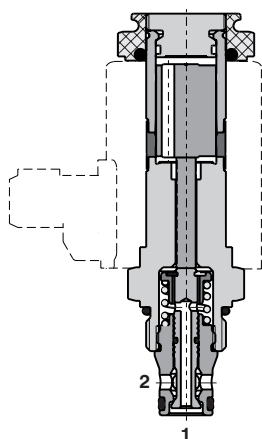


SD1E-A2

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

255



Technical Features

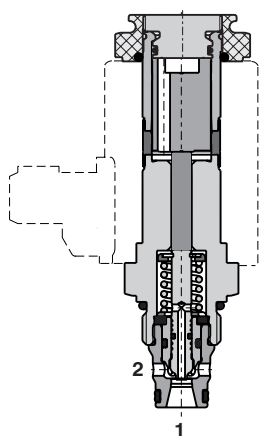
- › Hardened precision parts
- › High flow capacity and leak-free closing (up to 3 drops per minute)
- › High transmitted hydraulic power up to 350 bar
- › Normally open and normally closed version
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Coil interchangeability 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	255	256
Symbol		

256



Technical Data

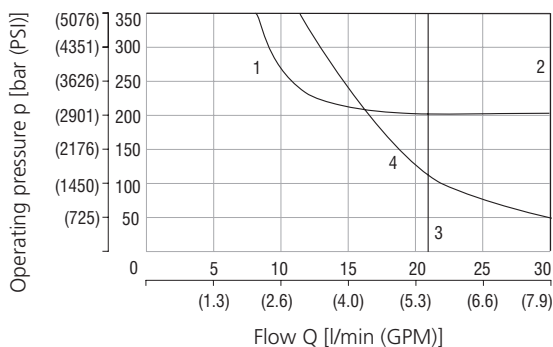
Valve size / Cartridge cavity	3/4-16 UNF-2A / A2	
Max. flow	l/min (GPM)	30 (7.9)
Max. operating pressure	bar (PSI)	350 (5080)
Fluid temperature range	°C (°F)	-20...80 (-4...176)
Ambient temperature range	°C (°F)	-20...80 (-4...176)
Supply voltage tolerance	%	AC, DC: ± 15
Max. switching frequency	1/h	15 000
Mass without coil	kg (lbs)	0.19 (0.42)

	Datasheet	Type
General information	GI_0060	Products and operating conditions
Coil types	C_8007	C19B*
Valve bodies	In-line mounted	SB-A2*
	Sandwich mounted	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)

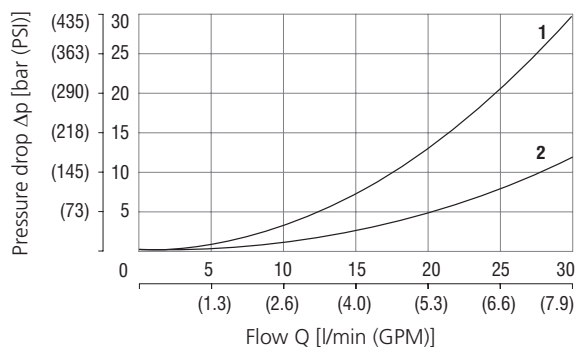
Operating limits

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



	Model	Connection
1	255	1→2
2	255	2→1
3	256	2→1
4	256	1→2

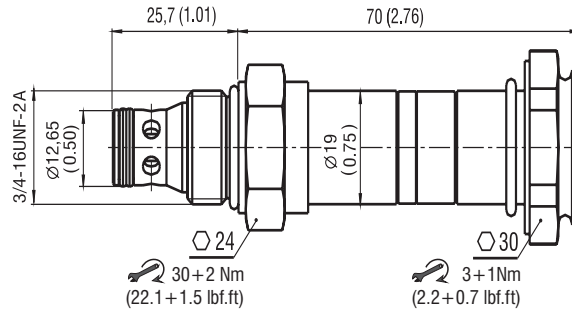
Pressure drop related to flow rate



	Model	Connection
1	255	1→2
1	255	2→1
2	256	1→2
2	256	2→1

Dimensions in millimeters (inches)

255, 256



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 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

SD1E-A2 / -

2/2 directional valve, solenoid operated, poppet type, blocking, direct acting, 3/4-16 UNF

High performance **H**

Functional symbol

255

256

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 standard
M2 rubber boot protected
M4 hand screw
M5 socket head screw
M9 without manual override