, Size 11-20
- Economical 300# ANSI Gage
- Tempered Borosilicate Glass
- Wetted parts conform to NACE MR0175 & MR0103
- All parts listed in ASTM or ASME B31.3
- All Gages feature a continuous, one-piece chamber regardless of length

The Series 300L gage is an economical gage with increased visible ranges per gage section. This gage series uses the proprietary Jerguson 25mm glass, which is thinner, narrower and longer than traditional gage glass. The Series 300L features a recessed gasket surface, barstock non-shrouded covers and ASTM grade bolting. Due to the length of each gage section this model is not recommended for high pressure steam service.

Refer to page 24 for Non-Frost Extensions, page 28 for Illuminators, page 25 for Support Brackets, and page 7 for Mica Shields.

PRESSURE / TEMPERATURE RATINGS (PSI)

Carbon Steel Chamber			
Temperature		Pressure	
°F	°C	PSI	BarG
100	38	750	51.7
200	93	750	51.7
300	149	730	50.3
400	204	705	48.6
500	260	665	45.9
600	316	605	41.7

Saturated Steam Rating 300 WSP

NOTE: Flanged gages are derated to flange rating, if applicable

TEST PRESSURE: All gages are hydrostatically tested by Jerguson prior to shipment @ 1 1/2 times the design pressure rating at 100°F (38°C).

PRESSURE / TEMPERATURE RATINGS (PSI)

Stainless Steel Chamber			
Temperature		Pressure	
°F	°C	PSI	BarG
100	38	720	49.6
200	93	620	42.7
300	149	560	38.6
400	204	515	35.5
500	260	480	33.1
600	316	450	31.0

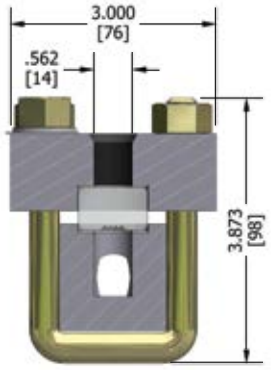
Saturated Steam Rating 300 WSP

NOTE: Flanged gages are derated to flange rating, if applicable

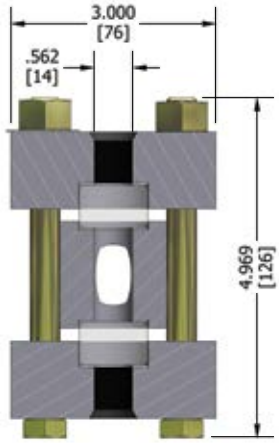
Liquid Level Gages

Series R-300L Reflex, Series T-300L Transparent

Sect. X Size	Visible Range		Overall Length (End Connected Gage Only)		Approximate Weight			
					Reflex, R-300L		Transp., T-300L	
	in	mm	in	mm	lbs.	Kgs	lbs.	Kgs
111	10.250	260	11.968	304	20	9.1	26	11.8
112	11.250	286	12.968	329	20	9.1	29	13.2
113	12.250	311	13.968	355	21	9.5	31	14.1
115	14.250	362	15.968	406	24	10.9	35	15.9
118	17.250	438	18.968	482	29	13.2	42	19.1
120	19.250	489	20.968	533	32	14.5	46	20.9
211	22.344	568	24.062	611	36	16.4	53	24.1
212	24.344	618	26.062	662	39	17.7	58	26.3
213	26.344	669	28.062	713	43	19.5	62	28.2
215	30.344	771	32.062	814	49	22.3	71	32.3
218	36.344	923	38.062	967	57	25.9	84	38.2
220	40.344	1025	42.062	1068	64	29.1	93	42.3
311	34.438	875	36.156	918	54	24.5	80	36.4
312	37.438	951	39.156	995	59	26.8	87	39.5
313	40.438	1027	42.156	1071	64	29.1	93	42.3
315	46.438	1180	48.156	1223	73	33.2	107	48.6
318	55.438	1408	57.156	1452	86	39.1	126	57.3
320	61.438	1561	63.156	1604	96	43.6	140	63.6
411	46.532	1182	48.250	1226	72	32.7	106	48.2
412	50.532	1284	52.250	1327	79	35.9	116	52.7
413	54.532	1385	56.250	1429	86	39.1	125	56.8
415	62.532	1588	64.250	1632	98	44.5	143	65.0
418	74.532	1893	76.250	1937	115	52.3	168	76.4
420	82.532	2096	84.250	2140	128	58.2	186	84.5
511	58.626	1489	60.344	1533	91	41.4	133	60.5
512	63.626	1616	65.344	1660	99	45.0	145	65.9
513	68.626	1743	70.344	1787	107	48.6	156	70.9
515	78.626	1997	80.344	2041	122	55.5	179	81.4
518	93.626	2378	95.344	2422	143	65.0	210	95.5
520	103.626	2632	105.344	2676	160	72.7	233	105.9
611	70.720	1796	72.438	1840	109	49.5	160	72.7
612	76.720	1949	78.438	1992	119	54.1	173	78.6
613	82.720	2101	84.438	2145	129	58.6	187	85.0
615	94.720	2406	96.438	2450	147	66.8	215	97.7
618	112.720	2863	114.438	2907	172	78.2	252	114.5
620	124.720	3168	126.438	3212	192	87.3	280	127.3



Series R-300L Reflex



Series T-300L Transparent

CE models available

ISO9001 CERTIFIED

Specifications (See page 3 for Specifying Information)

SECTIONS LENGTHS
Gage sections are available in six 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 1/2" and 3/4" 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 provide lateral support, and facilitate positioning of the gasket. This seat aids in field repair, and enhances safety/reliability.

