



S510(H) / S511(H) Directional Control Valve 2-Way, 2-Position Spool

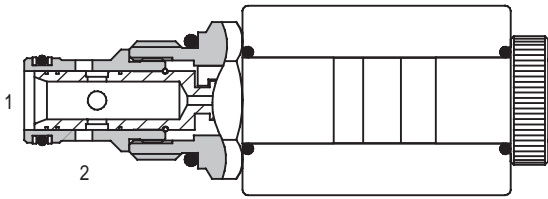
Up to 25 litres/min (6.5 US GPM) • Up to 210 bar (3000 PSI)

S510(H)

**NORMALLY OPEN
(as shown)**

S511(H)

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 (S510 / S511)
C16-*/29 (S510H / S511H)

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

* AC coils must be used with a rectifying connector.

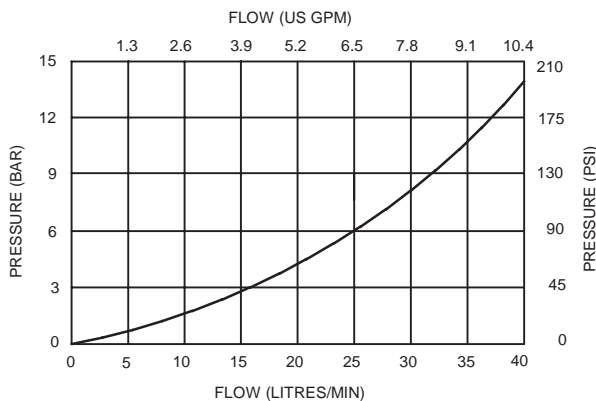
SPECIFICATIONS

Basic Model Code	S510(H) (N.O.)	S511(H) (N.C.)
Symbol		
Max. Working Pressure	210 bar (3000 psi)	
Flow Rating	See performance graphs	
Nominal flow (at Delta P = 5 bar (70 psi))	22 litres/min (6 US GPM)	
Internal Leakage	Less than 120 ml/min 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	

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PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



Integrated Hydraulics Ltd

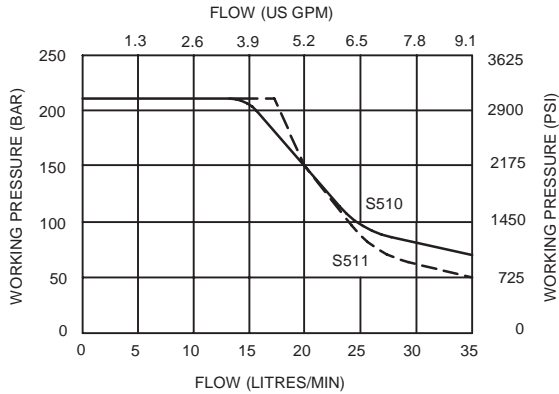
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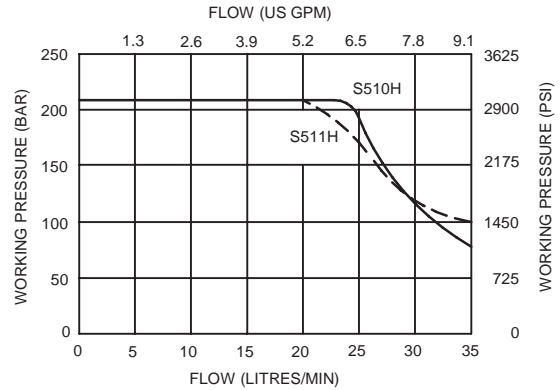
PERFORMANCE

S510 / S511 (Standard valve)



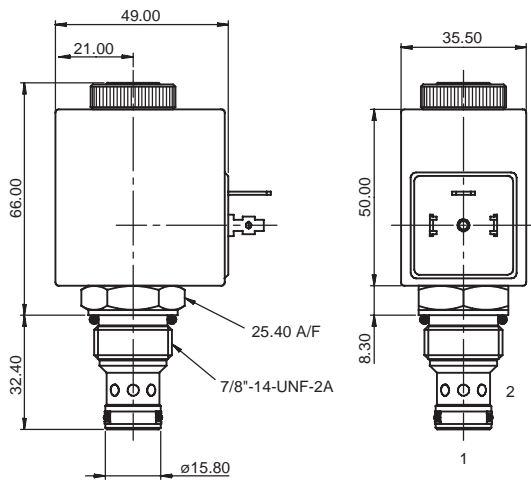
PERFORMANCE

S510H / S511H (Heavy duty valve)



CARTRIDGE ONLY

**BASIC CODE: S510(H) (Normally Open)
S511(H) (Normally Closed)**



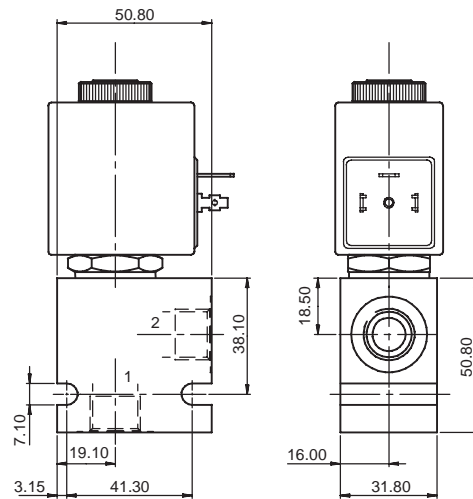
COMPLETE VALVE

3/8" 1/2" PORTS

**BASIC CODE: S510(H) (Normally Open)
S511(H) (Normally Closed)**

Body ONLY part numbers

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



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

S51 N H 24 3W**

Basic Code

S510 = (normally open - standard valve)
S510H = (normally open - heavy duty valve)
S511 = (normally closed - standard valve)
S511H = (normally closed - heavy duty valve)

Seals

N = Nitrile
V = Viton

Manual Override (consult factory for availability)

2 = Screw (S510(H) & S511(H))

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