



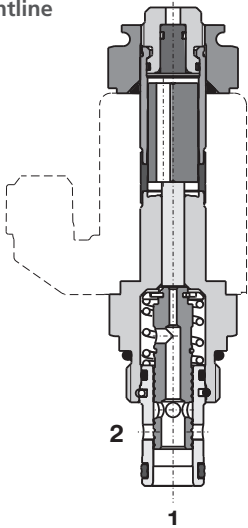
SD2E-A2

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



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

Lightline



Technical Features

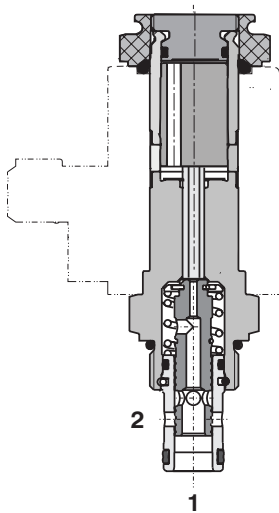
- › Hardened precision parts
- › High flow capacity
- › High transmitted hydraulic power
- › Wide range of manual overrides available
- › All ports may be fully pressurized
- › Variety of optional spools available
- › Coil interchangeability among SD*-A* product line
- › Standard version zinc-coated 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		

High performance



Technical Data

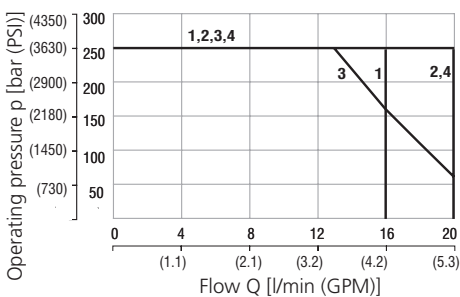
Valve size / Cartridge cavity		3/4-16 UNF-2A / A2	
		Lightline	High performance
Max. flow	l/min (GPM)	20 (5.3)	30 (7.9)
Max. operating pressure	bar (PSI)	250 (3630)	350 (5080)
Fluid temperature range	°C (°F)	-20...60 (-4...140)	-20...80 (-4...176)
Ambient temperature range	°C (°F)	-20...50 (-4...122)	-20...80 (-4...176)
Supply voltage tolerance	%	DC ± 10	AC, DC: ± 15
Max. switching frequency	1/h	15 000	
Mass 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 $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Operating limits - Lightline

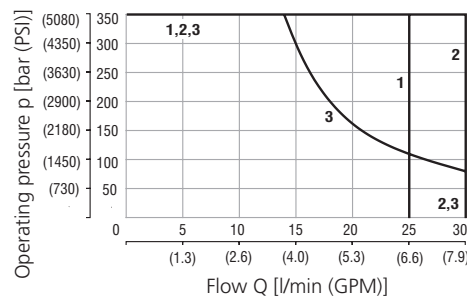
Oil 60 °C (140 °F) / Ambient temperature
50 °C (122 °F) / Voltage U_n -10% (21.6 VDC)



	Model	Connection
1	2112	2→1
2	2112	1→2
3	2111	1→2
4	2111	2→1

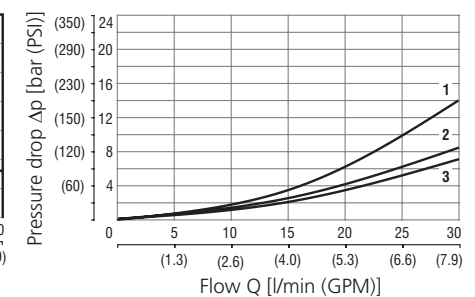
Operating limits - High performance

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



	Model	Connection
1	2112	2→1
2	2112	1→2
3	2111	1→2

Pressure drop related to flow rate - Lightline, High performance

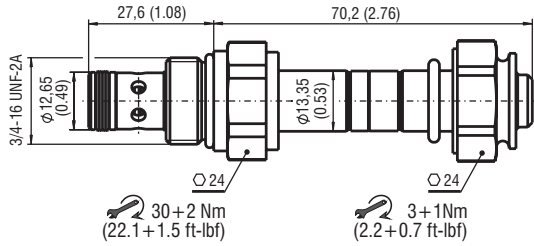


	Model	Connection
1	2112	1→2
1	2112	2→1
2	2111	1→2
3	2111	2→1

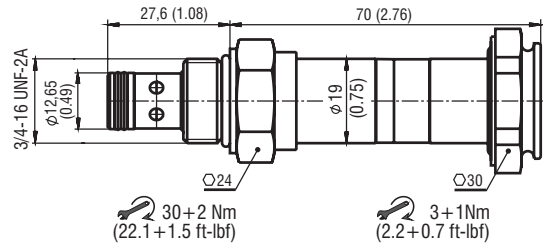
For operating limits under conditions and flow directions other than shown contact our technical support.

Dimensions in millimeters (inches)

Lightline



High performance



Manual Override in millimeters (inches)

No designation - standard	Designation M2 - rubber boot protected	Designation 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>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 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

SD2E-A2 / -

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

Lightline **L**
High performance **H**

Model

211
 212

Surface treatment

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

Seals

V NBR
FPM (Viton)

Manual override

No designation standard
M2 rubber boot protected
M5 socket head screw
M9 without manual override