WATER GAUGES See Water Gauge/Liquid Level Catalog (PHBRWGA) for more detailed information about the products in this section.

20-100 SERIES

LEAD FREE

LEAD FREE OPTION COMING SOON! (20LF-104 and 20LF-105)



LIGHT PATTERN BRONZE WATER GAUGES

Use for all types of liquid level verification; available with 3/8" or 1/2" NPT male pipe connections. Aluminum or plastic composition hand wheels; EPDM gauge glass gaskets standard. Other glass gaskets available. Automatic ball checks help prevent the loss of fluids should the glass break.

FEATURES

- Ball checks on 20-150 models
- Equipped with two metal guard rods for glass protection
- 1/4" needle drain valve in lower body
- CRN OF6616.5C

- Rated: 125 psig @ 350°F, 300 psig @ 100°F (See note)
- EPDM glass gasket
- TFE stem packing

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
20-101	3/8	5/8 x 10	145	ALUMINUM
20-102	3/8	5/8 x 10	145	COMPOSITION
20-104	1/2	5/8 x 12	160	ALUMINUM
20-105	1/2	5/8 x 12	160	COMPOSITION
20-150*	1/2	5/8 x 12	160	ALUMINUM
20-151*	1/2	5/8 x 12	160	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

20-200 SFRIFS



STANDARD PATTERN BRONZE WATER GAUGES

All standard 20 Series features but with a heavier valve body pattern for higher service ratings.

FEATURES

- Available with 3/8", 1/2" and 3/4" MNPT fittings
- Ball checks standard on 20-250 models
- Polished finish on 25-200 valves
- Rated: 200 psig @ 400°F, 400 psig @ 100°F (See note!)
- CRN OF6616.5C
- EPDM glass gasket
- TFE stem packing

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
20-201	3/8	5/8 x 10	185	ALUMINUM
20-202	3/8	5/8 x 10	189	COMPOSITION
20-204	1/2	5/8 x 12	205	ALUMINUM
20-205	1/2	5/8 x 12	205	COMPOSITION
20-207	3/4	3/4 x 16	270	ALUMINUM
20-208	3/4	3/4 x 16	270	COMPOSITION
20-250*	1/2	5/8 x 12	195	ALUMINUM
20-251*	1/2	5/8 x 12	200	COMPOSITION
20-253*	3/4	3/4 x 16	355	ALUMINUM
20-254*	3/4	3/4 x 16	360	COMPOSITION
25-201	3/8	5/8 x 10	180	ALUMINUM
25-202	3/8	5/8 x 10	185	COMPOSITION
25-204	1/2	5/8 x 12	190	ALUMINUM
25-205	1/2	5/8 x 12	190	COMPOSITION
25-207	3/4	3/4 x 16	290	ALUMINUM
25-208	3/4	3/4 x 16	295	COMPOSITION

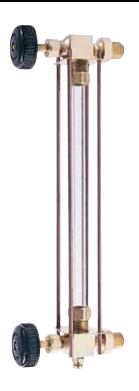
Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.



^{*} Automatic ball checks

^{*} Automatic ball checks

20-300 SERIES



STANDARD PATTERN BRASS WATER GAUGES

Available with 1/2" or 3/4" NPT male pipe connections. Four guard rods and EPDM gauge glass gaskets standard. Other glass gaskets available. Automatic ball checks help prevent the loss of fluids should the glass break.

FEATURES

- Standard 1/4" needle drain valve in lower body
- Pet cock or Apollo® ball valve drain option
- Polished finish on 25-400 and 25-500
- Ball checks standard on 20-350 and 25-500
- Rated: 200 psig @ 400°F, 400 psig @ 100°F
- CRN OF6616.5C
- TFE reinforced stem packing

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
20-304	1/2	5/8 x 12	260	ALUMINUM
20-305	1/2	5/8 x 12	270	COMPOSITION
20-307	3/4	3/4 x 16	345	ALUMINUM
20-308	3/4	3/4 x 16	365	COMPOSITION
20-350*	1/2	5/8 x 12	265	ALUMINUM
20-351*	1/2	5/8 x 12	265	COMPOSITION
20-353*	3/4	3/4 x 16	360	ALUMINUM
20-354*	3/4	3/4 x 16	365	COMPOSITION
25-404	1/2	5/8 x 12	285	ALUMINUM
25-405	1/2	5/8 x 12	285	COMPOSITION
25-407	3/4	3/4 x 16	350	ALUMINUM
25-408	3/4	3/4 x 16	350	COMPOSITION
25-501*	1/2	5/8 x 12	290	ALUMINUM
25-502*	1/2	5/8 x 12	290	COMPOSITION
25-504*	3/4	3/4 x 16	355	ALUMINUM
25-505*	3/4	3/4 x 16	355	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

Suffix Key - Applicable for all Water Gauges

SUFFIX KEY

- -00 Standard set includes top & bottom valves, glass and rods
- -01 Top valve only
- -02 Bottom valve only
- -03 Top & Bottom valves only (no glass or rods)
- -10 For special gauges with non-standard glass, rods, and/or gaskets.



