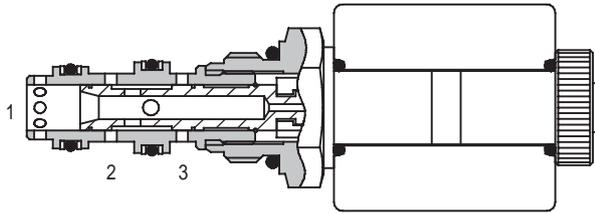




S220(H) Directional Control Valve - 3-Way, 2-Position Spool

Up to 14 litres/min (3.7 US GPM) • Up to 210 bar (3000 PSI)

S220(H)



APPLICATION

NORMALLY CLOSED (Pressure at Port 3)	NORMALLY OPEN (Pressure at Port 2)	SELECTOR (Pressure at Port 1)

COIL INFORMATION

(See Page 11-1021)

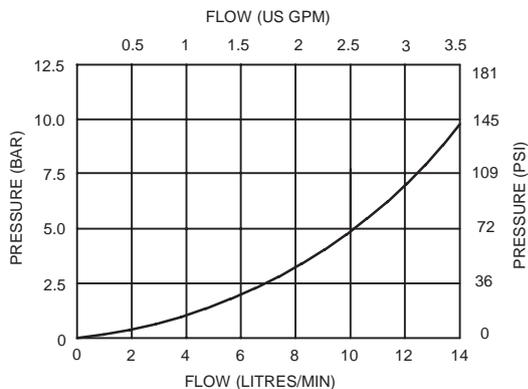
Part Number: C13-*/14 (S220)
C13-*/27 (S220H)

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

* AC coils must be used with a rectifying connector.

PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



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 S2 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

SPECIFICATIONS

Basic Model Code	S220 (std) / S220H (heavy duty)
Symbol	
Actuator Port Location	Port 1
Max. Working Pressure	210 bar (3000 psi)
Flow Rating	See performance graphs
Nominal flow (at Delta P = 5 bar (70 psi))	11 litres/min (3 US GPM)
Internal Leakage	Less than 60 ml/min past each land 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	SK973 (Nitrile) SK973V (Viton)
Mounting Position	Unrestricted
Cartridge Weight	0.13 kg (0.3 lbs)
Coil Weight	0.2 kg (0.4 lbs)
Cavity Number	A3531 (See Section 17)
Torque into Cavity	20 Nm (15 lbs ft)
Electrical Data	See coil data sheet
Line Body Material	Aluminium Alloy

Integrated Hydraulics Ltd

Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

Integrated Hydraulics Inc

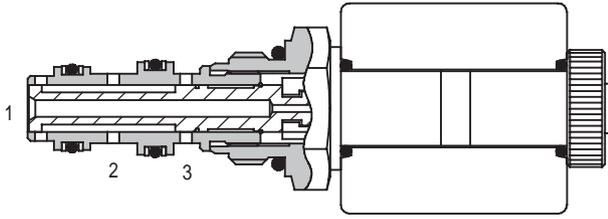
7047 Spinach Drive, Mentor, Ohio 44060, USA
Tel: (440) 974 3171 Fax: (440) 974 3170
Website: www.integratedhydraulics.com



S221(H) Directional Control Valve - 3-Way, 2-Position Spool

Up to 20 litres/min (5 US GPM) • Up to 210 bar (3000 PSI)

S221(H)



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 S2 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

APPLICATION

NORMALLY CLOSED (Pressure at Port 3)	NORMALLY OPEN (Pressure at Port 1)	SELECTOR (Pressure at Port 2)

SPECIFICATIONS

Basic Model Code	S221(std) / S221H (heavy duty)
Symbol	
Actuator Port Location	Port 2
Max. Working Pressure	210 bar (3000 psi)
Flow Rating	See performance graphs
Nominal Flow (at Delta P = 5 bar (70 psi))	11 litres/min (3 US GPM)
Internal Leakage	Less than 60 ml/min past each land 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	SK973 (Nitrile) SK973V (Viton)
Mounting Position	Unrestricted
Cartridge Weight	0.13 kg (0.3 lbs)
Coil Weight	0.2 kg (0.4 lbs)
Cavity Number	A3531 (See section 17)
Torque into Cavity	20 Nm (15 lbs ft)
Electrical Data	See coil data sheet
Line Body Material	Aluminium Alloy

COIL INFORMATION

(See Page 11-1021)

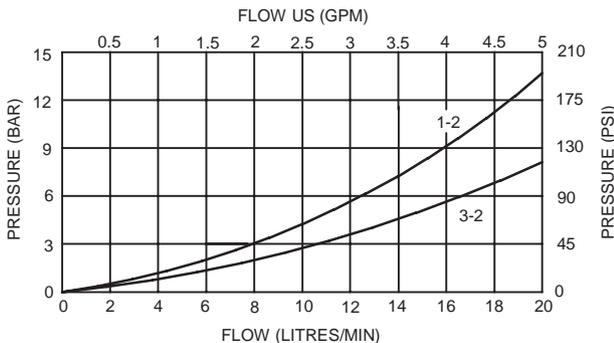
Part Number: C13-*/14 (S221)
C13-*/27 (S221H)

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

* AC coils must be used with a rectifying connector.

PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



Integrated Hydraulics Ltd

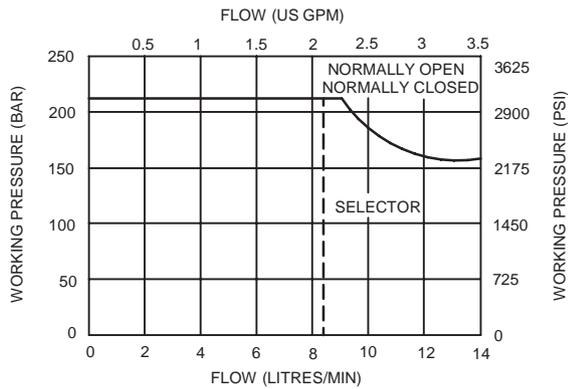
Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

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7047 Spinach Drive, Mentor, Ohio 44060, USA
Tel: (440) 974 3171 Fax: (440) 974 3170
Website: www.integratedhydraulics.com

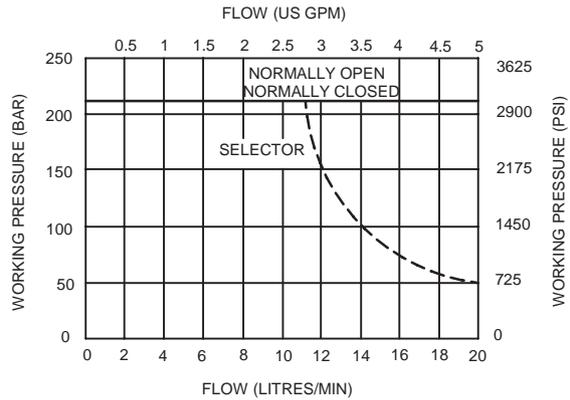
PERFORMANCE

S221 (Standard valve)



