

# Classic Tiger Series Power Valves

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

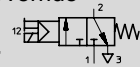
**FESTO**

### Single Solenoid Valve

Spring Return with Manual Override

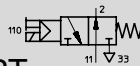
Type MFH-3-1/8

MFH-3-1/8 NPT



MOFH-3-1/8

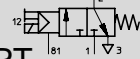
MOFH-3-1/8 NPT



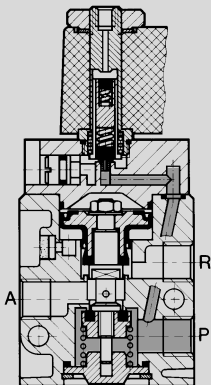
With External Pilot Supply

Type MFH-3-1/8-S

MFH-3-1/8-S NPT



Example: Type MFH-3-1/8

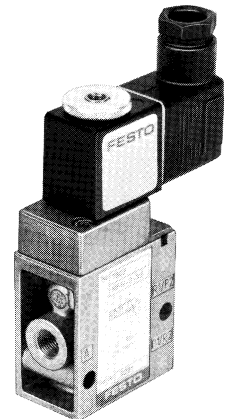


- 1, 11 (P) = Supply
- 2 (A) = Operating or Outlet
- 3, 33 (R) = Exhaust
- 81 (Pz) = External Pilot Supply

When the solenoid is energized, the valve shifts and remains shifted until the solenoid is deenergized. Manifolds: Type PAL-..., see page 317.

Type MFH-3-1/8, MOFH-3-1/8:

These are piloted valves with the solenoid controlling the pilot air. Pilot air is supplied via pressure port P. A number 1 or 2 on the gasket tab, visible in a slot under the solenoid cover, indicates the valve function (type). By rotating the gasket, the valve function will be reversed.



Valve shown with solenoid and socket accessories, ordered separately.

Gasket Tab No.	Valve Function	Pressure Port Connections	Standard Type
1	Normally Closed	1 (P <sub>1</sub> ), 3 (R <sub>1</sub> )	MFH-3-1/8
2	Normally Open	11 (P <sub>2</sub> ), 33 (R <sub>2</sub> )	MOFH-3-1/8

Type MFH-3-1/8-S:

An external pilot pressure must be supplied to port P<sub>Z</sub>. This valve can be used to control vacuum, pressure to 150 psi / 10 bar and in applications where the A port is blowing unrestricted to atmosphere (i.e., part ejection, chip removal, etc.).

**Accessories, see page 414.**

Order Number Part No./Type	ISO Connection	7802 MFH-3-1/8	7877 MOFH-3-1/8	7958 MFH-3-1/8-S
	NPT Connection	10834 MFH-3-1/8-NPT	10835 MOFH-3-1/8-NPT	10872 MFH-3-1/8-S-NPT
Medium	Compressed Air (Filtered, Lubricated or Unlubricated)†			
Design	Poppet valve piloted, with spring return			
Mounting	Holes through housing			
Connection	Output	G 1/8 ISO / 1/8 NPT		G 1/8 ISO / 1/8 NPT;
	Pilot	M 5 / 10-32 UNF		81:M 5
Orifice Size	0.20 in / 5 mm			
C <sub>v</sub> Factor (1 → 2)	0.5 C <sub>v</sub> / 500 l/min			
Operating Pressure Range	22.5 to 120 psi / 1.5 to 8 bar			28.4 in Hg to 150 psi / -0.95 to 10 bar
Control Pressure Range	—			15 to 120 psi / 1 to 8 bar (see graph on page 414)
Response Time at 90 psi / 6 bar	On: 9 ms. Off: 29 ms			
Medium Temperature*	14°F to +140°F / -10°C to +60°C			
Materials	Housing: Diecast Al, anodized. Seals: Buna N			
Weight	0.529 lb / 0.240 kg			
Direct Current	Standard Voltage	12, 24V		} For solenoids, see pages 455-456.
	Available Voltage	12 to 230V		
Alternating Current	Standard Voltage	24, 42, 110, 230V / 50 to 60 Hz		
	Available Voltage	12 to 240V / 50 or 60 Hz		
Power Consumption	DC	4.5 W		
	AC	Holding: 6 VA, Inrush 7.5 VA		
Type of Protection	IP 65 (DIN 40050)			
Duty Cycle	100%			
Type of Protection	IP 65 (DIN 40050)			

