

# Classic Tiger Series Power Valves

## 3/2 - 3 Way, 2 Position Valves, G 1/8 and 1/8" NPT

**FESTO**

### Single Pilot Valve

Spring Return  
Type VL/O-3-1/8-B

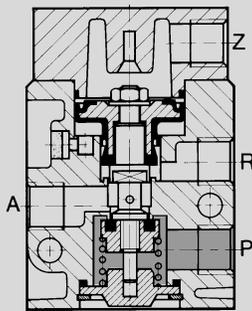


Depending on the connections, the valve functions either as "normally closed" (1 blocked, 2 exhausted to 3) or "normally open" (11 connected to 2, 33 blocked).

This valve is actuated only while pilot pressure is applied at port 110 or 12.

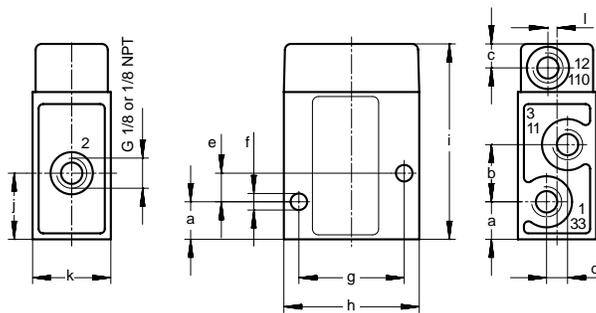
Manifolds: Type PAL-..., see page 451.  
Type PRS-..., see page 452.

Example: "Normally Closed" Configuration



The cover with port Z can be rotated 180°

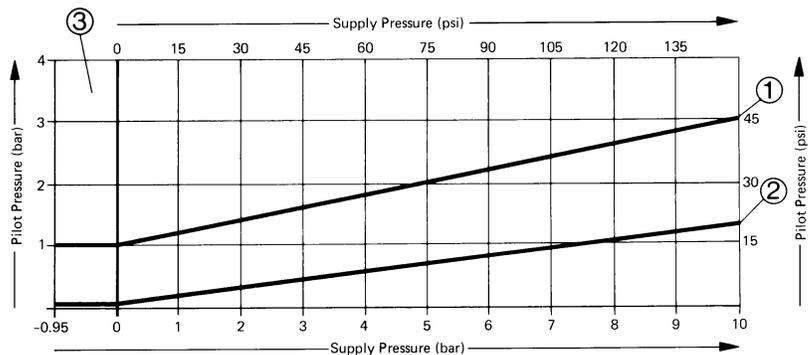
- 1, 11 (P) = Supply
- 2 (A) = Outlet
- 3, 33 (R) = Exhaust
- 110, 12 (Z) = Pilot



#### Dimensions

- a 0.49 in / 12.5 mm
- b 0.75 in / 19 mm
- c 0.31 in / 8 mm
- d 0.28 in / 7 mm
- e 0.37 in / 9.5 mm
- f 0.22 in / 5.5 mm
- g 1.38 in / 35 mm
- h 1.77 in / 45 mm
- i 2.56 in / 65 mm
- j 0.87 in / 22 mm
- k 1.02 in / 26 mm
- l 0.12 in / 3 mm

#### Minimum Pilot Pressure versus Supply Pressure



- ① Pressure On
- ② Pressure Off
- ③ Only with "Normally Closed" Function

Order Number	Part No./Type	7803 VL/O-3-1/8-B	10840 VL/O-3-1/8-B-NPT
Medium		Compressed air (filtered, lubricated or unlubricated)†	
Design		Poppet valve with spring return	
Mounting		2 through holes in housing	
Connection	Working Ports	G 1/8 ISO	1/8 NPT
	Pilot Port	G 1/8 ISO	1/8 NPT
Orifice Size		0.20 in / 5 mm	
C <sub>v</sub> Factor (P → A)		0.5 C <sub>v</sub> / 500 l/min	
Supply Pressure Range*		28.4 in Hg to 150 psi / -0.95 to 10 bar ("normally closed"), 0 to 150 psi / 0 to 10 bar ("normally open")	
Pilot Pressure Range		See graph (max. 150 psi / 10 bar)	
Response Time at 90 psi / 6 bar		On: 4 ms, Off: 10 ms	
Materials		Housing: Die cast aluminum, anodized; Seals: Buna N	
Weight		0.331 lb / 0.150 kg	

\*14 to +140°F / -10 to +60°C

†In "Normally Closed" design, suitable for vacuum operation (Vacuum connected to P<sub>1</sub>).

