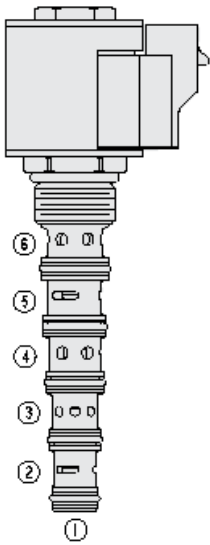




Overview



Description

A solenoid operated, 2 position, 6 way, direct acting, spool-type, screw-in hydraulic cartridge valve

Operation

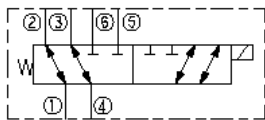
When de-energized, the SV80-61 blocks flow to ports 5 and 6, and allows flow between ports 4 and 3, and between ports 1 and 2. When energized, the spool shifts to block flow to ports 2 and 3 and allows flow between ports 4 and 5, and between ports 1 and 6

note: in circuits where the valve is used as a selector to direct flow between two cylinders of unequal area ratios, the cylinder head sides should be connected to ports 3 and 5, rod sides to ports 2 and 6

Features

- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Heavy-duty waterproof E&C Coils rated up to IP69K.
- Continuous-duty rated coil.
- Cartridges are voltage interchangeable.

Symbol



Ratings

Pressure Ratings

Pressure rating 207 bar (3000 psi)

Flow Ratings

Flow rating See performance graph

Maximum internal leakage 246 ml/min (15 in³/min) - **Note:** At 207 bar (3000 psi)

Temperature Ratings

Operating fluid temperature -40 to 100 °C (-40 to 212 °F) - **Note:** With buna N seals
 -26 to 204 °C (-15 to 400 °F) - **Note:** With viton seals

Storage temperature -40 to 70 °C (-40 to 160 °F)

Ambient temperature -40 to 70 °C (-40 to 160 °F)

Operating Parameters

Fluids Mineral based or synthetic hydraulic fluid with lubricating properties

Fluid viscosity range 7.4 to 420 cSt

Maximum operating contamination level 20/18/14 per ISO 4406

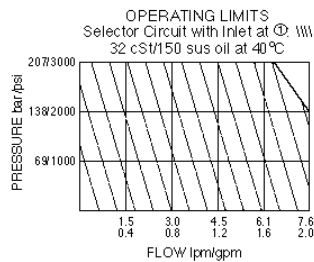
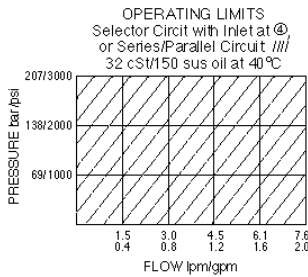
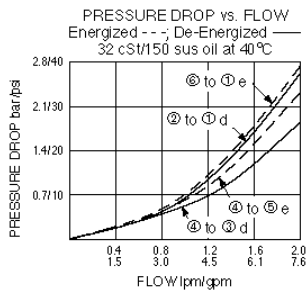
Properties

Unit weight 0.18 kg (0.4 lb)

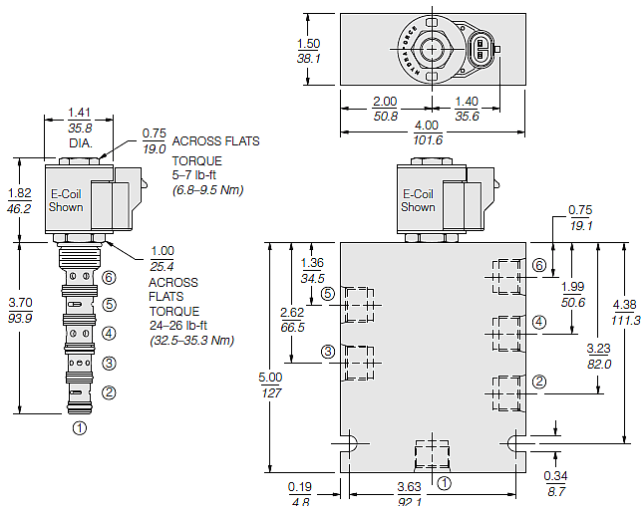
Internal wetted surface area 197 cm² (30.6 in²)



