



3-Way, 2-Position Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
	EVH 06/D5	NCS06/3	Solenoid Valve, Poppet	20 l/min	230 bar	10.16
2			Type, 3-Way, 2-Position	[5 US gal/min]	[3300 psi]	

2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
	SVP08-CDB	SDC08-2	Solenoid Valve, Poppet	16 l/min	230 bar	10.17
			Type, Double-Blocking,	[4 US gal/min]	[3300 psi]	
	EVK 06/C5	NCS06/2	Normally Closed	50 l/min	210 bar	10.18
				[13 US gal/min]	[3000 psi]	
		•				

Model No.	Cavity	Description	Flow*	Pressure	Page
SVP08-NC	SDC08-2	Solenoid Valve, Poppet	35 l/min	230 bar	10.19
		Type, Normally Closed, Pilot	[9 US gal/min]	[3300 psi]	
SVP10-NC	SDC10-2	Operated	80 l/min	230 bar	10.20
			[21 US gal/min]	[3300 psi]	
CP501-1	CP12-2		115 l/min	210 bar	10.21
			[30 US gal/min]	[3000 psi]	
	SVP08-NC SVP10-NC	SVP08-NC SDC08-2 SVP10-NC SDC10-2	SVP08-NC SDC08-2 Solenoid Valve, Poppet Type, Normally Closed, Pilot Operated	SVP08-NC SDC08-2 Solenoid Valve, Poppet Type, Normally Closed, Pilot 35 l/min [9 US gal/min] SVP10-NC SDC10-2 Operated 80 l/min [21 US gal/min] CP501-1 CP12-2 115 l/min	SVP08-NC SDC08-2 Solenoid Valve, Poppet Type, Normally Closed, Pilot 35 l/min [9 US gal/min] 230 bar [3300 psi] SVP10-NC SDC10-2 Operated 80 l/min [21 US gal/min] 230 bar [21 US gal/min]

2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
	SVP08-NCR	SDC08-2	Solenoid Valve, Poppet	35 l/min	230 bar	10.22
			Type, Normally Closed, Pilot	[9 US gal/min]	[3300 psi]	
2	SVP10-NCR	SDC10-2	Operated with Reverse	80 l/min	230 bar	10.23
			Free Flow	[21 US gal/min]	[3300 psi]	
	CP501-3	CP12-2		115 l/min	210 bar	10.24
				[30 US gal/min]	[3000 psi]	
	CP502-3	SDC16-2		130 l/min	210 bar	10.25
1(1)				[34 US gal/min]	[3000 psi]	
	CP503-3	SDC20-2		230 l/min	210 bar	10.26
				[61 US gal/min]	[3000 psi]	

2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
	SVP08-NO	SDC08-2	Solenoid Valve, Poppet	35 l/min	230 bar	10.27
(2)			Type, Normally Open, Pilot	[9 US gal/min]	[3300 psi]	
	SVP10-NO	SDC10-2	Operated	80 l/min	230 bar	10.28
	≓			[21 US gal/min]	[3300 psi]	

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.







2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
	CP501-2	CP12-2	Solenoid Valve, Poppet	115 l/min	210 bar	10.29
			Type, Normally Open, Pilot	[30 US gal/min]	[3000 psi]	
			Operated			

2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
12	SVP08-NOR	SDC08-2	Solenoid Valve, Poppet	35 l/min	230 bar	10.30
			Type, Normally Open, Pilot	[9 US gal/min]	[3300 psi]	
	SVP10-NOR	SDC10-2	Operated with reverse Free	80 l/min	230 bar	10.31
// /			Flow	[21 US gal/min]	[3300 psi]	

2-Way Poppet	Model No.	Cavity	Description	Flow*	Pressure	Page
2	CP501-4	CP12-2	Solenoid Valve, Poppet	115 l/min	210 bar	10.32
			Type, Normally Open, Pilot	[30 US gal/min]	[3000 psi]	
	CP502-4	SDC16-2	Operated with reverse Free	130 l/min	210 bar	10.33
			Flow	[34 US gal/min]	[3000 psi]	
1	CP503-4	SDC20-2		230 l/min	210 bar	10.34
				[61 US gal/min]	[3000 psi]	

2-Way Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-22-01	SDC08-2	Solenoid Valve, Spool Type,	16 l/min	230 bar	10.35
(2)			2-Way, 2-Position, Normally	[4 US gal/min]	[3300 psi]	
			Open, Push Type			
/ / / /						
						_
2-Way Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	Model No. SV10-22-01	Cavity SDC10-2	Description Solenoid Valve, Spool Type,	Flow* 27 l/min	Pressure 230 bar	Page 10.36
2-Way Spool		•				
		•	Solenoid Valve, Spool Type,	27 l/min	230 bar	
		•	Solenoid Valve, Spool Type, 2-Way, 2-Position, Normally	27 l/min	230 bar	
		•	Solenoid Valve, Spool Type, 2-Way, 2-Position, Normally	27 l/min	230 bar	
		•	Solenoid Valve, Spool Type, 2-Way, 2-Position, Normally	27 l/min	230 bar	

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.





2-Way Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
(3)	SV08-22-02	SDC08-2	Solenoid Valve, Spool Type,	14 l/min	230 bar	10.37
(2)			2-Way, 2-Position, Normally	[4 US gal/min]	[3300 psi]	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SV10-22-02	SDC10-2	Closed, Pull Type	35 l/min	230 bar	10.38
/				[9 US gal/min]	[3300 psi]	
1)						

2-Way Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-22-03	SDC08-2	Solenoid Valve, Spool Type,	12 l/min	230 bar	10.39
(2)			2-Way, 2-Position, Normally	[3 US gal/min]	[3300 psi]	
			Open, Pull Type			

3-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-23-01	SDC08-3	Solenoid Valve, Spool Type,	17 l/min	230 bar	10.40
1			3-Way, 2-Position	[5 US gal/min]	[3300 psi]	
	SV10-23-01	SDC10-3		28 l/min	230 bar	10.41
				[7 US gal/min]	[3300 psi]	
	CP521-21	CP12-3		60 l/min	240 bar	10.42
3 2				[16 US gal/min]	[3500 psi]	

3-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-23-02	SDC08-3	Solenoid Valve, Spool Type,	10 l/min	230 bar	10.43
			3-Way, 2-Position	[3 US gal/min]	[3300 psi]	
3 2	SV10-23-02	SDC10-3		15 l/min [4 US gal/min]	230 bar [3300 psi]	10.44

3-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-23-03	SDC08-3	Solenoid Valve, Spool Type,	18 l/min	230 bar	10.45
			3-Way, 2-Position	[5 US gal/min]	[3300 psi]	
3 2						

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.





3 1



3-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
①	SV08-23-04	SDC08-3	Solenoid Valve, Spool Type,	10 l/min	230 bar	10.46
$\wedge \wedge \wedge \perp \wedge \wedge$			3-Way, 2-Position	[3 US gal/min]	[3300 psi]	
3 2	SV10-23-04	SDC10-3		20 l/min [5 US gal/min]	230 bar [3300 psi]	10.47

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV08-24-01	SDC08-4	Solenoid Valve, Spool Type, 4-Way, 2-Position	8 l/min [2 US gal/min]	230 bar [3300 psi]	10.48
3 0	SV10-24-01	SDC10-4		15 l/min [4 US gal/min	230 bar [3300 psi]	10.49

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
② ④	SV08-24-02	SDC08-4	Solenoid Valve, Spool Type,	10 l/min	230 bar	10.50
			4-Way, 2-Position	[3 US gal/min]	[3300 psi]	
M ± ± V						

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV08-24-04	SDC08-4	Solenoid Valve, Spool Type,	8 l/min	230 bar	10.51
			4-Way, 2-Position	[2 US gal/min]	[3300 psi]	
3 1						

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV10-24-12	SDC10-4	Solenoid Valve, Spool Type,	18 l/min	230 bar	10.52
3 1			4-Way, 2-Position	[5 US gal/min]	[3300 psi]	

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.





4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
② 4	SV10-24-05	SDC10-4	Solenoid Valve, Spool Type, 4-Way, 2-Position	25 l/min [7 US gal/min]	230 bar [3300 psi]	10.53

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV10-24-07	SDC10-4	Solenoid Valve, Spool Type,	24 l/min	230 bar	10.54
			4-Way, 2-Position	[6 US gal/min]	[3300 psi]	
3 1						

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
4 2	SV08-24-08	SDC08-4	Solenoid Valve, Spool Type,	24 l/min	230 bar	10.55
3 1			4-Way, 2-Position	[6 US gal/min]	[3300 psi]	

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	CP531-21	CP12-4	Solenoid Valve, Spool Type,	32 l/min	240 bar	10.56
			4-Way, 2-Position	[8 US gal/min]	[3500 psi]	
3 1						

4-Way, 2-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV10-24-13	SDC10-4	Solenoid Valve, Spool Type,	21 l/min	230 bar	10.57
			4-Way, 2-Position	[6 US gal/min]	[3300 psi]	
3 1						

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.







4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-34-02	SDC08-4	Solenoid Valve, Spool Type,	10 l/min	230 bar	10.58
(2) (4)			4-Way, 3-Position	[2 US gal/min]	[3300 psi]	
52 3 1	SV10-34-02	SDC10-4		20 l/min [6 US gal/min]	230 bar [3300 psi]	10.59

4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-34-03	SDC08-4	Solenoid Valve, Spool Type,	8 l/min	230 bar	10.60
(2)			4-Way, 3-Position	[2 US gal/min]	[3300 psi]	
52 3 1 51						

4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV10-34-03	SDC10-4	Solenoid Valve, Spool Type,	16 l/min	230 bar	10.61
(2)			4-Way, 3-Position	[4 US gal/min]	[3300 psi]	
52 3 1 51						

4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV08-34-04	SDC08-4	Solenoid Valve, Spool Type,	6 l/min	230 bar	10.62
(2)			4-Way, 3-Position	[2 US gal/min]	[3300 psi]	
S2 3 1 1 51						

4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
	SV10-34-04	SDC10-4	Solenoid Valve, Spool Type,	15 l/min	230 bar	10.63
(2) (4)			4-Way, 3-Position	[4 US gal/min]	[3300 psi]	
52 3 1 51						

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.





4-Way, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
2 4	SV08-34-05	SDC08-4	Solenoid Valve, Spool Type, 4-Way, 3-Position	10 l/min [2 US gal/min]	230 bar [3300 psi]	10.64
S2 3 1 1 S1	SV10-34-05	SDC10-4		20 l/min [6 US gal/min]	230 bar [3300 psi]	10.65

4-W	Vay, 3-Position Spool	Model No.	Cavity	Description	Flow*	Pressure	Page
		SV10-34-11	SDC10-4	Solenoid Valve, Spool Type,	24 l/min	230 bar	10.66
	(2) (4)			4-Way, 3-Position	[6 US gal/min]	[3300 psi]	
	52 3 1 1						

^{*} Flow ratings are based on a pressure drop of 7 bar [100 psi] unless otherwise noted. They are for comparison purposes only.





SOLENOID VALVES

Solenoid valves are electrically-operated, on-off poppet or spool-type valves for load holding, blocking, or directional control applications.





PLUS+1™ COMPLIANT

Comatrol solenoid valves are PLUS+1[™] compliant. PLUS+1 compliance means our valves are directly compatible with the PLUS+1 machine control architecture. Adding solenoid valves to your application using PLUS+1 GUIDE software is as easy as *drag-and-drop*. Software development that used to take months can now be done in just a few hours. For more information on PLUS+1 GUIDE, visit *www.comatrol.com* or *www.sauer-danfoss.com/plus1*. The table below details available GUIDE function blocks for controlling Comatrol solenoid valves.

