# Humphrey Manual Valves

Humphrey manual 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 in rugged use, these compact valves require no lubrication. Bottom inlets are available for normally closed valves (except 250-4H and 501V valves). A 125 Series valve has a full 0.125-inch orifice. A 250 Series valve has a full 0.250-inch orifice, providing three times the flow of 125 Series valves.



125T-3-10-21 Model 125T is a 0.125-inch orifice, heavy-duty lever valve that is easy to operate with fingers or thumb. Designed for reduced operator fatigue, the 125T is also excellent as a knee-operated valve. The actuator can be positioned (rotated) 360°, and the valve itself can be mounted in any position.

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125T

250T-3-10-21 Model 250T is a 0.250-inch orifice, heavy-duty lever valve that is easy to operate with fingers or thumb. Designed for reduced operator fatigue. The actuator can be positioned (rotated) 360°, and the valve itself can be mounted in

250T

any position.

(rotated) 360°. ÄIIĮ

125V

Model 125V is a 0.125-inch

orifice, 2-position, normally closed,

heavy duty valve with a straight-

in closed or open position. The

ble and permits visual identifi-

cation of valve position. The

actuator can be positioned

line 90° throw and positive detent

large, rugged toggle will not wob-

125V

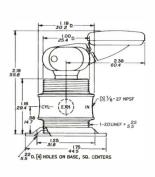
125V

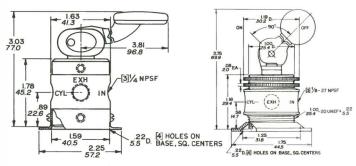
for panel mounting Model 125V valve for panel mounting is identical to the 125V valve but may be ordered with Panel Mounting Nuts (Specify Code 22).

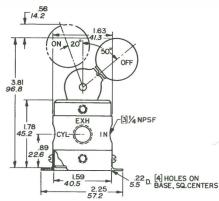
125V-3-10-22

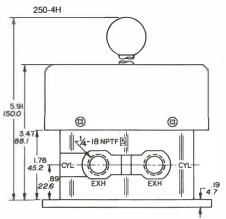
250V

125V-3-10-21













Model 250V is a 0.250-inch orifice, detented, heavy-duty toggle valve providing positive detent in the closed or open position and a straight-line 70° throw. The actuator can be positioned (rotated) 360°. The base of the 250V may be used for either panel or bottom mounting.





### 250-4H

Model 250-4H is a 0.250-inch orifice, lever-operated valve. Moving the lever toward the inlet actuates right side; moving the lever toward the exhaust actuates left side; the center position is neutral. Mount

with four #10-32 tapped holes in body, with two slotted lugs on body, or on mounting base. The valve may be positioned on base in 90° increments.

250-4H-21

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# **Options for Humphrey Manual Valves**

- Mounting Base, Code 21.
- Panel Mounting Nuts, Code 22 (125 Series valves only).
- Brass Body. (For 125 and 250 Series 3-way valves.)
- 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).
- Bottom Inlet for normally closed models (except 250-4H and 501V).

# **Specifications**

#### MEDIA:

Compressed Air (Consult factory for others)

# PRESSURE RANGE:

All 125s: 0 to 125 psig (0 to 8.6 bars) All 250s: 0 to 125 psig (0 to 8.6 bars)

**TEMPERATURE RANGE:** 

-20 to 225°F (-28.9 to 107.2°C)

#### MATERIALS:

All 125s: Zinc Die Cast, Zinc Plated Steel, Aluminum, Brass, Stainless Steel, Buna N,

All 250s: Zinc Die Cast, Zinc Plated Steel. Aluminum, Brass, Stainless Steel, Buna N LUBRICATION . . . . . . . . . . Not required FILTRATION ...... Not required

# Air Flow to Atmosphere

### Weight

MODEL	25 PSIG CFM	(1.7 BARS) LPM	125 PSIG CFM	(8.6 BARS) LPM	ACTUAL LBS	KGS
125T 125V	4.5	127.3	24.3	679.2	.26 .24	.12 .11
250T 250V	25.0	707.5	75.0	2122.5	.70 .70	.30 .30
250-4H	22.0	622.6	70.0	1981.0	2.1	.94

#### Fill/Exhaust Times (Seconds)

	SUPPLY PRESSURE									
		At 50 psig (3.5 bars)				At 100 psi	(7.0 bars)			
		Chamber Fill 0-40 psig (0-2.8 bars)		Exhaust 50-10 psig (3.57 bars)		Chamber Fill 0-80 psig (0-5.5 bars)		Exhaust 100-20 psig (7.0-1.4 bars)		
MODEL	10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)		10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)			
	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUS1		
All 125s All 250s	0.106 0.032	0.238 0.044	0.834 0.312	1.150 0.433	0.124 0.033	0.221 0.059	0.922 0.324	1.260 0.565		

