5 port pilot operated valve 4F Series

Overview

The heavy-duty oil-free 4F Series 5port valve provides outstanding overall performance and a wide selection usable for a variety of applications. This valve is suitable for ø6 to ø250 cylinder drives.

Features

Resource saving The special soft packing seal enables use in an oil-free environment.

Long life

The proven soft spool method extends life.

Compatible with infrequent use The proven soft spool method enables smooth startup after long nonuse, ideal for infrequent use.

Robust against dust

▲ Safety precautions	888
Discrete/individual wiring manifold 4F/M4F Series	883
Master valve 4F/M4F Series	961

Technical data

(1) How to wire terminal box wiring and connector 972



Pneumatic components

Safety precautions

Always read this section before starting use. Refer to Intro 63 for valve general precautions.

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During Use & Maintenance

1. Common

A CAUTION

■ Do not plug in the PE port.

The pilot pressure will not be exhausted, inhibiting valve operation.

- When using the DIN terminal box with continuous power ON specifications where the ambient temperature is high, the gasket could deteriorate quickly. Replace the gasket in this case.
- The external pilot is low pressure specification for pressurizing the P (S) port. Contact CKD when using a vacuum or pressurizing from another port.
- Use the manual button to confirm trial operation. If this button is left locked for a long time, the locking mechanism could be damaged, and the state may change from ON to OFF.

■ Stations

When operating 6 or more valves at once, supply pressure (S) from both ends of the manifold block, and release the exhaust (E) to the air from both ends. Failure to use both ends will cause malfunctions due to exhaust pressure.

■ The connection port for the 4F0 to 4F3 series has Rp parallel threads. Wrap sealing tape or apply adhesive before connecting pipes to prevent leakage when pipes are connected.

2. Manual override

CAUTION

■ Manual override

This solenoid valve is pilot-operated, so even if manual override operates, the main valve does not change unless air is supplied to the S port.

■ Non-locking manual override

With non-locking manual override, press manual override with a rod. When using the 2-position single solenoid or 3-position solenoid, the valve is in the same status as when power is on while override is pressed down. Status is returned when released. With the 2-position double solenoid, the same state as when X (Y) is energized is set when X (Y) manual override is pressed. The main valve holds this status even when manual override is released. Operate Y (X) side manual override to restore status.



When using 4F0/1, push with ø3 or smaller rod.

Locking manual override

Rotating locking manual override 45° with a screwdriver sets the valve to the same status as when energized and locks it. Override is turned only clockwise. Do not rotate beyond locked status or the mechanism could be damaged. Locked manual override must be unlocked (position 0) before normal operation is started.



MN3E0 MN4E0

4GA/B M4GA/B

MN4GA/B

4GA/B (Master

W4GA/B2

W4GB4

MN3S0 MN4S0 4TB

4L2-4/ LMF0

4SA/B0

4SA/B1

4KA/B

4F PV5G/

CMF PV5/ CMF

3MA/B0

3PA/B P/M/B

NP/NAP/ NVP

4F*0E

HMV HSV 2QV 3QV

SKH PCD/ FS/FD

Ending