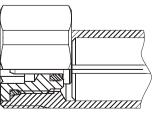
GUIDE function blocks

On-off	10106088
On-off-on	10106102

SV AND SVP COIL OPTIONS

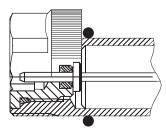
All SV and SVP valves may be ordered with a robust coil option. The robust coil option uses a steel nut and does not use O-rings on the top and bottom of the coil. The standard coil option uses a plastic nut with one O-ring on the top of the coil and one O-ring on the bottom of the coil.





No O-rings needed Torque is same as standard nut

Standard Coil Nut



Standard Coil Nut Kit includes O-rings

P108 282E





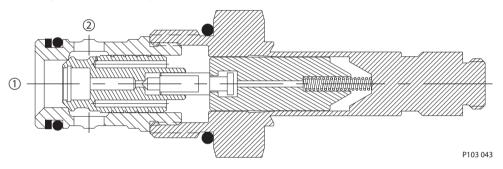
POPPET-TYPE SOLENOID VALVES

Poppet-type solenoid valves are two-way, normally open or normally-closed valves.

Normally-closed

Normally-closed poppet valves block flow from 2 to 1 when de-energized. When the solenoid coil is energized, magnetic force lifts the small pilot dart from it's seat, creating a pressure differential across the main poppet that provides the force to lift the main poppet off it's seat. Models with free-reverse-flow also act as a low-pressure, free-flow check valve from 1 to 2 when energized; standard models provide an orifice-connection to 2 when pressure is applied at 1.

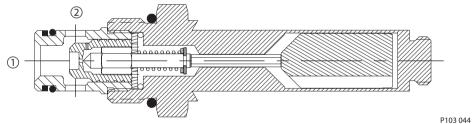
Normally closed poppet-type solenoid valve



Normally-open

Normally-open poppet valves provide free flow from 2 to 1 when de-energized. When the solenoid coil is energized, magnetic force seats the small pilot dart, creating a pressure differential that provides the force to seat the main poppet and block flow. Models with free-reverse flow also act as a low-pressure, free-flow check valve from 1 to 2 when de-energized; standard models provide an orifice-connection to 2 when pressure is applied at 1.

Normally open poppet-type solenoid valve







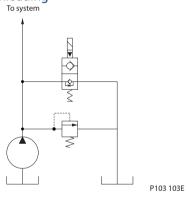
POPPET-TYPE SOLENOID VALVES (continued)

Applications

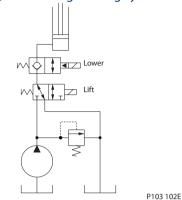
Common applications for normally-open and normally-closed poppet valves include:

- · Load holding and lowering with single-acting cylinders.
- Unloading of a fixed-displacement pump.
- four-way, three-position valve functions. These circuits create low-cost, compact alternatives to subplate- or stack-type directional control valves. As an added advantage these poppet valve circuits do not need load holding checks as the poppets provide the same low-leakage function.

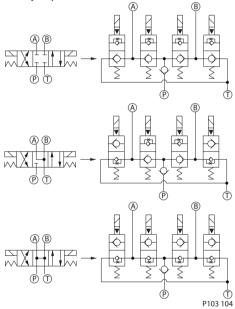
Pump unloading



Lift, hold, & lower single acting cylinder



4-way 3-position directional valve circuits







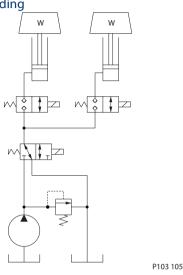
BI-DIRECTIONAL POPPET-TYPE SOLENOID **VALVES**

Bi-directional poppet-type solenoid valves are two-way, normally open or normally-closed valves. The poppets are pressure-balanced so that the spring holds the poppet in it's de-energized position. When the solenoid coil is energized, magnetic force overcomes the spring and causes the poppet to shift.

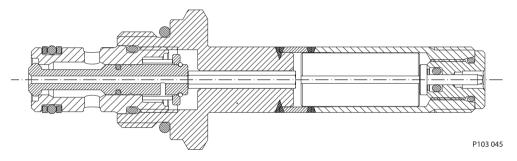
Normally-closed

Normally-closed bi-directional poppet valves block flow in both directions when de-energized and allow freeflow when energized. These valves are typically used as directional controls for single-acting cylinders or uni-directional motors where low-leakage load holding is required, or where multiple functions must be separated.

Independent cylinder operation and load-holding



Normally closed bi-directional poppet-type solenoid valve



SPOOL-TYPE SOLENOID VALVES

Spool-type valves are available in 2-way 2-position, 3-way 2-position, 4-way 2-position, and 4-way 3 position configurations. For all these valves the spools are pressurebalanced and are held in position by a spring when de-energized. When the solenoid coil is energized, magnetic force overcomes the spring and shifts the spool. As the spool moves, flow forces, also known as Bernoulli forces, act on the spool and can prevent proper operation. These forces are a function of pressure and flow, and the catalog ratings show the operating limits for each valve. These limits are based on the valve's ability to shift at 85% of nominal voltage at 140°F ambient temperature. For this reason flow and pressure ratings for solenoid spool valves should not be exceeded.

Consult your Comatrol representative for extreme applications.



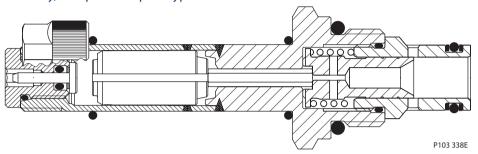


SPOOL-TYPE SOLENOID VALVES (continued)

Two-way, two-position

Two-way, two-position spool-type valves are either normally open or normally closed.

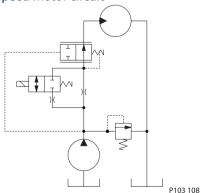
Two-way, two-position spool-type solenoid valve



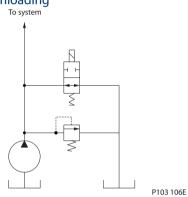
Common applications for two-way, two-position spool type solenoid valves are:

- Unloading of a fixed-displacement pump.
- Cylinder regeneration. When the two-way two-position spool valve is energized the cylinder circuit is in regeneration mode for faster cylinder extension.
- Two-speed motor (or cylinder) operation. By using multiple valves and circuit logic, similar circuits can be used for three-speed, four-speed, etc.

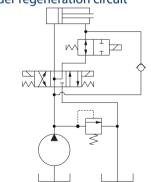
Two-speed motor circuit



Pump unloading



Cylinder regeneration circuit



Energize 2-way spool valve for faster extension





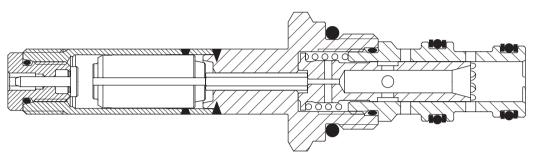
SPOOL-TYPE SOLENOID VALVES (continued)

Three-way, two-position

Three-way, two-position spool-type valves are available with a variety of porting and flow paths.

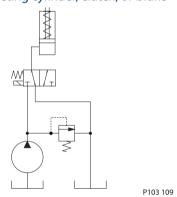
Common applications for three-way, two-position spool type solenoid valves:

Three-way, two-position spool-type solenoid valves

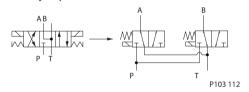


- · Control of a single-acting cylinder, clutch, or brake.
- · Circuit selector
- · Pilot control for a large directional spool.
- Use in combination to duplicate four-way, three-position valve functions, creating low-cost, compact alternatives to subplate- or stacktype directional control valves.

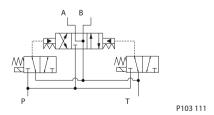
Single acting cylinder, clutch, or brake



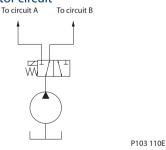
4-way 3-position directional valve circuits



Pilot for directional valve



Selector circuit





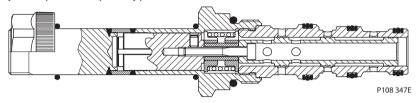


SPOOL-TYPE SOLENOID VALVES (continued)

Four-way, two-position

Four-way, two-position spool-type valves are available with normally-open, normally-closed, reversing, and single-acting spool options.

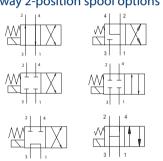
Four-way, two-position spool-type solenoid valves



Common applications for four-way, two-position spool type solenoid valves are:

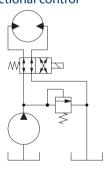
- Directional control for motors or cylinders.
- Use in combination to duplicate four-way, three-position valve functions, creating low-cost, compact alternatives to subplate- or stacktype directional control valves.

4-way 2-position spool options



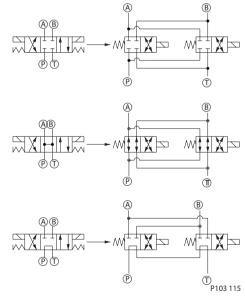
P103 113

Motor directional control



P103 114

4-way 3-position directional valve circuits





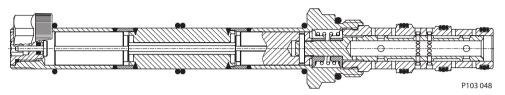


SPOOL-TYPE SOLENOID VALVES (continued)

Four-way, three-position

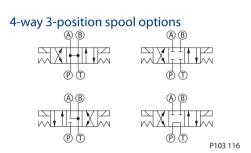
Four-way, three-position spool-type valves are available with normally-open, normally-closed, motor, and tandem spools.

Four-way, three-position spool-type solenoid valve

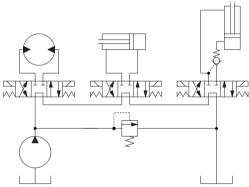


These valves are typically used for directional control for motor or cylinder functions.

Typical series (or open-center) and parallel (or closed-center) circuits are shown below.

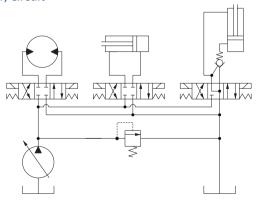


Series (open-center) circuit



P103 117

Parallel (closed-center) circuit



P103 118





OPERATION

This is a direct-acting, 2-position, 3-way, poppet-type solenoid valve.

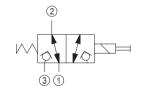
EVH 06/D5

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	20 l/min [5 US gal/min]
[100 psi]	
Weight	0.44 kg [0.97 lb]
Cavity	NCS06/3
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

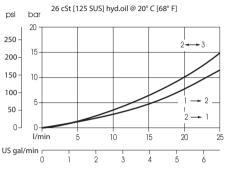
Schematic

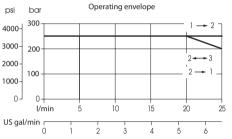


P103 536

Theoretical performance





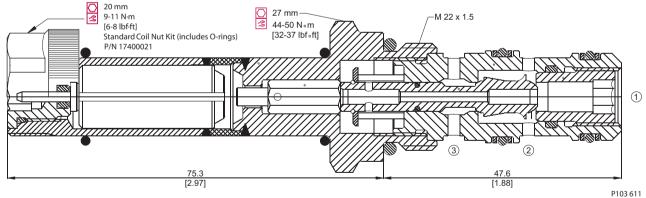


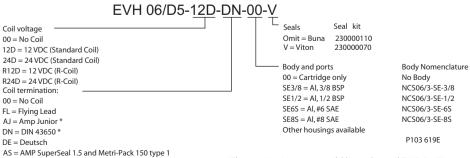
P103 616E

DIMENSIONS

mm [in]

Cross-sectional view





^{*} These terminations are not available on robust coil (R12D, R24D)







OPERATION

This is a normally-closed, doubleblocking poppet-type solenoid valve.