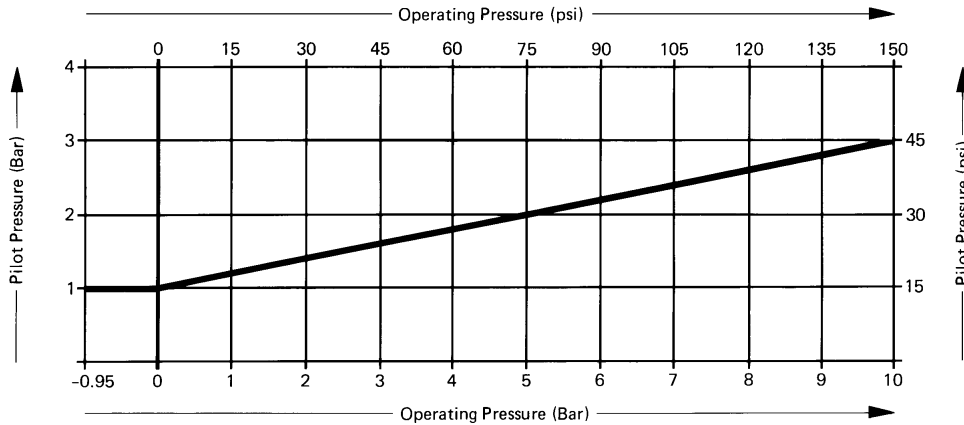
\* 23 to +104°F / -5 to +40°C ambient temperature range

† Type MFH-3-1/8-S is suitable for Vacuum Operation (Vacuum Connected to 1)

# Classic Tiger Series Power Valves

## Dimensions

Minimum pilot pressure versus operating pressure, with Type MFH-3-1/8-S.



**Accessories:**  
(Order Separately)

**Solenoid F-coils**  
with socket, see page 455  
without socket, see page 456

**Standard Sockets, Type MSSD-F**  
see page 459

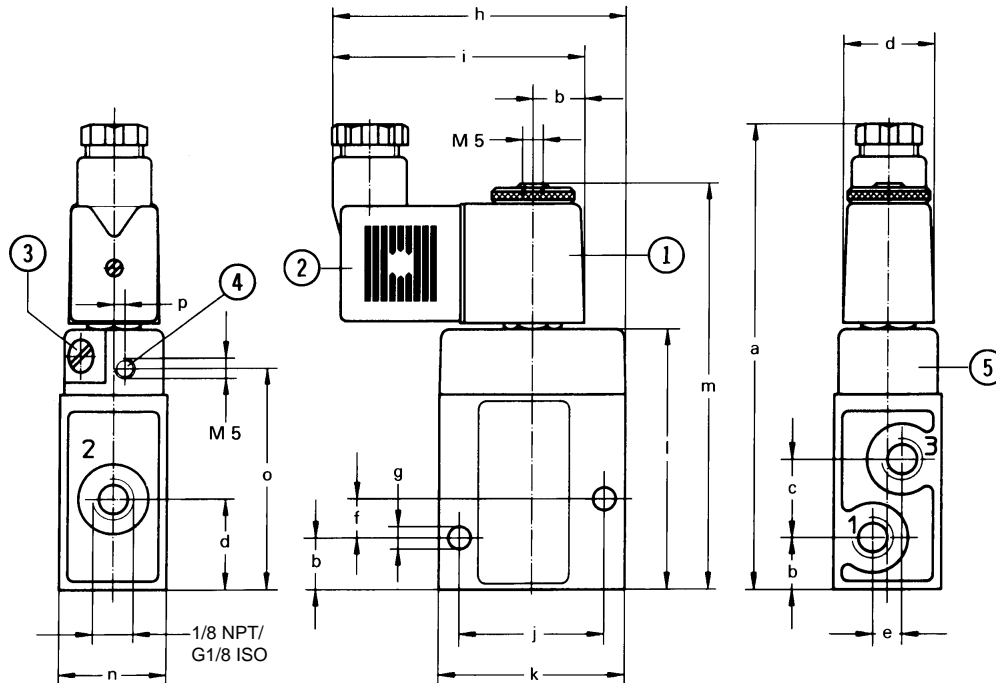
**Sockets with cable, Type KMF-...**  
see page 460

**LED Gaskets, Type MF-LD-...**  
see pages 462-463

**Indicator Inserts, Type MFL-...**  
see page 464

**Solenoid Inserts, Type MFZ-...**  
see page 465

Type MFH-3-1/8    MFH-3-1/8-NPT  
MOFH-3-1/8    MOFH-3-1/8-NPT  
MFH-3-1/8-S    MFH-3-1/8-S-NPT



- ① Solenoid can be rotated
- ② Plug can be turned 180°
- ③ Manual override
- ④ External pilot supply connection for Type MFH-3-1/8-S only
- ⑤ Cover can be turned 180°

### Dimensions

a	4.45 in / 113 mm	i	2.40 in / 61 mm
b	0.49 in / 12.5 mm	j	1.38 in / 35 mm
c	0.75 in / 19 mm	k	1.77 in / 45 mm
d	0.87 in / 22 mm	l	2.48 in / 63 mm
e	0.28 in / 7 mm	m	3.88 in / 98.5 mm
f	0.37 in / 9.5 mm	n	1.02 in / 26 mm
g	0.22 in / 5.5 mm	o	2.11 in / 53.5 mm
h	2.80 in / 71 mm	p	0.11 in / 2.7 mm

- 1, 11 (P) = Supply
- 2 (A) = Operating or Outlet
- 3, 33 (R) = Exhaust
- 81 (Pz) = External Pilot Supply (MFH-3-1/8-S only)

Permissible torque on solenoid mounting nuts = 13 lb in / 150 Ncm.