

Solenoid Valves Catalog 4-Way, 2-Position Spool SV10-24-07

OPERATION

Solenoid Valve, Spool Type, 2-Position, 4-Way, 10-Size. When de-energized, all ports on the SV10-24-07 are blocked. When energized, the spool shifts allow from port 3 to port 2, and from port 4 to port 1. Follow the "Operating Envelope" limits to ensure shifting of the valve during operation.

APPLICATIONS

These spool-type 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.

This valve can be operated with an inlet pressure of 315 bar on port 3 for 400,000 cycles. Port 1 may be pressurized to 210 bar, but is not intended as inlet (Tank only).

SPECIFICATIONS

Rated pressure*	230 bar [3300 psi]**					
Rated flow at 7 bar	24 l/min					
[100 psi]	[6 US gal/min]					
Weight	0.45 kg [0.99 lb]					
Cavity	SDC10-4					
Standard Coil	M16 26 Watt					
Robust Coil	R16 20 Watt					
	Robust Nut P/N 173804910					
	(no coil O-rings needed)					

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

Pressure drop

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

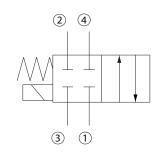
PERFORMANCE CURVES

26 cSt [121 SUS] hyd.oil at 50°C [122 °F] psi bar 300 20 1) 4 to 1 Energized 2) 3 to 2 Energized 15 200 10 2-100 5 0 40 l/min 10 20 30 8 Ó 2 4 6 10 US gall/min

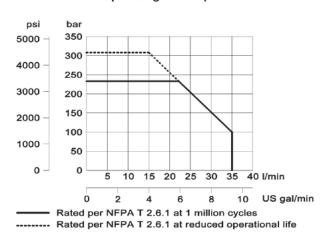


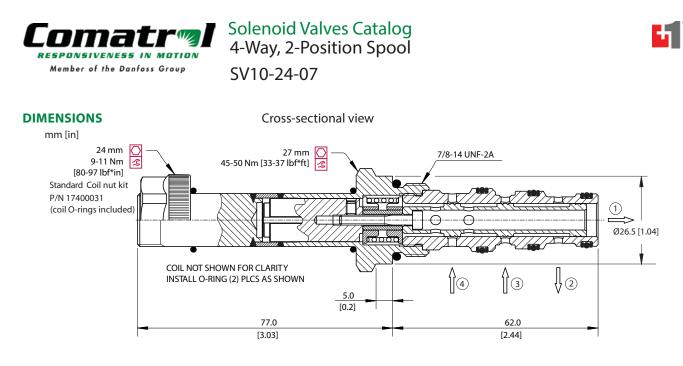
Shown with Standard Coil, Deutsch Connector

SCHEMATIC



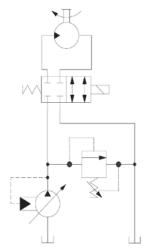
Operating envelope





EXAMPLE CIRCUITS

Uni-directional Motor



ORDERING INFORMATION

<u>SV10</u> - <u>24</u> - <u>07</u> - <u>12D</u> - <u>DE</u> - <u>B</u> - <u>00</u>						Code			Body Nomenclature			
								00 Cartridge		No Body		
Solenoid Valve, 10 Size Cavity				1 1				6S		SAE, AL	CP10-4-6S	
				1 1				85	#8 5	SAE, AL	CP10-4-8S	
				1 1				S8S		AE, Steel	CP10-4-S8S	
				1 1				L3B	3/8	BSP, AL	SDC10-4-L3B	
24:							L4B	1/2 BSP, AL		SDC10-4-L4B		
2 Position, 4 Way, Spool Type			1 1				S4B	1/2 B	SP, Steel	CP10-4-S4B		
2 roshon, 4 way, opoor rype											6 LV0	
								50	eal Code	Material	Seal Kits	
							+	B V	Buna-N Viton	354001919 354002019		
Schematic: Pull Type				-				1	V	viton	354002019	
				Coil Termination	1	Standard Coil	IP Rating	Robust Coi	I IP Rati	ng		
Coil Voltage Standard Coil Robust Coil					Code	_	Code		-			
	Code	Code			No Coil	00	-	00	- 1			
No Coil, with nut*		R00		Amp Junior		AJ	IP67					
10 VDC		R10D		Amp Junior with Diode		AJD	IP67					
12 VDC	12D	R12D		AMP SuperSeal 1.5		AS	IP67	AS IP6		<		
20 VDC	20D	R20D	AN	AMP SuperSeal with Diode		ASD	IP67	ASDB IP6		(
24 VDC	24D	R24D		Deutsch		DE	IP67	DE	IP69F	<		
110 VAC**	110A	-		Deutsch with Diode		DED	IP67	DEDB	IP69F	<		
220 VAC**	220A	· ·		Flying Leads		FL	IP65	FL	IP69F	(
* Standard coil – plastic nut and O-rings Flying Leads			Flying Leads with	n Diode	FLD	IP65	FLDB	IP69F	<			
R-coil – steel nut P/N 173804910			DIN 43650		DN	IP65	-	-				
(no coil O-rings needed)				Metri-Pack 150 Type 2		-	-	M3	IP69F	(
** DIN only - external rectifier needed			M	etri-Pack 150 with	-	-	M3DB	IP69F	<			
,												