# **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.









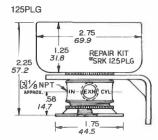
**125PLG** 125PLG Model 125PLG is a 0.125-inch orifice, guarded palm-operated valve with internal pilot to ease operation and reduce operator fatigue. Its guard inhibits unintended operation and inhibits "bridging" when used in pairs for two-hand, no tie-down controls. The 125PLG mounts in any position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

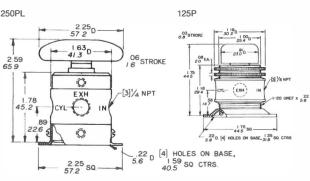
and three colored (red, green, black) actuator stickers. 

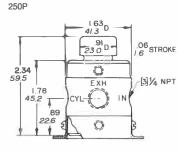
250PL 250PL-3-10-21 Model 250PL is a rugged, 0.250inch orifice, palm-operated valve with a large aluminum actuator for easy operation and reduced operator fatigue. The 250PL mounts in any position, in-line or with base. Specify if 250PL is desired with base on actuator end for panel mounting.

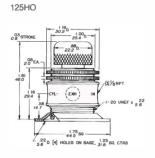
125P 125P-3-10-20-40 Model 125P is a 0.125-inch orifice, push-button valve with a highimpact nylon actuator for strength and durability. It spring-returns to normal position. The highly reliable 125P valve is designed with a short stroke piston, has no sliding seals, and requires no lubrication. If steel 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). W......

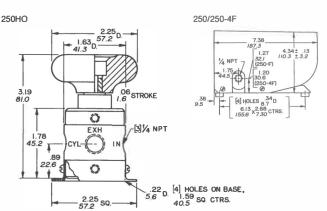
250P 250P-3-10-21 Model 250P is a 0.250-inch orifice, push-button valve with a highimpact nylon actuator for strength and durability. It spring-returns to normal position. This highly reliable valve is designed with a short stroke piston, has no sliding seals, and requires no lubrication. It is available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

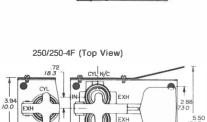




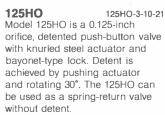










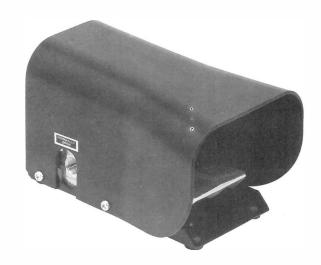






250HO 250HO-3-10-20 Model 250HO is a 0.250-inch orifice, normally closed, detented, palm-operated valve. Detent is achieved by pressing the large aluminum palm actuator; valve is returned to the normally closed position by pressing the red center-button. The 250HO functions as a pneumatic "circuit breaker"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



# 250-4F

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

# **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
- Steel Button for Push-Button Valves, Code 41 (125s only).
- Bottom Inlet for normally closed models (except 250F/-4F)

# **Specifications**

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

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

# Weight

MODEL	25 PSIG CFM	(1.7 BARS) LPM	125 PSIG CFM	(8.6 BARS) LPM	ACTUAL LBS	KGS
125PLG 125P 125H0	4.5	127.3	24.3	679.2	.26 .21 .26	.12 .09 .12
250PL 250P 250H0 250F	25.0	707.5	75.0	2122.5	0.7 0.6 1.0 3.8	0.3 0.3 0.4 1.7
250-4F	22.0	622.6	70.0	1981.0	4.7	2.2

# Fill/Exhaust Times (Seconds)

	SUPPLY PRESSURE							
	At 50 psig (3.5 bars)				At 100 psig (7.0 bars)			
	Chamber Fill 0-40 psig (0-2.8 bars) 10 Cubic Inches (164cc)		Exhaust 50-10 psig (3.57 bars) 100 Cubic Inches (1640cc)		Chamber Fill 0-80 psig (0-5.5 bars) 10 Cubic Inches (164cc)		Exhaust 100-20 psig (7.0-1.4 bars) 100 Cubic Inches (1640cc)	
MODEL	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST
All 125s All 250s	0.106 0.032	0.238 0.044	0.834 0.312	1.150 0.433	0.124 0.033	0.221 0.059	0.922 0.324	1.260 0.565