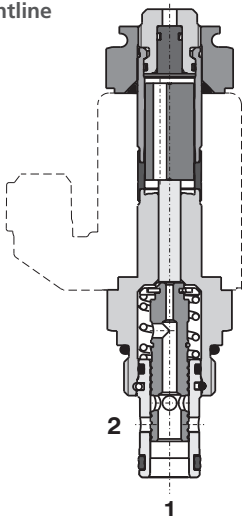


2/2 Directional Valve, Solenoid Operated, Spool Type, Direct Acting

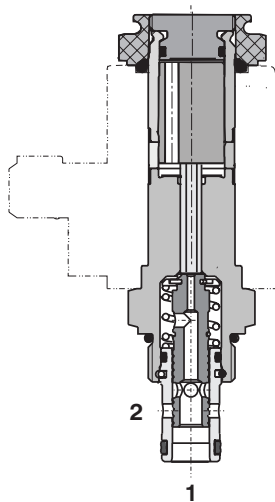
SD2E-A2

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

Lightline



High performance



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, bi-directional spool valve in the form of a screw-in cartridge. The valve is used mainly to direct flow to actuators.

Model Code	2111	2112
Symbol		

Technical Data

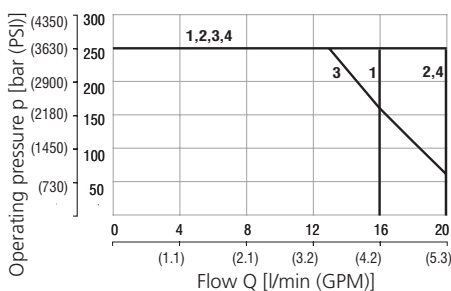
Valve size / Cartridge cavity		3/4-16 UNF-2A / A2 (C-8-2)	
		Lightline	High performance
Max. flow	l/min (GPM)	20 (5.3)	30 (7.9)
Max. operating pressure	bar (PSI)	250 (3630)	350 (5080)
Fluid temperature range (NBR)	°C (°F)	-30...60 (-22...140)	-30...80 (-22...176)
Fluid temperature range (FPM)	°C (°F)	-20...60 (-4...140)	-20...80 (-4...176)
Ambient temperature range	°C (°F)	-30...50 (-22...122)	-30...80 (-22...176)
Supply voltage tolerance	%	DC ± 10	AC, DC: ± 15
Max. switching frequency	1/h	15 000	
Weight without coil	kg (lbs)	0.14 (0.31)	0.20 (0.44)

		Datasheet	Type
General information		GI_0060	Products and operating conditions
Coil types		C_8007	C14B* C19B*
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 mm²/s (156 SUS)

Operating limits - Lightline

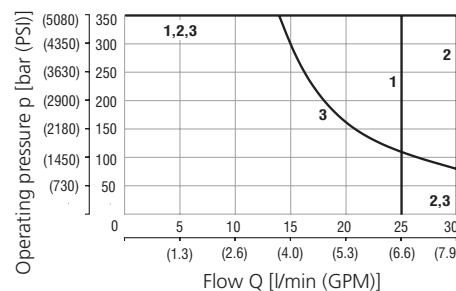
Oil 60 °C (140 °F) / Ambient temperature
50 °C (122 °F) / Voltage U_n -10% (21.6 V DC)



Model	Connection
1	2→1
2	1→2
3	1→2
4	2→1

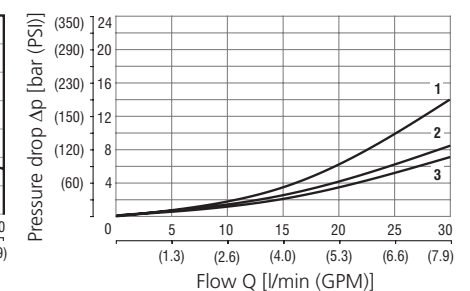
Operating limits - High performance

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



Model	Connection
1	2→1
2	1→2
2	2→1
3	1→2

Pressure drop related to flow rate
- Lightline, High performance

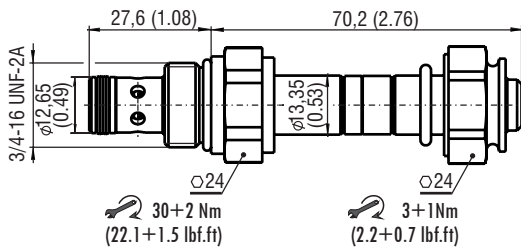


Model	Connection
1	1→2
1	2→1
2	1→2
3	2→1

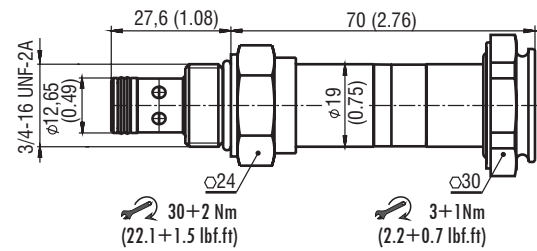
For operating limits under conditions and flow directions other than shown contact our technical support.

Dimensions in millimeters (inches)

Lightline



High performance



Manual Override in millimeters (inches)

No Designation - standard	Designation M2 - rubber boot protected	Designation M4 - hand screw (only for High performance)	Designation M5 - socket head screw, size 2.5	Designation M9 - without manual override
<p>L ~ 70,2 (2.63) H ~ 70,0 (2.76)</p>	<p>L ~ 81,7 (3.22) H ~ 81,5 (3.21)</p>	<p>H ~ 89,6 (3.53)</p>	<p>L ~ 77,2 (3.04) H ~ 77,6 (3.06)</p>	<p>L ~ 67,2 (2.65) H ~ 70,0 (2.76)</p>

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

SD2E-A2 / -

2/2 directional valve, solenoid operated, spool type, direct acting

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

Model
Lightline
High performance

Functional symbol

2I11

2I12

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
standard
M2 rubber boot protected
M4 hand screw (only for High performance)
M5 socket head screw
M9 without manual override