

Lowest Operating
Torques at
High Pressures

630 Series Valves

Introducing Sherwood's NEW Master Valves

High-pressure shut-off valves designed for heavy-duty use on manifold systems, fill plants, tube trailers and other piping systems. Valves are suitable for use with oxygen, acetylene, nitrogen, argon, helium, hydrogen, carbon dioxide, nitrous oxide and other inert gases.

Key Features & Benefits

- **Easy Operation** - Lowest operating torque available, E-Z grip handwheel and slow opening design combine to make the new 630 series a breeze to operate.
- **Flow Control** - 3 turns from the closed position to fully open.
- **Versatility** - Specially designed resilient soft seat has been third party certified at Wendell Hull and approved for Oxygen service so one valve can fulfill all your gas service needs. Optional copper and monel seats for dedicated oxygen service.
- **Installation Options** - Front or back panel mounting capabilities available.
- **Interchangeability** - Sized to be interchangeable with other manufacturers' valves as an easy drop in replacement for your current installation.
- **Vacuum Capable** - Vacuum tested to ensure the highest purity filling operations.
- **Field Rebuildable** - All valves are field rebuildable.
- **TPED** - Approval Pending.



Design Specifications

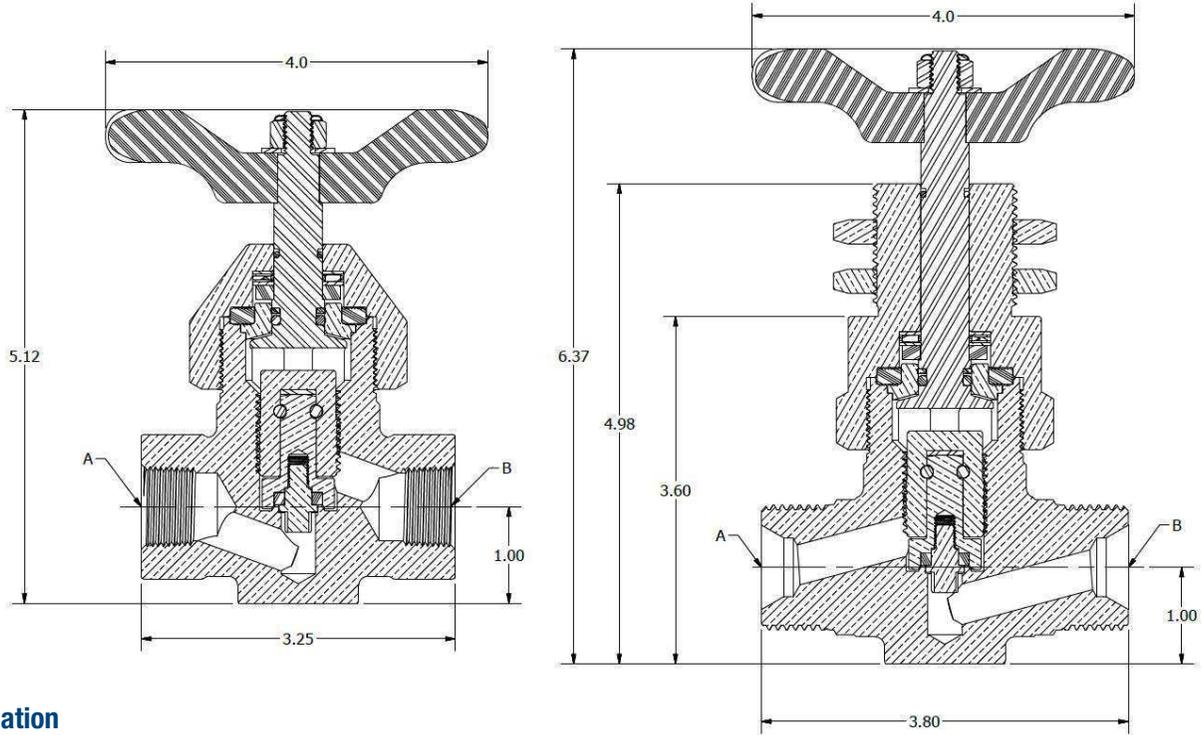
Working Pressure (Maximum)*	6000 PSI (414 Bar)*
Oxygen Surge Pressure Rating	4350 PSI (300 Bar)
Burst Pressure	15,000 PSI (1034 Bar)
Leak Rate Internal/External	1 x 10 ⁻⁴ atm cc/sec. (mL/sec.)
Operating Temperature	-50° F to +149° F (-45° C to +65° C)
Operating Torque	7-9 in.-lbs. @ 6000 PSI (0.8 to 1.0 N-m)
Flow Data Cv	2.3
Cycle Life (Minimum)	2000 Cycles (Minimum)
Cleaned for Oxygen Service	Per CGA G-4.1

*Valves with 1-11/2" connections are de-rated to 3000 PSI (207 Bar) due to the connections maximum pressure rating per CGA V-10



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630 Series Valves



Ordering Information

Sherwood Part Number	A Inlet	B Outlet	FEATURES
630GR-4	1/2" NPT	1/2" NPT	
630GR-6	3/4" NPT	3/4" NPT	
630GR-8	1-11 1/2" NPSM	1-11 1/2" NPSM	
630GR-4PM	1/2" NPT	1/2" NPT	PANEL MOUNT
630GR-6PM	3/4" NPT	3/4" NPT	PANEL MOUNT
630GR-8PM	1-11 1/2" NPSM	1-11 1/2" NPSM	PANEL MOUNT

Materials of Construction

Part Description	Materials of Construction
Body	Forged Brass C37700
Packing	PTFE
Handwheel	Black Phenolic
Bonnet and Inner Bonnet	Brass C36000
Stem	303 Stainless Steel
Stem O-Ring	Buna-N
Bonnet O-Ring	Viton
Plug Assembly	
Plug	Brass C36000
Plug Tip	Brass C36000
Spring Pin	18-8 Stainless Steel
Retaining Staple	302/304 Stainless Steel
Seat	Kel-F
Seat Retainer	Brass C36000
Backup Ring	Buna-N
Needle Bearing and Washer	Steel
Bearing Spacer	303 Stainless Steel
Thrust Bearing	302/304 Stainless Steel
Handwheel Nut	18-8 Stainless steel w/ Nylon Insert
Handwheel Washer	18-8 Stainless Steel
Lubricant	Turmoxygen®

Key Replacement Part Kits

- 630-4KITPK
- Plug and seat assembly kit
- 630-8KITPK
- Handwheel kit
- 630-3KITPK
- Standard stem and bonnet kit
- 630-3PMKITPK
- Panel mount stem and bonnet kit