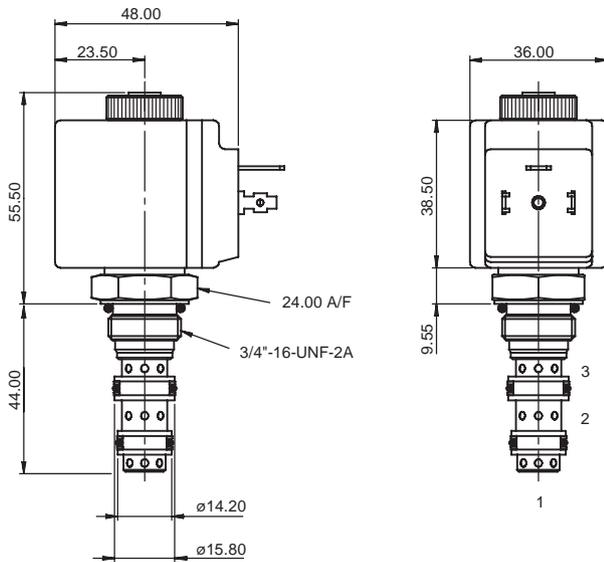
PERFORMANCE

S221H (Heavy duty valve)



CARTRIDGE ONLY

BASIC CODE: S221 / S221H



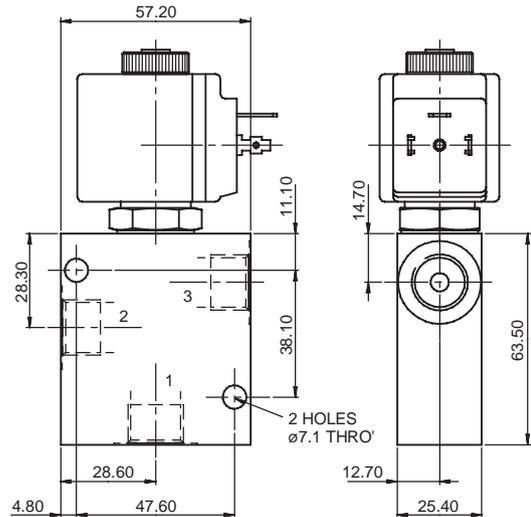
COMPLETE VALVE

1/4" 3/8" PORTS

BASIC CODE: S221 / S221H

Body ONLY part numbers

BSP, aluminium SAE, aluminium
1/4" B7724 3/8" B6516
3/8" B6684



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

S221* **N** **H** **24** **3W**

Basic Code

S221 = (standard valve)
S221H = (heavy duty valve)

Seals

N = Nitrile
V = Viton

Manual Override (consult factory for availability)

1 = Push and twist
2 = Screw

Port Sizes

2W = 1/4" BSP
3W = 3/8" BSP
6T = 3/8" 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

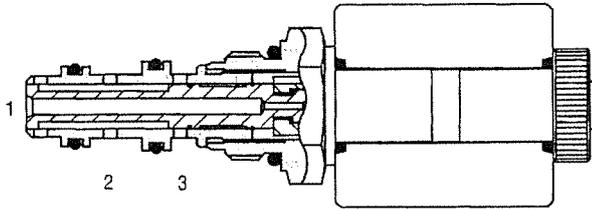
We reserve the right to change specifications without notice



S222 Directional Control Valve - 3-Way, 2-Position Spool

20 litres/min (5 US GPM) • Up to 100 bar (1500 PSI)

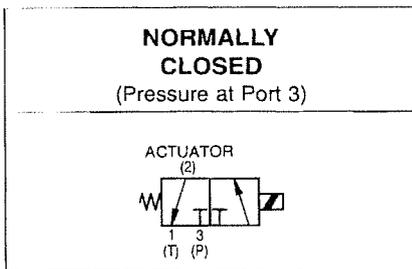
S222



FEATURES

- Increased flow capacity with low pressure drop.
- 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 S2 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

APPLICATION



SPECIFICATIONS

Basic Model Code	S222
Symbol	
Actuator Port Location	Port 2
Max. Working Pressure	100 bar (1500 psi)
Flow Rating	20 litres/min (5 US GPM)
Nominal Flow (at Delta P = 5 bar (70 psi))	17 litres/min (4.5 US GPM)
Internal Leakage	Less than 40 ml/min 100 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	SK975 (Nitrile) SK975V (Viton)
Mounting Position	Unrestricted
Cartridge Weight	0.13 kg (0.3 lbs)
Coil Weight	0.2 kg (0.4 lbs)
Cavity Number	A18333 (See Section 17)
Torque into Cavity	20 Nm (15 lbs ft)
Electrical Data	See coil data sheet
Line Body Material	Aluminium Alloy

COIL INFORMATION

(See Page 11-1021)

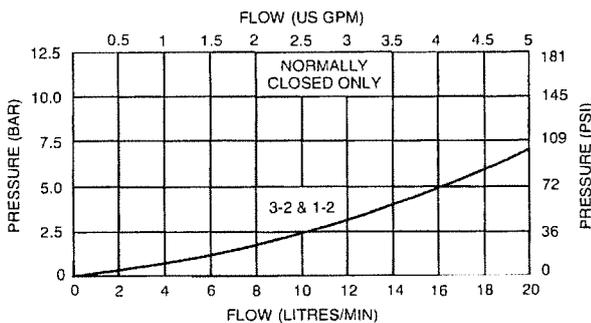
Part Number: C13-*-* /14

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

* AC coils must be used with a rectifying connector.

PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



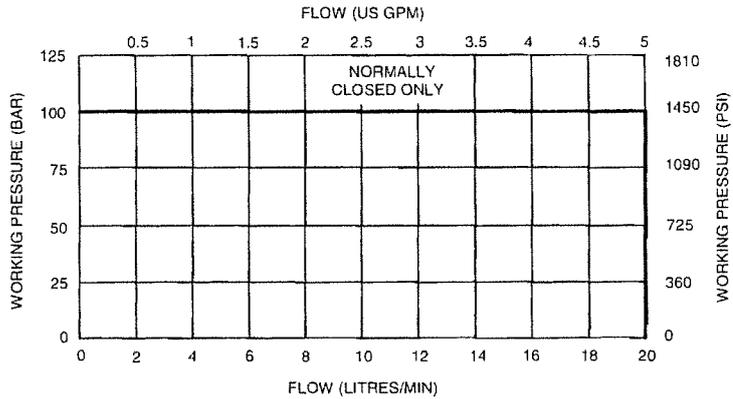
Integrated Hydraulics Ltd

Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

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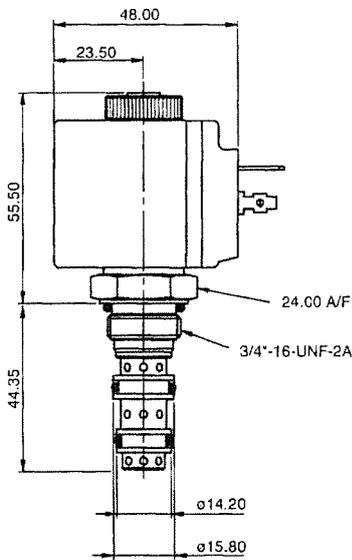
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PERFORMANCE



