

Classic Tiger Series Power Valves

3/2 - 3 Way, 2 Position Valves, Piloted, G 1/4 or 1/4" NPT

FESTO

Single Solenoid Valve

Spring Return with Manual Override

Type MFH-3-1/4

MFH-3-1/4-NPT

MOFH-3-1/4

MOFH-3-1/4-NPT

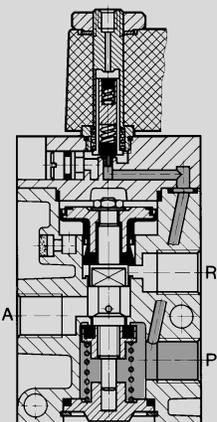
With External Pilot Supply

Type MFH-3-1/4-S

MFH-3-1/4-S NPT

Example: Type MFH-3-1/4

- 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.

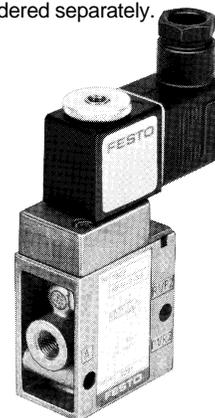
Manifolds: Type PAL-..., see page 451.

Type PRS-..., see pages 452-453.

Type MFH-3-1/4, MOFH-3-1/4:

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 ₁), 3 (R ₁)	MFH-3-1/4
2	Normally Open	11 (P ₂), 33 (R ₂)	MOFH-3-1/4

Type MFH-3-1/4-S:

An external pilot pressure must be supplied to port P_z. 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 416.

Order Number Part No./Type	ISO Connection	9964 MFH-3-1/4	7876 MOFH-3-1/4	7959 MFH-3-1/4-S
	NPT Connection	10836 MFH-3-1/4-NPT	10837 MOFH-3-1/4-NPT	10873 MFH-3-1/4-S-NPT
Medium	Compressed air (filtered, lubricated or unlubricated)†			
Design	Poppet valve, piloted, with spring return			
Mounting	Holes through housing			
Connection	G 1/4 ISO / 1/4 NPT		G 1/4 ISO / 1/4 NPT; 81: M 5	
Orifice Size	0.28 in / 7 mm			
C _v Factor (1 → 2)	0.8 C _v / 800 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	
Pilot Pressure Range	—		15 to 120 psi / 1 to 8 bar (see graph on page 416)	
Response Time at 90 psi / 6 bar	On: 10 ms / Off: 29 ms		On: 15 ms / Off: 45 ms	
Medium Temperature*	14°F to +140°F / -10°C to +60°C			
Materials	Housing: Diecast Al, anodized. Seals: Buna N			
Weight	0.705 lb / 0.320 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		
Duty Cycle	100%			
Type of Protection	IP 65 (DIN 40050)			

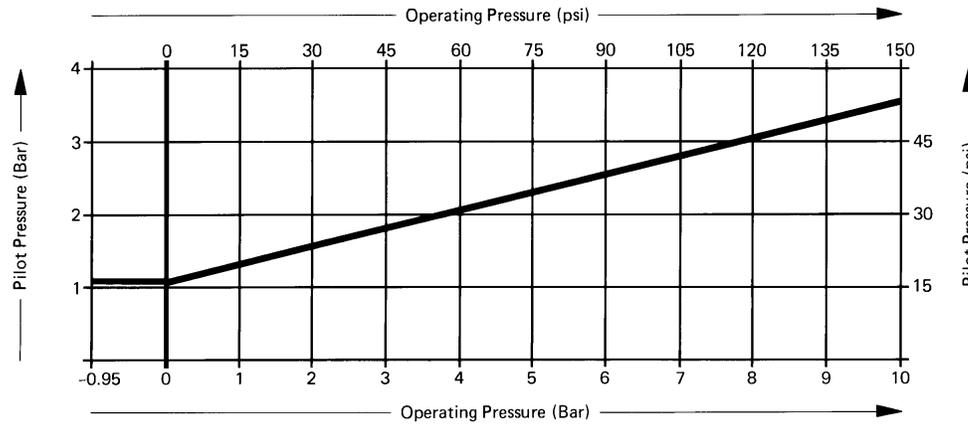
*23 to +140°F / -5 to +40°C ambient temperature range

