

Penberthy Steel Water Gauge Valve Sets

PENBERTHY®

**Steel Valves in 16 Models for Pressures up to 3000
PSI (200 Bar)**



PENBERTHY®

SG800 Series Forged Steel Lever Operated Water Gauge Valves For Dependable Steam Service to 1500 PSI (100 Bar)

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SG800 Series Lever Operated Forged Steel Water Gauge Valves

For Dependable Steam Service to 1500 PSI at 600°F

Available with 3/4" Male Pipe Connection or Standard ANSI Flange

SG800 Series valves offer choices in vessel and gauge connections, ball check locations, and union availability. Refer to the Model Selection Guide for individual model features to meet your specific installation requirements.

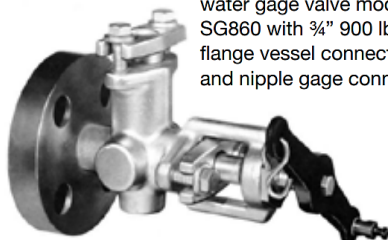
All SG800 Series valves are of outside screw and yolk design. Design and performance features include:

- Forged steel body to ASTM SA-105 Specification
- Type 303 stainless steel stem and one-piece 420F stainless steel replaceable seat (see page 5)
- Grafoil Packing Cartridge (see page 5) is secured by identical two-bolt packing yokes
- Quadruple stem thread allows full open/closed positions with only one-quarter level turn
- Stem brushing is positioned outside body, away from high temperatures and corrosive fluids
- 1/2" Female NPT/SW connection for blowdown

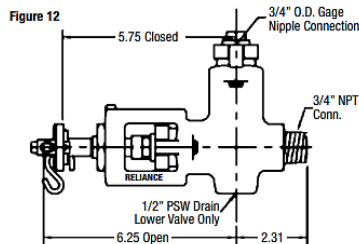
SG800 Series forged steel water gage valve model SG854 with 3/4" male pipe vessel connection and nipple gage connection



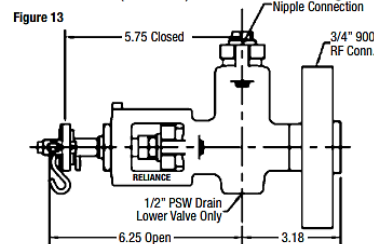
SG800 Series forged steel water gage valve model SG860 with 3/4" 900 lb. RF flange vessel connection and nipple gage connection



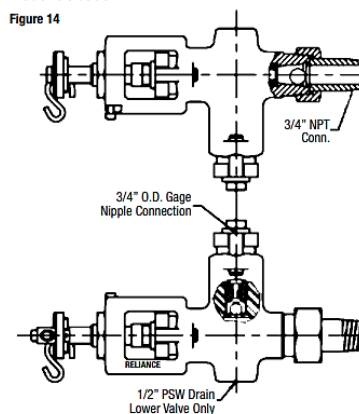
SG800 Series
Model SG854S (Standard)



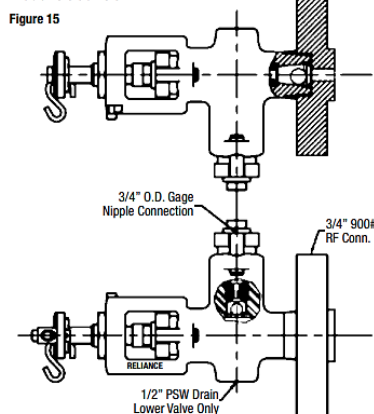
SG800 Series
Model SG860S (Standard)



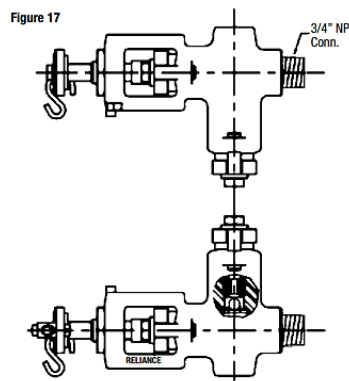
SG800 Series
Model SG855S



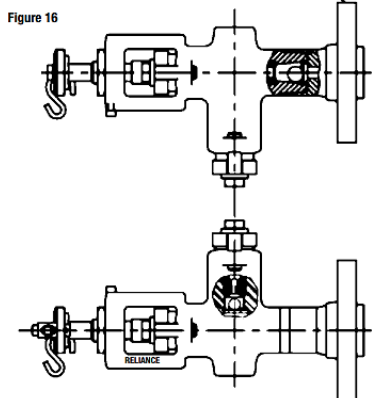
SG800 Series
Model SG861US



SG800 Series
Model SG886S



SG800 Series
Model SG885US



L200 and SG700 Series Forged Steel Chain Wheel Operated Water Gauge Valves For Dependable Steam Service to 3000 PSI (200 Bar)

