

Classic Tiger Series Power Valves

5/2 - 5 Ported 4 Way, 2 Position Valves, Piloted, G 1/8 or 1/8" NPT

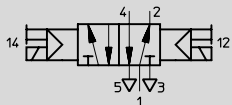
FESTO

Double Solenoid Valve

With Manual Override and Socket

Type JMFH-5-1/8

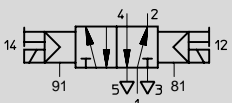
JMFH-5-1/8-NPT



With External Pilot Supply

Type JMFH-5-1/8-S

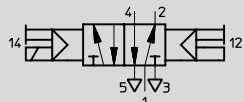
JMFH-5-1/8-S-NPT



Dominating Double Solenoid Valve

With Manual Override

Type JMFDH-5-1/8

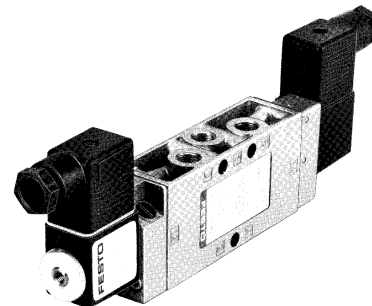


NOTE:

This single solenoid valve can be ordered without socket. See order example in table below.

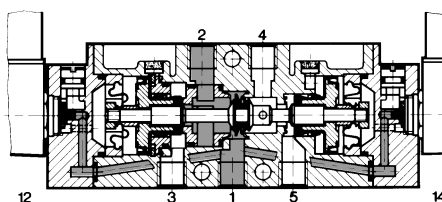
The valve is shifted by alternately energizing the solenoids. When a solenoid is energized, the valve shifts. Only a momentary signal is required (see response time) because the valve will maintain its shifted position until the other solenoid is energized.

If both solenoids are energized, (JMFDH) solenoid 14 will dominate and the valve will shift to the flow position 1 → 4, 2 → 3.



Valve shown with solenoid and socket accessories.

Example: Type JMFH-5-1/8



- 1 (P) = Supply
- 4, 2 (A, B) = Outlet
- 5, 3 (R, S) = Exhaust
- 81, 91 (Pz) = Auxiliary Pilot Air

For manifold mounting,
Type PAL-..., see page 451.
Type PRS-..., see page 452.

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

| | | | |
|---------------------------------|---|---------------------------------|--|
| Order Number | 8820 | 14008 | 8821 |
| Part No./Type | JMFH-5-1/8 | JMFH-5-1/8-S | JMFDH-5-1/8 |
| | 10875 | 15613 | — |
| | JMFH-5-1/8-NPT | JMFH-5-1/8-S-NPT | |
| Design | Poppet valve, piloted | | |
| Medium | Compressed air (filtered, lubricated or unlubricated) | | |
| Mounting | Through-holes in housing | | |
| Connection | G 1/8 ISO / 1/8 NPT | | G 1/8 ISO / 1/8 NPT, 81, 91: M5 |
| Orifice Size | 0.20 in / 5 mm | | |
| C _v Factor (P → A) | 0.6 C _v / 600 l/min | | |
| Operating Pressure Range | 22.5 to 120 psi / 1.5 to 8 bar | 0 to 120 psi / 0 to 8 bar | 37.5 to 120 psi / 2.5 to 8 bar |
| Pilot Pressure Range | — | 17 to 120 psi / 1.2 to 8 bar | |
| Response Time at 90 psi / 6 bar | 10 ms | | 10 ms, dominating function 24 ms |
| Medium Temperature Range* | 14 to 140°F / -10 to +60°C | | |
| Materials | Housing: Diecast Al, anodized. Seals: Buna N | | |
| Weight | 0.937 lb / 0.425 kg | | |
| Direct Current | Standard Voltage | 12, 24V | } For solenoid coils, 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, In rush 7.5 VA | | |
| ED Switching Time | 100% | | |
| Type of Protection | IP 65 (DIN 40050) | | |

