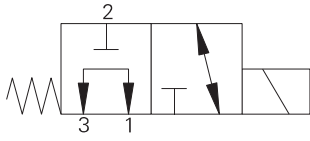


SV12M-12-3 - Solenoid valve

3-way, 2-position, spool type solenoid valve
Up to 34 L/min (9 USgpm) • 350 bar (5000 psi)

A



Operation

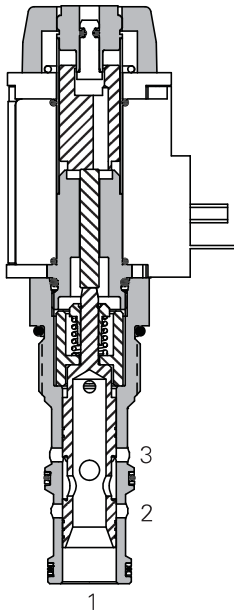
In the de-energized position this valve allows flow from port 1 to 3 while port 2 is blocked.

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

Features

Hardened, ground and honed working parts to limit leakage. IP69K Large ToughCoil compatibility. Continuously rated. Compact design with low Pressure drop. Rated pressure on all ports. Working pressure 350 bar.

Sectional view



Performance data

Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports except port 1)	350 bar (5000 psi)
Typical application pressure at port 1	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	38 L/min (10 USgpm) Max. flow port 1 to port 3 - 34 L/min (9 USgpm)
Internal leakage	350 cc/min (21.5 in ³ /min) @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Coil duty	Continuous from 85% to 110% of nominal voltage
Cavity	C-12-3
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration Cleanliness code	18/16/13
Standard housing materials	Steel
Weight including coil	0.86 kg (1.9 lbs)
Seal kit	9900171-000 Buna-N, 9900172-000 (Viton®)

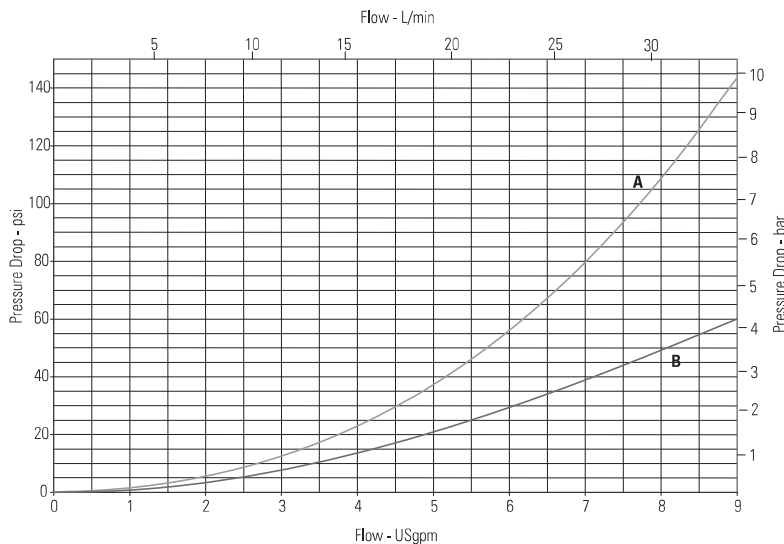
Viton is a registered trademark of E.I. DuPont

Description

This is a 3-way 2-position, high pressure, 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

Cartridge only



A - Port 2 to port 1 energized
B - Port 1 to port 3 de-energized

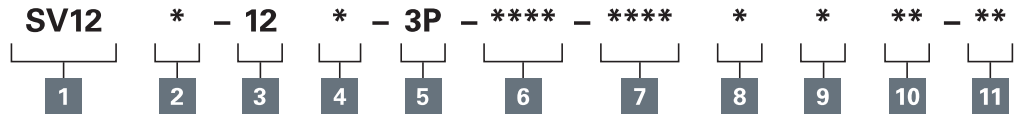
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

SV12M-12-3 - Solenoid valve

3-way, 2-position, spool type solenoid valve
Up to 34 L/min (9 USgpm) • 350 bar (5000 psi)