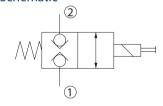
SVP08-CDB

SPECIFICATIONS

Specifications

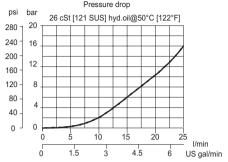
230 bar [3300 psi]
16 l/min [4 US gal/min]
6 drops/min @ Rated
pressure
0.32 kg [0.71 lb]
SDC08-2
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

Schematic



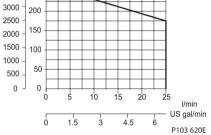
P102 716

Theoretical performance



Operating envelope 26 cSt [121 SUS] hyd.oil@50°C [122°F] 3500 250

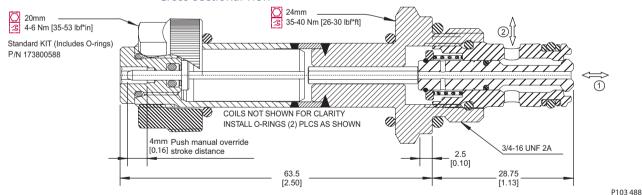
psi

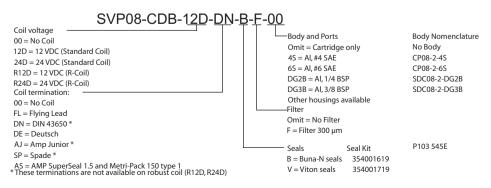


DIMENSIONS

mm [in]

Cross-sectional view







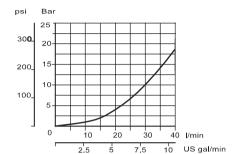


OPERATION

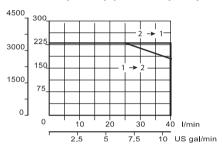
This is a normally-closed, double-blocking poppet-type solenoid valve.

Theoretical performance

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



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



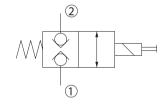
P103 861E

SPECIFICATIONS

Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	50 l/min [13 US gal/min]
[100 psi]	
Weight	0.43 kg [0.95 lb]
Cavity	NCS06/2
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Schematic

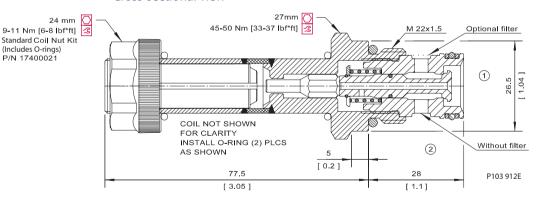


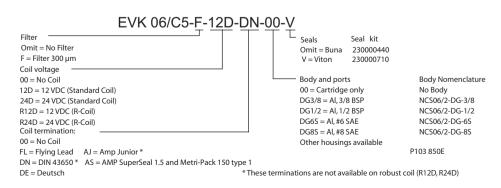
P102 716

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

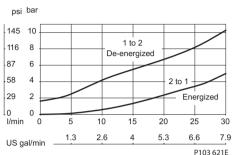
This is a normally-closed, pilot-operated, poppet-type solenoid valve.

SVP08-NC

Theoretical performance

Pressure drop

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]

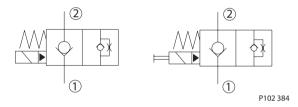


SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Maximum flow at	35 l/min [9 US gal/min]
rated pressure	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.23 kg [0.51 lb]
Cavity	SDC08-2
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

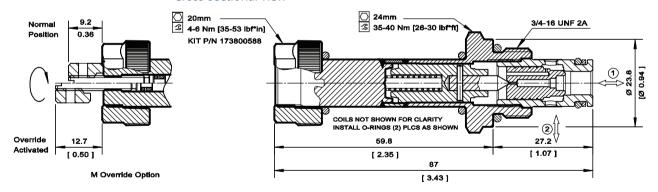
Schematic

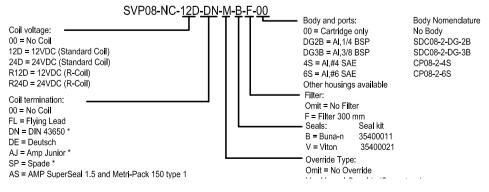


DIMENSIONS

mm [in]

Cross-sectional view









P103 491

OPERATION

SPECIFICATIONS

This is a normally-closed, pilot-operated, poppet-type solenoid valve.

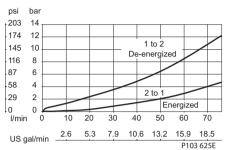
SVP10-NC

Specifications

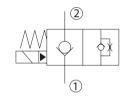
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	80 l/min [21 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.43 kg [0.95 lb]
Cavity	SDC10-2
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)
Cavity Standard Coil	0.43 kg [0.95 lb] SDC10-2 M16 26 Watt R16 20 Watt Robust Nut P/N 173804910

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]

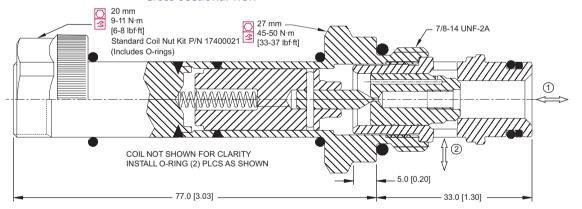


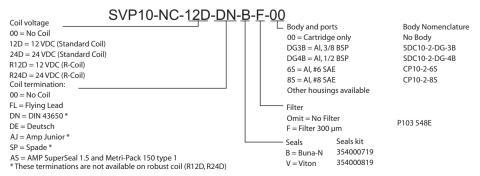
Schematic



DIMENSIONS

mm [in] Cross-sectional view









OPERATION

This valve is a normally closed, pilot operated, poppet type solenoid.

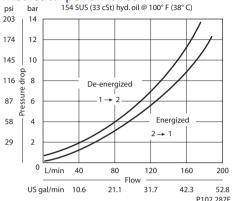
CP501-1

SPECIFICATIONS

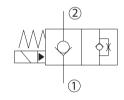
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	115 l/min [30 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.53 kg [1.16 lb]
Cavity	CP12-2
Standard Coil	D10 16 Watt
Coil nut	620186
Coil nut	620186

Theoretical performance



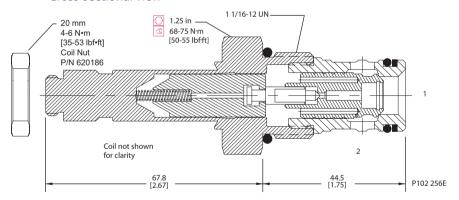
Schematic



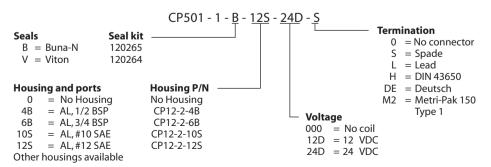
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P102 323E





OPERATION

This is a normally-closed, pilot-operated, poppet-type solenoid valve with free reverse flow.

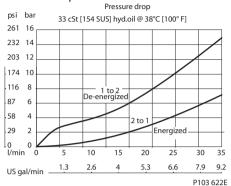
SVP08-NCR

SPECIFICATIONS

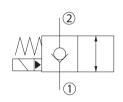
Specifications

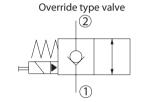
Specifications	
Rated pressure	230 bar [3300 psi]
Maximum flow at	35 l/min [9 US gal/min]
rated pressure	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.23 kg [0.51 lb]
Cavity	SDC08-2
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Theoretical performance



Schematic



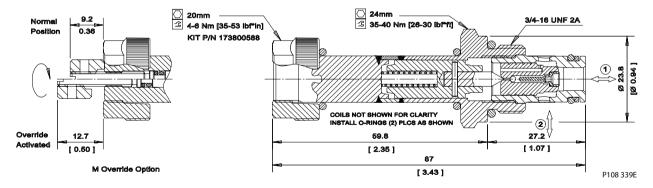


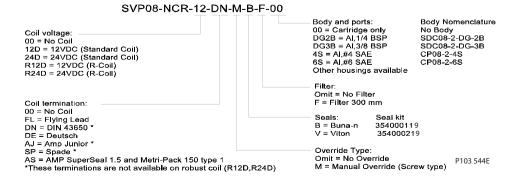
P102 386

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This is a normally-closed, pilot-operated, poppet-type solenoid valve with free reverse flow.

SVP10-NCR

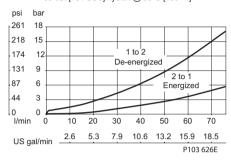
SPECIFICATIONS

Specifications

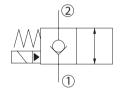
230 bar [3300 psi]
80 l/min [21 US gal/min]
6 drops/min @ Rated
pressure
0.43 kg [0.95 lb]
SDC10-2
M16 26 Watt
R16 20 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



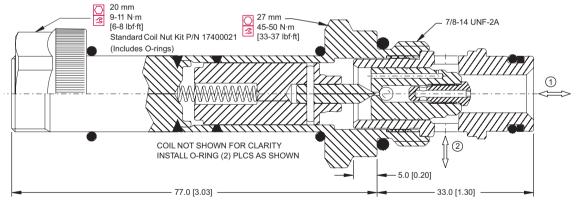
Schematic



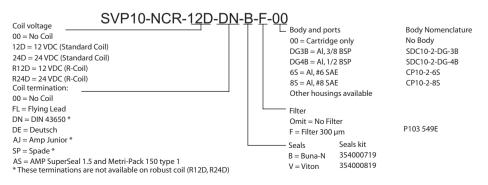
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P103 487





OPERATION

This valve is a normally closed, pilot operated, poppet type solenoid valve with free reverse flow.

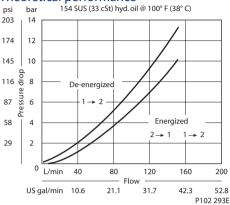
CP501-3

SPECIFICATIONS

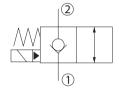
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	115 l/min [30 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.53 kg [1.16 lb]
Cavity	CP12-2
Standard Coil	D10 16 Watt
Coil nut	620186

Theoretical performance



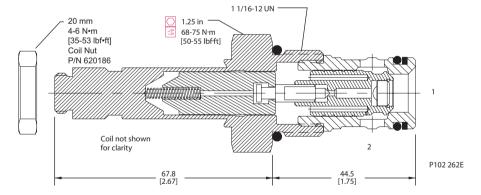
Schematic



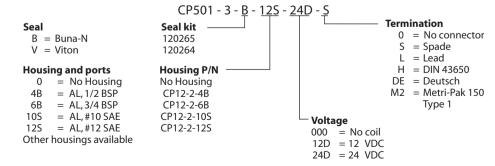
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P102 321E





OPERATION

This valve is a normally closed, pilot operated, poppet type solenoid valve with free reverse flow.

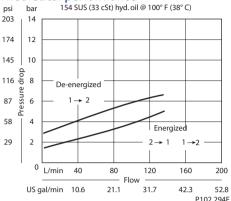
CP502-3

SPECIFICATIONS

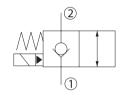
Specifications

210 bar [3000 psi]
130 l/min [34 US gal/min]
6 drops/min @ Rated
pressure
0.66 kg [1.45 lb]
SDC16-2
D10 16 Watt
620186

Theoretical performance



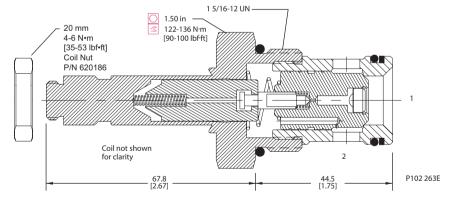
Schematic



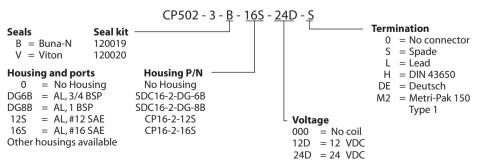
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P102 318E





OPERATION

This valve is a normally closed, pilot operated, poppet type solenoid valve with free reverse flow.