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

Classic Tiger Series Power Valves

Dimensions

Type JMFH-5-1/8, JMFH-5-1/8 NPT
 JMFH-5-1/8-S, JMFH-5-1/8-S-NPT
 JMFDH-5-1/8

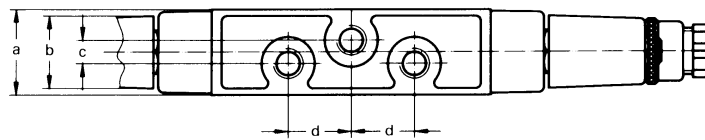
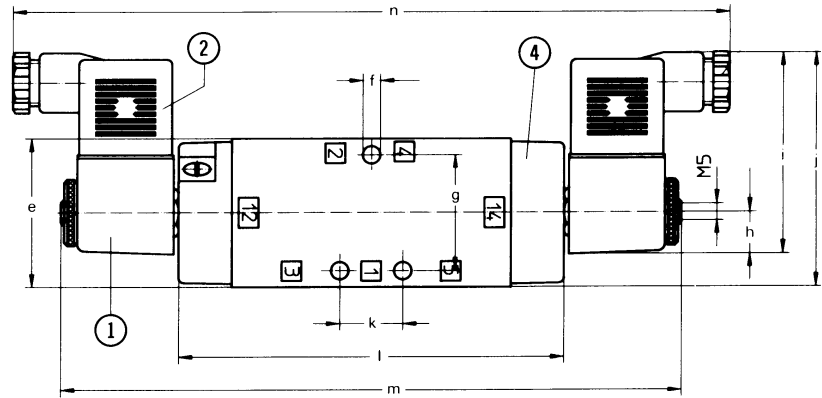
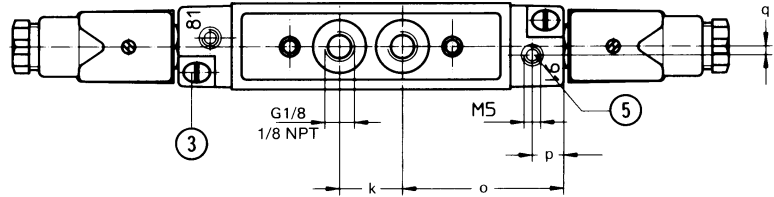
- ① Solenoid coil can be rotated
- ② Plug can be turned 180°
- ③ Manual override
- ④ Cover can be rotated 180°
- ⑤ Additional auxiliary control air connection with Type JMFH-5-1/8-S

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

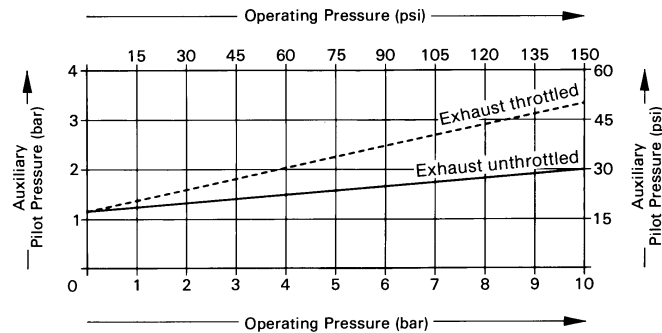
- 1 (P) = Supply
- 4, 2 (A, B) = Outlet
- 5, 3 (R, S) = Exhaust
- 81, 91 (Pz) = Auxiliary Pilot Air

Dimensions

- | | |
|---------------------|---------------------|
| a 1.02 in / 26 mm | j 2.80 in / 71 mm |
| b 0.87 in / 22 mm | k 0.75 in / 19 mm |
| c 0.28 in / 7 mm | l 4.57 in / 116 mm |
| d 0.75 in / 19 mm | m 7.36 in / 187 mm |
| e 1.77 in / 45 mm | n 8.58 in / 218 mm |
| f 0.21 in / 5.3 mm | o 1.91 in / 48.5 mm |
| g 1.38 in / 35 mm | p 0.37 in / 9.5 mm |
| h 0.49 in / 12.5 mm | q 0.11 in / 2.7 mm |
| i 2.40 in / 61 mm | |



Minimum pilot pressure as a function of operating pressure, with Type JMFH-5-1/8-S, JMFH-5-1/8-S-NPT



Wear Parts Kit

| | |
|--------------|--------------------------|
| For Type | JMFH-5-1/8, JMFH-5-1/8-S |
| Order Number | 104891 |

Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical
Electromechanical actuators, motors, controllers & drives



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



© Copyright 2008, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

Festo North America

United States

Customer Resource Center

502 Earth City Expy., Suite 125
Earth City, MO 63045

For ordering assistance, or to find
your nearest Festo Distributor,

Call: 1.800.99.FESTO

Fax: 1.800.96.FESTO

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO

Fax: 1.800.96.FESTO

Email: product.support@us.festo.com

Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788
www.festo.com/us

Sales Offices

Appleton

N. 922 Tower View Drive, Suite N
Greenville, WI 54942

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057

Detroit - Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326

New York

395 Moreland Road
Hauppauge, NY 11788

Silicon Valley

4935 Southfront Road, Suite F
Livermore, CA 94550

Design and Manufacturing Operations



East: 395 Moreland Road, Hauppauge, NY 11788



Central: 1441 East Business Center Drive, Mt. Prospect, IL 60056



West: 4935 Southfront Road, Suite F, Livermore, CA 94550

Mexico

Headquarters

Festo Pneumatic, S.A.
Av. Ceylán 3, Col. Tequesquahuac
54020 Tlalnepantla, Edo. de México
Call: 011 52 [55] 53 21 66 00
Fax: 011 52 [55] 53 21 66 65
Email: festo.mexico@mx.festo.com
www.festo.com/mx



Canada

Headquarters

Festo Inc.
5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Call: 1.905.624.9000
Fax: 1.905.624.9001
Email: info.ca@ca.festo.com
www.festo.com/ca



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan
Latvia Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com