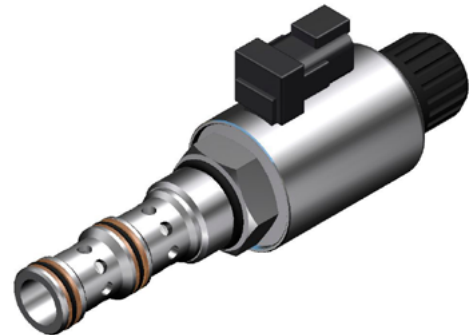


OPERATION

Solenoid Valve, Poppet Type, 2-Position, 3-Way, Pull-Type, 12-size. When de-energized, the CP521-21 allows flow from port 1 to port 2, while port 3 is blocked. When energized, flow is allowed from port 3 to port 1, while port 2 is blocked. Follow the “Operating Envelope” limits to ensure shifting of the valve during operation. This valve comes standard with a one-direction, push-pin manual override.



APPLICATIONS

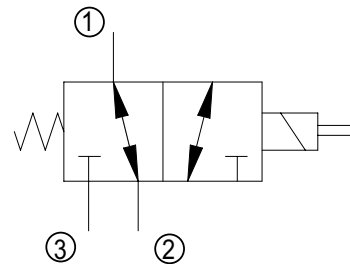
These spool-type valves are commonly used in a selector circuit, or as an on/off pilot control for a directional spool valve. Solenoid spool-type valves are direct acting and respond quickly to coil voltage input. Spool valves will have some leakage due to spool clearance, so if your application requires no leakage at the working port(s), apply a low leakage poppet valve(s), like PO check valve, counterbalance valve, etc., in addition to this solenoid valve. This valve can operate with an inlet pressure of 315 bar for 400,000 cycles. In case of inlet from port 2 this value can be increased to 600,000 cycles.

SPECIFICATIONS

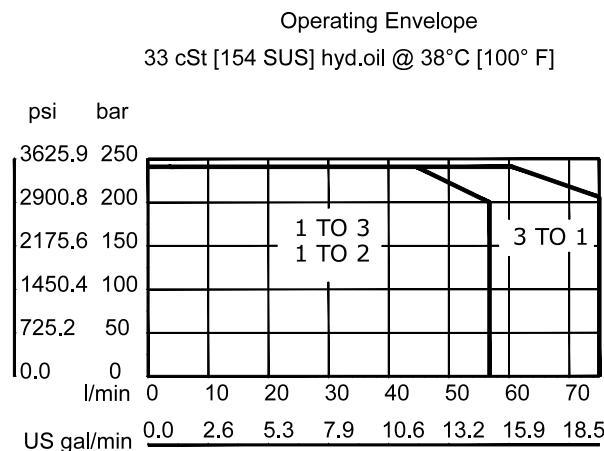
Rated pressure*	240 bar [3500 psi]
Rated flow at 7 bar [100 psi]	60 l/min [16 US gal/min]
Weight	0.80 kg [1.76 lb]
Cavity	CP12-3
Robust Coil (Standard)	D14E 30 Watt Robust Nut P/N 321567

* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

SCHEMATIC



PERFORMANCE CURVES





Solenoid Valves Technical Information

3-Way, 2-Position Spool

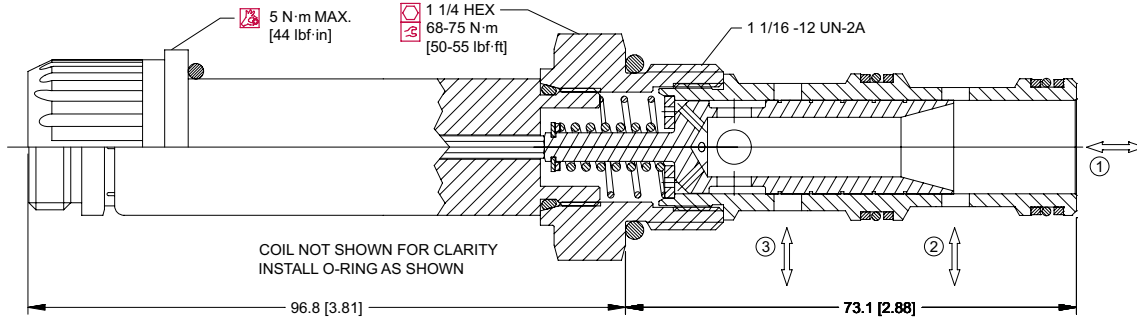
CP521-21



DIMENSIONS

mm [in]

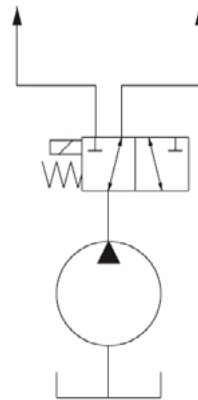
Cross-sectional view



EXAMPLE CIRCUITS

Selector circuit

To circuit A To circuit B



ORDERING INFORMATION

CP521-21-B-10S-24D-S

Seals

B = Buna-N
V = Viton

Seal kit
120053
120052

Housing and ports

0 = No Housing
4B = AL, 1/2 BSP
6B = AL, 3/4 BSP
10S = AL, #10 SAE
12S = AL, #12 SAE

Housing P/N

No Housing
CP12-3-4B
CP12-3-6B
CP12-3-10S
CP12-3-12S

Termination

0 = No connector
S = Spade
L = Lead wire
H = DIN 43650
M2 = Metripak 150 Type 1
DE = Deutsch
AJ = Amp Junior

Coil Voltage

000 = No coil
12D = 12 VDC
24D = 24 VDC