^{*} Automatic ball checks

20-410 SERIES



SIDE MOUNTED HANDWHEEL WATER GAUGES

Side-mounted handwheels allow water gauge operation in hard-to-reach places; with all the 20 Series design features.

FEATURES

- · Ideal for concealed jacketed type boilers
- EPDM standard gauge glass gasket
- Standard 1/4" needle drain valve
- Rated: 125 psig @ 350°F, 300 psig @ 100°F (See note)
- 1-1/4" Extended shank length
- Chrome plate option
- Guard rod glass protection
- CRN OF6616.5C

Part Number	Side	Pipe Size (in.)	Glass O.D. & Length		Shank Length (in.)	Wheel Type
20-410-00	LH	1/2	5/8 x 12	180	1.25	ALUMINUM

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

20-600/20-800 SERIES



BRONZE EXPANSION TANK GAUGES

Bottom shut-off valve allows for glass maintenance without complete drainage.

FEATURES

- Automatic ball check
- EPDM standard gauge glass gasket
- 20-800 models: 1/4" NPT port in upper body for pressure gauge
- Rated: 200 psig @ 400°F, 400 psig @ 100°F (See note)
- Guard rod glass protection
- CRN OF6616.5C

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
20-604-00*	1/2	5/8 x 12	155	ALUMINUM
20-605-00*	1/2	5/8 x 12	175	COMPOSITION
20-804-00*	1/2	5/8 x 12	160	ALUMINUM
20-805-00*	1/2	5/8 x 12	160	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

Note: Not for use on boiler systems

* Automatic ball checks



20-700/20-710 SERIES



BRONZE EXPANSION TANK GAUGES

Simple liquid level indicator. Available with 3/8" or 1/2" MNPT connections; EPDM gauge glass gaskets and 1/4" drain valve in lower body.

FEATURES

- 20-713 & 20-714 with plug for easy glass replacement
- 1/4" pet cock or Apollo® ball valve optional
- Guard rod glass protection
- Rated: 125 psig @ 350°F, 300 psig @ 100°F (See note)
- CRN OF6616.5C

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)
20-703-00	3/8	5/8 x 10	120
20-704-00	1/2	5/8 x 12	135
20-713-00	3/8	5/8 x 10	130
20-714-00	1/2	5/8 x 12	145

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

Note: Not for use on boiler systems

21 SERIES



BRONZE WATER GAUGES WITH EXTENDED SHANK

Ideal for concealed jacket type boilers.

FEATURES

- 1-3/4" shank length
- 21-100 rated 125 psig @ 350°F, 300 psig @ 100°F
- 21-200 rated 200 psig @ 400°F, 400 psig @ 100°F (See note)
- Equipped with two copper-plated steel guard rods for glass protection
- EPDM glass gasket
- TFE reinforced stem packing
- CRN OF6616.5C

Model Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
21-104	1/2	5/8 x 12	185	ALUMINUM
21-105	1/2	5/8 x 12	197	COMPOSITION
21-150*	1/2	5/8 x 12	195	ALUMINUM
21-151*	1/2	5/8 x 12	207	COMPOSITION
21-204	1/2	5/8 x 12	215	ALUMINUM
21-205	1/2	5/8 x 12	219	COMPOSITION
21-250*	1/2	5/8 x 12	215	ALUMINUM
21-251*	1/2	5/8 x 12	215	COMPOSITION

^{*} Automatic ball checks

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.



23-400 SERIES



STAINLESS STEEL LIQUID LEVEL GAUGES

Ideal for handling alcohol solvents, acetic acid and ketones. Automatic models conform to ASME requirements; aluminum and composition handwheels.

FEATURES

- PTFE reinforced gauge glass gaskets, stem packings
- Chemical resistant PTFE seat
- 5/16" diameter full-flow, all SS drain ball valves with safety handle
- Four SS guard rods for glass protection
- Rated 500 psig @ 450°F (See note)
- · High pressure gauge glass standard
- CRN OF6616.5C
- Automatic check models conform to ASME power boiler code requirements for automatic water gauges

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
Non-Automatic				
23-401-00	1/2	5/8 x 12	385	ALUMINUM
23-402-00	1/2	5/8 x 12	385	COMPOSITION
23-404-00	3/4	3/4 x 16	450	ALUMINUM
23-405-00	3/4	3/4 x 16	450	COMPOSITION
ASME-Automatic				
23-450-00	1/2	5/8 x 12	390	ALUMINUM
23-451-00	1/2	5/8 x 12	390	COMPOSITION
23-453-00	3/4	3/4 x 16	455	ALUMINUM
23-454-00	3/4	3/4 x 16	455	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

23-600 SERIES



STAINLESS STEEL EXPANSION TANK GAUGES

Bottom shut-off valve allows for glass maintenance without complete drainage.

