



# S501 / S502 Directional Control Valve - 2-Way, 2-Position Poppet

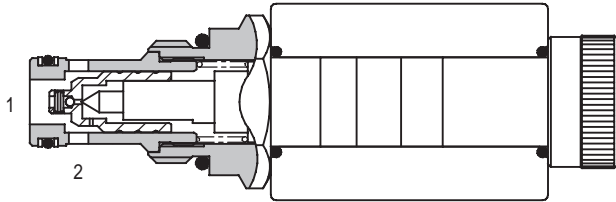
60 litres/min (16 US GPM) • 210 bar (3000 PSI)

## S501

**NORMALLY OPEN**  
(as shown)

## S502

**NORMALLY CLOSED**



## FEATURES

- High flow capacity with reduced space requirements.
- No dynamic seals.
- Standard valve bodies and common cavities.
- One-piece encapsulated coil with minimal amperage draw.
- Oil immersed armature solenoid.
- Various coil terminals and voltages.
- Coil interchangeability with all Series S5 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

## COIL INFORMATION

(See Page 11-1021)

Part Number: C16-\*/\*/19

Voltage available: 12, 24 VDC  
110, 220 VAC\*

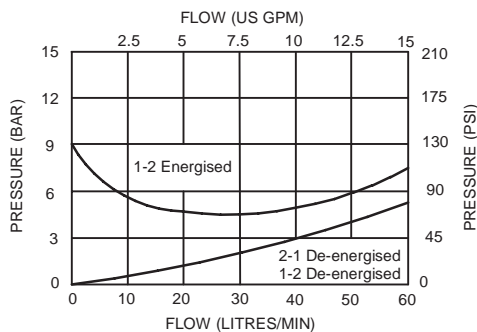
\* AC coils must be used with a rectifying connector.

## SPECIFICATIONS

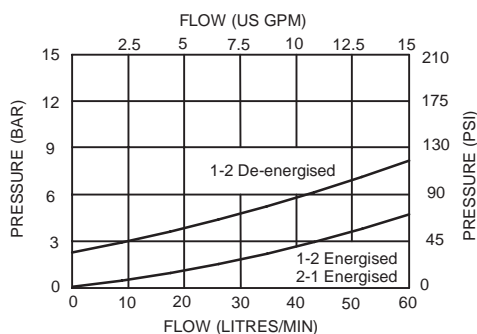
## PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)

### S501 (Normally Open)



### S502 (Normally Closed)



Basic Model Code	S501 (N.O.)	S502 (N.C.)
Symbol		
Max. Working Pressure	210 bar (3000 psi)	
Flow Rating	60 litres/min (16 US GPM)	
Nominal Flow (at Delta P = 5 bar (70 psi))	60 litres/min (16 US GPM)	
Internal Leakage	0.6 ml/min (10 dpm) 210 bar differential at 32 centistokes	
Temperature Range	-20 to +120°C (-4 to +248°F)	
Nominal Viscosity Range	15 to 250 centistokes	
Recommended Filtration	BS5540/4 18/13 (25 micron or better)	
Fluid	Compatible with most general purpose hydraulic fluids	
Seal Material	Standard nitrile with PTFE back up rings	
Seal Kit Number	SK1028 (Nitrile)	SK1028V (Viton)
Mounting Position	Unrestricted	
Cartridge Weight	0.2 kg (0.4 lbs)	
Coil Weight	0.3 kg (0.6 lbs)	
Cavity Number	A12370 (See Section 17)	
Torque into Cavity	30 Nm (22 lbs ft)	
Electrical Data	See coil data sheet	
Line Body Material	Aluminium Alloy	

## Integrated Hydraulics Ltd

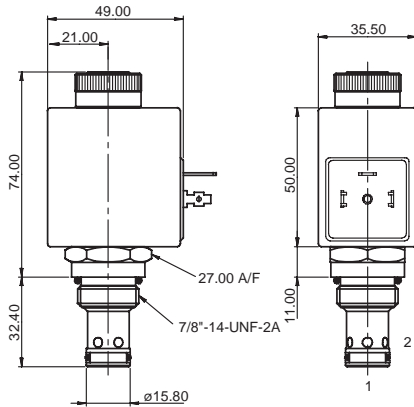
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## Integrated Hydraulics Inc

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### CARTRIDGE ONLY

**BASIC CODE: S501 (Normally Open)**



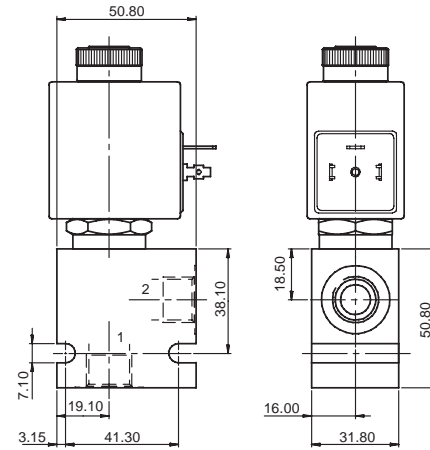
### COMPLETE VALVE

**3/8" 1/2" PORTS**

**BASIC CODE: S501 (Normally Open)**

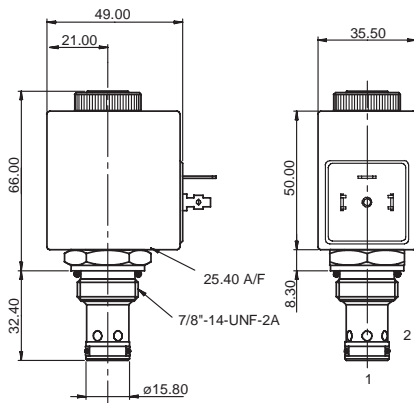
Body ONLY part numbers

BSP, aluminium	SAE, aluminium	SAE, steel
3/8" B19053	1/2" B19402	1/2" B20601
1/2" B19356		



### CARTRIDGE ONLY

**BASIC CODE: S502 (Normally Closed)**



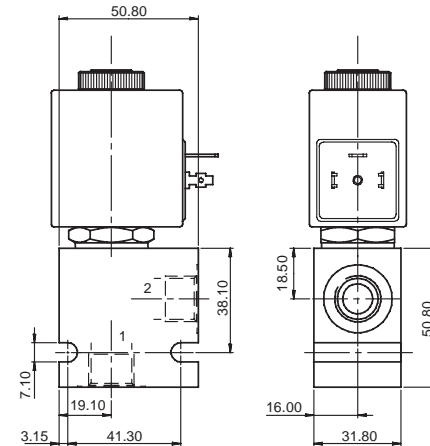
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3/8" B19053	1/2" B19402	1/2" B20601
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Where measurements are critical request certified drawings

### ORDERING CODE EXAMPLE

**S501 N H 24 3W**

**Basic Code**

S501 = (normally open)  
S502 = (normally closed)

**Seals**

N = Nitrile  
V = Viton

**Manual Override (consult factory for availability)**

2 = Screw (S501, S502)

**Port Sizes**

3W = 3/8" BSP  
4W = 1/2" BSP  
8T = 1/2" SAE

**Voltage**

12 = 12 VDC  
24 = 24 VDC  
110 = 110 VAC  
220 = 220 VAC

**Coil Termination**

H = DIN43650  
F = Flying Leads  
DM = Deutsch Moulded  
Other terminations available on request

We reserve the right to change specifications without notice