CARTRIDGE ONLY

BASIC CODE: S222



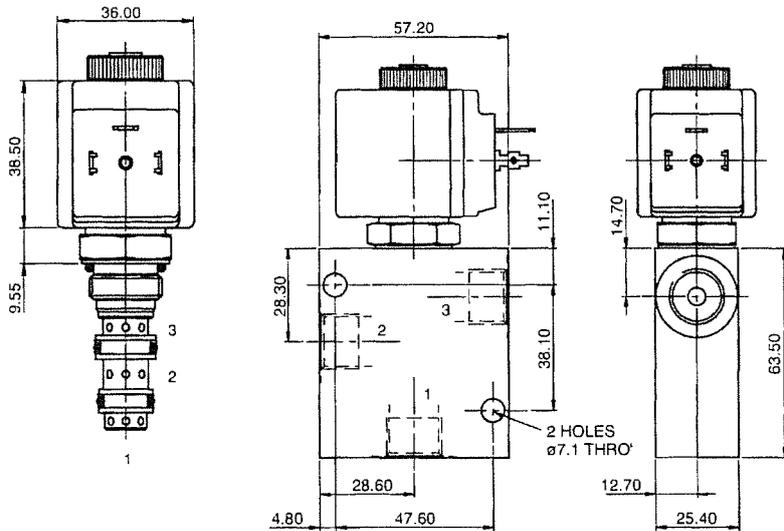
COMPLETE VALVE

1/4" 3/8" PORTS

BASIC CODE: S222

Body ONLY part numbers

BSP, aluminium SAE, aluminium
 1/4" B7724 3/8" B6516
 3/8" B6684



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

S222 N H 24 3W

Basic Code
S222

Seals
N = Nitrile
V = Viton

Manual Override (consult factory for availability)
1 = Push and twist
2 = Screw

Port Sizes

2W = 1/4" BSP
3W = 3/8" BSP **6T** = 3/8" SAE

Voltage

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

Coil Termination

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

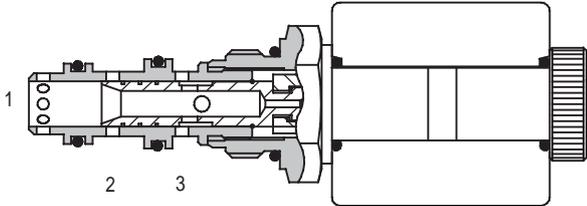
We reserve the right to change specifications without notice



S228 Directional Control Valve - 3-Way, 2-Position Spool

15 litres/min (4 US GPM) • Up to 50 bar (725 PSI)

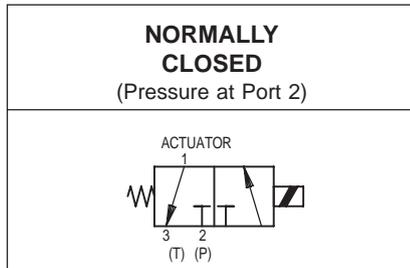
S228



FEATURES

- Increased flow capacity with low pressure drop.
- 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 S2 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

APPLICATION



SPECIFICATIONS

Basic Model Code	S228
Symbol	
Actuator Port Location	Port 1
Max. Working Pressure	50 bar (750 psi)
Flow Rating	15 litres/min (4 US GPM)
Nominal Flow (at Delta P = 5 bar (70 psi))	15 litres/min (4 US GPM)
Internal Leakage	Less than 60 ml/min 50 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	SK975 (Nitrile) SK975V (Viton)
Mounting Position	Unrestricted
Cartridge Weight	0.13 kg (0.3 lbs)
Coil Weight	0.2 kg (0.4 lbs)
Cavity Number	A18333 (See Section 17)
Torque into Cavity	20 Nm (15 lbs ft)
Electrical Data	See coil data sheet
Line Body Material	Aluminium Alloy

COIL INFORMATION

(See Page 11-1021)

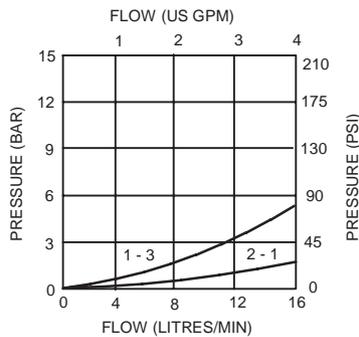
Part Number: C13-*/14

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

* AC coils must be used with a rectifying connector.

PRESSURE DROP v's FLOW

Viscosity = 32 cSt (150 SSU)



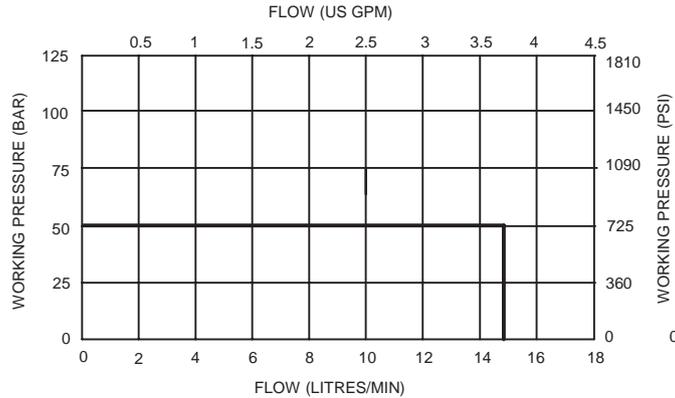
Integrated Hydraulics Ltd

Collins Road, Heathcote Ind. Est., Warwick, CV34 6TF, UK.
Tel: +44 (0) 1926 881171 Fax: +44 (0) 1926 315729
Website: www.integratedhydraulics.com

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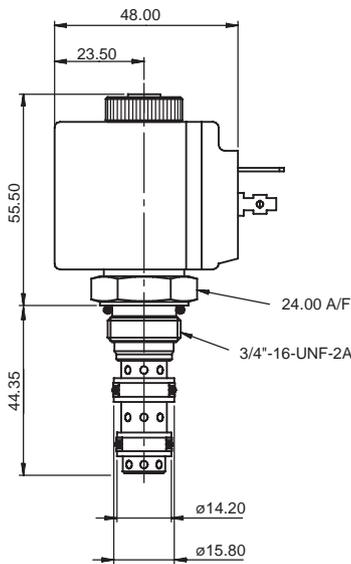
7047 Spinach Drive, Mentor, Ohio 44060, USA
Tel: (440) 974 3171 Fax: (440) 974 3170
Website: www.integratedhydraulics.com

