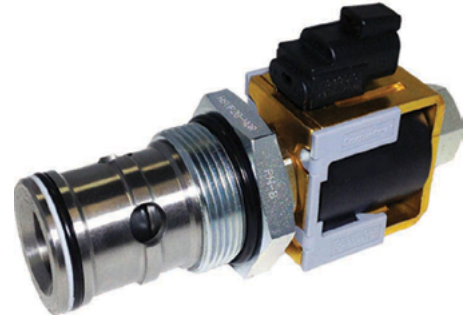


### OPERATION

This is a normally-closed, pilot-operated, poppet-style 20-size solenoid valve. When de-energized, the SVP20-NC 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 flow from port 2 to port 1, and severely restricts from port 1 to port 2.

### APPLICATIONS

The SVP20-NC is designed to function as load holding or blocking valve in applications where low internal leakage is required. In load holding applications, the circuit should be designed so that the de-energized state is the position that is holding the load. This solenoid valve is a technical replacement for CP503-1.



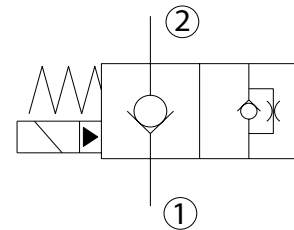
Shown with Robust Coil, Deutsch Connector

### SPECIFICATIONS

Rated pressure*	230 bar [3300 psi]*
Rated flow at 7 bar [100 psi]	227 l/min [60 US gal/min]
Leakage	6 drops/min @ Rated pressure
Weight	1.04 kg [2.29 lb]
Cavity	<b>SDC20-2</b>
Standard Coil	<b>M16</b> 26 Watt
Robust Coil	<b>R16</b> 20 Watt Robust Nut P/N <b>173804910</b> (no coil O-rings needed)

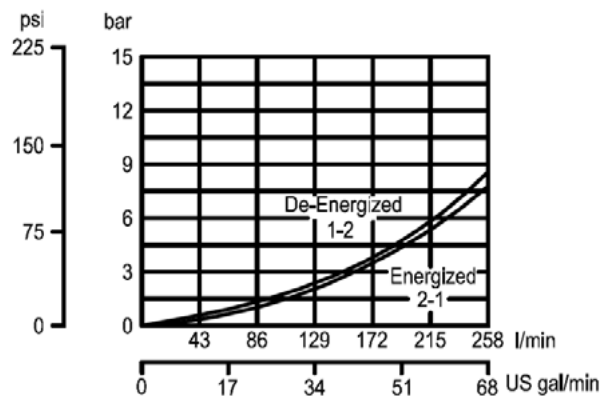
\* Rated Pressure based on NFPA fatigue test standards (at 1 Million Cycles).

### SCHEMATIC



### PERFORMANCE CURVES

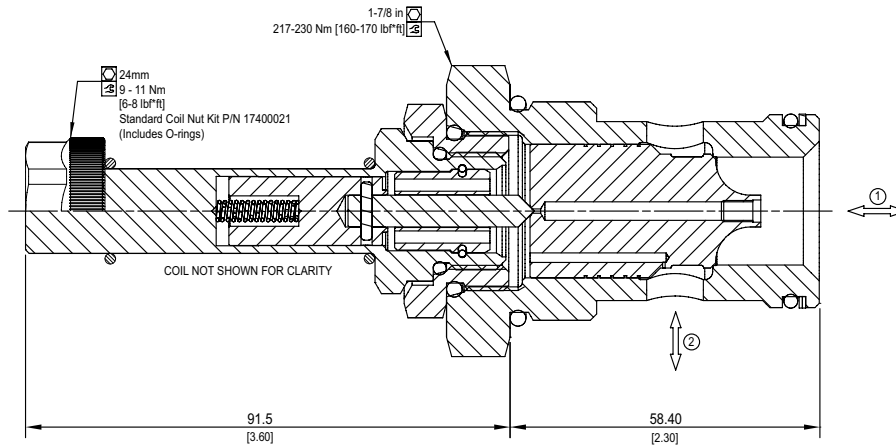
Pressure Drop  
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]



### DIMENSIONS

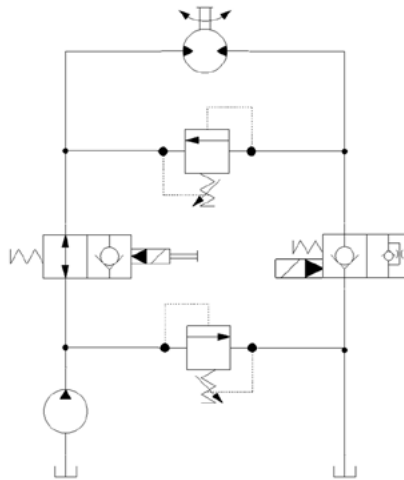
mm [in]

### Cross-sectional view



### EXAMPLE CIRCUITS

#### On/Off Motor Circuit



### ORDERING INFORMATION

**SVP20 - NC - 12D - DE - XC - B - 00**

Solenoid Valve  
Normally-Closed, Pilot Operated,  
20 Size, Poppet Type

Coil Voltage			Coil Termination				
Description	Standard Coil Code	Robust Coil Code	Type	Standard Coil Code	IP Rating	Robust Coil Code	IP Rating
No Coil, with nut*	00	R00	No Coil	00	-	R00	-
10 VDC	10D	R10D	Amp Junior	AJ	IP67	-	-
12 VDC	12D	R12D	Amp Junior with Diode	AJD	IP67	-	-
20 VDC	20D	R20D	AMP SuperSeal 1.5	AS	IP67	AS	IP69K
24 VDC	24D	R24D	AMP SuperSeal with Diode	ASD	IP67	ASDB	IP69K
110 VAC**	110A	-	Deutsch	DE	IP69K	DE	IP69K
220 VAC**	220A	-	Desutch with Diode	DED	IP69K	DEDB	IP69K
			Flying Leads	FL	IP65	FL	IP69K
			Flying Leads with Diode	FLD	IP65	FLDB	IP69K
			DIN 43650	DN	IP65	-	-
			Metri-Pack 150 Type 2	-	-	M3	IP69K
			Metri-Pack 150 with Diode	-	-	M3DB	IP69K

Bodies		
Code	Ports & Material	Body Nomenclature
00	Cartridge Only	No Body
16S	#16 SAE, AL	SCD20-2-16S
S16S	#16 SAE, DUCTILE	SDC20-2-S16S
20S	#20 SAE, AL	SDC20-2-6B
S20S	#20 SAE, DUCTILE	SDC20-2-S6B
8B	1 BSP, AL	SDC20-2-8B
S8B	1 BSP, DUCTILE	SDC20-2-S8B
10B	1 1/4 BSP, AL	SDC20-2-10B
S10B	1 1/4 BSP, DUCTILE	SDC20-2-S10B

\*\*Aluminum bodies are to be used for pressures less than 210 bar (3,000 PSI)

Seal Option		
Code	Material	Seal Kits
B	Buna	120011
V	Viton	120012

Manual Override	
Code	Description
XC	No Override

\*Standard coil - plastic nut and O-rings  
R-coil - steel nut P/N 173804910 (no coil O-rings needed)  
\*\*DIN only - external rectifier needed