Comatrol
RESPONSIVENESS IN MOTION
Member of the Danfoss Group

Solenoid Valves Catalog
4 Way, 2 Position Spool
SV15-24-02

OPERATION

Solenoid Valve, Spool Type, 2-Position, 4-Way, High Flow (15-Size). When de-energized, the SV15-24-02 blocks flow to all ports. When energized, the spool shifts to allow flow from port 3 to port 4, and from port 2 to port 1. Follow the "Operating Envelope" limits to ensure shifting of the valve during operation. The SV15 uses a 15 size cavity. This valve is a direct replacement for EDH 12/4206 and uses a metric M33x2 cavity (NCS 12/4) for high flow capability.

Shown with Standard Coil, Deutsch Connector

APPLICATIONS

These valves are primarily used in mobile and industrial applications for controlling the direction of the flow in a circuit, like motors or cylinders. Solenoid spool-type valves are direct acting and respond quickly to coil voltage input. Spool valves will have some leakage due to spool clearance, so if your application requires no leakage at the working port(s), apply a low leakage poppet valve(s), like PO check valve, counterbalance valve, etc., in addition to this solenoid valve. Use the optional screen to help protect the actuator from large particles. This valve can operate with an inlet pressure of 315 bar on port 3 for 300,000 cycles. Port 1 may be pressurized to 150 bar, but is not intended for use as inlet (Tank only).

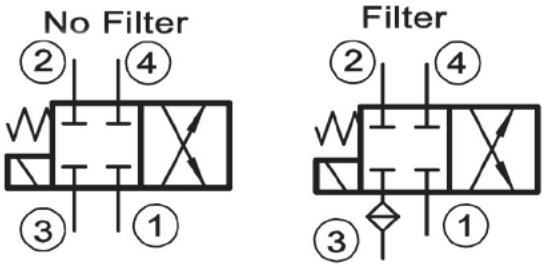
SPECIFICATIONS

Rated Pressure*	210 bar [3045 psi]**
Maximum Rated Flow at 7 bar [100 psi]	60 l/min [16 US gal/min]
Weight including coil	0.95 kg [2.09 lbs]
Cavity	NCS 12/4
Coil	M19-33W
Diode (Optional)	Unidirectional

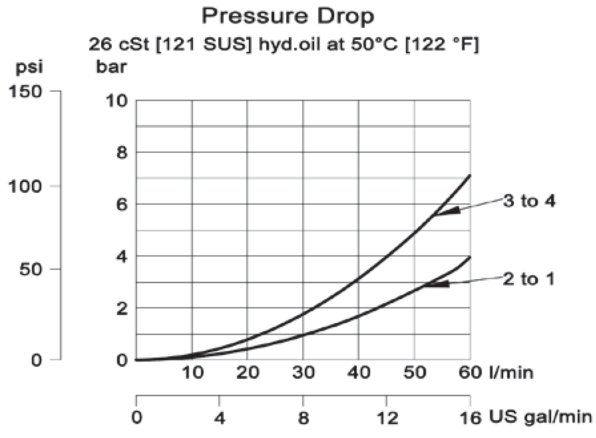
* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

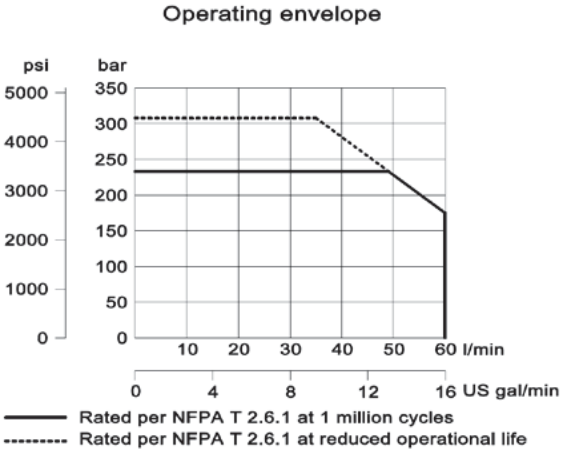
** See 315 bar pressure rating note on page 10.