FEATURES

- Stainless steel guard rod glass protection
- Rated: 250 psig at 406°F: maximum working pressure (See note)
- · Standard PTFE reinforced gauge glass gaskets
- High pressure glass standard
- CRN OF6616.5C

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
23-651-00	1/2	5/8 x 12	225	ALUMINUM
23-654-00	3/4	5/8 x 12	225	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

Note: Not for use on boiler systems



24-300 SERIES



HEAVY PATTERN BRONZE LIQUID LEVEL GAUGES

Automatic and non-automatic direct reading gauges in shank pipe sizes 1/2" and 3/4".

FEATURES

- Heavy pattern bronze valve body
- Guard rod bracket to accommodate four guard rods
- 250 psig @ 400°F
- 500 psig @ 100°F
- PTFE reinforced gauge glass gasket and stem packing are standard
- Automatic check models conform to ASME power boiler code requirements for automatic water gauges
- · High pressure gauge glass and gaskets are standard
- CRN OF6616.5C
- Bronze ball valve drains are standard

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)	Wheel Type
Non-Automatic				
24-301-00	1/2	5/8 x 12	425	ALUMINUM
24-302-00	1/2	5/8 x 12	425	COMPOSITION
24-304-00	3/4	3/4 x 16	490	ALUMINUM
24-305-00	3/4	3/4 x 16	490	COMPOSITION
ASME-Automatic				
24-350-00	1/2	5/8 x 12	425	ALUMINUM
24-351-00	1/2	5/8 x 12	425	COMPOSITION
24-353-00	3/4	3/4 x 16	490	ALUMINUM
24-354-00	3/4	3/4 x 16	490	COMPOSITION

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.

24-600 SERIES



BRONZE CHAIN LEVER WATER GAUGES

Lever on standard 12-foot chain allows operator to open and close valves that would be beyond reach.

FEATURES

- Rated 250 psig @ 400°F, 500 psig @ 100°F (See note)
- Quick operation quarter turn
- ASME automatic ball check option
- 1/4" full-blow ball valve with safety handle
- High pressure glass
- CRN OF6616.5C
- · TFE reinforced stem packing
- TFE reinforced glass gasket
- · Steel rod glass protection

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)
24-601-00	1/2	5/8 x 12	515
24-602-00	3/4	3/4 x 16	580
24-651-00*	1/2	5/8 x 12	515
24-652-00*	3/4	3/4 x 16	580

^{*} ASME Automatic ball check model

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.



25-600 SERIES



POLISHED BRONZE CHAIN LEVER WATER GAUGES

Lever on standard 12-foot chain allows operator to open and close valves that would be beyond reach.

FEATURES

- Quick operation quarter turn
- Service rating: 250 psig @ 400°F, 500 psig @ 100°F (See note)
- EPDM gauge glass gasket
- 1/4" needle drain valve
- 20-600 series un-polished
- · Graphite stem packing
- Steel rod glass protection
- CRN OF6616.5C

Part Number	Pipe Size (in.)	Glass O.D. & Length	Wt./100 (lbs.)
25-601-00	1/2	5/8 x 12	335
25-602-00	3/4	3/4 x 16	350
20-601-00 †	1/2	5/8 x 12	370
20-602-00 †	3/4	3/4 x 16	435

Note: Service ratings are subject to pressure/temperature ratings of gauge glass and glass gaskets.
† Un-polished

Water Accessories

GLASS PROTECTOR



TUBULAR GAUGE GLASS PROTECTOR

Reduces risk of injury and damage from glass failure; maximum length: 50". **FEATURES**

- Heavy duty brass tube
- No. I-2733* 5/8" Glass Protector
- No. I-2734* 3/4" Glass Protector
- Made to fit most water gauges
- Not available on 23-400, 23-650, 24-300, 24-350, 24-600 models

Note: Water gauge part number and centerline length are required when ordering. Priced according to length and application.



Water Gauge Accessories

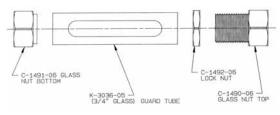
TUBULAR GAUGE GLASS PROTECTOR



FEATURES

- Reduces the risk of injury and damage from broken exploding glass.
- Made to fit most water gauges.
- Priced according to length and application.
- Maximum protector length of 50".
- Tubular gauge glass protector not available on the 23-400, 23-650, 24-300, 24-350, and 24-600 series.
- Maximum of 50" length

Give series number and centerline distance "L" when ordering.



