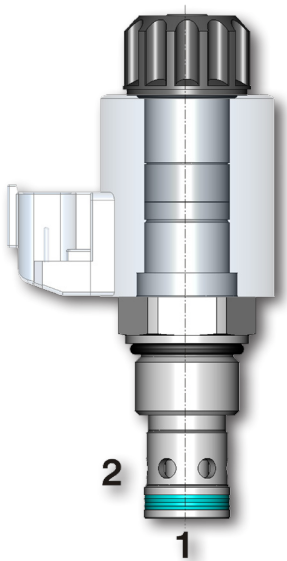


2/2 Directional Valve, Solenoid Operated, Poppet Type, Piloted

SD3E-C2*S5(S6) 1-1/16-12 UN • Q_{max} 150 l/min (40 GPM) • p_{max} 350 bar (5100 PSI)



Technical Features

- › Hardened precision parts
- › High flow capacity and high tightness of poppet in the seat
- › High transmitted hydraulic power, max. pressure 350 bar
- › Normally open and normally closed version
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Coil interchangeability among SD*- C/H* product line
- › In the standard version, the valve is zinc-coated for 240 h protection acc. to ISO 9227

Functional Description

2-way, 2-position pilot operated poppet valve in form of a screw-in cartridge. The valve is used mainly for on-off bi-directional control of flow to actuators with leak-free closing in both directions.

Model Code	2S5	2S6
Symbol		

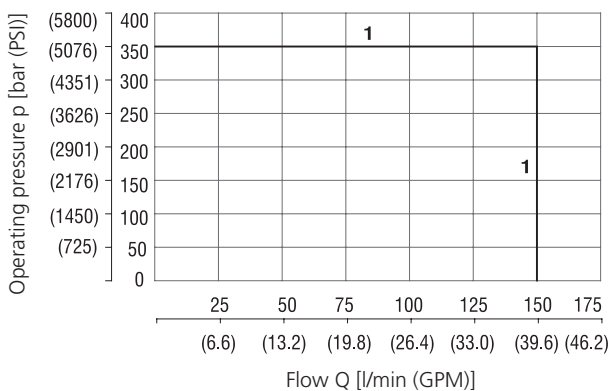
Technical Data

Valve size / Cartridge cavity		1-1/16-12 UN / C2 (VC12-2)	
		High performance	
Max. flow	l/min (GPM)	150 (39.6)	
Max. operating pressure	bar (PSI)	350 (5080)	
Fluid temperature range (NBR)	°C (°F)	-30...80 (-22...176)	
Fluid temperature range (FPM)	°C (°F)	-20...80 (-4...176)	
Ambient temperature range	°C (°F)	-30...80 (-22...176)	
Max. inner leakage of closed valve at kinematic viscosity 32 mm ² /s	cm ³ /min	0.7	
Supply voltage tolerance	%	AC, DC: ± 15	
Max. switching frequency	1/h	7 000	
Weight without coil	kg (lbs)	0.40 (0.88)	
		Datasheet	Type
General information		GI_0060	Products and operating conditions
Coil types		C_8007	C22B*
Valve bodies	In-line mounted	SB_0018	SB-C2*
	Sandwich mounted	SB-04(06,10)_0028	on request
Cavity details / Form tools		SMT_0019	SMT-C2*
Spare parts		SP_8010	

Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Operating limits - High performance

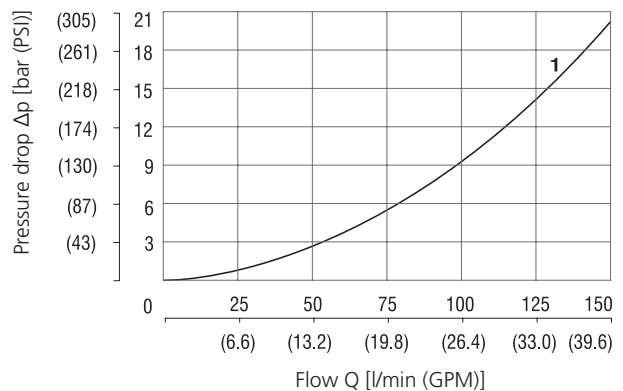
Oil 80 °C (176 °F) / Ambient temperature
50 °C (122 °F) / Voltage U_n -10% (21.6 V DC)



	Model	Connection
1	2S5	1→2, 2→1
1	2S6	1→2, 2→1

Pressure drop related to flow rate

- High performance

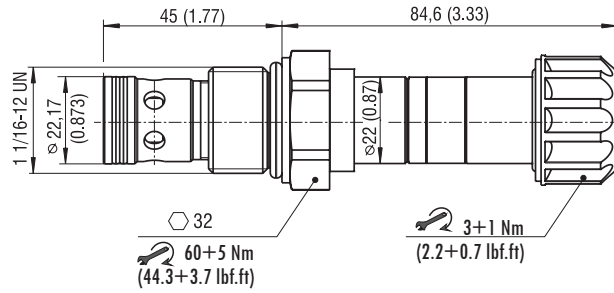


	Model	Connection	Solenoid
1	2S5	1→2, 2→1	on
1	2S6	1→2, 2→1	off

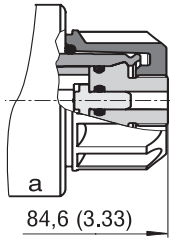
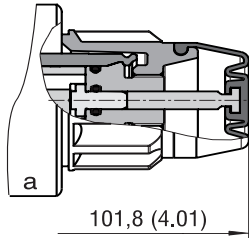
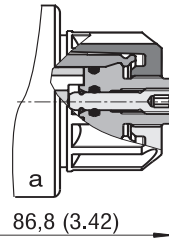
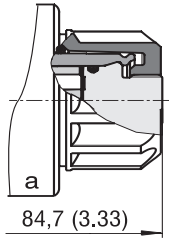
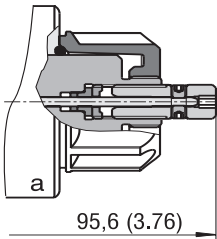
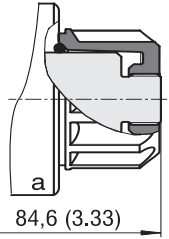
For operating limits under conditions other than shown contact the technical support.

Dimensions in millimeters (inches)

High performance



Manual Override in millimeters (inches)

No designation - for 2S6 - standard	Designation M2 for 2S6 - rubber boot protected	Designation M5 - for 2S6 - socket head screw, hex. 2.5	Designation M9 - for 2S6 - without manual override
 84,6 (3.33)	 101,8 (4.01)	 86,8 (3.42)	 84,7 (3.33)
		Designation M5 - for 2S5 - socket head screw, hex. 2.5	Designation M9 - for 2S5 - without manual override
		 95,6 (3.76)	 84,6 (3.33)

In case of solenoid malfunction or power failure, the valve poppet can be shifted by manual override under the condition that the pressure in the back line does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

Ordering Code

SD3E - C2 / H **- B**

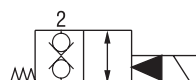
2/2 directional valve, solenoid operated, poppet type, piloted

Valve cavity
1-1/16-12 UN (VC12-2)

Model
High performance

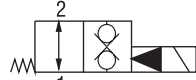
Functional symbol

normally closed (NC), blocking



2S5

normally open (NO), blocking



2S6

No designation
V

Surface treatment
zinc-coated (ZnNi), ISO 9227 (520 h)

Seals
NBR
FPM (Viton)

No designation
M2
M5
M9

Manual override
standard for 2S6
rubber boot protected for 2S6
socket head screw (hex. 2.5)
without manual override