PERFORMANCE



CARTRIDGE ONLY

BASIC CODE: S228



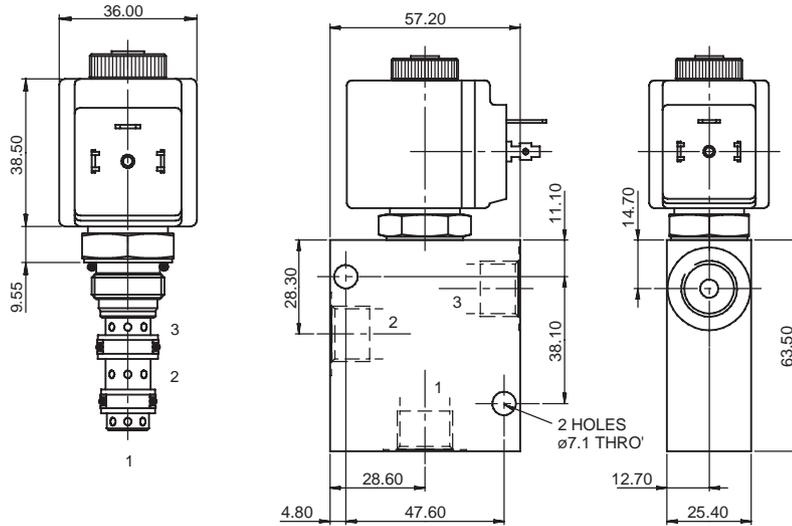
COMPLETE VALVE

1/4" 3/8" PORTS

BASIC CODE: S228

Body ONLY part numbers

<i>BSP, aluminium</i>	<i>SAE, aluminium</i>
1/4" B7724	3/8" B6516
3/8" B6684	



Where measurements are critical request certified drawings

ORDERING CODE EXAMPLE

S228 N H 24 3W

Basic Code
S228

Seals
N = Nitrile
V = Viton

Manual Override (consult factory for availability)

Port Sizes

2W = 1/4" BSP
3W = 3/8" BSP
6T = 3/8" SAE

Voltage

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

Coil Termination

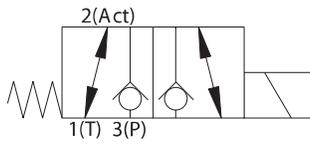
H = DIN43650
F = Flying Leads
DM = Deutsch Moulded
Other terminations available on request

We reserve the right to change specifications without notice

S229 - Solenoid valve

3-way, 2-position poppet type solenoid valve
Up to 12L/min (3.2 USgpm) • 210 bar (3000 psi)

A



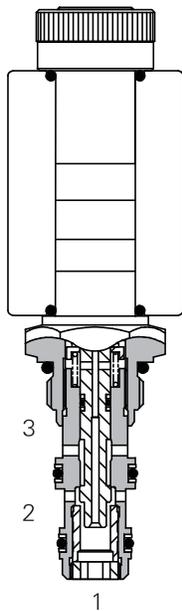
Operation

In the de-energized condition port 3 is blocked and port 2 is open to port 1. When energized port 3 is open to port 2 and port 1 is blocked.

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.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

Sectional view



Performance data

Ratings and specifications

Figures based on Viscosity 32 cST (150 SSU)

Actuator port location	Port 2
Max working pressure	210 bar (3000 psi)
Rated flow	See performance graphs
Nominal flow at $\Delta P = 5$ bar (70 psi)	10 L/min (2.6 USgpm)
Internal leakage	Less than .6 ml/min (10 dpm)
Temperature range	-30° to 120°C (-22° to 248°F)
Cavity	A3531 (see Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	All general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20, etc
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 18/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium Alloy
Coil weight	0.3 kg (0.6 lbs)
Cartridge weight	0.13 kg (0.3 lbs)
Seal kit	SK119 (Nitrile) SK119V (Viton®)
Coil part number	C16-*/*/29
Coil voltage available	12, 24 VDC, 110, 220, VAC*

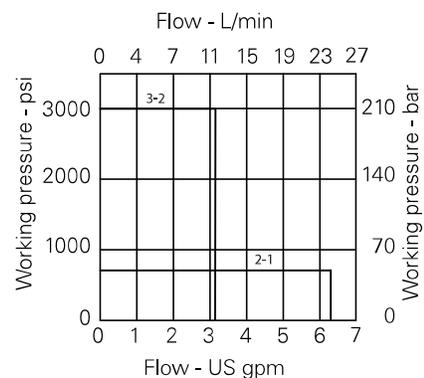
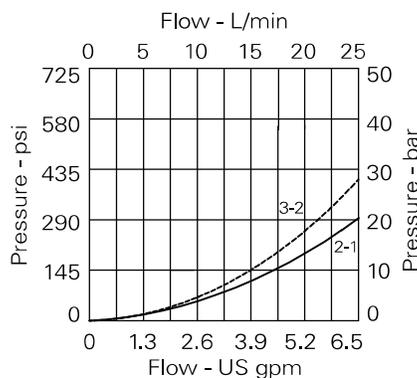
Viton is a registered trademark of E.I. DuPont

*AC coils must be used with a rectifying connector

Description

This valve is a 2 position 3 ported poppet solenoid operated diverter screw in cartridge valve. It is ideal for use in systems where low leakage is important.

Pressure drop

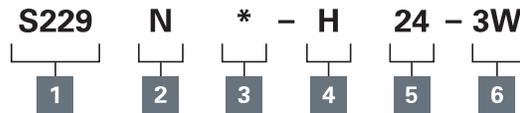


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S229 - Solenoid valve

3-way, 2-position poppet type solenoid valve
Up to 12L/min (3.2 USgpm) • 210 bar (3000 psi)

Model code



A

1 Function

S229

2 Seal material

N - Nitrile
V - Viton®

3 Manual Override

2 - Screw
3 - Push
(Consult factory for availability).
See page A-960.

4 Coil Termination

H - DIN43650
F - Flying lead
DM - Deutsch moulded
Other terminations available
on request.

5 Voltage

12 - 12 VDC
24 - 24 VDC
110 - 110 VAC
220 - 220 VAC

6 Port size

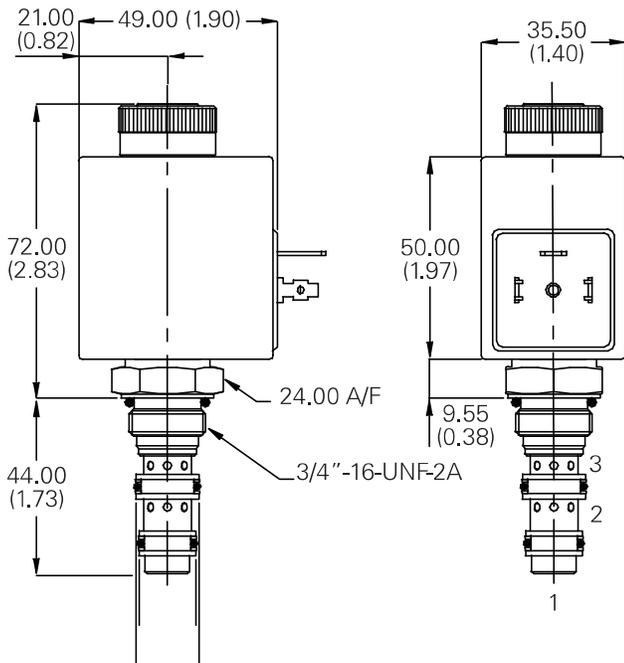
Code	Port size	Housing number - body only
Aluminium		
2W	1/4" BSP	B7724
3W	3/8" BSP	B6684
6T	3/8" SAE	B6516