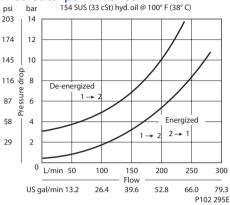
CP503-3

SPECIFICATIONS

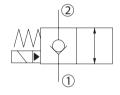
Specifications

- 1	
Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	230 l/min [61 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.91 kg [2.00 lb]
Cavity	SDC20-2
Standard Coil	D10 16 Watt
Coil nut	620186

Theoretical performance



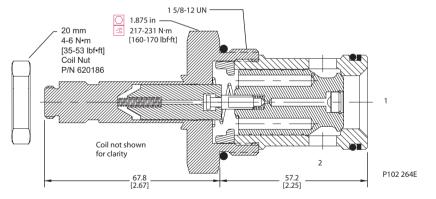
Schematic



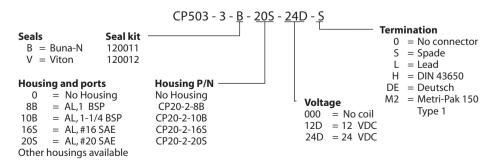
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P102 316E





OPERATION

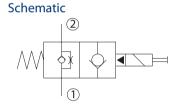
This is a normally-open, pilot-operated, poppet-type solenoid valve.

SVP08-NO

SPECIFICATIONS

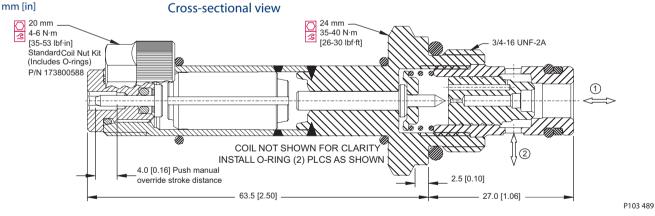
Specifications

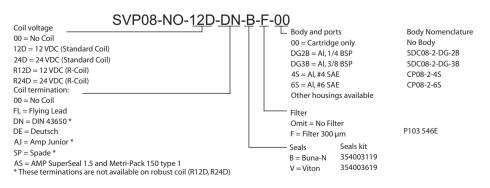
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	35 l/min [9 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.23 kg [0.51 lb]
Cavity	SDC08-2
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

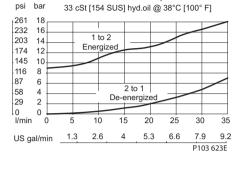


P102 385

DIMENSIONS











OPERATION

This is a normally-open, pilot-operated, poppet-type solenoid valve.

SVP10-NO

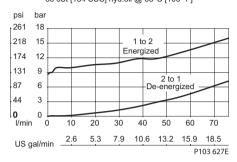
SPECIFICATIONS

Specifications

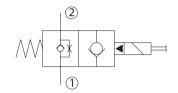
Rated pressure 230 bar [3300 psi] Rated flow at 7 bar [100 psi] 80 l/min [21 US gal/min] Leakage 6 drops/min @ Rated pressure Weight 0.43 kg [0.95 lb]		
bar [100 psi] Leakage 6 drops/min @ Rated pressure Weight 0.43 kg [0.95 lb]	Rated pressure	230 bar [3300 psi]
Leakage 6 drops/min @ Rated pressure Weight 0.43 kg [0.95 lb]	Rated flow at 7	80 l/min [21 US gal/min]
Weight 0.43 kg [0.95 lb]	bar [100 psi]	
	Leakage	6 drops/min @ Rated pressure
Cavity SDC10-2	Weight	0.43 kg [0.95 lb]
Cavity SDC10 2	Cavity	SDC10-2
Standard Coil M16 26 Watt	Standard Coil	M16 26 Watt
Robust Coil R16 20 Watt	Robust Coil	R16 20 Watt
Robust Nut P/N 173804910		Robust Nut P/N 173804910
(no coil O-rings needed)		(no coil O-rings needed)

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



Schematic

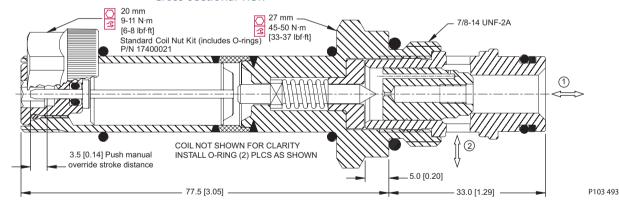


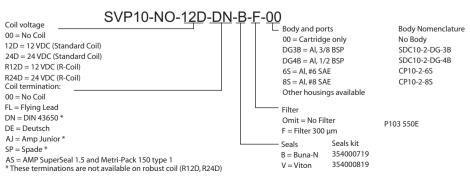
P102 385

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This valve is a normally open, pilot operated, poppet type solenoid.

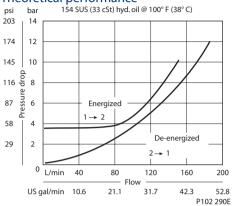
CP501-2

SPECIFICATIONS

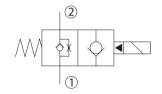
Specifications

210 bar [3000 psi]
115 l/min [30 US gal/min]
6 drops/min @ Rated
pressure
0.54 kg [1.19 lb]
CP12-2
D10 16 Watt
621468 (Std.), 622477
(Option M)

Theoretical performance



Schematic

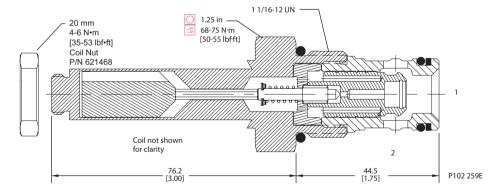


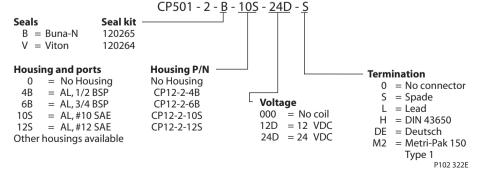
P102 261E

DIMENSIONS

mm [in]

Cross-sectional view







P103 490

OPERATION

This is a normally-open, pilot-operated, poppet-type solenoid valve with free reverse flow.

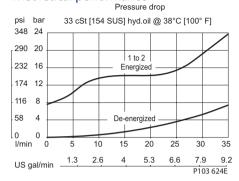
SVP08-NOR

SPECIFICATIONS

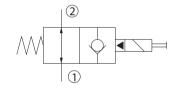
Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	35 l/min [9 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.23 kg [0.51 lb]
Cavity	SDC08-2
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Theoretical performance



Schematic

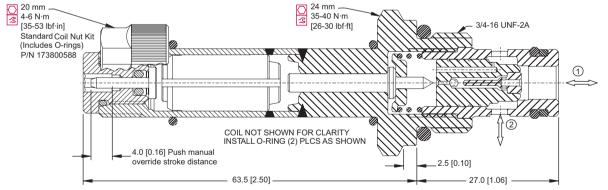


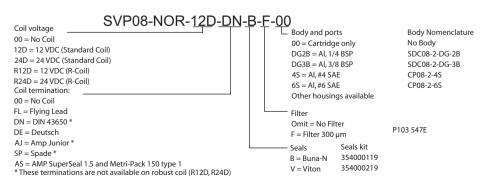
P102 387

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This is a normally-open, pilot-operated, poppet-type solenoid valve with free reverse flow.

SVP10-NOR

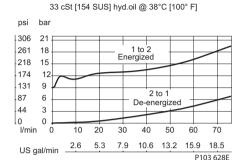
SPECIFICATIONS

Specifications

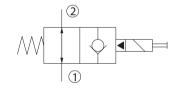
Specifications	
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	80 l/min [21 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.43 kg [0.95 lb]
Cavity	SDC10-2
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Theoretical performance

riessule diop



Schematic

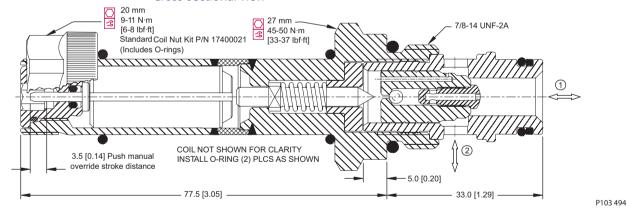


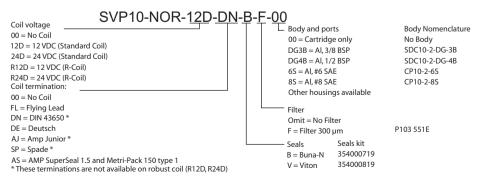
P102 387

DIMENSIONS

mm [in]

Cross-sectional view





MEMBER OF THE SAUER-DANFOSS GROUP

Cartridge Valves Technical Information Solenoid Valves 2-Way Poppet



OPERATION

This valve is a normally open, pilot operated, poppet type solenoid valve with free reverse flow.

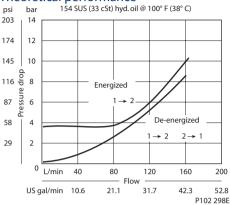
CP501-4

SPECIFICATIONS

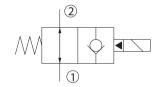
Specifications

Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	115 l/min [30 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.54 kg [1.19 lb]
Cavity	CP12-2
Standard Coil	D10 16 Watt
Coil nut	621468 (Std.), 622477
	(Option M)

Theoretical performance



Schematic

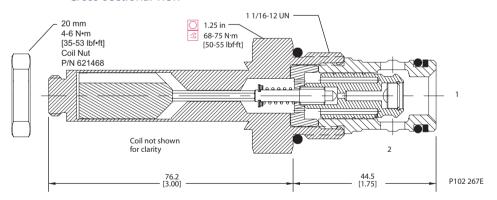


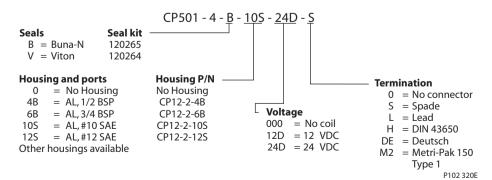
P108 262

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This valve is a normally open, pilot operated, poppet type solenoid.

CP502-4

SPECIFICATIONS

Specifications

210 bar [3000 psi]
130 l/min [34 US gal/min]
6 drops/min @ Rated
pressure
0.68 kg [1.50 lb]
SDC16-2
D10 16 Watt
621468 (Std.), 622477
(Option M)

21.1

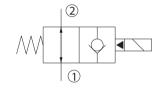
31.7

42.3

52.8 P102 299E

US gal/min 10.6

Schematic

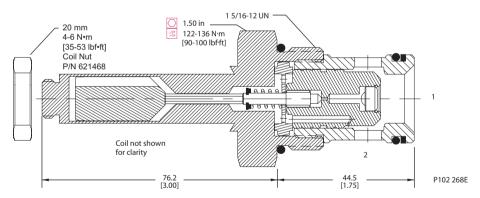


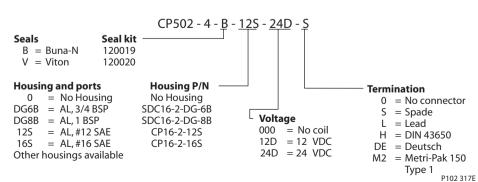
P108 262

DIMENSIONS

mm [in]

Cross-sectional view





MEMBER OF THE SAUER-DANFOSS GROUP

Cartridge Valves Technical Information Solenoid Valves 2-Way Poppet



OPERATION

This valve is a normally open, pilot operated, poppet type solenoid.