Part Number	Size	Length
I-2733-05	5/8" O.D. glass	Up to 12" long
I-2733-05L	5/8" O.D. glass	12" to 24" long
I-2734-05	3/4" O.D. glass	Up to 16" long
I-2734-05L	3/4" O.D. glass	16" to 24" long

WATER GAUGE REPAIR KITS

Kit	Applications		
20.004.04	20-101, 20-102, 20-104, 20-105, 20-150, 20-151,		
20-001-01 20-003-01	20-405, 20-406, 20-407, 20-408, 20-410		
	21-101, 21-102, 21-104, 21-105, 21-150, 21-151,		
20-001-02	20-201, 20-202, 20-204, 20-205, 20-250, 20-251, 20-304, 20-305, 20-350, 20-351		
20-003-02	20-604, 20-605, 20-804, 20-805, 21-204, 21-205, 21-250, 21-251, 25-201		
, 25-202,	25-204, 25-205, 25-404, 25-405, 25-501, 25-502		
20-001-03	20-207, 20-208, 20-253, 20-254, 20-307, 20-308, 20-353, 20-354		
20-003-03	25-207, 25-208, 25-407, 25-408, 25-504, 25-505		
20-001-04	20-601, 25-601		
20-003-04	20 001,23 001		
20-001-05	20-602, 25-602		
20-003-05	20-002, 23-002		
20-001-06	20-703, 20-704, 20-713, 20-714		
20-003-06	20-103, 20-104, 20-113, 20-114		
20-001-07	23-401, 23-402, 23-450, 23-451		
20-003-07	23-401, 23-402, 23-431		
20-001-08	20-405, 20-406, 20-407, 20-408		
20-003-08	20-403, 20-400, 20-407, 20-400		
20-001-09	23-404, 23-405, 23-453, 23-454		
20-003-09	23-404, 23-403, 23-434		
20-001-10	23-651, 23-654		
20-003-10	23 031,23 034		
20-001-11	24-301, 24-302, 24-350, 24-351, 24-450, 24-451		
20-003-11	24-301, 24-302, 24-330, 24-331, 24-431		
20-001-12	24-304, 24-305, 24-353, 24-354, 24-453, 24-454		
20-003-12	24-304, 24-303, 24-333, 24-433, 24-434		
20-001-13	24-601, 24-651, 24-751, 24-851		
20-003-13	24 001,24 031,24 131,24 031		
20-001-14	24-602, 24-652, 24-752, 24-852		
20-003-14			
20-002-01	20-101, 20-102, 20-104, 20-105, 20-150, 20-151, 20-201, 20-202, 20-204, 20-205,		
	20-250, 20-251, 20-304, 20-305, 20-350, 20-351, 20-405, 20-406, 20-407, 20-408,		
	20-410, 20-601, 20-604, 20-605, 20-703, 20-704, 20-713, 20-714, 20-804, 20-805,		
20-002-02	20-207, 20-208, 20-253, 20-254, 20-307, 20-308, 20-353, 20-354, 25-207, 25-208,		
	25-407, 25-408, 25-504, 25-505, 20-602, 25-602		
20-002-03	23-401, 23-402, 23-450, 23-451, 24-301, 24-302, 24-350, 24-351, 24-450, 24-451,		
	24-601, 24-651, 24-751, 24-851		
20-002-04	23-404, 23-405, 23-453, 23-454, 24-304, 24-305, 24-353, 24-354, 24-453, 24-454,		
	24-602, 24-652, 24-752, 24-852		

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The standard repair kits contain glass packing, stem packing, friction washers, seat washers, and drain washer applicable to the particular valve. Three types of glass packing, EPDM rubber, Hypalon®, and Virgin Teflon®, are included in the standard repair kit. For oil related service, Fluorelastomer (Viton®) glass gasket sets are available. For severe applications, graphite glass gaskets and stem packing sets are available for each model.

REPAIR KIT SELECTION INSTRUCTIONS

It is helpful to determine the following information when ordering a repair kit.

- Model number (if not available describe gauge, i.e. material, # guard rods, NPT size, etc.)
 - Glass O.D. and type
- Handle type
- Service media, temperature, and pressure

If you know the model number just refer to the "Repair Kit Applications" chart to select kit number for your valve. To order the standard kit, or Viton®, or graphite gaskets, assemble the ordering matrix for the desired kit number.

If you are unable to determine model number please determine the above information and call customer service for assistance.

For replacement glass please determine the above information in addition to the "L" dimension and call customer service.

"L" dimension (center to center height of water gauge inlets).

