

Humphrey Manual and Foot Valves

Humphrey manual and foot valves are 2-way, 3-way, and 4-way valves featuring high flow and full orifice throughout their internal chambers. Simply designed for high reliability, these diaphragm valves require no lubrication and are appropriate for use in both refined and impure air systems. A 125 Series valve has a full 0.125-inch orifice. A 250 Series valve has a full 0.250-inch orifice, providing nearly three times the flow of 125 Series valves.



125PLG 125PLG
Model 125PLG is a 0.125-inch orifice, guarded palm-operated valve with internal pilot to ease operation and reduce operator fatigue. Its guard inhibits unintended operation and inhibits "bridging" when used in pairs for two-hand, no tie-down controls. The 125PLG mounts in any position and is furnished with panel locking nuts, base, side mount, and three colored (red, green, black) actuator stickers.



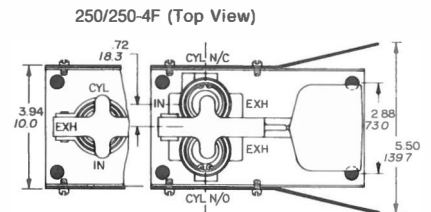
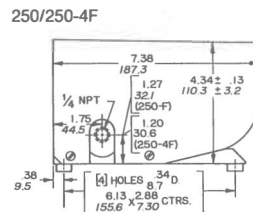
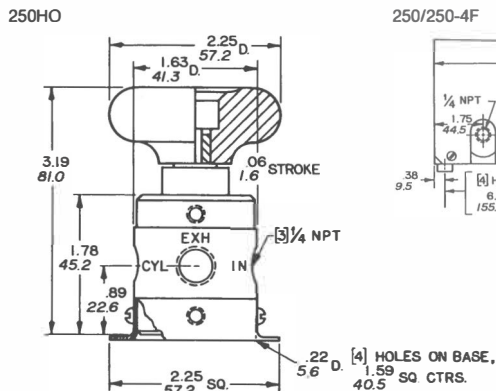
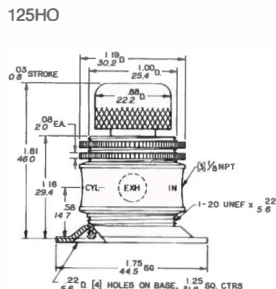
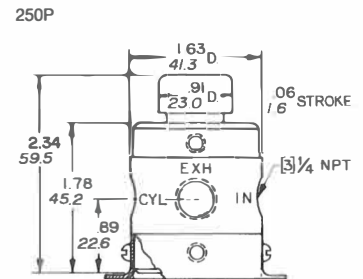
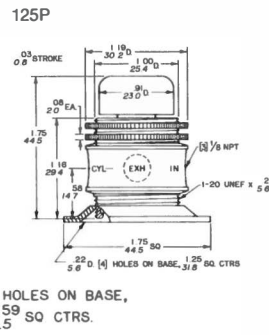
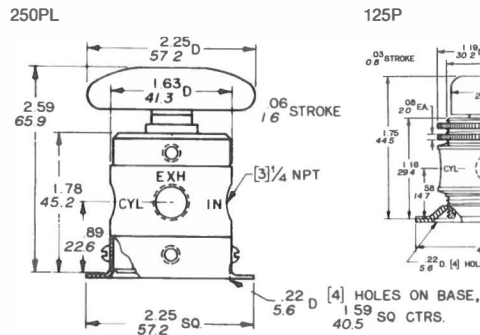
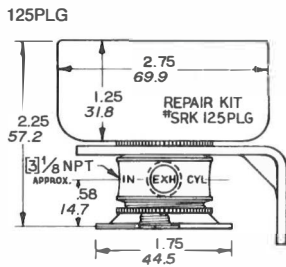
250PL 250PL-3-10-21
Model 250PL is a rugged, 0.250-inch orifice, palm-operated valve with a large aluminum actuator for easy operation and reduced operator fatigue. The 250PL mounts in any position, in-line or with base. Specify if 250PL is desired with base on actuator end for panel mounting.



125P 125P-3-10-20-40
Model 125P is a 0.125-inch orifice, push-button valve with a high-impact nylon actuator for strength and durability. It spring-returns to normal position. The highly reliable 125P valve is designed with a short stroke piston, has no sliding seals, and requires no lubrication. If steel button is desired, specify Code 41. Model 125P mounts in any position, in-line or with base. For panel mounting, specify Code 22 (panel mounting nuts).



250P 250P-3-10-21
Model 250P is a 0.250-inch orifice, push-button valve with a high-impact nylon actuator for strength and durability. It spring-returns to normal position. This highly reliable valve is designed with a short stroke piston, has no sliding seals, and requires no lubrication. It is available with base on actuator end for added durability.