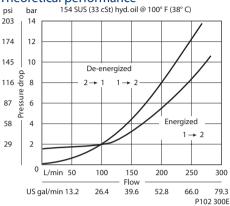
CP503-4

SPECIFICATIONS

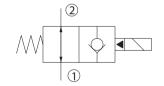
Specifications

<u> </u>	
Rated pressure	210 bar [3000 psi]
Rated flow at 7 bar	230 l/min [61 US gal/min]
[100 psi]	
Leakage	6 drops/min @ Rated
	pressure
Weight	0.91 kg [2.00 lb]
Cavity	SDC20-2
Standard Coil	D10 16 Watt
Coil nut	621468 (Std.), 622477
	(Option M)

Theoretical performance



Schematic

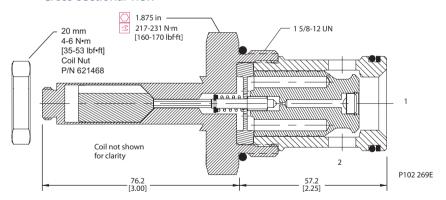


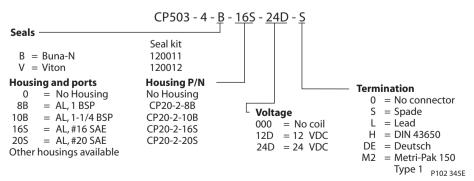
P108 262

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This is a normally-open, direct-acting, 2-way, 2-position, spool-type solenoid valve.

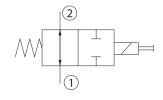
SV08-22-01

SPECIFICATIONS

Specifications

-	
230 bar [3300 psi]	
16 l/min [4 US gal/min]	
0.29 kg [0.64 lb]	
SDC08-2	
M13 20 Watt	
R13 16 Watt	
Robust Nut P/N 173804910	
(no coil O-rings needed)	

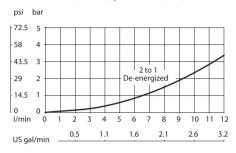
Schematic

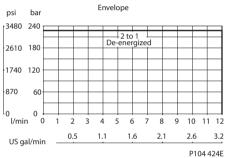


P108 284

Theoretical performance

Pressure Drop 33 cSt [154 SUS] hyd.oil @ 38°C [100° F]

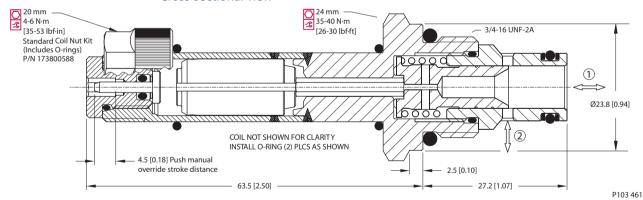


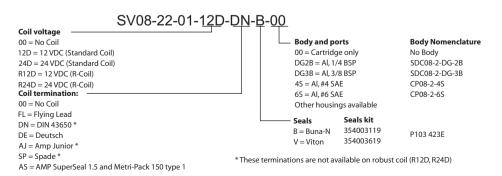


DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves



2-Way Spool SV10-22-01

OPERATION

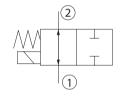
This is a normally-open, direct-acting, 2-way, 2-position, spool-type solenoid valve.

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	27 l/min [7 US gal/min]
[100 psi]	
Weight	0.43 kg [0.95 lb]
Cavity	SDC10-2
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

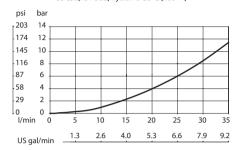
Schematic

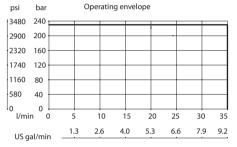


P102 389

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



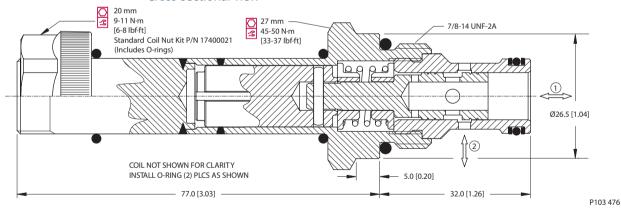


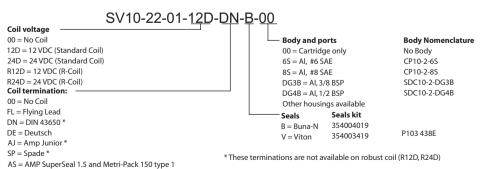
P103 577E

DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves



2-Way Spool SV08-22-02

OPERATION

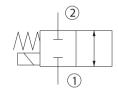
This is a normally-closed, direct-acting, 2-way, 2-position, spool-type solenoid valve.

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	14 l/min [4 US gal/min]
[100 psi]	
Weight	0.29 kg [0.64 lb]
Cavity	SDC08-2
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

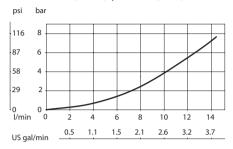
Schematic

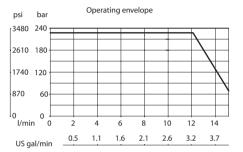


P102 388

Theoretical performance





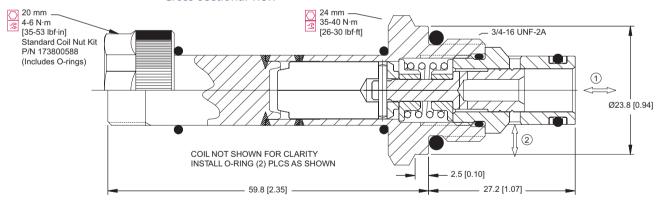


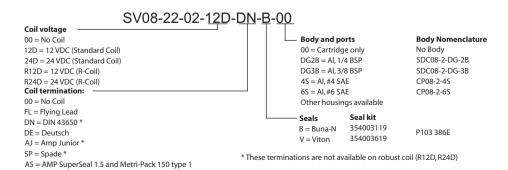
P103 564E

DIMENSIONS

mm [in]

Cross-sectional view





Cartridge Valves Technical Information Solenoid Valves 2-Way Spool



OPERATION

This is a normally-closed, direct-acting, 2-way, 2-position, spool-type solenoid valve.

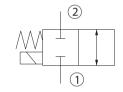
SV10-22-02

SPECIFICATIONS

Specifications

oar [3300 psi]
min [9 US gal/min]
kg [0.95 lb]
10-2
26 Watt
20 Watt
ust Nut P/N 173804910
oil O-rings needed)

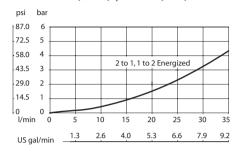
Schematic

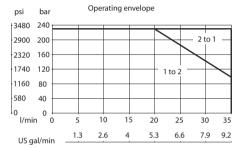


P102 388

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



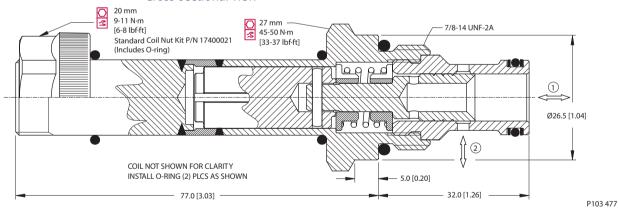


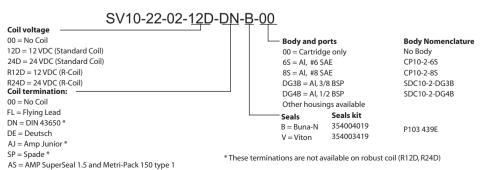
P103 578E

DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves



MEMBER OF THE SAUER-DANFOSS GROUP

2-Way Spool SV08-22-03

OPERATION

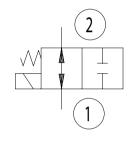
This is a direct-acting, 2-position, 2-way, spool-type solenoid valve.

SPECIFICATIONS

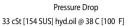
Specifications

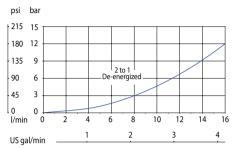
230 bar [3300 psi]
12 l/min [3.2 US gal/min]
0.29 kg [0.64 lb]
SDC08-2
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

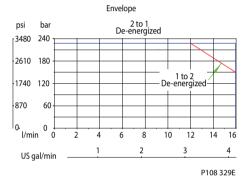
Schematic



Theoretical performance



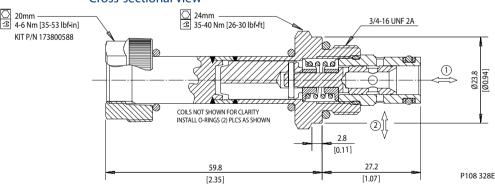


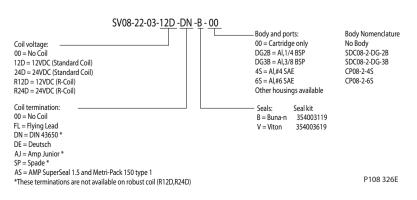


DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves



2-Way, 2-Position Spool SV08-23-01

OPERATION

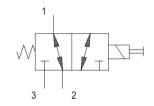
This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

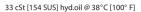
230 bar [3300 psi]
17 l/min [5 US gal/min]
0.31 kg [0.68 lb]
SDC08-3
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

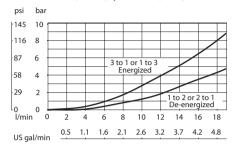
Schematic



P108 332E

Theoretical performance

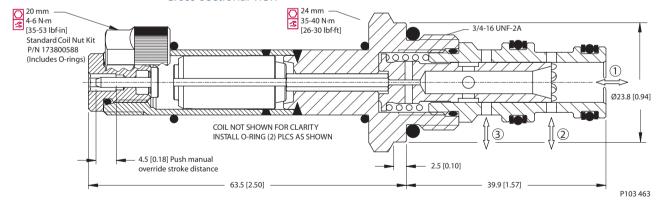


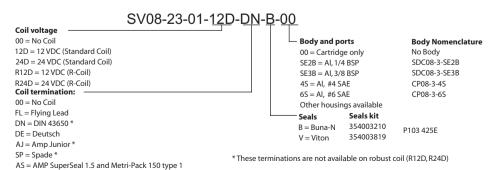


DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves 2-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

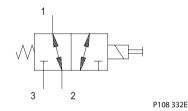
SV10-23-01

SPECIFICATIONS

Specifications

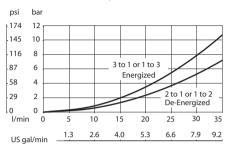
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	28 l/min [7 US gal/min]
[100 psi]	
Weight	0.42 kg [0.93 lb]
Cavity	SDC10-3
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

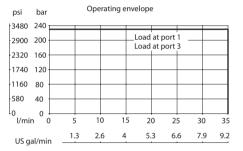
Schematic



Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



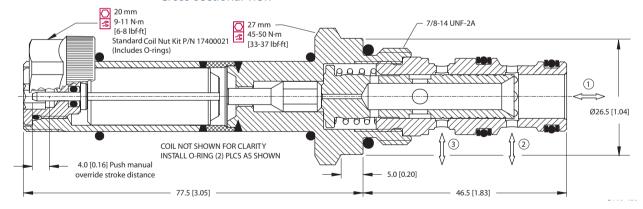


P103 579E

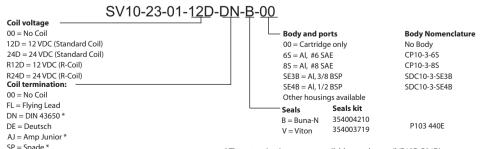
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION







CP521-21

OPERATION

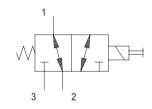
This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

Rated pressure	240 bar [3500 psi]
Rated flow at 7 bar	60 l/min [16 US gal/min]
[100 psi]	
Weight	0.80 kg [1.76 lb]
Cavity	CP12-3
Standard Coil	D14E 30 Watt
Coil nut	321567

