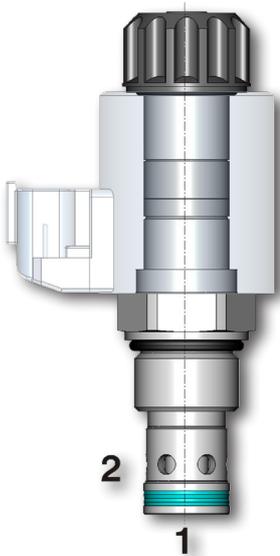


2/2 Directional Valve, Solenoid Operated, Poppet Type, Piloted

**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		

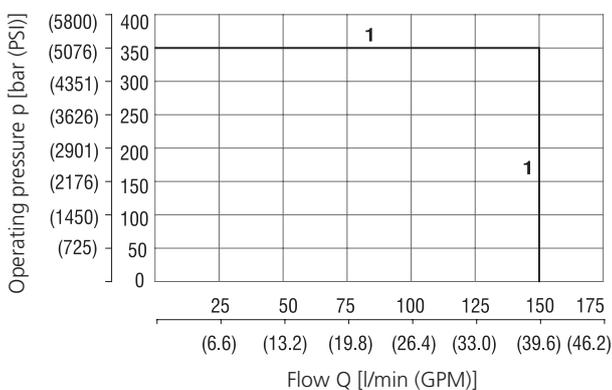
**Technical Data**

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 (5100)	
Max. internal leakage in the direction 1→2; 2→1	cm <sup>3</sup> /min	≤ 0.25 at 250 bar (v=32 mm <sup>2</sup> /s)	
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)	
Fluid viscosity range	mm <sup>2</sup> s <sup>-1</sup>	10 ... 500	
Weight without coil	kg (lbs)	0.40 (0.88)	
		Datasheet	
		Type	
General information	HA 0060	Products and operating conditions	
Coil types	HA 8007	C22B*	
Valve bodies	In-line mounted	HA 0018	SB-C2*
	Sandwich mounted	HA 0028	on request
Cavity details / Form tools	HA 0019	SMT-C2*	
Spare parts	HA 8010		

**Characteristics** measured at v = 32 mm<sup>2</sup>/s (156 SUS)

**Operating limits - High performance**

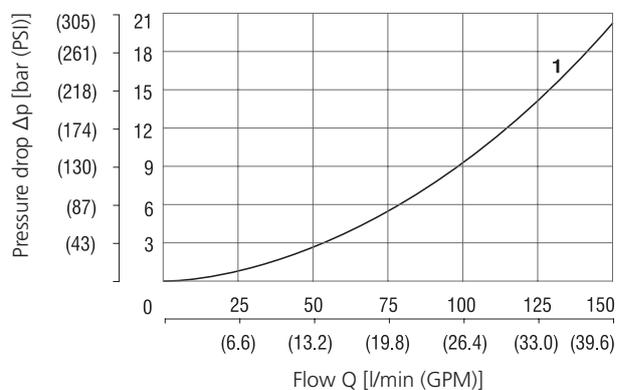
Oil 80 °C (176 °F) / Ambient temperature  
50 °C (122 °F) / Voltage U<sub>n</sub> -10% (21.6 V DC)



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

**Pressure drop related to flow rate**

- High performance

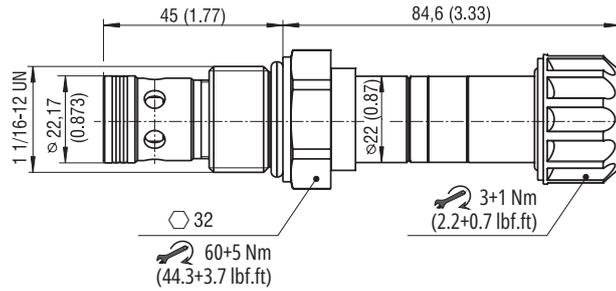


	Model	Connection	Solenoid
1	2S5	1→2, 2→1	on
1	2S6	1→2, 2→1	off

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**

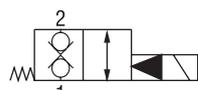
**2/2 directional valve, solenoid operated, poppet type, piloted**

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

**Model**  
High performance

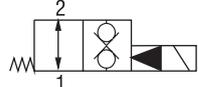
**Functional symbol**

normally closed (NC), blocking



2S5

normally open (NO), blocking



2S6

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

**No designation**  
V

**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