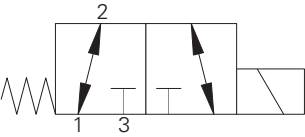


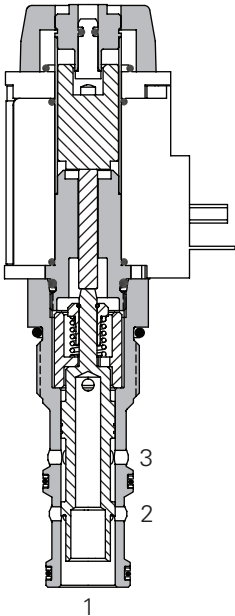
SV14A/B-12-3 - Solenoid Valve

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

A



Sectional View



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

Performance

Ratings and Specifications

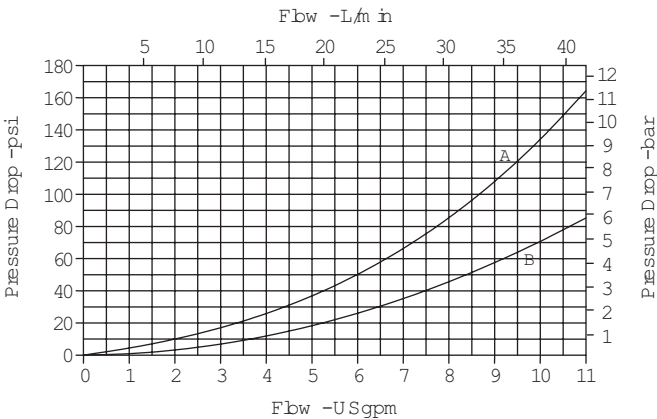
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)		
Typical application pressure (all ports except port 1)		350 bar (5000 psi)
Typical application pressure at port 1		210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)		350 bar (5000 psi)
Rated flow	SV14A-12-3 SV14B-12-3	34 L/min (9 USgpm) 42 L/min (11 USgpm)
Internal leakage		350 cc/min (21.5 in3/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	SV14A-12-3 SV14B-12-3	0.68 kg (1.5 lbs) 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 3 to port 2 energized
B - Port 2 to port 1 de-energized

SV14A/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

SV14	*	-	12	*	3P	-	****	-	****	-	*	*	**	-	**
1	2	3	4	5	6	7	8	9	10	11					

1 Function
SV14 - Solenoid valve

2 Max Flow
A - 34 L/min (9 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

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
G - ISO 4400 DIN 43650
W - Flying lead (DC only)
C - Deutsch 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 SV14A-12
R - R series (30W) used
for SV14B-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")

Dimensions

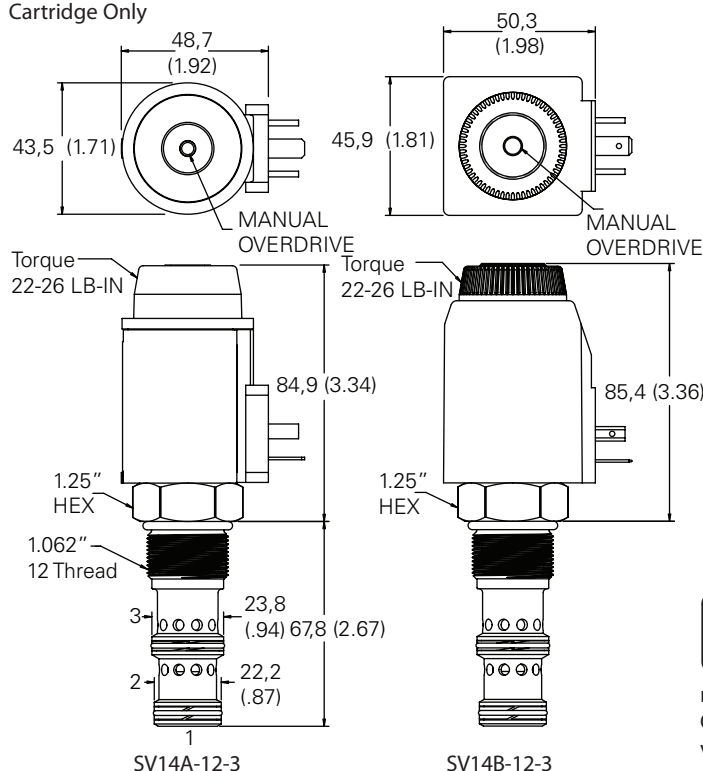
mm (inch)

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

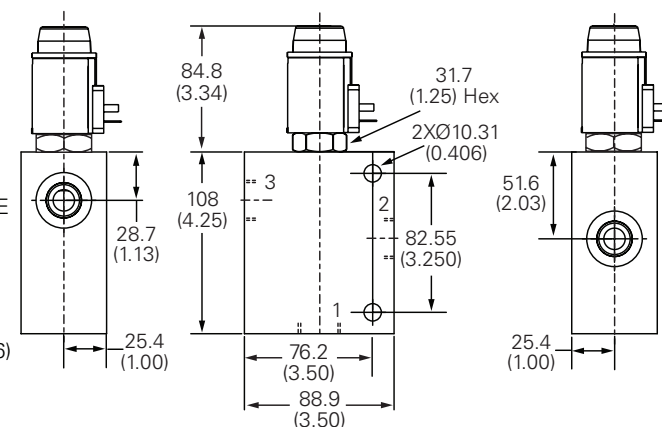
Torque cartridge in steel housing 102-115 Nm (75-85 ft. lbs)

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).