SCHEMATIC



PERFORMANCE CURVES





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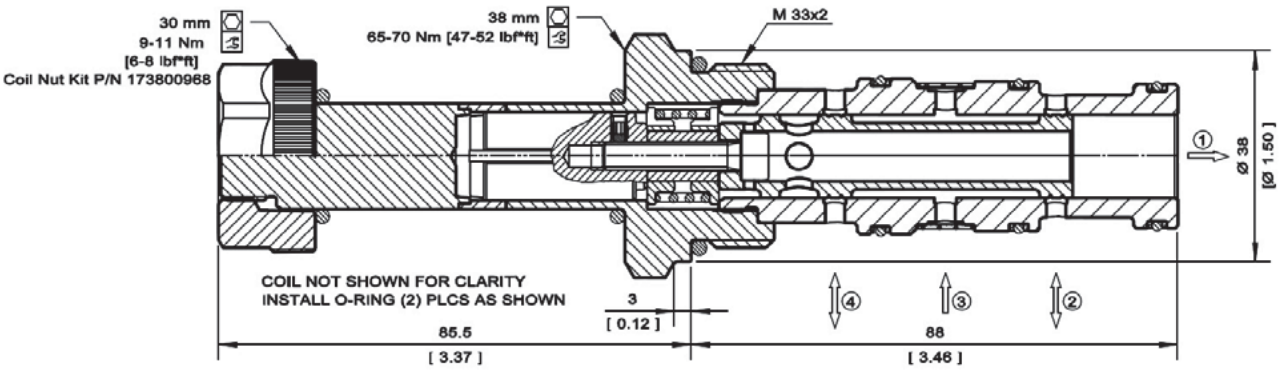
DIMENSIONS

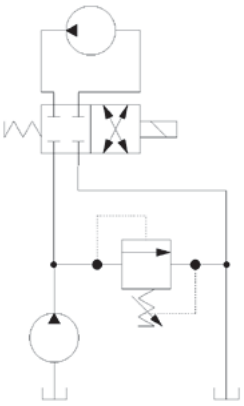
mm [in]

Cross-sectional view

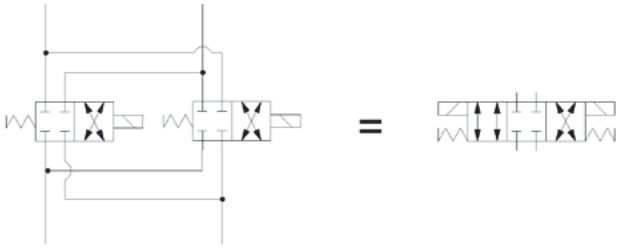


EXAMPLE CIRCUITS

Uni-directional Motor



Create a 4-Way 3-Position Valve Circuit



ORDERING INFORMATION

SV15 - 24 - 02 - 12D - DE - B - F - 00

Solenoid Valve, Spool Type, 15 Size Cavity

24: 2 Position, 4 Way

02: Schematic type

Coil Voltage	Standard Coil Code
No Coil, with nut*	00
10 VDC	10D
12 VDC	12D
20 VDC	20D
24 VDC	24D
110 VAC**	110A
220 VAC**	220A

* Standard coil – plastic nut and O-rings
** External Rectifier Needed – DN termination only

Coil Termination	Standard Coil Code	IP Rating
No Coil	00	-
Amp Junior	AJ	IP67
Amp Junior with Diode	AJD	IP67
Deutsch	DE	IP67
Deutsch with Diode	DED	IP67
Flying Leads	FL	IP65
DIN 46650	DN	IP65

Seal Code	Material	Seal Kits
B	Buna-N	11115884
V	Viton	11115885

Filter: No Filter Omit F, 300 µm

Code	Body and Ports	Body Nomenclature
00	Cartridge Only	No Body
8S	#8 SAE, AL	NCS 12/4-L-8S
12S	#12 SAE, AL	NCS 12/4-L-12S
4B	1/2 BSP, AL	NCS 12/4-L-1/2
6B	3/4 BSP, AL	NCS 12/4-L-3/4