

### OPERATION

This is a normally-closed, pilot-operated, poppet-style 08-size solenoid valve. When de-energized, the SPV08-NCF acts as a check valve, allowing flow from port 1 to port 2, and blocking flow from port 2 to port 1. When energized, the valve's poppet is shifted and allows restricted flow through the orifice from port 2 to port 1. This valve is available with optional filter and with pull-type manual override.

### APPLICATIONS

The SVP08-NCF is designed to function as load holding or blocking valve in applications where low internal leakage and various bleeding flows are required in two different positions. In load holding applications, the circuit should be designed so that the de-energized state is the position that is holding the load. When it is energized, a load lowering function will be achieved via a non-compensated orifice. Example applications include scissor & telescopic manlifts, which use a single-acting cylinder for raising and lowering of the platform. The valve has an additional (optional) threaded pull-type override for emergency lowering via a wire cable or a knob handle.



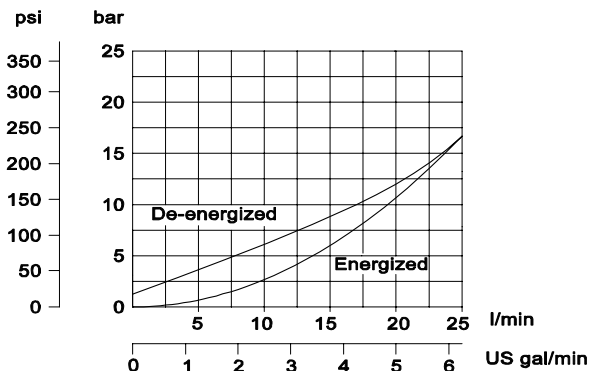
### SPECIFICATIONS

Rated pressure*	230 bar [3300 psi]
Rated flow at 7 bar [100 psi]	16 l/min [4.2 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	0.23 kg [0.51 lb]
Cavity	<b>SDC08-02</b>
Standard Coil	<b>M13</b> 20 Watt
Robust Coil	<b>R13</b> 16 Watt Robust Nut P/N 173800539 (no coil O-rings needed)
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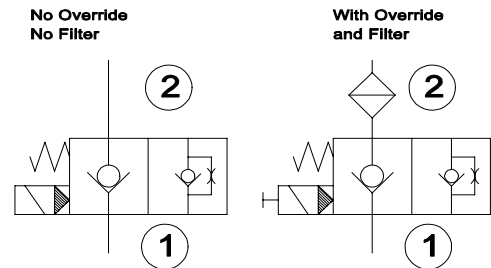
\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

### PERFORMANCE CURVES

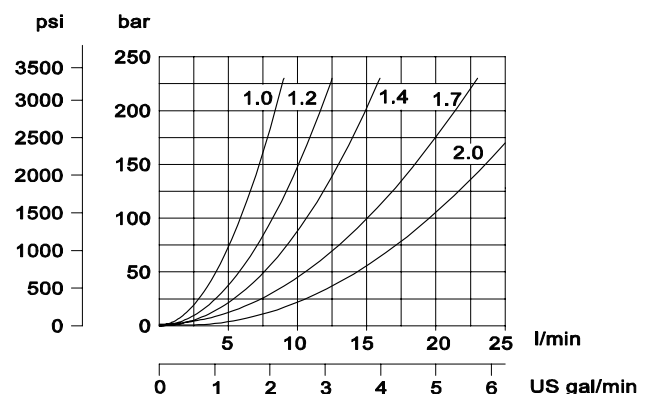
Pressure drop (1 to 2)  
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



### SCHEMATIC



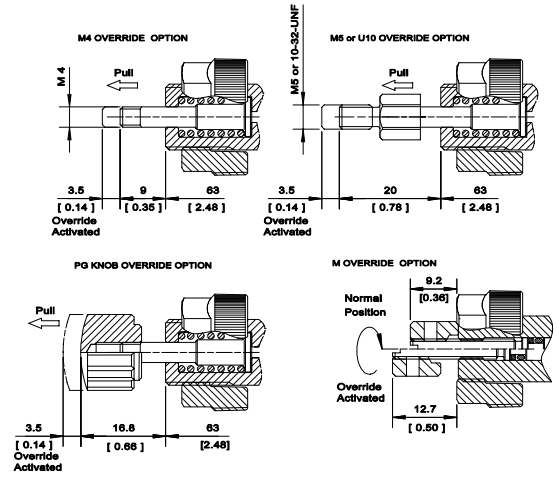
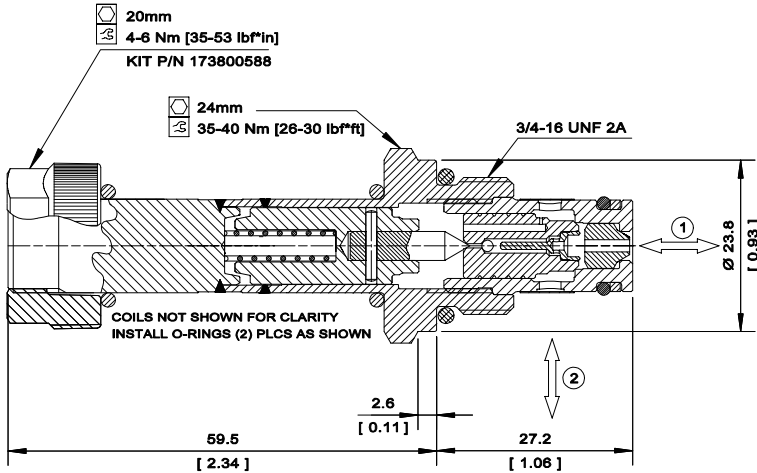
Pressure drop (2 to 1)  
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



