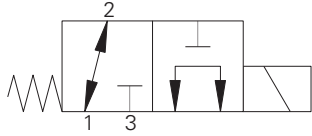


SV11A/B-12-3 - Solenoid Valve

3-way, 2-position spool type solenoid valve
Up to 42 L/min (11 USgpm) • 350 bar (5000 psi)

A



Operation

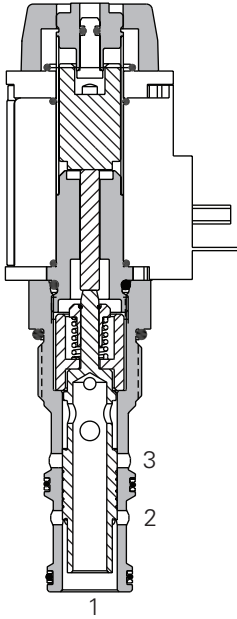
In the de-energized position this valve allows flow from port 1 to 2 while port 3 is blocked.

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. IP69K Tough coil compatibility. Continuously rated. Compact design with low pressure drop. Rated pressure on all ports. Working pressure 350 bar.

Sectional View



Performance

Ratings and Specifications

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

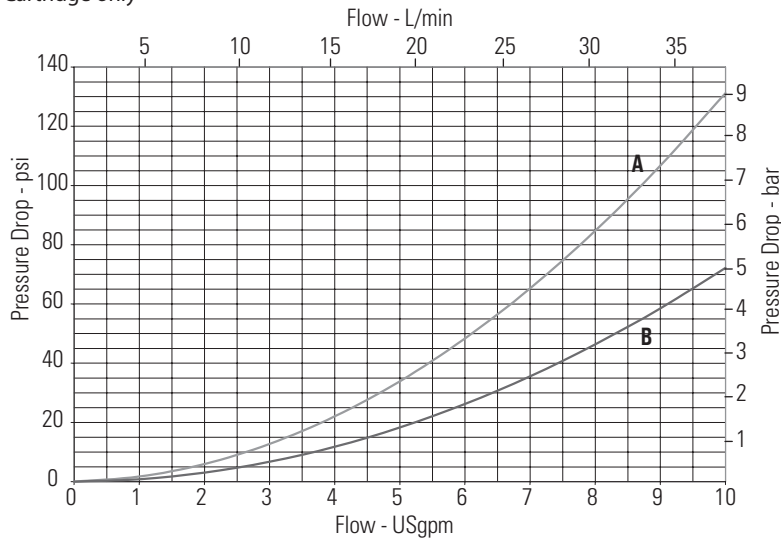
Typical application pressure (all ports except port 1)	350 bar (5000 psi)	
Typical application pressure at port 1	210 bar (3000 psi)	
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)	
Rated flow	SV11A-12-3	38 L/min (10 USgpm)
	SV11B-12-3	42 L/min (11 USgpm)
	Max. flow port 1 to port 2 -	27 L/min (7 USgpm)
	Max. flow port 1 to port 2 -	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	SV11A-12-3	0.68 kg (1.5 lbs)
	SV11B-12-3	0.86 kg (1.9 lbs)
Seal kit	9900171-000 Buna-N), 9900172-000 (Viton™) <small>Viton is a registered trademark of E.I. DuPont</small>	

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



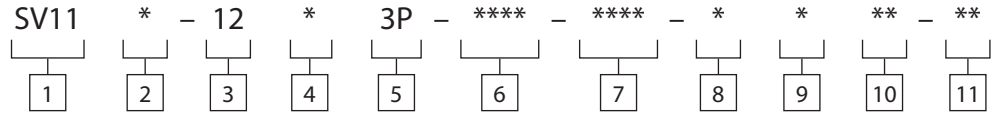
A - Port 3 to port 1 energized
B - Port 1 to port 2 de-energized

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

SV11A/B-12-3 - Solenoid Valve

3-way, 2-position spool type solenoid valve
Up to 42 L/min (11 USgpm) • 350 bar (5000 psi)

Model Code



1 Function
SV11 - Solenoid valve

2 Max Flow
A - 38 L/min (10 USgpm)
B - 42 L/min (11 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*

8 Connector types
Blank - No coil
G - ISO 4400 DIN 43650
W - Flying lead (DC only)
C - Deutch on Leads
H - Metripak 150 on Leads
F - Weatherpak Male on Leads
For coil dimensions see section C.

9 Coil types
Blank - No coil
L - L series (30W EN 490)
used for SV1A-12
R - R series (30W) used
for SV1B-12

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")
SF - Soft shift

Dimensions
mm (inch)

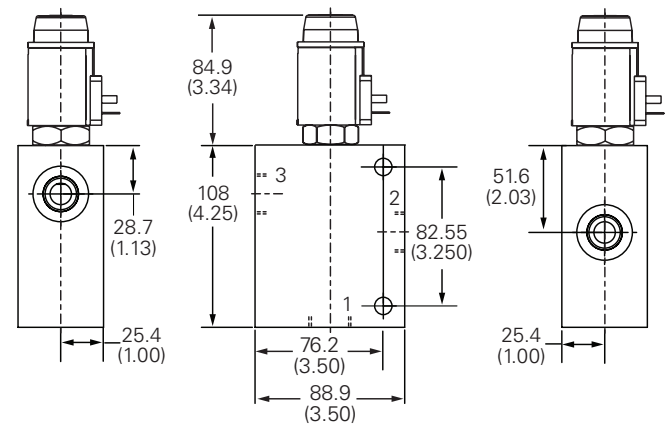
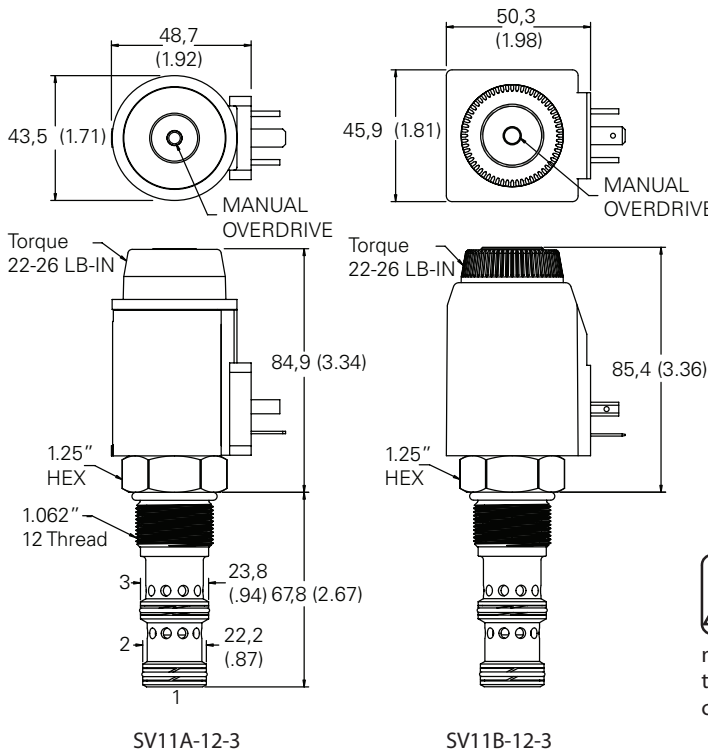
Cartridge Only

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

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

Note: When solenoid vale is
ordered as cartridge only,
coil nut is included.

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 pres-
sures up to 210 bar (3000 psi).
Steel housings must be used
for operating pressures above
210 bar (3000 psi).