# Classic Tiger Series Power Valves

## 3/2 - 3 Way, 2 Position Valves, G 1/4 and 1/4" NPT

### Single Pilot Valve

Spring Return  
Type VL/O-3-1/4

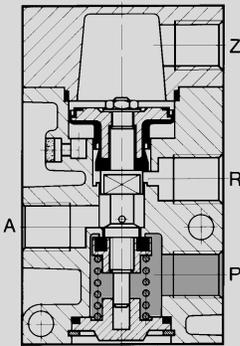


Depending on the connections, the valve functions either as "normally closed" (1 blocked, 2 exhausted to 3) or "normally open" (11 connected to 2, 33 blocked).

This valve is actuated only while pilot pressure is applied at port 110 or 12.

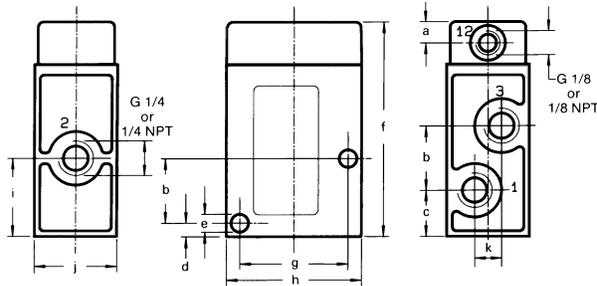
Manifolds: Type PAL-..., see page 451.  
Type PRS-..., see page 452.

Example: "Normally closed" configuration



The cover with port Z can be rotated 180°

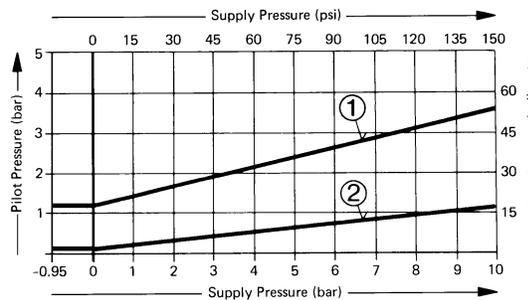
- 1, 11 (P) = Supply
- 2 (A) = Outlet
- 3, 33 (R) = Exhaust
- 110, 12 (Z) = Pilot



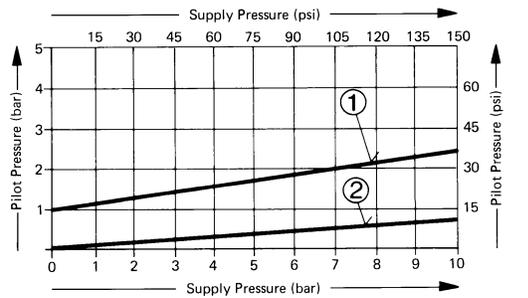
### Dimensions

- a 0.31 in / 8 mm
- b 0.94 in / 24 mm
- c 0.66 in / 17 mm
- d 0.19 in / 5 mm
- e 0.25 in / 6.5 mm
- f 3.15 in / 80 mm
- g 1.57 in / 40 mm
- h 1.96 in / 50 mm
- i 1.14 in / 29 mm
- j 1.20 in / 30.4 mm
- k 0.39 in / 10 mm

### Normally Closed



### Normally Open



- ① Pressure On
- ② Pressure Off

Order Number	9984 VL/O-3-1/4	10841 VL/O-3-1/4-NPT
Medium	Compressed air (filtered, lubricated or unlubricated)†	
Design	Poppet valve with spring return	
Mounting	2 through-holes in housing	
Orifice Size	0.28 in / 7 mm	
Connection	Working Ports	G1/4 ISO
	Pilot Ports	G1/8 ISO
C <sub>v</sub> Factor (P → A)	0.8 C <sub>v</sub> / 800 l/min	
Supply Pressure Range*	28.4 in Hg to 150 psi / -0.95 to 10 bar ("normally closed") 0 to 150 psi / 0 to 10 bar ("normally open")	
Pilot Pressure Range	See graph (max. 150 psi / 10 bar)	
Response Time at 90 psi / 6 bar	On: 8 ms, Off: 30 ms	
Materials	Housing: Diecast aluminum, anodized. Seals: Buna N	
Weight	0.507 lb / 0.230 kg	

\*14 to +140°F / -10 to +60°C

†In "Normally Closed" design, suitable for vacuum operation (Vacuum connected to P<sub>1</sub>).

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