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.36 kg (0.8 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

Standard Ported Body: Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi);

E-Coil: Weight: 0.14 kg (0.3 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

Installation Specifications

Cavity	VC10-6
Cartridge installation torque	33.9 to 36.6 N-m (25 to 27 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK80-6X-MMMMM	- Note: X = seal option
Housings		
Coils		

Order Code



POSITION	CODE	DESCRIPTION
		SV80-61E-H-J-L
E		Manual Override
E	BLANK	NONE
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
L		Coil
L	0	No Coil
L	10DL	10 VDC, D-Coil, Dual Lead Wires
L	10DR/D	10 VDC, D-Coil, Deutsch with Diode
L	10DS	10 VDC, D-Coil, Dual Spade
L	10EL	10 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	10ER	10 VDC, E-Coil, Deutsch
L	10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
L	12DG	12 VDC, D-Coil, DIN 43650
L	12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
L	12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
L	12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	12DL/W/D	12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
L	12DR	12 VDC, D-Coil, Deutsch
L	12DR/D	12 VDC, D-Coil, Deutsch with Diode
L	12DR/Z	12 VDC, D-Coil, Deutsch with Zener Diode
L	12DS	12 VDC, D-Coil, Dual Spade
L	12EG	12 VDC, E-Coil, DIN 43650
L	12EG/Z	12 VDC, E-Coil, DIN 43650 with Zener Diode
L	12EJ	12 VDC, E-Coil, AMP Jr.
L	12EJ/Z	12 VDC, E-Coil, AMP Jr. with Zener Diode
L	12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	12EL/Z	12 VDC, E-Coil, Dual Lead Wires with Zener Diode
L	12ER	12 VDC, E-Coil, Deutsch
L	12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
L	12EY	12 VDC, E-Coil, Metri-Pack 150
L	12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
L	20DG	20 VDC, D-Coil, DIN 43650
L	20DS	20 VDC, D-Coil, Dual Spade
L	20ER	20 VDC, E-Coil, Deutsch



POSITION	CODE	DESCRIPTION
L	20ER/Z	20 VDC, E-Coil, Deutsch with Zener Diode
L	24AG	24 VDC, D-Coil, DIN 43650
L	24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
L	24DG	24 VDC, D-Coil, DIN 43650
L	24DL	24 VDC, D-Coil, Dual Lead Wires, 18 inches long
L	24DL/36	24 VDC, D-Coil, Dual Lead Wires, 36 inches long
L	24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	24DR	24 VDC, D-Coil, Deutsch
L	24DR/D	24 VDC, D-Coil, Deutsch with Diode
L	24DR/Z	24 VDC, D-Coil, Deutsch with Zener Diode
L	24DS	24 VDC, D-Coil, Dual Spade
L	24EG	24 VDC, E-Coil, DIN 43650
L	24EG/Z	24 VDC, E-Coil, DIN 43650 with Zener Diode
L	24EJ	24 VDC, E-Coil, AMP Jr.
L	24EL/D	24 VDC, E-Coil, Dual Lead Wires with Diode
L	24ER	24 VDC, E-Coil, Deutsch
L	24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
L	24EY	24 VDC, E-Coil, Metri-Pack 150
L	24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode
L	36DG	36 VDC, D-Coil, DIN 43650
L	36DS	36 VDC, D-Coil, Dual Spade
L	115AG	115 VAC, D-Coil, DIN 43650
L	115AP	115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires
L	230AG	230 VAC, D-Coil, DIN 43650
L	230AP	230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires