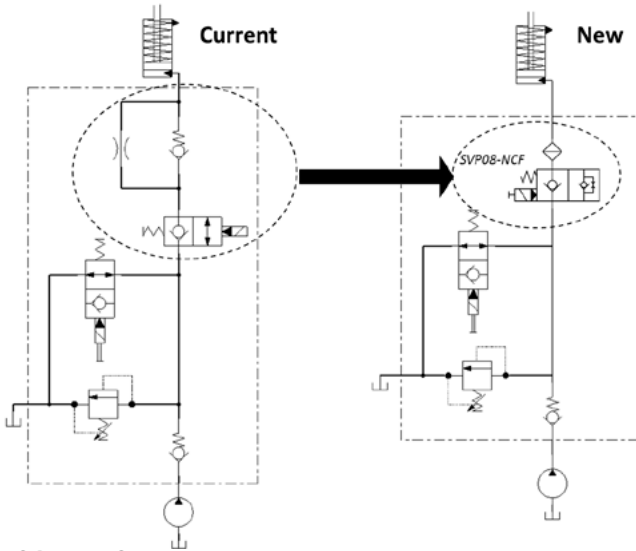


### DIMENSIONS mm [in]

### Cross-sectional view



### EXAMPLE CIRCUITS



Current vs new circuit schematics for single-acting cylinder application. SVP08-NCF replaces 3 valves, while adding manual override and filter options.

### ORDERING INFORMATION

#### SVP08 - NCF - 1.0 - 12D - DE - M4 - B - F - 00

Solenoid Valve, Poppet type  
08 Size cavity  
NCF: Normally Closed,  
Flow Control Fixed, Pull Type

Orifice Ø	Flow 7 bar
1.0	1.3 LPM [0.34 GPM]
1.2	2.2 LPM [0.58 GPM]
1.4	2.7 LPM [0.71 GPM]
1.7	4 LPM [1.06 GPM]
2.0	5.8 LPM [1.54 GPM]

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

\* Standard coil-plastic nut and O-rings; R-coil- steel nut P/N 173800539 (no coil O-rings needed)  
\*\* DIN only-external rectifier needed

Coil Termination	Standard Coil Code	IP Rating	Robust Coil Code	IP Rating
No Coil	00	-	00	-
Amp Junior	AJ	IP 67	-	-
Amp Junior W Diode	AJD	IP 67	-	-
AMP SuperSeal 1.5	AS	IP 67	AS	IP 69K
AMP SuperSeal W Diode	ASD	IP 67	ASDB	IP 69K
Deutsch	DE	IP 69K	DE	IP 69K
Deutsch W Diode	DED	IP 69K	DEDB	IP 69K
Flying Leads	FL	IP 65	FL	IP 69K
Flying Leads W Diode	FLD	IP 65	FLDB	IP 69K
DIN 43650	DN	IP 65	-	-
Metri-Pack 150 Type 2	-	-	M3	IP 69K
Metri-Pack 150 W Diode	-	-	M3DB	IP 69K

Filter	
No Filter	Omit
Filter 300 m/l	F

Code	Body and Ports	Body Nomenclature
00	Cartridge only	No Body
4S	#4 SAE, AL	CP08-2-4S
6S	#6 SAE, AL	CP08-2-6S
S6S	#6 SAE, Steel	CP08-2-S6S
2B	1/4 BSP, AL	SDC08-2-2B
3B	3/8 BSP, AL	SDC08-2-3B
S3B	3/8 BSP, Steel	CP08-2-S3B

Code	Material	Seal Kits
B	Buna-N	354000119
V	Viton	354000219

Code	Manual Override
Omit	No Override
M4	Pull Override M4 thread
M5	Pull Override M5 thread
U10	Pull O/R 10-32-UNF thread
PG	Pull Override with Knob
M	Pull Screw