Dimensions

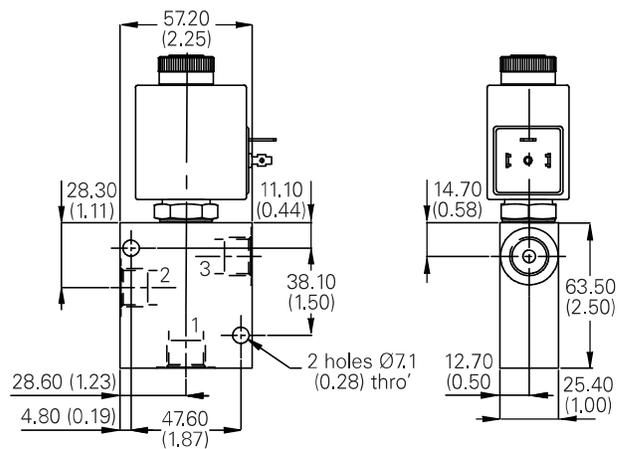
mm (inch)

Cartridge only

Basic Code
S229



Installation drawing

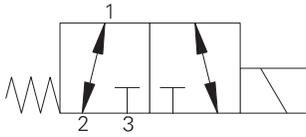


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S520(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 40L/min (10 USgpm) • 210 bar (3000 psi)

A



Operation

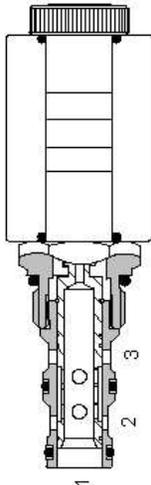
In the de-energized position this valve allows flow from port 1 to 2 while port 3 is blocked.

In the energized position flow is allowed from port 3 to port 1 while port 2 is blocked.

Features

Hardened, ground and honed working parts to limit leakage. Continuously rated. Compact design with low Pressure drop. Rated pressure on all ports.

Sectional view



Performance data

Ratings and specifications

Figures based on Viscosity 32 cST (150 SSU)

Actuator port location	Port 1
Max working pressure	210 bar (3000 psi)
Rated flow at $\Delta P = 5$ bar (70 psi)	Up to 40 L/min (10 USgpm)
Nominal flow	22 L/min (6 USgpm)
Internal leakage	Less than 120 ml/min past each land 210 bar differential at 32 centistokes
Temperature range	-30° to +120°C (-22° to +248°F)
Cavity	C-10-3 (see Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	Most general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20 etc
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 18/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium alloy
Coil weight	0.3 kg (0.6 lbs)
Cartridge weight	0.2 kg (0.4 lbs)
Seal kit	SK1030 (Nitrile) SK1030V (Viton®)
Coil part number	S520: C16-*/19 S520(H): C16-*/29
Coil voltage available	12, 24 VDC, 110, 220, VAC*

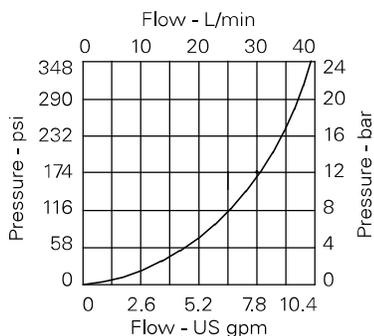
Viton is a registered trademark of E.I. DuPont

*AC coils must be used with a rectifying connector

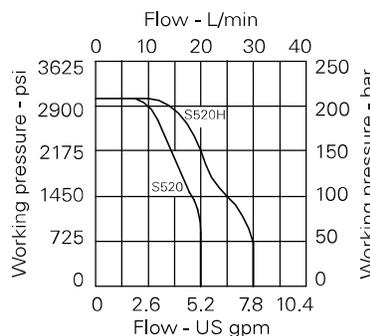
Description

This is a 3-way 2-position, direct acting, spool type solenoid valve. This valve can be used in applications requiring separate pressure and tank lines, such as a single acting cylinder or any other application where a three way two position solenoid valve is needed.

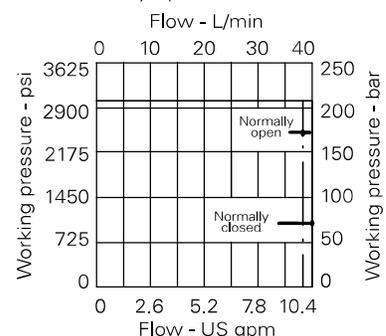
Pressure drop



Selector Mode



Normally closed and Normally open modes

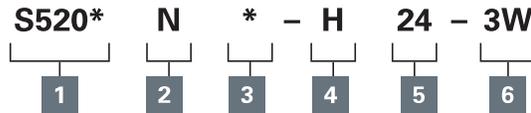


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S520(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 40L/min (10 USgpm) • 210 bar (3000 psi)

Model code



A

1 Function

S520 - Standard valve
S520(H) - Heavy duty valve

2 Seal material

N - Nitrile
V - Viton®

3 Manual Override

2 - Screw
(Consult factory for availability).
See page A-960.

4 Coil Termination

H - DIN43650
F - Flying leads
DM - Deutsch moulded
Other terminations available
on request.

5 Voltage

12 - 12 VDC
24 - 24 VDC
110 - 110 VAC
220 - 220 VAC

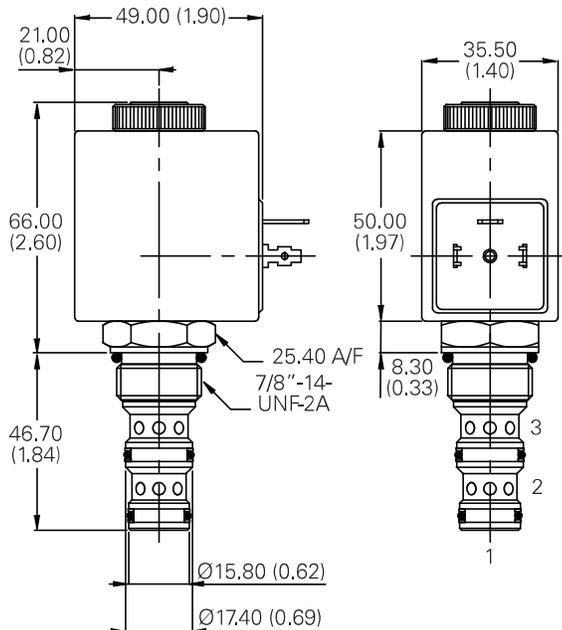
6 Port size

Code	Port size	Housing number - body only
		Aluminium
3W	3/8" BSP	B18982
4W	1/2" BSP	B19358
8T	1/2" SAE	B19360

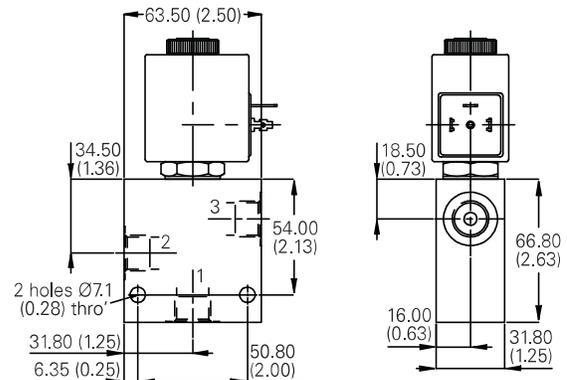
Dimensions

mm (inch)

Cartridge only



Installation drawing

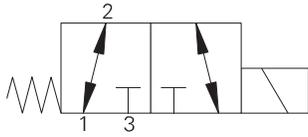


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S521(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 44 L/min (11.5 USgpm) • Up to 210 bar (3000 psi)

A



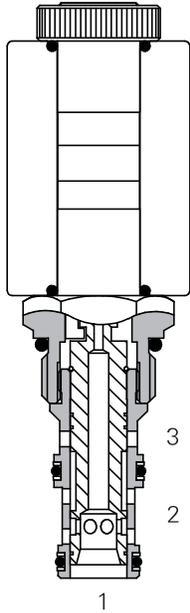
Operation

In the de-energized position this valve allows flow from port 2 to 1 while port 3 is blocked. In the energized position flow is allowed from port 2 to port 3 while port 1 is blocked.