Schematic

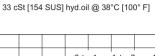


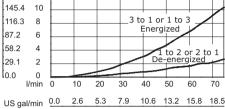
P108 332E

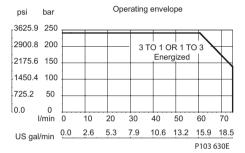
Theoretical performance

psi bar

174.0 12



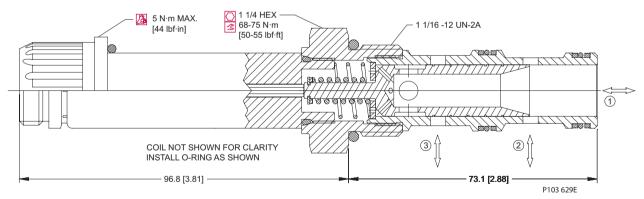




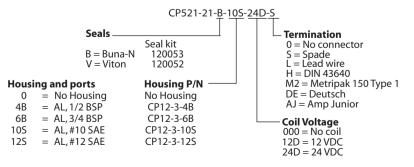
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



P103 631E



Cartridge Valves Technical Information Solenoid Valves 2-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

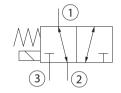
SV08-23-02

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	10 l/min [3 US gal/min]
[100 psi]	
Weight	0.31 kg [0.68 lb]
Cavity	SDC08-3
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

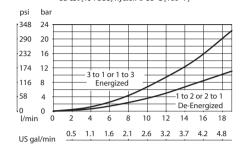
Schematic

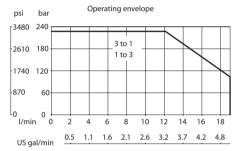


P108 285

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



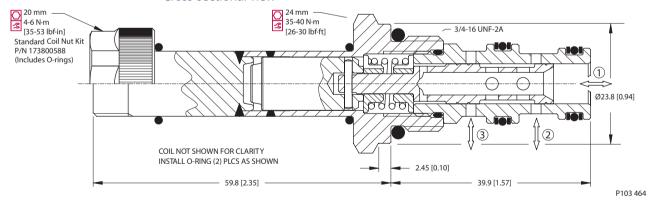


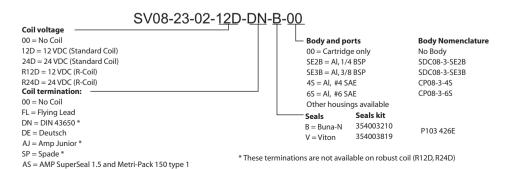
P103 565E

DIMENSIONS

mm [in]

Cross-sectional view







OPERATION

This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

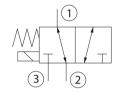
SV10-23-02

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	15 l/min [4 US gal/min]
[100 psi]	
Weight	0.42 kg [0.93 lb]
Cavity	SDC10-3
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)
Standard Coil	M16 26 Watt R16 20 Watt Robust Nut P/N 173804910

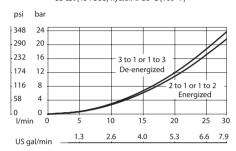
Schematic

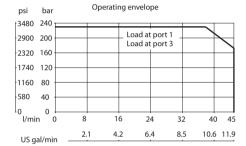


P102 720

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



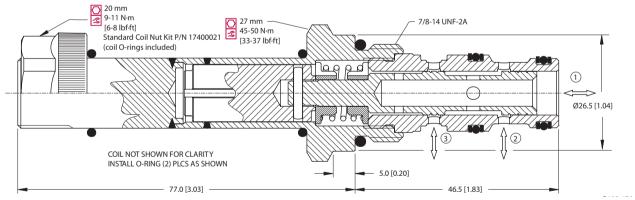


P103 580E

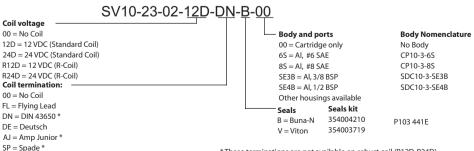
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



^{*}These terminations are not available on robust coil (R12D, R24D)



Cartridge Valves Technical Information Solenoid Valves 2-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

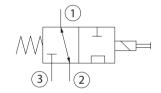
SV08-23-03

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	18 l/min [5 US gal/min]
[100 psi]	
Weight	0.31 kg [0.68 lb]
Cavity	SDC08-3
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

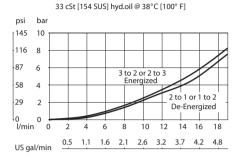
Schematic

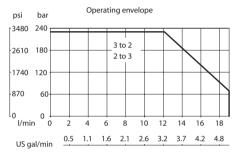


P108 264

Theoretical performance



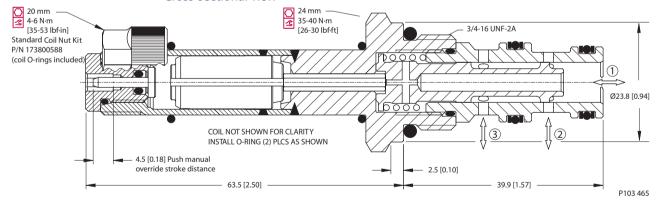


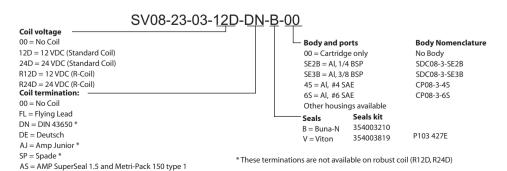


P103 566E

DIMENSIONS

mm [in] Cross-sectional view









SV08-23-04

OPERATION

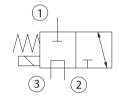
This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

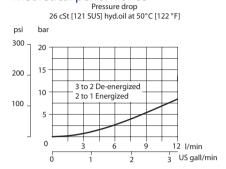
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	10 l/min [3 US gal/min]
[100 psi]	
Weight	0.31 kg [0.68 lb]
Cavity	SDC08-3
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

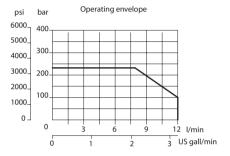
Schematic



P108 265

Theoretical performance



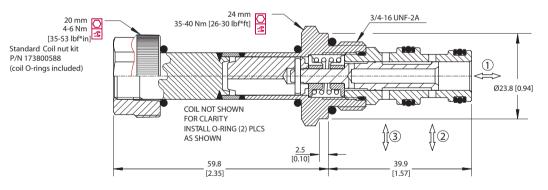


P103 567E

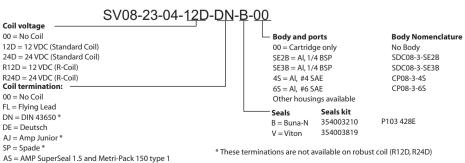
DIMENSIONS

mm [in]

Cross-sectional view



P103 466



^{*} These terminations are not available on robust coil (R12D, R24D)



Cartridge Valves Technical Information Solenoid Valves 2-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 3-way, spool-type solenoid valve.

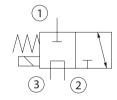
SV10-23-04

SPECIFICATIONS

Specifications

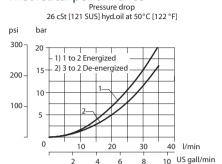
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	20 l/min [5 US gal/min]
[100 psi]	
Weight	0.42 kg [0.93 lb]
Cavity	SDC10-3
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

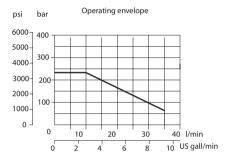
Schematic



P108 265

Theoretical performance



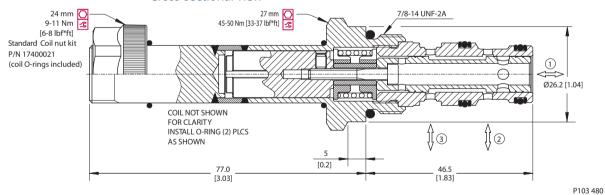


P103 581E

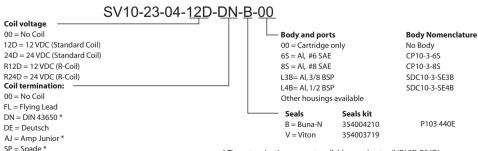
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



^{*} These terminations are not available on robust coil (R12D, R24D)

Cartridge Valves Technical Information Solenoid Valves



MEMBER OF THE SAUER-DANFOSS GROUP

4-Way, 2-Position Spool SV08-24-01

OPERATION

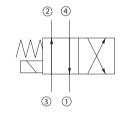
This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

230 bar [3300 psi]
8 l/min [2 US gal/min]
0.32 kg [0.71 lb]
SDC08-4
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

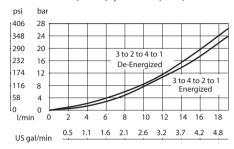
Schematic

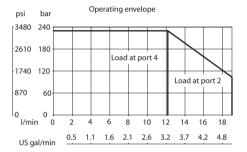


P108266

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



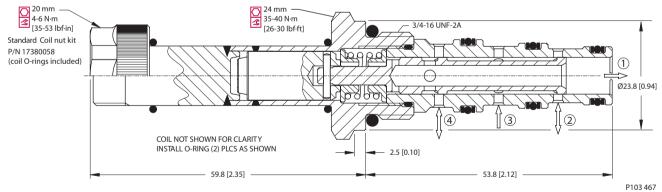


P103 568E

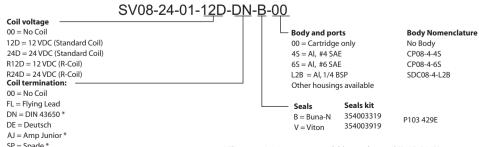
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



^{*} These terminations are not available on robust coil (R12D, R24D)





OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

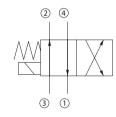
SV10-24-01

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	15 l/min [4 US gal/min]
[100 psi]	
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)

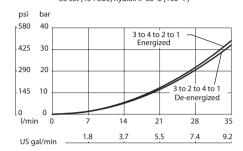
Schematic

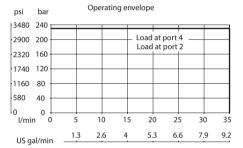


P108266

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



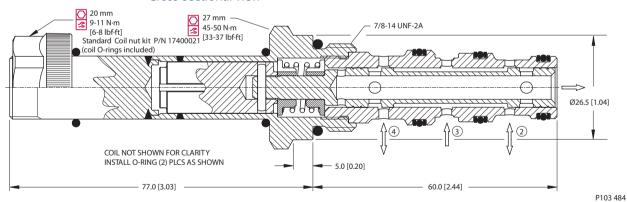


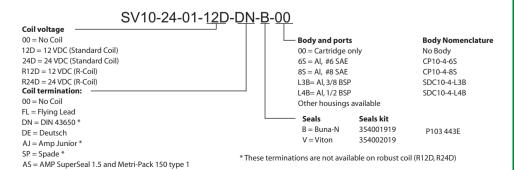
P103 582E

DIMENSIONS

mm [in]

Cross-sectional view







MEMBER OF THE SAUER-DANFOSS GROUP

4-Way, 2-Position Spool SV08-24-02

OPERATION

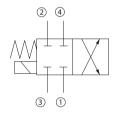
This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

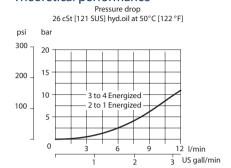
230 bar [3300 psi]
10 l/min [3 US gal/min]
0.31 kg [0.68 lb]
SDC08-4
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

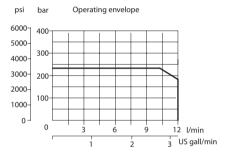
Schematic



P108268

Theoretical performance



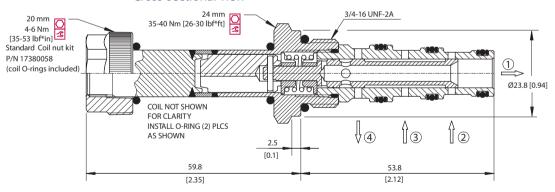


P103 570E

DIMENSIONS

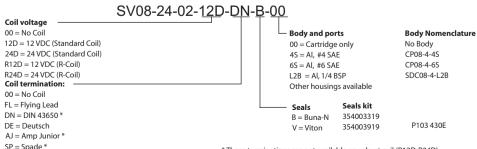
mm [in]