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L200 Series & SG700 Series Wheel Operated Forged Steel Water Gauge Valves

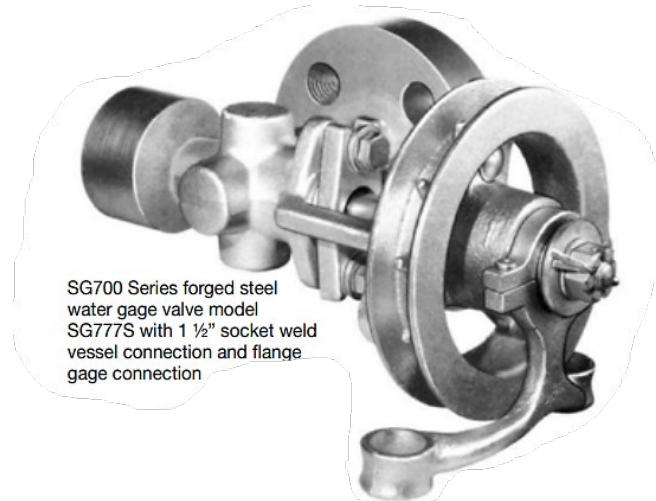
For Dependable Steam Service up to 3000 PSI at 700°F

Exclusively Chain Wheel Operated Models

L200 Series & SG700 Series valves offer choices in vessel and gauge connections, equalizer tube availability and maximum steam pressure services. Refer to the Model Selection Guide for individual model features to meet your specific installation requirements.

All chain wheel operated models are of outside screw and yok design. Design and performance features include:

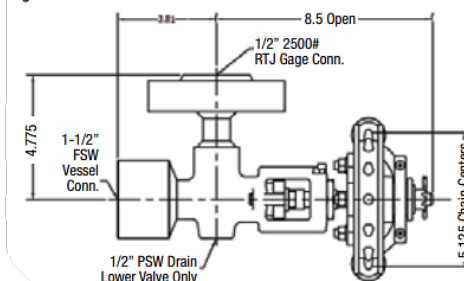
- Forged steel body to ASTM SA-105 Specification
- Type 303 stainless steel stem
- On Series 700 models only, one-piece 420F stainless steel replaceable seat (see page 5)
- Grafoil Packing Cartridge (see page 5) is secured by identical two-bolt packing yokes
- Single-pitch stem thread allows easy valve operation by chain wheel
- Stem bushing is positioned outside body, away from high temperatures and corrosive fluids
- ½" Female SW connection for blowdown



SG700 Series forged steel water gauge valve model SG777S with 1 ½" socket weld vessel connection and flange gauge connection

SG700 Series
Model SG777S
Lower Valve (Top View)

Figure 21



NOTE: Female socket weld connectors are not included when valves are to be welded to water columns. To specify for the above applications, add "C" to model numbers. Example: Model SG777S (with socket weld connectors) becomes Model SG777CS (without socket weld connectors).

Standard Drain Connections SG800 Series – ½" Female NPT/Socket Weld
L200 & SG700 – ½" Socket Weld

Steel Water Gauge Valves

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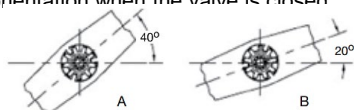
Steel Water Gauge Valve Sets

Model	Design Pressure (Bar)	Vessel Connection	Ball Checks	Gauge Connection	WT (lbs.)
L200	3000 (206)	1 1/2" Female	Optional	3/4-1500# Large Female Flange	27
SG777S	2500 (172)	1 1/2" Female SW	Optional	1/2" 2500# RTJ	20
SG777CS	2501 (172)	3/4" Male NPT	Optional	1/2" 2500# RTJ	18
SG777CMSW	2502 (172)	3/4" Male SW	Optional	1/2" 2500# RTJ	18
SG854S	1500 (103)	3/4" Male NPT	No	3/4" OD Nipple	15
SG854F-300	605 (42)	3/4" Male NPT	No	3/4" 300# RF	20
SG854F-600	1135 (78)	3/4" Male NPT	No	3/4" 600# RF	22
SG854F-900	1500 (103)	3/4" Male NPT	No	3/4" 900# RF	24
SG855S	1500 (103)	3/4" Male NPT	Yes	3/4" OD Nipple	16
SG860S	1500 (103)	3/4" 900#RF Flange	No	3/4" OD Nipple	24
SG861S	1500 (103)	3/4" 900#RF Flange	Lower (only)	3/4" OD Nipple	24
SG861US	1500 (103)	3/4" 900#RF Flange	Yes	3/4" OD Nipple	24
SG885S	1135 (78)	3/4" 600#RF Flange	Lower (only)	3/4" OD Nipple	24
SG885US	1135 (78)	3/4" 600#RF Flange	Yes	3/4" OD Nipple	24
SG886S	1500 (103)	3/4" Male NPT	Lower (only)	3/4" OD Nipple	15

18-Position Gauge Lever

Positive, non-slip locking in 18 positions is assured with the patented Penberthy gauge lever. The lever is standard on all bronze and SG800 Series forged steel water gauge valves.