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 Series S5 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

Sectional view



Performance data

Ratings and specifications

Figures based on Viscosity 32 cSt (150 SSU)

Actuator port location	Port 2
Max working pressure	210 bar (3000 psi)
Rated flow	See performance graphs
Nominal flow at $\Delta P = 5 \text{ bar (70 psi)}$	17 L/min
Internal leakage	Less than 120 ml/min past each land 210 bar differential
Temperature range	-30° to +120°C (-22° to +248°F)
Cavity	C-10-3 (see Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	All general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20 etc
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 18/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium alloy
Coil Weight	0.3 kg (0.6 lbs)
Weight	0.2 kg (0.4 lbs)
Seal kit	SK1030 (Nitrile) SK1030V (Viton®)
Coil part number	C16-*-*/19 (S521) C16-*-*/29(S521H)
Coil voltage available	12, 24 VDC, 110, 220, VAC*

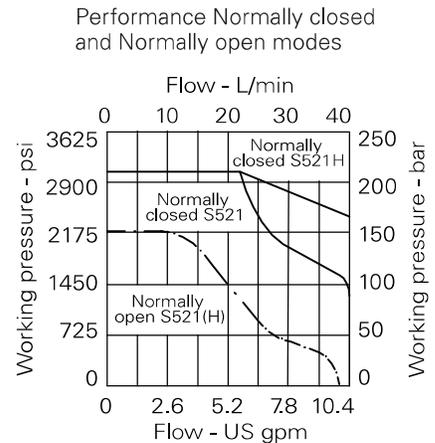
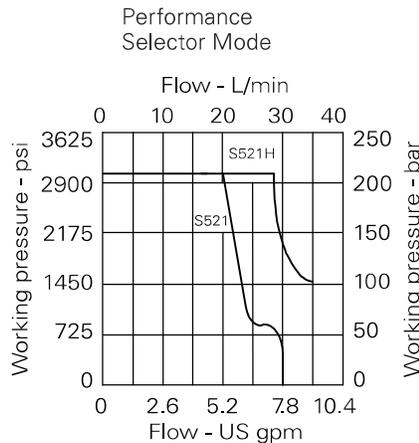
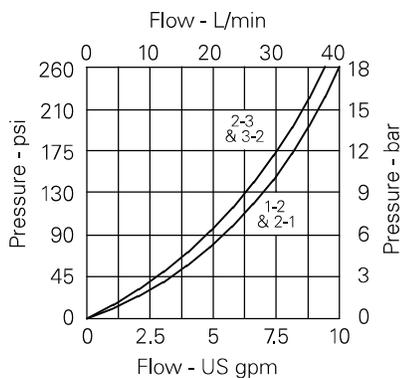
Viton is a registered trademark of E.I. DuPont

*AC coils must be used with a rectifying connector

Description

This is a 3-way 2-position, direct acting, spool type solenoid valve. This valve can be used in applications requiring separate pressure and tank lines, such as a single acting cylinder or any other application where a three way two position solenoid valve is needed.

Pressure drop

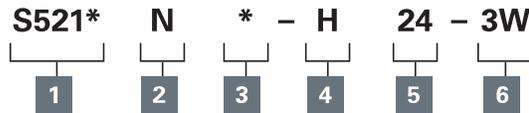


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S521(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 44 L/min (11.5 USgpm) • Up to 210 bar (3000 psi)

Model code



1 Function

S521 - Standard valve
S521(H) - Heavy duty valve

2 Seal material

N - Nitrile
V - Viton®

3 Manual Override

2 - Screw
(Consult factory for availability).
See page A-960.

4 Coil Termination

H - DIN43650
F - Flying leads
DM - Deutsch moulded
Other terminations available on request.

5 Voltage

12 - 12 VDC
24 - 24 VDC
110 - 110 VAC
220 - 220 VAC

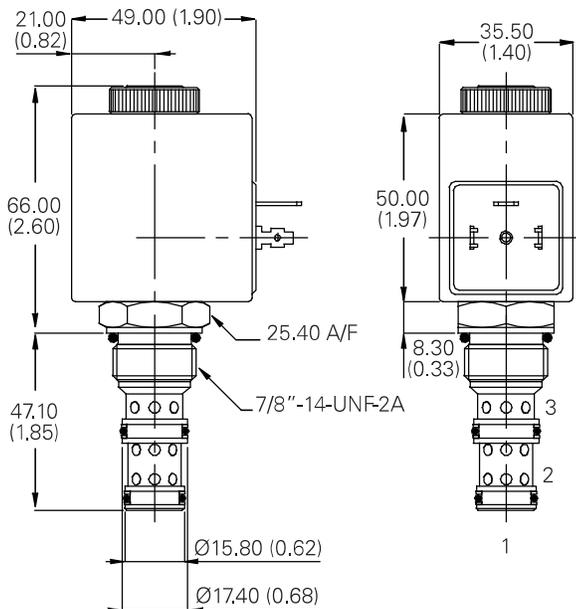
6 Port size

Code	Port size	Housing number - body only
		Aluminium
3W	3/8" BSP	B18982
4W	1/2" BSP	B19358
8T	1/2" SAE	B19360

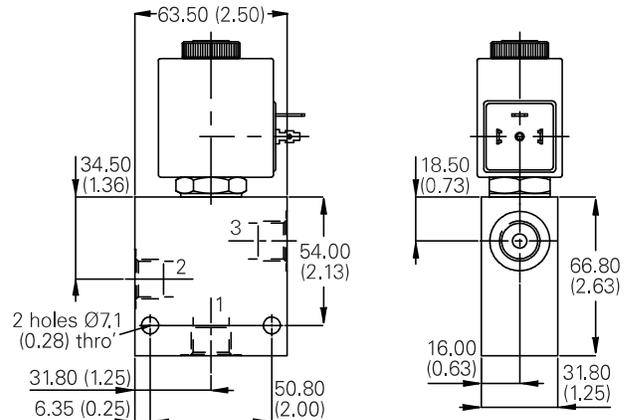
Dimensions

mm (inch)

Cartridge only



Installation drawing

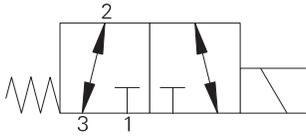


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S525(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 30 L/min (8 USgpm) • 2.10 bar (3000 psi)

A



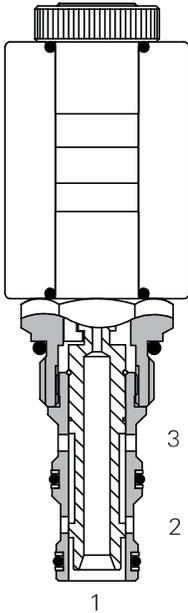
Operation

In the de-energized position this valve allows flow from port 2 to 3 while port 1 is blocked. In the energized position flow is allowed from port 1 to port 2 while port 3 is blocked.