Cross-sectional view



P103 468

ORDERING INFORMATION



^{*} These terminations are not available on robust coil (R12D, R24D)



Cartridge Valves Technical Information Solenoid Valves



MEMBER OF THE SAUER-DANFOSS GROUP

4-Way, 2-Position Spool SV08-24-04

OPERATION

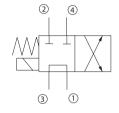
This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	8 l/min [2 US gal/min]
[100 psi]	
Weight	0.31 kg [0.68 lb]
Cavity	SDC08-4
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

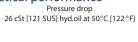
Schematic

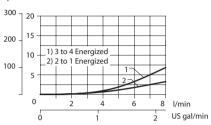


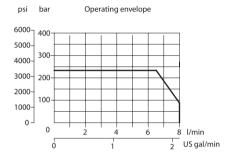
P108271

Theoretical performance

psi





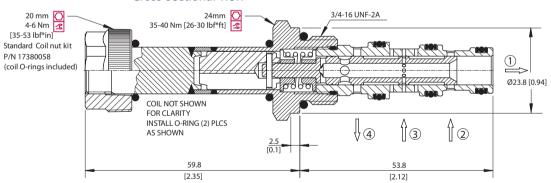


P103 571E

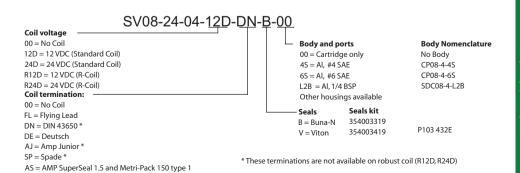
DIMENSIONS

mm [in]

Cross-sectional view



P103 470







OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

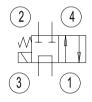
SV10-24-12

SPECIFICATIONS

Specifications

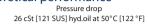
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	8 l/min [2 US gal/min]
[100 psi]	
Weight	0.31 kg [0.68 lb]
Cavity	SDC08-4
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

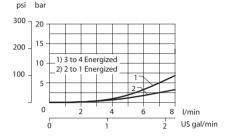
Schematic

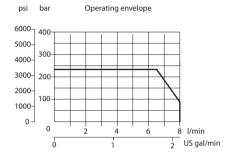


P108 393E

Theoretical performance





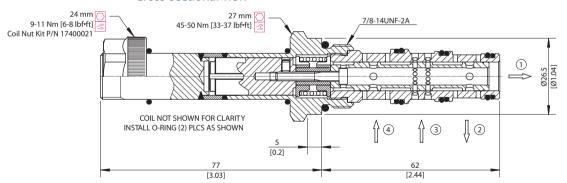


P103 571E

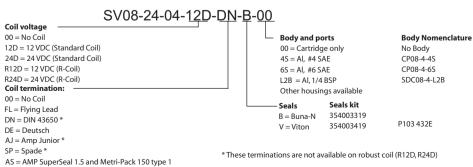
DIMENSIONS

mm [in]

Cross-sectional view



P103 552



^{*} These terminations are not available on robust coil (R12D, R24D)



Cartridge Valves Technical Information Solenoid Valves 4-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

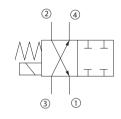
SV10-24-05

SPECIFICATIONS

Specifications

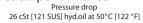
230 bar [3300 psi]
25 l/min [7 US gal/min]
0.45 kg [0.99 lb]
SDC10-4
M16 26 Watt
R16 20 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

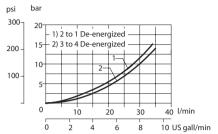
Schematic

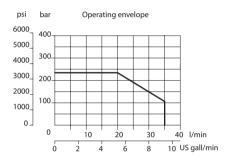


P108270

Theoretical performance





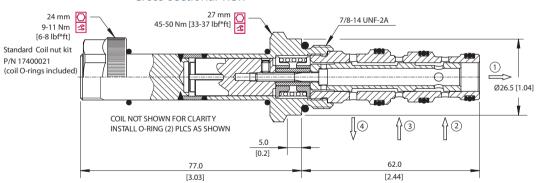


P103 583E

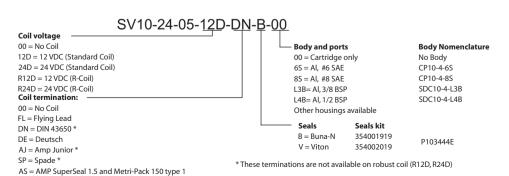
DIMENSIONS

mm [in]

Cross-sectional view



P103 481





Cartridge Valves Technical Information Solenoid Valves



MEMBER OF THE SAUER-DANFOSS GROUP

4-Way, 2-Position Spool SV10-24-07

OPERATION

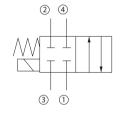
This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

SPECIFICATIONS

Specifications

230 bar [3300 psi]
24 l/min [6 US gal/min]
0.45 kg [0.99 lb]
SDC10-4
M16 26 Watt
R16 20 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

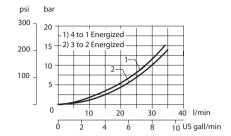
Schematic

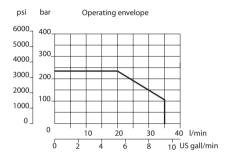


P108273

Theoretical performance

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



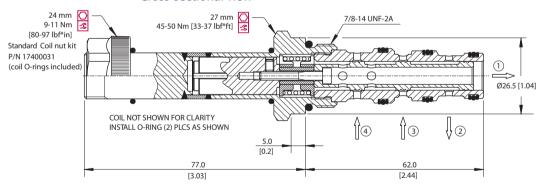


P103 585E

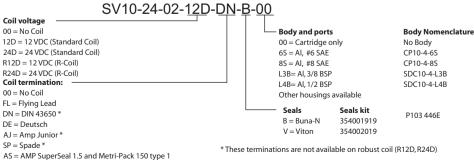
DIMENSIONS

mm [in]

Cross-sectional view



P103 483





Cartridge Valves Technical Information Solenoid Valves 4-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

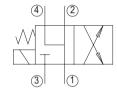
SV08-24-08

SPECIFICATIONS

Specifications

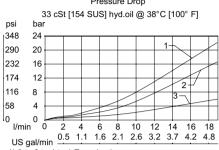
Rated pressure	230 bar [3300 psi]
Rated flow at bar	24 l/min [6 US gal/min]
[psi]	
Weight	0.45 kg [0.99 lb]
Cavity	SDC08-4
Standard Coil	M16 20 Watt
Robust Coil	R16 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Schematic



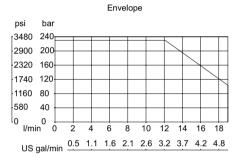
P108 334E

Theoretical performance



1) 3 to 2 to 4 to 1 Energized 2) 4 to 1 De-Energized 3) 2 to 1 De-Energized

[2.12]



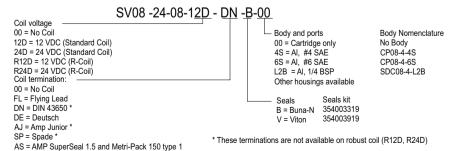
P108 yyyE

DIMENSIONS

mm [in]

Cross-sectional view 24 mm 35-40 Nm [26-30 lbf*ft] 🕏 3/4-16 UNF-2A 20 mm 4-6 Nm [35-53 lbf*in] Coil Nut Kit De pa P/N 173800588 1 COIL NOT SHOWN FOR CLARITY INSTALL O-RING (2) PLCS ^][4 13 12 AS SHOWN 2.5 [0.1] 59.8 53.8

ORDERING INFORMATION



P108 zzzE

P108 aaaE

[2.35]





OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

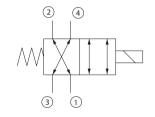
CP531-21

SPECIFICATIONS

Specifications

Rated pressure	240 bar [3500 psi]
Rated flow at 13	32 l/min [8 US gal/min]
bar [189 psi]	
Weight	0.82 kg [1.81 lb]
Cavity	CP12-4
Standard Coil	D14E 30 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

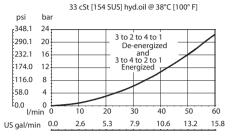
Schematic

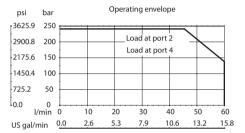


P108267

Theoretical performance

Pressure drop

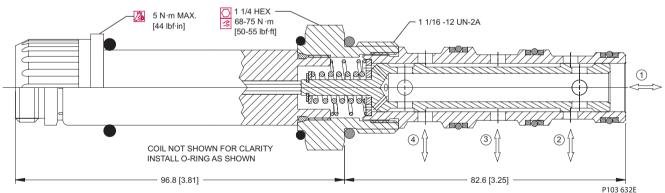




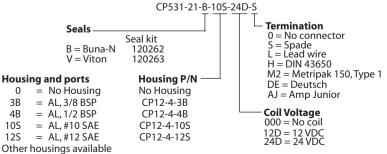
P103 634E

DIMENSIONS mm [in]

Cross-sectional view



ORDERING INFORMATION



P103 633E



Cartridge Valves Technical Information Solenoid Valves 4-Way, 2-Position Spool



OPERATION

This is a direct-acting, 2-position, 4-way, spool-type solenoid valve.

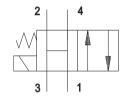
SV10-24-13

SPECIFICATIONS

Specifications

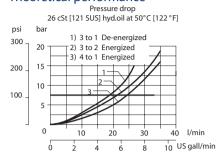
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	21 l/min [6 US gal/min]
[100 psi]	
Weight	0.45 kg [0.99 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

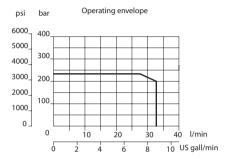
Schematic



P108 333E

Theoretical performance



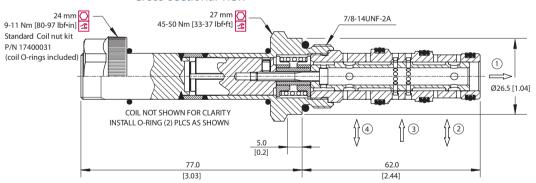


P103 587E

DIMENSIONS

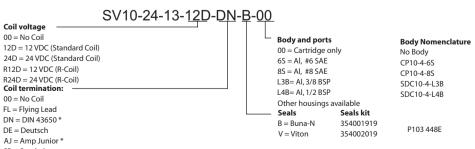
mm [in]

Cross-sectional view



P103 553

ORDERING INFORMATION



^{*}These terminations are not available on robust coil (R12D, R24D)



OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

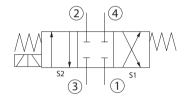
SV08-34-02

SPECIFICATIONS

Specifications

230 bar [3300 psi]
10 l/min [3 US gal/min]
0.55 kg [1.21 lb]
SDC08-4
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

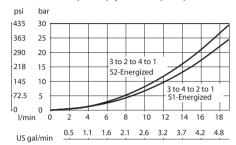
Schematic

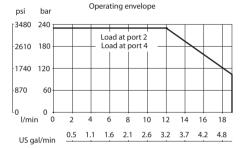


P108279

Theoretical performance





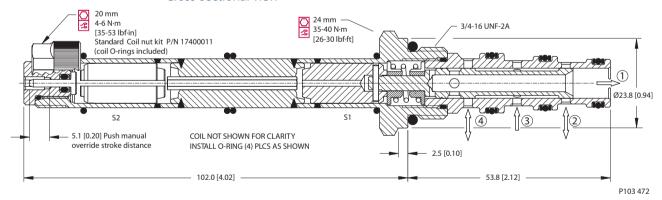


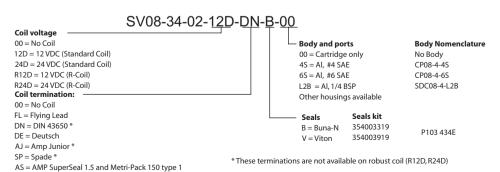
P103 573E

DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves 4-Way, 3-Position Spool



OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

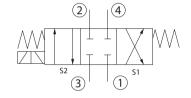
SV10-34-02

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	20 l/min [5 US gal/min]
[100 psi]	
Weight	0.81 kg [1.79 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

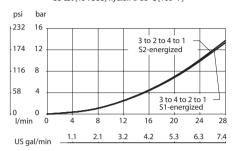
Schematic

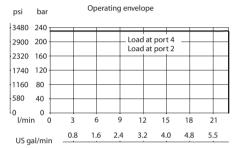


P108279

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



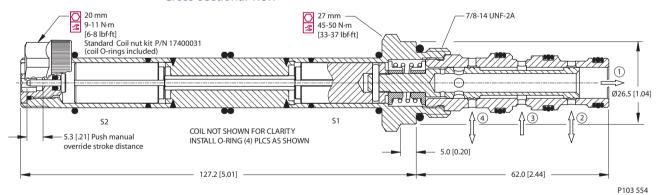


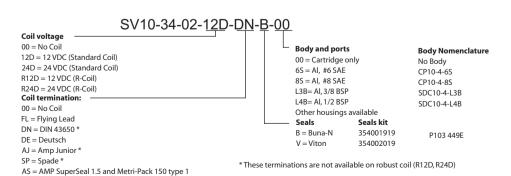
P103 588E

DIMENSIONS

mm [in]

Cross-sectional view









OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

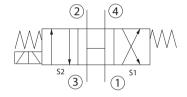
SV08-34-03

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	8 l/min [2 US gal/min]
[100 psi]	
Weight	0.55 kg [1.21 lb]
Cavity	SDC08-4
Standard Coil	M13 20 Watt
Robust Coil	R13 16 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Schematic



Theoretical performance

psi

203

174

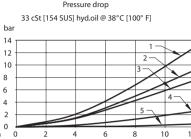
145

116

87

58 29

l/min



US gal/min 1) 3 to 2 to 4 to 1 S2-Energized 2) 3 to 4 to 2 to 1 S1 Energized

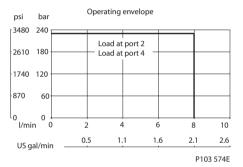
0.5

4) 4 to 1 De-Energized

3.2

3) 3 to 1 De-Energized



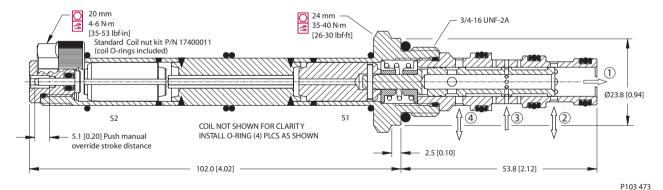


P108277

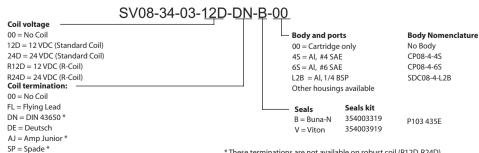
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



^{*} These terminations are not available on robust coil (R12D, R24D)



Cartridge Valves Technical Information Solenoid Valves 4-Way, 3-Position Spool



OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

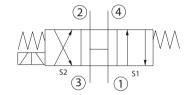
SV10-34-03

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	16 l/min [4 US gal/min]
[100 psi]	
Weight	0.81 kg [1.79 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

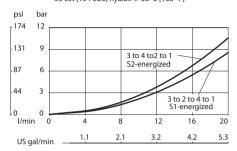
Schematic

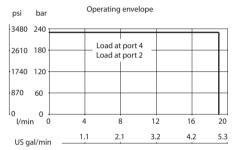


P108278

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



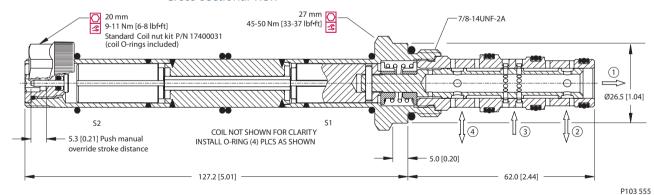


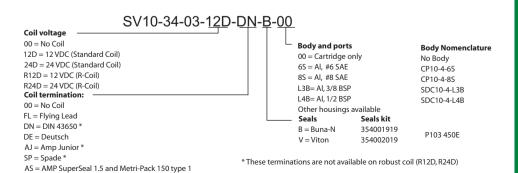
P103 589E

DIMENSIONS

mm [in]

Cross-sectional view







OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

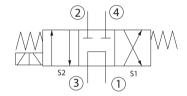
SV08-34-04

SPECIFICATIONS

Specifications

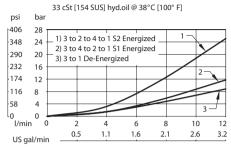
230 bar [3300 psi]
6 l/min [2 US gal/min]
0.55 kg [1.21 lb]
SDC08-4
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

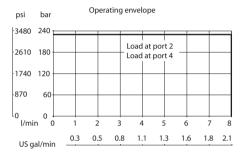
Schematic



P102 394E

Theoretical performance



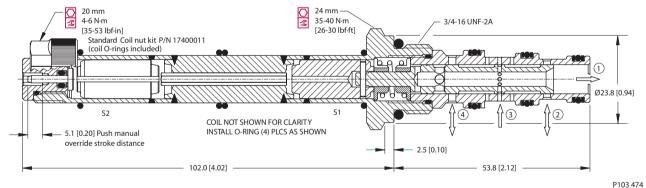


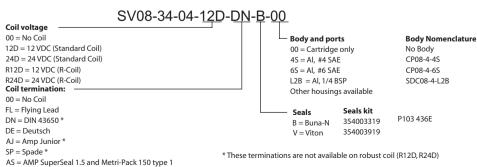
P103 575E

DIMENSIONS

mm [in]

Cross-sectional view







Cartridge Valves Technical Information Solenoid Valves 4-Way, 3-Position Spool



OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

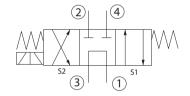
SV10-34-04

SPECIFICATIONS

Specifications

Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	15 l/min [4 US gal/min]
[100 psi]	
Weight	0.81 kg [1.79 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

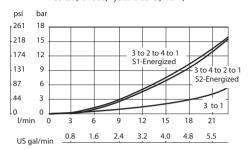
Schematic

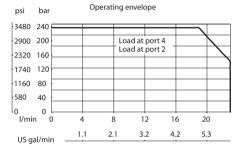


P108276

Theoretical performance

33 cSt [154 SUS] hyd.oil @ 38°C [100° F]



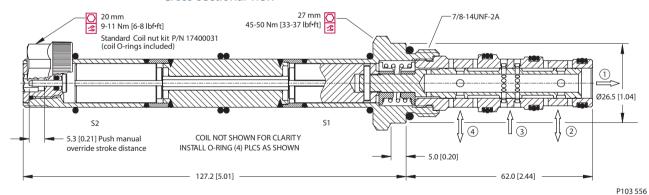


P103 590E

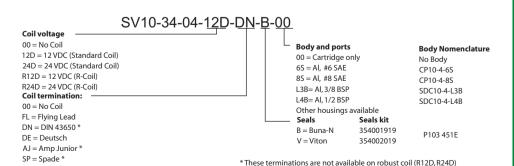
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION





OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

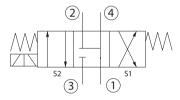
SV08-34-05

SPECIFICATIONS

Specifications

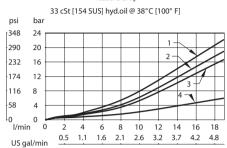
230 bar [3300 psi]
10 l/min [3 US gal/min]
0.55 kg [1.21 lb]
SDC08-4
M13 20 Watt
R13 16 Watt
Robust Nut P/N 173804910
(no coil O-rings needed)

Schematic

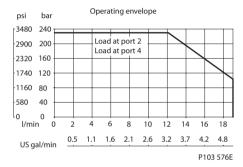


P108280

Theoretical performance

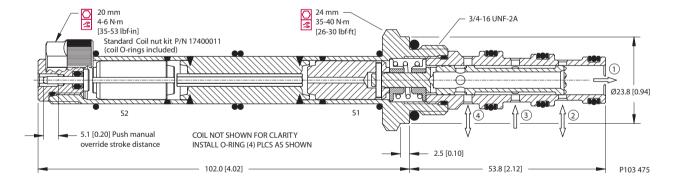


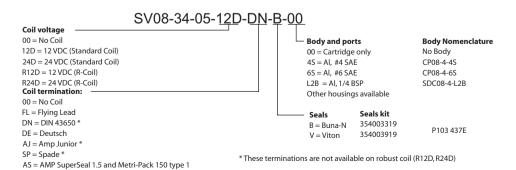
- 1) 3 to 2 to 4 to 1 S2-Energized 2) 3 to 4 to 2 to 1 S1 Energized
- 4) 2 to 1 De-Energized
- 3) 4 to 1 De-Energized



DIMENSIONS mm [in]

Cross-sectional view









OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

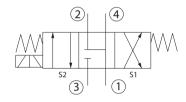
SV10-34-05

SPECIFICATIONS

Specifications

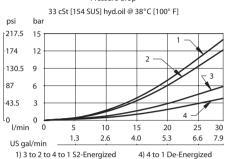
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	20 l/min [5 US gal/min]
[100 psi]	
Weight	0.81 kg [1.79 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

Schematic

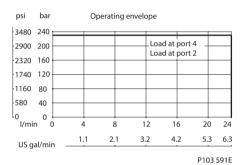


P108280

Theoretical performance



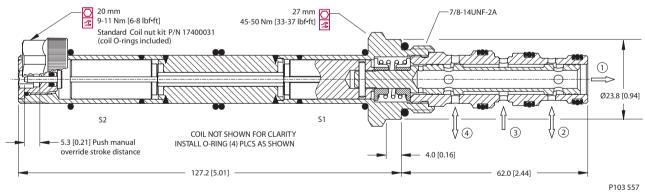
- 1) 3 to 2 to 4 to 1 S2-Energized
- 2) 3 to 4 to 2 to 1 S1 Energized
- 3) 2 to 1 De-Energized



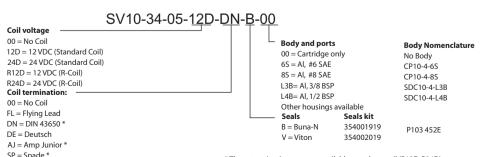
DIMENSIONS

mm [in]

Cross-sectional view



ORDERING INFORMATION



^{*} These terminations are not available on robust coil (R12D, R24D)



OPERATION

This is a direct-acting, 3-position, 4-way, spool-type solenoid valve.

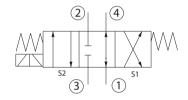
SV10-34-11

SPECIFICATIONS

Specifications

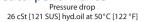
Rated pressure	230 bar [3300 psi]
Rated flow at 7 bar	24 l/min [6 US gal/min]
[100 psi]	
Weight	0.81 kg [1.79 lb]
Cavity	SDC10-4
Standard Coil	M16 26 Watt
Robust Coil	R16 20 Watt
	Robust Nut P/N 173804910
	(no coil O-rings needed)

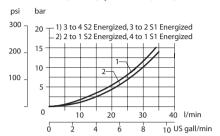
Schematic

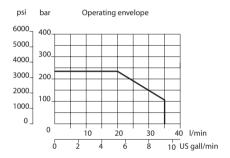


P108283

Theoretical performance







P103 597E

DIMENSIONS

mm [in]

Cross-sectional view