† Type MFH-3-1/4-S is suitable for vacuum operation (vacuum connected to P)

Classic Tiger Series Power Valves

Dimensions

Minimum Pilot Pressure versus Operating Pressure, with Type MFH-3-1/4-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

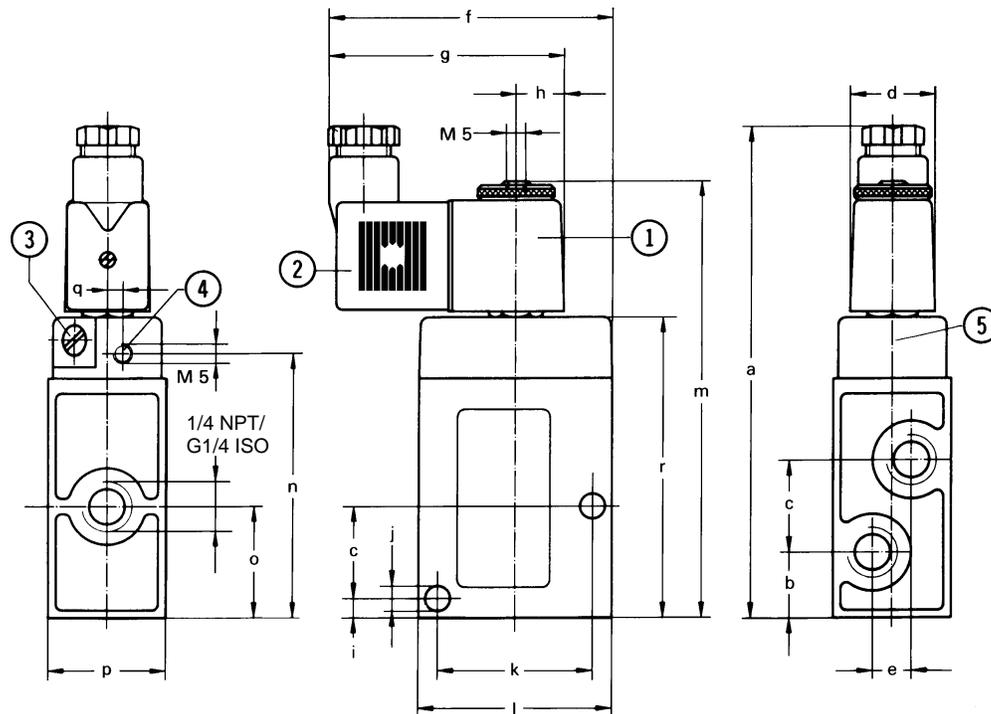
Sockets with cable, Type KMF-...
see page 460

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-3-1/4 MFH-3-1/4-NPT
MOFH-3-1/4 MOFH-3-1/4-NPT
MFH-3-1/4-S MFH-3-1/4-S-NPT



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

Dimensions

a	5.04 in / 128 mm	j	0.26 in / 6.5 mm
b	0.67 in / 17 mm	k	1.57 in / 40 mm
c	0.94 in / 24 mm	l	1.97 in / 50 mm
d	0.87 in / 22 mm	m	4.47 in / 113.5 mm
e	0.39 in / 10 mm	n	2.70 in / 68.5 mm
f	2.89 in / 73.5 mm	o	1.14 in / 29 mm
g	2.40 in / 61 mm	p	1.20 in / 30.4 mm
h	0.49 in / 12.5 mm	q	0.20 in / 4 mm
i	0.20 in / 5 mm	r	3.0 in / 78 mm

1, 11 (P) = Supply
2 (A) = Operating or Outlet
3, 33 (R) = Exhaust
81 (Pz) = External Pilot Supply (MFH-3-1/4-S only)

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

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