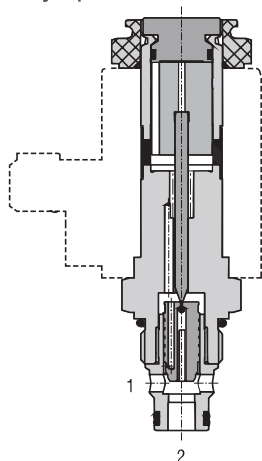


## 2/2 Directional Valve, Solenoid Operated, Poppet-Type, Piloted

### SD3E-A2

3/4-16 UNF •  $Q_{max}$  30 l/min (8 GPM) •  $p_{max}$  420 bar (6100 PSI)

#### Normally Open



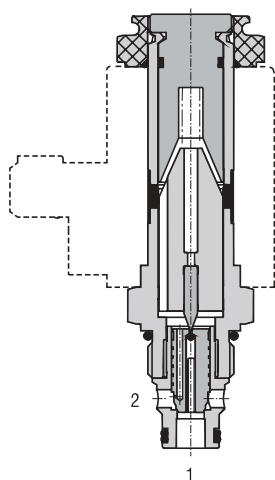
#### Technical Features

- › Hardened precision parts
- › High flow capacity
- › High transmitted hydraulic power
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Variety of optional spools available
- › Coil interchangeability among SD\*-A\* product line
- › Standard version zinc-coated with surface protection acc. to ISO 9227 (240 h salt spray)

#### Functional Description

2-way, 2-position high pressure, piloted 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 one direction.

#### Normally Closed



Model Code	2O2	2L2
Symbol		

#### Technical Data

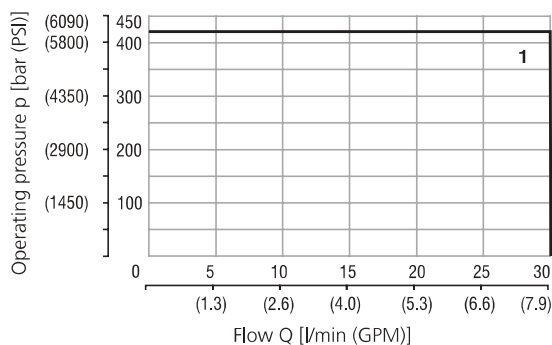
Valve size / Cartridge cavity	3/4-16 UNF-2A / A2	
Max. flow	l/min (GPM)	30 (7.9)
Max. operating pressure	bar (PSI)	420 (6090)
Fluid temperature range	°C (°F)	-20...80 (-4...176)
Ambient temperature range	°C (°F)	-20...80 (-4...176)
Supply voltage tolerance	%	AC, DC: ± 15
Max. switching frequency	1/h	15 000
Mass without coil	kg (lbs)	0.20 (0.44)

	Datasheet	Type	
General information	GI_0060	Products and operating conditions	
Coil types	C_8007	C 14B*	C 19B*
Valve bodies	In-line mounted	SB_0018	SB-A2*
	Sandwich mounted	SB-04(06)_0028	SB-*A2*
Cavity details / Form tools	SMT_0019	SMT-A2*	
Spare parts	SP_8010		

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

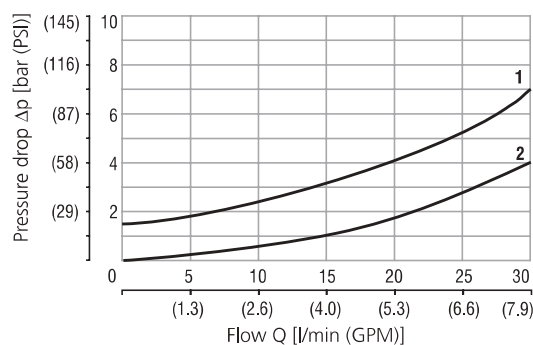
#### Operating limits

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



	Model	Connection
1	2L2	1→2, 2→1
1	2O2	1→2, 2→1

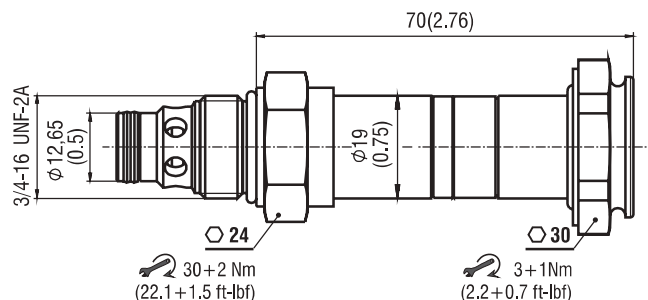
#### Pressure drop related to flow rate



	Model	Connection	Solenoid
1	H2L2	1→2	off
2	H2L2	1→2	on
2	H2L2	2→1	on
2	H2O2	1→2	off
2	H2O2	2→1	off
2	H2O2	1→2	on

For operating limits under conditions and flow directions other than shown contact our technical support.

## Dimensions in millimeters (inches)



## Manual Override in millimeters (inches)

No designation - standard for 2O2	Designation M2 for 2O2 - rubber boot protected	Designation M5 for 2O2 - socket head screw, size 2.5	Designation M9 for 2O2 - without manual override
 ~ 70,0 (2.76)	 ~ 81,5 (3.21)	 ~ 77,6 (3.06)	 ~ 70,0 (2.76)
		Designation M5 for 2L2 - socket head screw, size 2.5	Designation M9 for 2L2 - without manual override
		 ~ 88,8 (3.50)	 ~ 70,0 (2.76)

In case of solenoid malfunction or power failure, the spool of the valve can be shifted by manual override as long as the pressure in port T does not exceed 25 bar (363 PSI). For alternative manual overrides contact our technical support.

## Ordering Code

**SD3E-A2 /**     -

**2/2 Directional Valve, solenoid operated, poppet-type, piloted, 3/4-16 UNF**

High performance **H**

**Model**

2O2

2L2

**Surface treatment**

**A** zinc-coated (ZnCr-3), ISO 9227 (240h)

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

**Seals**

**No designation** NBR

**V** FPM (Viton)

**Manual override**

**No designation** standard for 2O2

**M2** rubber boot protected

**M5** socket head screw

**M9** without manual override