

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

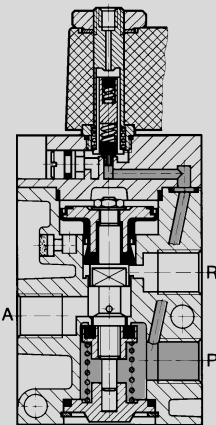
MOFH-3-1/4-NPT

With External Pilot Supply

Type MFH-3-1/4-S

MFH-3-1/4-S NPT

Example: Type MFH-3-1/4



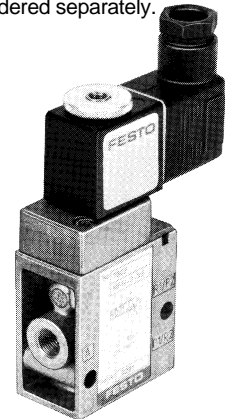
- 1, 11 (P) = Supply
- 2 (A) = Operating or Outlet
- 3, 33 (R) = Exhaust
- 81 (Pz) = External Pilot Supply

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.

Valve shown with solenoid and socket accessories, ordered separately.



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.

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)			

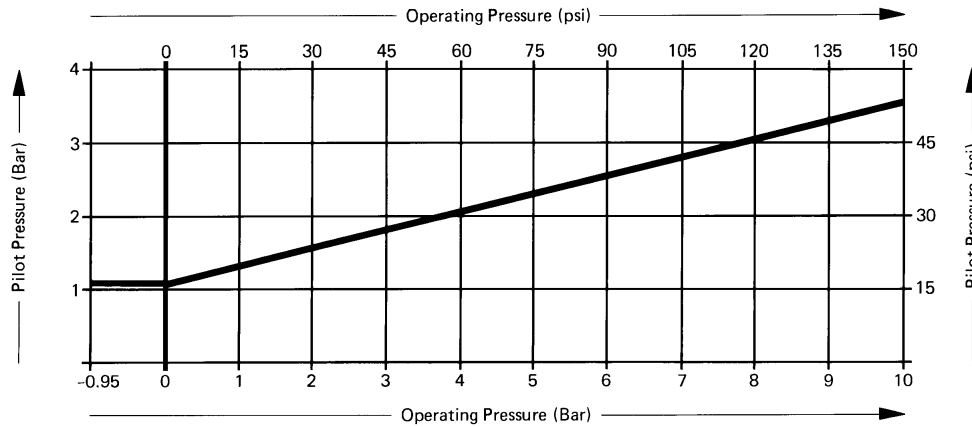
*23 to +140°F / -5 to +40°C ambient temperature range

† 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

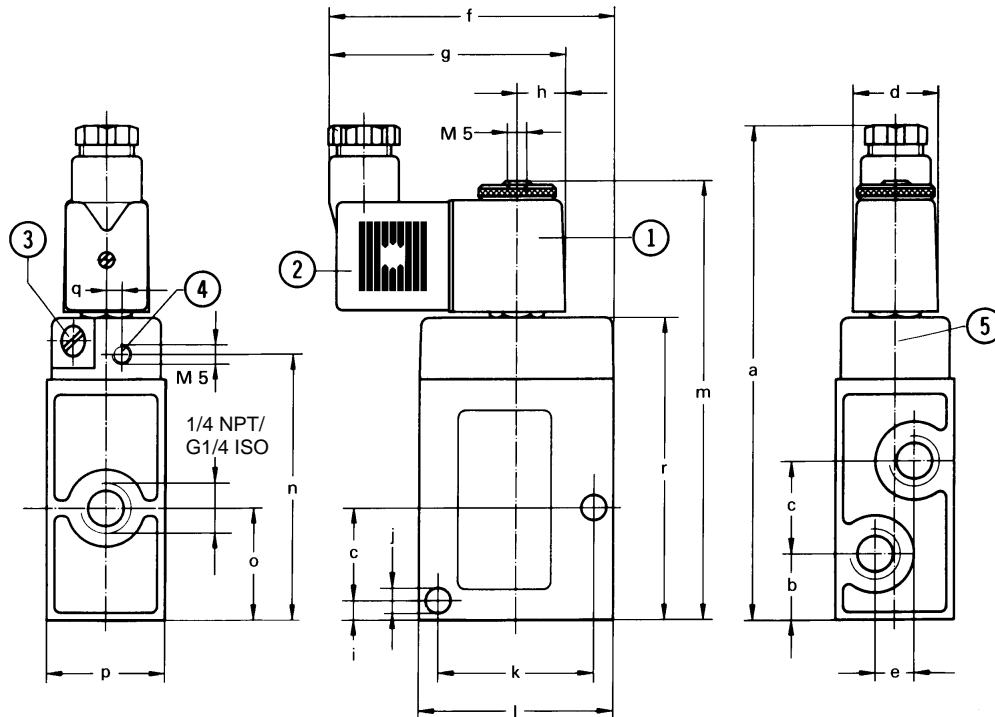
Sockets with cable, Type KMF-...
see page 460

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.