The gauge lever is readily adjusted to the desired angle regardless of the valve stem orientation when the valve is closed.



Moving the lever from position A to B achieves an intermediate angle adjustment quickly and easily.

Grafoil Packing Cartridge



Penberthy forged steel water gauge valves feature advanced packing cartridges for the operating stem and nipple (end stem) gauge connections which provide leak-free operation. The cartridge replaces loose, individual packing washers and is now standard on all series 800 models. The cartridge is also provided in the RK-34 Live-Loading Retrofit Kit (Figure 30).

One-Piece Valve Seat



Figure 25
REPLACEABLE SEAT
WITH HEX HEAD

Faster renewing, improved performance and longer service life are all benefits of the one-piece valve seat standard in SG800 Series valves. Machined from 420F stainless steel, the hardened valve seat offers precise fit and flow surfaces.

Live Loading Option

LIVE-LOADING RETROFIT KIT FOR SG SERIES FORGED STEEL WATER GAUGE VALVES

Fits all and SG800 Series Models

Available As Specified Option On New Valves*

The Penberthy RK-34 Live-Loading Kit is available to improve the performance and service life of SG800 Series valves already installed. Live-loading produces a more leak-free valve, resisting damage from vibration, pressure changes, time in service and other wear factors. The kit includes all required parts and comes complete with step-by-step instructions for easy and rapid conversion.

RK-34 Retrofit Parts Combine with Existing Parts to Achieve Live-Loading Performance. Retrofit Kit

Includes:

- 2 Cap Screws
- 4 Flat Washers
- 1 Graphite Packing Cartridge
- 8 Spring Washers
- Instructions

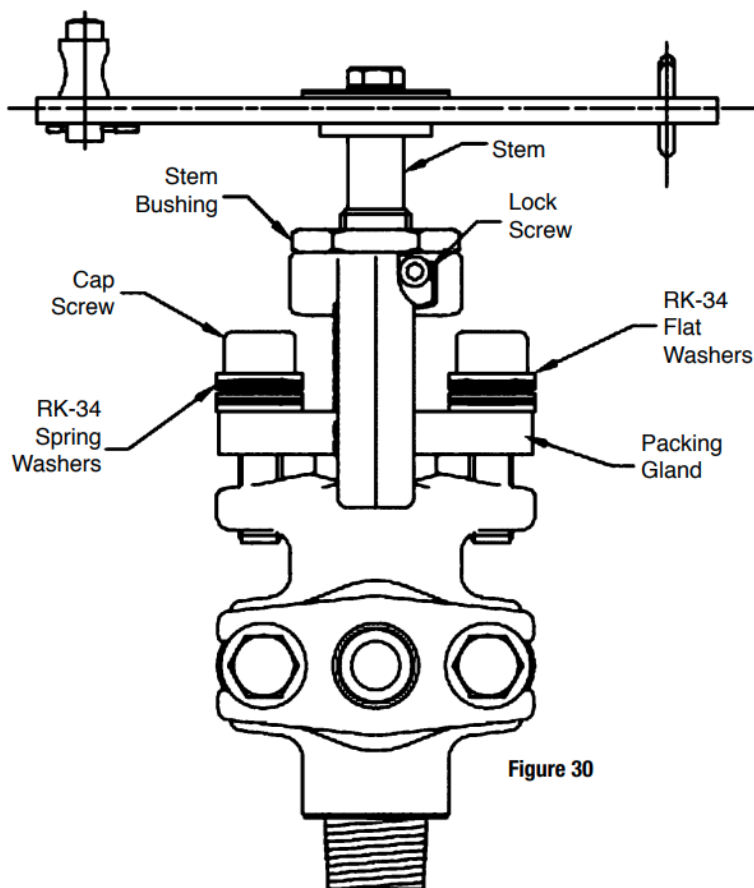


Figure 30

**To specify Live-Loading on new valves, add "P" to the model numbers. (Example: SG854P)*

Penberthy Boiler Instrumentation & Control Devices



Yarway Color-Port®
Water Level Gauges



Yarway Liquid Level Gauges



Yarway 3200 Probe Column/Control Units

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