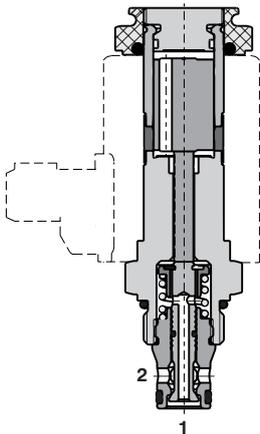


2/2 Directional Valve, Solenoid Operated, Poppet Type, Blocking, Direct Acting

SD1E-A2

3/4-16 UNF • Q_{max} 30 l/min (8 GPM) • p_{max} 350 bar (5100 PSI)

2S5



Technical Features

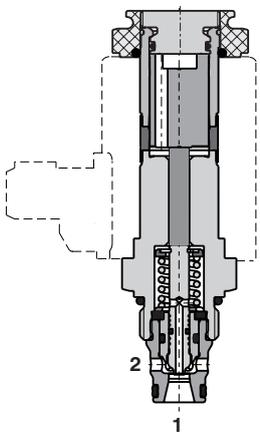
- › Hardened precision parts
- › High flow capacity and leak-free closing
- › High transmitted hydraulic power up to 350 bar
- › Normally open and normally closed version
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Coil interchangeability among SD*-A*/H product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

Functional Description

2-way, 2 position high pressure direct acting 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		

2S6



Technical Data

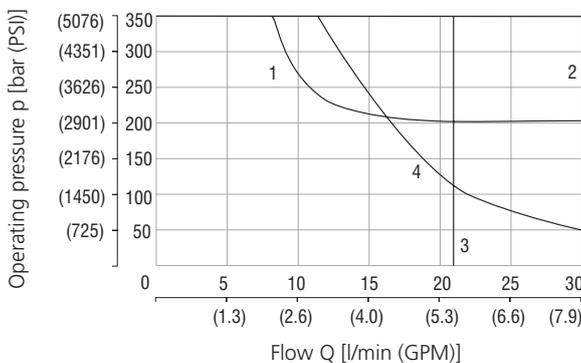
Valve size / Cartridge cavity		3/4-16 UNF-2A / A2 (C-8-2)
Max. flow	l/min (GPM)	30 (7.9)
Max. operating pressure	bar (PSI)	350 (5100)
Max. internal leakage in the direction 1→2; 2→1 ($v=32$ mm ² /s)	cm ³ /min	≤ 0.25 at 250 bar
Fluid temperature range (NBR)	°C (°F)	-30...80 (-22...176)
Fluid temperature range (FPM)	°C (°F)	-20...80 (-4...176)
Ambient temperature range	°C (°F)	-30...80 (-22...176)
Fluid viscosity range	mm ² s ⁻¹	10 ... 500
Weight without coil	kg (lbs)	0.19 (0.42)

	Datasheet	Type
General information	HA 0060	Products and operating conditions
Coil types	HA 8007	C 19B*
Valve bodies	In-line mounted	HA 0018
	Sandwich mounted	HA 0028
Cavity details / Form tools	HA 0019	SMT-A2*
Spare parts	HA 8010	

Characteristics measured at $v = 32$ mm²/s (156 SUS)

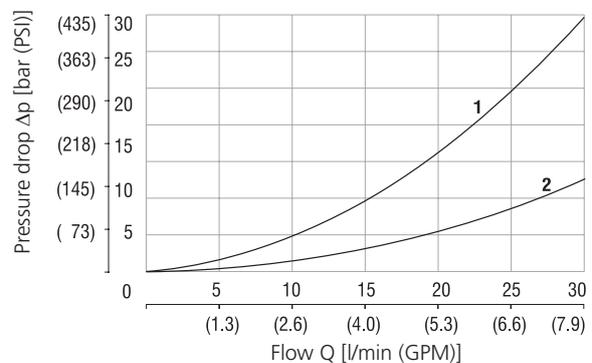
Operating limits

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	2S5	2→1
3	2S6	2→1
4	2S6	1→2

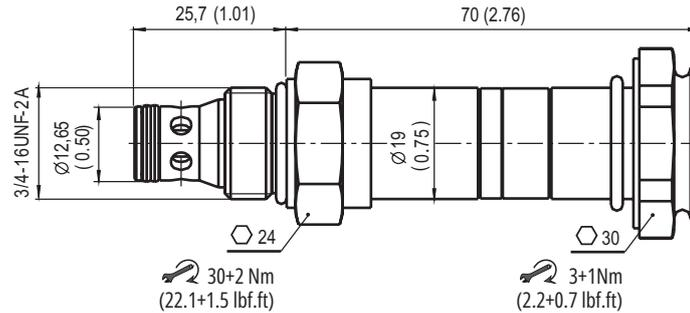
Pressure drop related to flow rate



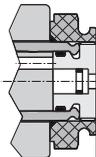
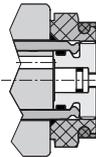
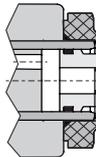
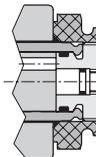
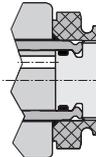
	Model	Connection
1	2S5	1→2
1	2S5	2→1
2	2S6	1→2
2	2S6	2→1

Dimensions in millimeters (inches)

2S5, 2S6



Manual Override in millimeters (inches)

No designation - standard	Designation M2 - rubber boot protected	Designation M4 - hand screw	Designation M5 - socket head screw, size 2.5	Designation M9 - without manual override
 ~ 70.0 (2.76)	 ~ 81.5 (3.21)	 ~ 90 (3.54)	 ~ 77.5 (3.05)	 ~ 70.0 (2.76)

In case of solenoid malfunction or power failure, the valve spool 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

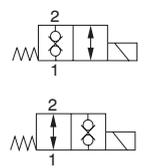
SD1E-A2 / H -

2/2 directional valve, solenoid operated, poppet type, blocking, direct acting

Valve cavity
3/4-16 UNF (C-8-2)

Model
High performance

Functional symbol



2S5

2S6

Surface treatment
A zinc-coated (ZnCr-3), ISO 9227 (240 h)
B zinc-coated (ZnNi), ISO 9227 (520 h)

Seals
No designation V
NBR
FPM (Viton)

Manual override
No designation
M2 rubber boot protected
M4 hand screw
M5 socket head screw
M9 without manual override