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 Series S5 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

Sectional view



Performance data

Ratings and specifications

Performance data is typical based on Viscosity 32 cSt (150 SSU)

Actuator port location	Port 2
Max working pressure	210 bar (3000 psi)
Rated flow	See performance graphs
Nominal flow at $\Delta P = 5$ bar (70 psi)	25 L/min (6.5 USgpm)
Internal leakage	Less than 120 ml/min 210 bar differential
Temperature range	-30° to 120°C (-22° to 248°F)
Cavity	C-10-3 (See Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	Most general purpose hydraulics fluids such as: MIL-H-5606, SAE 10, SAE 20 etc
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 18/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium alloy
Coil weight	0.3 kg (0.6 lbs)
Cartridge weight	0.2 kg (0.4 lbs)
Seal kit	SK1030 (Nitrile) SK1030V (Viton®)
Coil part number	C16*-/19 (3525) C16*-/29 (5525H)
Coil voltage available	12, 24 VDC, 110, 220, VAC*

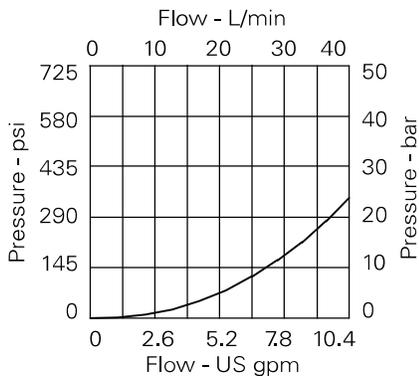
Viton is a registered trademark of E.I. DuPont

*AC coils must be used with a rectifying connector

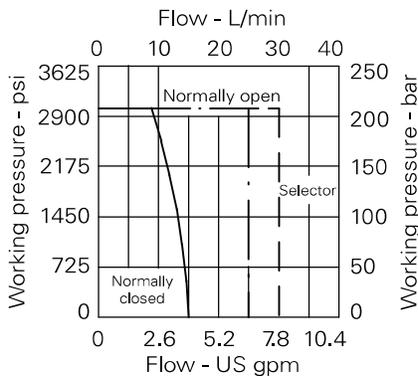
Description

This is a 3-way 2-position, direct acting, spool type solenoid valve. This valve can be used in applications requiring separate pressure and tank lines, such as a single acting cylinder or any other application where a three way two position solenoid valve is needed.

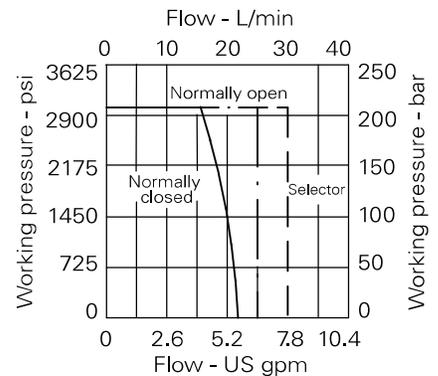
Pressure drop



Performance S525



Performance S525H



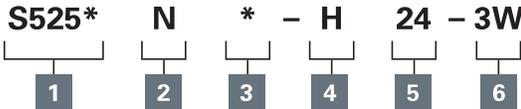
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S525(H) - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 30 L/min (8 USgpm) • 210 bar (3000 psi)

A

Model code



- 1 Function**
S525 - Standard valve
S525H - Heavy duty valve

- 2 Seal material**
N - Nitrile
V - Viton®

- 3 Manual override**
2 - Screw
(Consult factory for availability).
See page A-960.

- 4 Coil Termination**
H - DIN43650
F - Flying leads
DM - Deutsch moulded
Other terminations available on request.

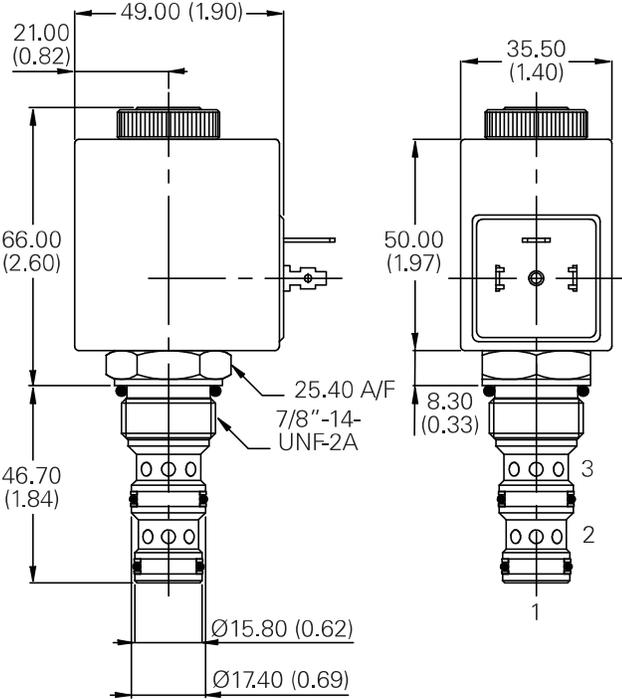
- 5 Voltage**
12 - 2 VDC
24 - 24 VDC
110 - 110 VAC
220 - 220 VAC

6 Port size

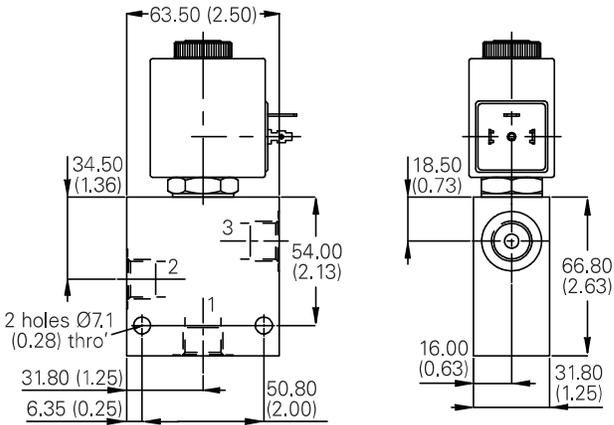
Code	Port size	Housing number - body only
		Aluminium
3W	3/8" BSP	B18982
4W	1/2" BSP	B19358
8T	1/2" SAE	B19360

Dimensions
mm (inch)

Cartridge only



Installation drawing

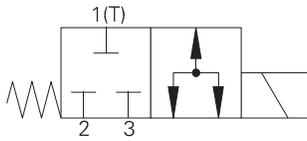


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S526 - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 35 L/min (9 USgpm) • 2.10 bar (3000 psi)

A



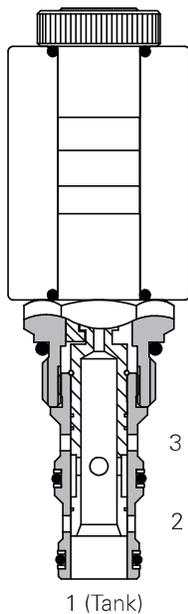
Operation

In the de-energized condition all ports are closed. When energized all ports are open to each other.