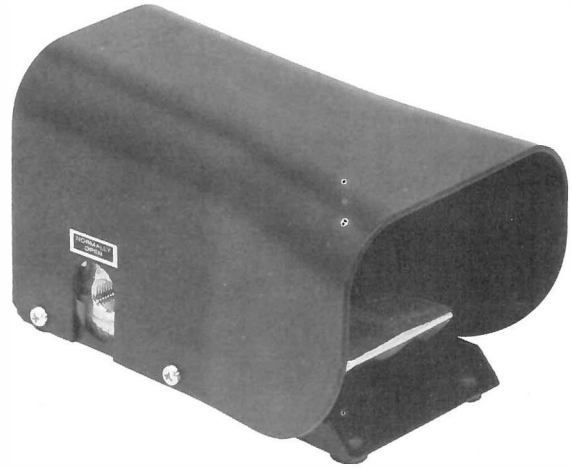




125HO 125HO-3-10-21
 Model 125HO is a 0.125-inch orifice, detented push-button valve with knurled steel actuator and bayonet-type lock. Detent is achieved by pushing actuator and rotating 30°. The 125HO can be used as a spring-return valve without detent.



250HO 250HO-3-10-20
 Model 250HO is a 0.250-inch orifice, normally closed, detented, palm-operated valve. Detent is achieved by pressing the large aluminum palm actuator; valve is returned to the normally closed position by pressing the red center-button. The 250HO functions as a pneumatic "circuit breaker" and automatically closes if there is a sudden loss of pressure (below approximately 12 psig); valve must be manually re-opened. The pressure range of the 250HO valve is 25-125 psig.



250F
 Model 250F is a 2-way or 3-way, 0.250-inch orifice, guarded foot valve. Its 12-gauge steel guard helps protect the operator's foot from falling objects and other hazards. The actuator has a positive

stop to protect valve from damage in rugged use. Its four rubber feet may be removed and the holes used for mounting.



250-4F
 Model 250-4F is a 4 way, 5 port version of 250F, supplied normally closed/normally open as standard.



250-4F

Options for Humphrey Manual and Foot Valves

- Mounting Base, Code 21.
- Panel Mounting Nuts, Code 22 (125 Series valves only.)
- Brass Body, (2-/3-way models only).
- Viton A Diaphragms for resistance to mild chemicals and for sustained temperatures to 400°F (204.4°C) and intermittent temperatures to 600°F (315.5°C). Not available for 125PLG or 250F valves.
- Steel Button for Push-Button Valves, Code 41 (125s only).
- Bottom Inlet for normally closed models (except 250F/-4F).

Specifications

MEDIA:
 Compressed Air (Consult factory for others)

PRESSURE RANGE:

- 125PLG:** 30 to 125 psig (2.1 to 8.6 bars)
- 125P, 125HO:** 0 to 125 psig (0 to 8.6 bars)
- 250PL, 250P, 250F:** 0 to 125 psig (0 to 8.6 bars)
- 250HO:** 25 to 125 psig (1.7 to 8.6 bars)

TEMPERATURE RANGE:
 -20 to 225°F (-28.9 to 107.2°C)

MATERIALS:

- All 125s:** Zinc Plated Steel, Aluminum, Brass, Stainless Steel, Buna N, Nylon
- All 250s:** Zinc Die Cast, Aluminum, Brass, Stainless Steel, Buna N

LUBRICATION Not required
FILTRATION Not required

Air Flow to Atmosphere

MODEL	At 50 psig (3.5 bars)		At 100 psig (8.6 bars)		Weight	
	25 PSIG CFM	(1.7 BARS) LPM	125 PSIG CFM	(8.6 BARS) LPM	ACTUAL LBS	KGS
125PLG	4.5	127.3	24.3	679.2	.26	.12
125P					.21	.09
125HO					.26	.12
250PL	25.0	707.5	75.0	2122.5	0.7	0.3
250P					0.6	0.3
250HO					1.0	0.4
250F					3.8	1.7
250-4F	22.0	622.6	70.0	1981.0	4.7	2.2

Fill/Exhaust Times (Seconds)

MODEL	SUPPLY PRESSURE							
	At 50 psig (3.5 bars)			At 100 psig (7.0 bars)				
	Chamber Fill 0-40 psig (0-2.8 bars)		Exhaust 50-10 psig (3.5-7 bars)	Chamber Fill 0-80 psig (0-5.5 bars)		Exhaust 100-20 psig (7.0-1.4 bars)		
	10 Cubic Inches (164cc)	100 Cubic Inches (1640cc)	10 Cubic Inches (164cc)	100 Cubic Inches (1640cc)	100 Cubic Inches (1640cc)			
FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST			
All 125s	0.106	0.238	0.834	1.150	0.124	0.221	0.922	1.260
All 250s	0.032	0.044	0.312	0.433	0.033	0.059	0.324	0.565