A

Model code



1 Function

SV12 - Solenoid valve

2 Max flow

M - 38 L/min (10 USgpm)

3 Size

12 - 12 size

4 Seal material

Blank - Buna-N

V - Viton®

5 Style

3P - 3 way, push type manual override

6 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminium	Steel
A6G	3/4" BSPP	02-161816	
A12H	SAE 12	02-160646	
S4G	1/2" BSPP		02-169815
S6G	3/4" BSPP		02-169814
S10T	SAE 10		02-161070
S12T	SAE 12		02-169816

7 Voltage rating

00 - No coil

12D - 12VDC

24D - 24VDC

12B - 12VDC/w diode*

24B - 24VDC/w diode*

*Optional arc suppression diode.

8 Connector types

Blank - No coil

W - Flying lead

N - Deutsch male, DT04-2P, integrated

For coil dimensions see section C.

9 Coil types

Blank - No coil

R - R series (30W) Large ToughCoil

10 Coil special features

Blank - No coil

00 - No special feature

11 Special features

00 - None

(Only required if valve has Special features, omitted if "00".)

Dimensions

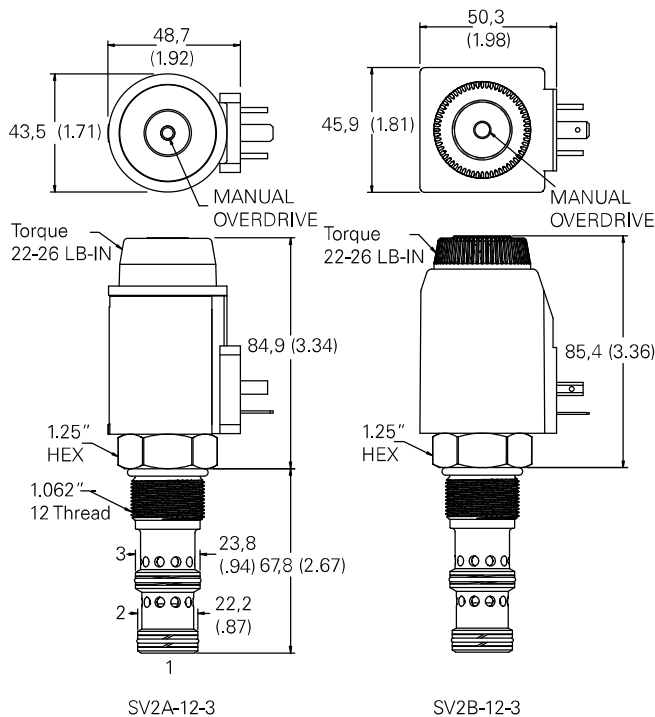
mm (inch)

Torque cartridge in aluminum housing 81-95 Nm (60-70 ft. lbs)

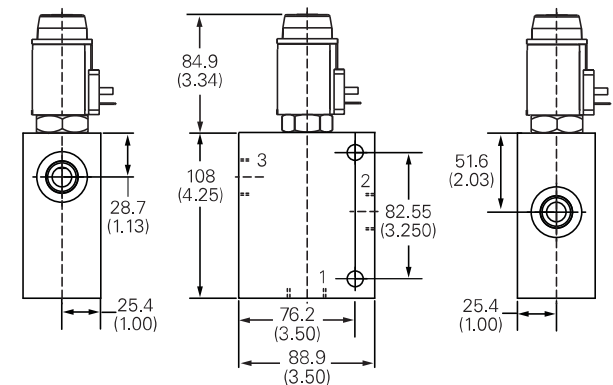
Torque cartridge in steel housing 102-115 Nm (75-85 ft. lbs)

Note: When solenoid valve is ordered as Cartridge only, coil nut is included.

Cartridge only



Installation drawing (Steel)



Warning

Maintain 2.5-3 Nm (1.8-2.2 ft. lbs) maximum torque on valve tube nut. Over tightening may cause valve failure.

Warning

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings **must** be used for operating pressures **above** 210 bar (3000 psi).

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