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 Series S5 valves.
- Manual override, seal variations and other options available.
- Sealed coil arrangement to protect stem from corrosion.

Sectional view



Performance data

Ratings and specifications

Performance data is typical with Viscosity 32 cST (150 SSU)

Max working pressure	210 bar (3000 psi)
Rated flow	See performance graphs
Nominal flow at $\Delta P = 5$ bar (70 psi)	11 L/min (3 USgpm)
Internal leakage	Less than 120 ml/min past each land 210 bar differential
Temperature range	-30° to +120°C (-22° to +248°F)
Cavity	C-10-3 (see Section M)
Electrical data	See coil data sheet
Torque cartridge into cavity	30 Nm (22 lbs ft)
Mounting position	Unrestricted
Fluids	All general purpose hydraulics fluids such as MIL-H-5606, SAE 10, SAE 20 etc
Seal material	Standard nitrile with PTFE back up rings
Filtration	BS5540/4 Class 18/13 (25 micron or better)
Nominal viscosity range	15 to 250 cSt
Standard housing materials	Aluminium alloy
Coil weight	0.3 kg (0.6 lbs)
Cartridge weight	0.2 kg (0.4 lbs)
Seal kit	SK1030 (Nitrile) SK1030V (Viton®)
Coil part number	C16-*,*/19
Coil voltage available	12, 24 VDC, 110, 220, VAC*

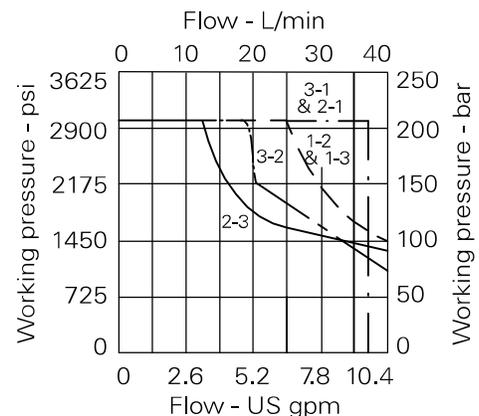
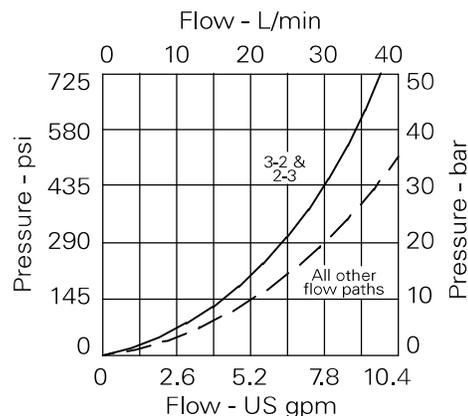
Viton is a registered trademark of E.I. DuPont

*AC coils must be used with a rectifying connector

Description

This valve is a 2 position 3 ported solenoid operated screw in cartridge valve suitable as a float valve connecting all ports together when energized.

Pressure drop

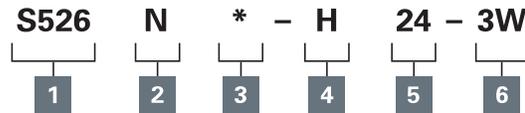


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

S526 - Solenoid valve

3-way, 2-position spool type solenoid valve
Up to 35 L/min (9 USgpm) • 210 bar (3000 psi)

Model code



A

1 Function

S526

2 Seal material

N - Nitrile

V - Viton®

3 Manual override

2 - Screw

(Consult factory for availability).
See page A-960

4 Coil Termination

H - DIN43650

F - Flying leads

DM - Deutsch moulded

Other terminations available
on request.

5 Voltage

12 - 12 VDC

24 - 24 VDC

110 - 110 VAC

220 - 220 VAC

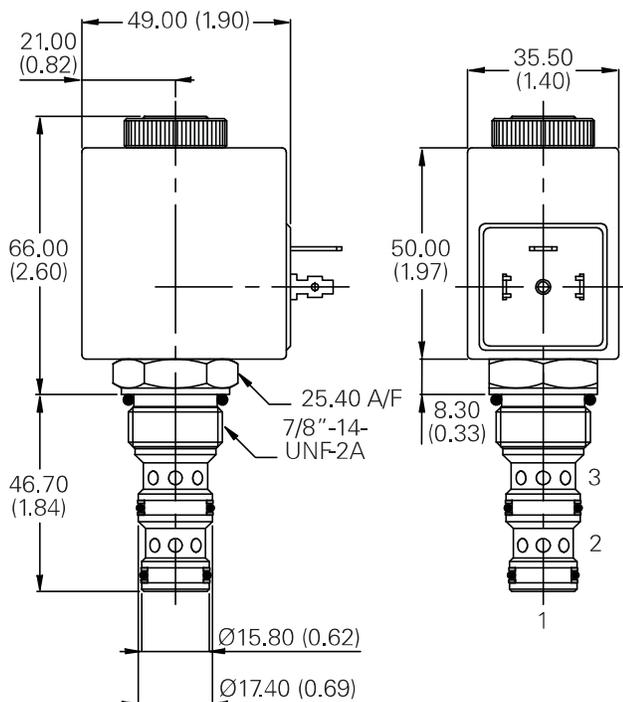
6 Port size

Code	Port size	Housing number - body only
		Aluminium
3W	3/8" BSP	B18982
4W	1/2" BSP	B19358
8T	1/2" SAE	B19360

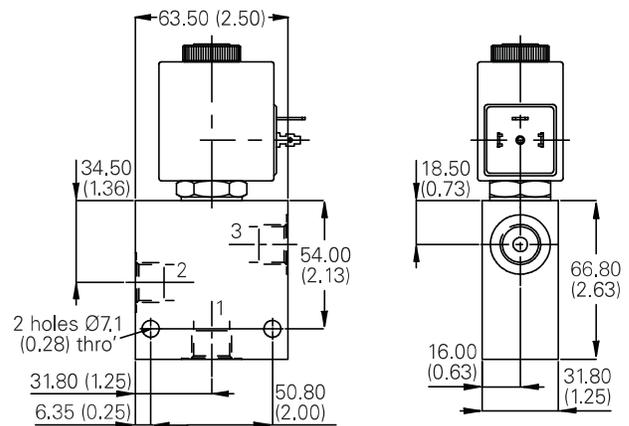
Dimensions

mm (inch)

Cartridge only



Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.