COVERS
Carbon steel non-shrouded covers are standard with optional materials available. The cushion gasket surface is recessed on all covers.

BOLTS & NUTS
Steel fasteners, heat treated for strength; A193 B7 bolts / A194 2H nuts. NACE options include A193 B7M bolts / A194 2HM nuts (Transparent only) and A193 B8M bolts / A194 8M nuts (316 Stainless Steel).

GLASS
Tempered borosilicate is used to 600°F (316°C) Transparent glass may be protected from corrosive media with mica shields.

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

FINISH
All carbon steel parts are finish coated prior to assembly with Jerguson Protective FP-16. Optional coatings such as FP-11 offshore available.

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

Glass Types & Sizes



Glass Materials

- Borosilicate
  - Up to 600°F (316°C)
  - Up to 300 WSP
  - Over 300 WSP, Mica Protected Transparent Glass Only
- HP Borosilicate
  - Up to 600°F (316°C)
  - Higher Tolerances
- Aluminosilicate
  - Up to 800°F (426°C)

Glass Sizes – Industry Standard 34mm
Sizes 1 thru 9 (All models except 300L)

Size	Length	Typical Visible Range
1	4-1/2" (115mm)	3-3/4" (95mm)
2	5-1/2" (140mm)	4-3/4" (121mm)
3	6-1/2" (165mm)	5-3/4" (146mm)
4	7-1/2" (190mm)	6-3/4" (171mm)
5	8-5/8" (220mm)	7-7/8" (200mm)
6	9-7/8" (250mm)	9-1/8" (232mm)
7	11" (280mm)	10-1/4" (260mm)
8	12-5/8" (320mm)	11-7/8" (302mm)
9	13-3/8" (340mm)	12-5/8" (321mm)

Glass Sizes – Jerguson 25mm
Sizes 11 thru 20 (Series 300L - Obsolete 5 & 12)

Size	Length	Typical Visible Range
11	11" (280mm)	10-1/4" (260mm)
12	12" (305mm)	11-1/4" (286mm)
13	13" (330mm)	12-1/4" (311mm)
15	15" (381mm)	14-1/4" (362mm)
18	18" (457mm)	17-1/4" (438mm)
20	20" (508mm)	19-1/4" (489mm)

Specification

Materials of Construction

- Borosilicate Glass
- Gaskets
  - IFG® -5500 Standard (Seal/Cushion)
  - Graphite, with .002" (.05mm) stainless steelreinforcement layer
  - Teflon®
  - Other Materials Available

Chamber

- Carbon Steel
  - To -20°F (-28°C)
- Low Temp Carbon Steel
  - To -50°F (-45°C)
  - Charpy Impact Tested
  - B7M Bolts / 2HM Nuts
- Stainless Steel
  - To -325°F (-198°C)
  - Dual Rated 316/316L
- All Acceptable for NACE Service

Shields

Shields are used to protect the glass from chemical attack. Two shields are available: Mica and PCTFE.

Mica: Mica shields are used to protect the glass from corrosion in high pressure steam (over 300WSP) and caustic applications (pH >11).

PCTFE: PCTFE shields (formerly known as Kel-F®) are primarily used in Hydrofluoric Acid service. Note that the PCTFE shield also serves as the sealing gasket; no additional sealing gasket is required.



Gage Code for Jerguson Gages

Special Features
M = Mica Shield
K = PCTFE (Kel-F) Shield
F = Non-frosting
H = External Heating
E = Electrical Heating
T = Internal Heating
CH = Close Hook-up (Side or Back Conns.)
W = Weld Pad
IW = Isolable Weld Pad

Glass Size Series 300L: 11, 12, 13, 15, 18, 20
Other Series: 1 thru 9

27-RFCH-20

Number of Sections: 27

Type of Glass
R = Reflex
T = Transparent

Series: 20, 32, 300L L10, 40, 51

Gasket Materials — Standard Offering

Material	Min. Temperature	Max. Temperature	Rating Factor
Garlock IFG-5500	-40˚F (-40˚C)	550˚F (288˚C)	100%
25% Glass Filled TFE	-328˚F (-200˚C)	500˚F (260˚C)	100%
Grafoil	-400˚F (-240˚C)	800˚F (427˚C)	100%
PCTFE (Kel-F) Shield	-400˚F (-240˚C)	302˚F (150˚C)	50%

Authorised Distributor:

NATIONWIDE OIL & GAS

46, Jalan SS 22/21, Damansara Jaya,
47400 Petaling Jaya,
Selangor Darul Ehsan, Malaysia.
Email: nog@nog.com.my
Website: www.nog.com.my