Solenoid Valves
SV10-35-05

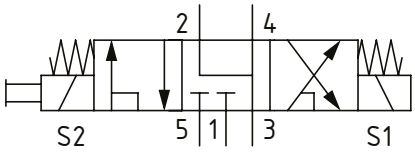
Solenoid Valve, 5-way, 3-position, Spool Type

230 bar [3300 psi] • 30 l/min [8 US gpm]

OPERATION AND DESCRIPTION

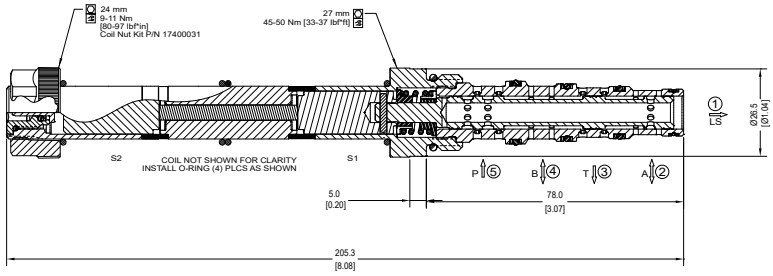
This is a 5-way, 3-position, spool type, direct acting solenoid valve. In the center condition, ports 2 and 4 are connected to port 3, and port 5 and 1 are blocked. By energizing one coil, port 5 opens to 2 and 1 and port 4 to 3. When energizing the other coil, port 5 will be open to 4 and 1, port 2 connects to 3. This valve provides a directional control function with a neutral de-energized state with the service lines open to tank allowing pressure to decay. Port 5 and port 1, which is normally used as a load sense port, are closed. The valve can be used in any hydraulic application where an actuator needs to be controlled in both directions needing a load sense line to activate a pump controller. Always check the operating envelope to make sure the valve will work under the required application conditions.

SCHEMATIC



DIMENSIONS

mm [in]



PERFORMANCE DATA

Rated Pressure*	**230 bar [3300 psi]****
Flow Capability	**30 l/min [8 US gpm]**
Coil Options	M16, R16
Weight	0.9 kg [1.98 lb]
Cavity	SDC10-5

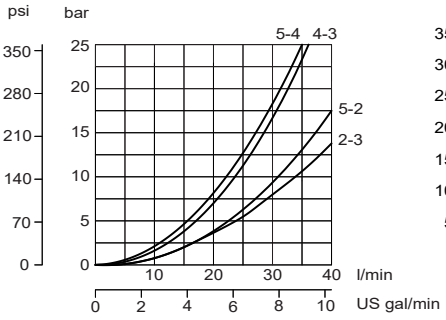
*Rated Pressure based on NFPA fatigue test standards (at 1 million cycles)

**Valve can operate with an inlet pressure of 315 bar [4600 psi] at port 3 for 400,000 cycles

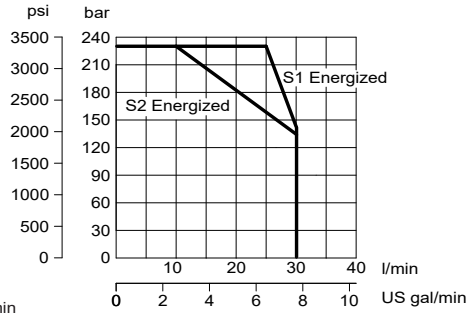
PERFORMANCE CURVES

Pressure drop

26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



Operating envelope



MODEL CODE

SV10 - 35 - 05 - 12D - DE - PB - B - 6S

Coil Voltage

Standard Coil Code	Robust Coil Code	Coil Voltage
00	**R00**	No Coil, nut included*
10D	**R10D**	10 VDC
12D	**R12D**	12 VDC
20D	**R20D**	20 VDC
24D	**R24D**	24 VDC
110A		110 VAC**
220A		220 VAC**

*Standard Coil - Plastic coil nut and o-rings (p/n 17400031)
*Robust Coil - Steel coil nut and no o-rings (p/n 173804910)
**DIN only - external rectifier needed

Connector Type

Standard Coil Code	Robust Coil Code	Connector Type
00	**00**	No Coil
AJ		Amp Junior
AJD		Amp Junior with Diode
AS	**AS**	AMP SuperSeal 1.5
ASD	**ASDB***	AMP SuperSeal with Diode
DE	**DE**	Deutsch
DED	**DEDB***	Deutsch with Diode
FL	**FL**	Flying Leads
FLD	**FLDB***	Flying Leads with Diode
DN		DIN 43650

*Bi-directional diode

Housing

Code	Ports & Material	Housing Model Code
00	No Housing	
6S	#6 SAE, AL	SDC10-5-6S
8S	#8 SAE, AL	SDC10-5-8S
S8S	#8 SAE, Steel	SDC10-5-S8S
L3B	3/8 BSP, AL	SDC10-5-L3B
L4B	1/2 BSP, AL	SDC10-5-L4B
S4B	1/2 BSP, Steel	SDC10-5-S4B

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Seal Option

Code	Seal kit
B-Buna - N	11192395
V-Viton	11192396

Manual Override Option

Omit-Push Pin
PB-Push Button
SPS-Screw Type
OPS-Protected Push Pin
PAP-Push and Pull*

*For PAP override, load sense pressure must be less than 150 bar