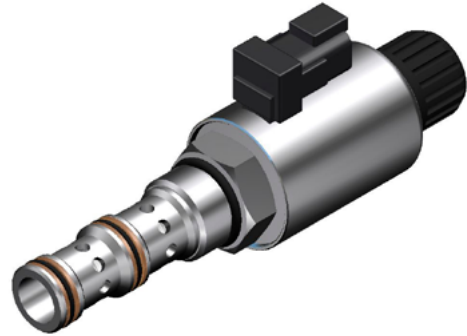


### OPERATION

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.

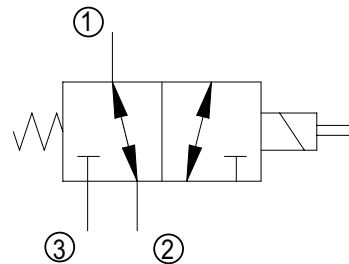


### SPECIFICATIONS

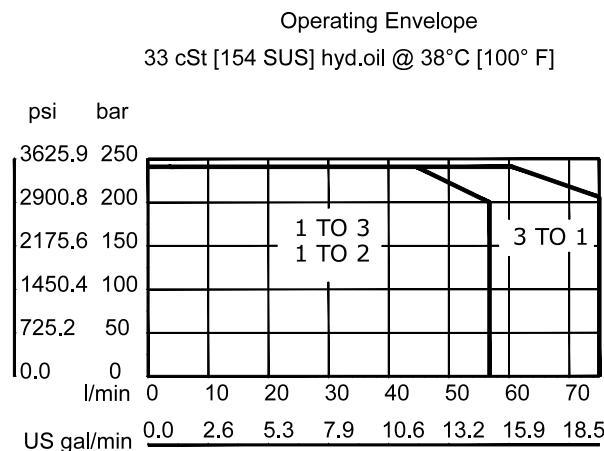
Rated pressure*	240 bar [3500 psi]
Rated flow at 7 bar [100 psi]	60 l/min [16 US gal/min]
Weight	0.80 kg [1.76 lb]
Cavity	CP12-3
Robust Coil (Standard)	D14E 30 Watt Robust Nut P/N 321567

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

### SCHEMATIC



### PERFORMANCE CURVES





# Solenoid Valves Technical Information

## 3-Way, 2-Position Spool

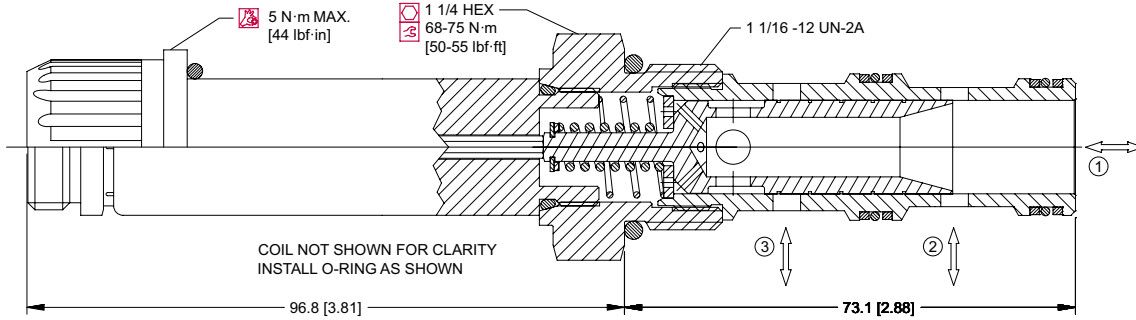
### CP521-21



### DIMENSIONS

mm [in]

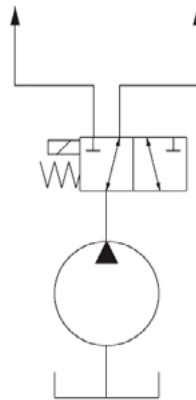
### Cross-sectional view



### 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