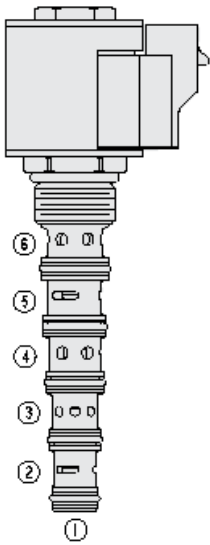




## Overview



### Description

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

### Operation

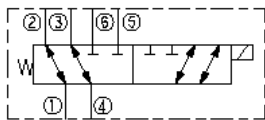
When de-energized, the SV80-61 blocks flow to ports 5 and 6, and allows flow between ports 4 and 3, and between ports 1 and 2. When energized, the spool shifts to block flow to ports 2 and 3 and allows flow between ports 4 and 5, and between ports 1 and 6.

**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 Eâ€™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 in<sup>3</sup>/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

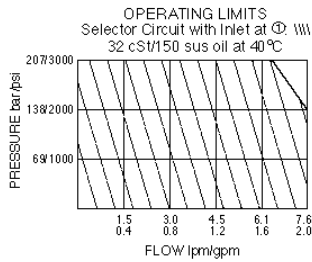
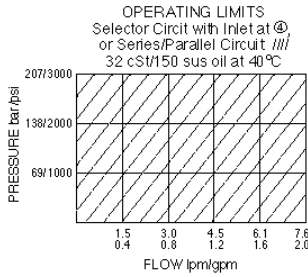
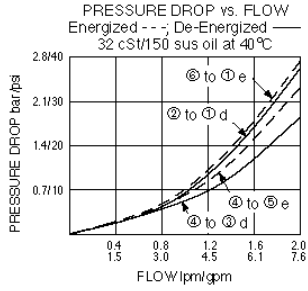
## Properties

Unit weight 0.18 kg (0.4 lb)

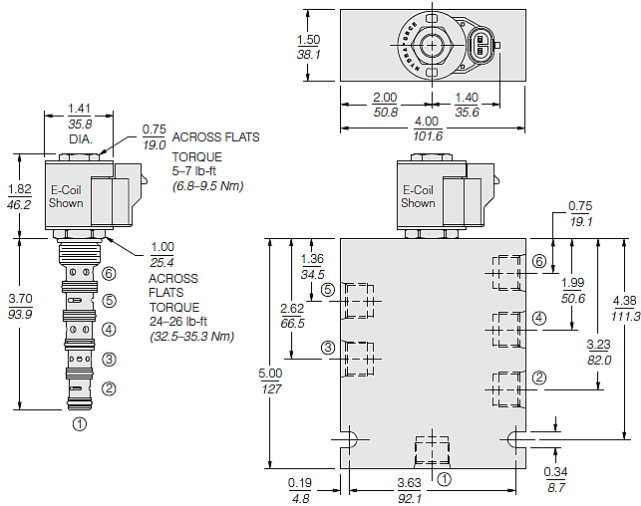
Internal wetted surface area 197 cm<sup>2</sup> (30.6 in<sup>2</sup>)



## Performance



## Dimensions



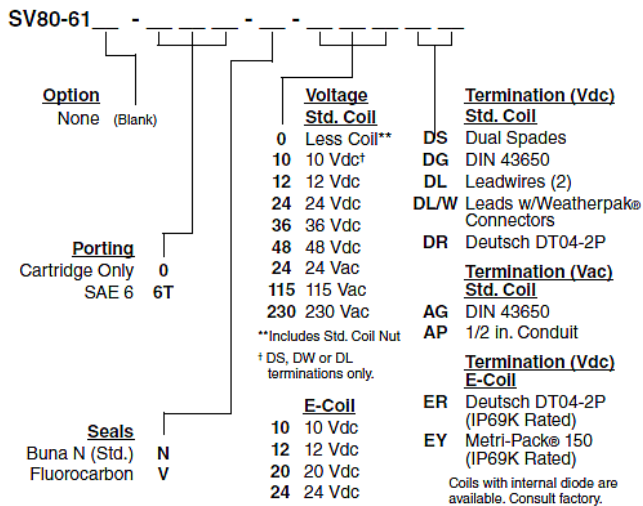
## Installation Specifications

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
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## Order Code



## Model Options

### SV80-61E-H-J-L

#### E Manual Override

CODE	DESCRIPTION
BLANK	NONE

#### H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6

#### J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

#### L Coil

CODE	DESCRIPTION
0	No Coil
10DL	10 VDC, D-Coil, Dual Lead Wires
10DR/D	10 VDC, D-Coil, Deutsch with Diode
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires, 18 inches long
10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
10ER	10 VDC, E-Coil, Deutsch
10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DL/W/D	12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
12DR	12 VDC, D-Coil, Deutsch



CODE	DESCRIPTION
12DR/D	12 VDC, D-Coil, Deutsch with Diode
12DR/Z	12 VDC, D-Coil, Deutsch with Zener Diode
12DS	12 VDC, D-Coil, Dual Spade
12EG	12 VDC, E-Coil, DIN 43650
12EG/Z	12 VDC, E-Coil, DIN 43650 with Zener Diode
12EJ	12 VDC, E-Coil, AMP Jr.
12EJ/Z	12 VDC, E-Coil, AMP Jr. with Zener Diode
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
12EL/Z	12 VDC, E-Coil, Dual Lead Wires with Zener Diode
12ER	12 VDC, E-Coil, Deutsch
12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
12EY	12 VDC, E-Coil, Metri-Pack 150
12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
20DG	20 VDC, D-Coil, DIN 43650
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
20ER/Z	20 VDC, E-Coil, Deutsch with Zener Diode
24AG	24 VDC, D-Coil, DIN 43650
24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires, 18 inches long
24DL/36	24 VDC, D-Coil, Dual Lead Wires, 36 inches long
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
24DR	24 VDC, D-Coil, Deutsch
24DR/D	24 VDC, D-Coil, Deutsch with Diode
24DR/Z	24 VDC, D-Coil, Deutsch with Zener Diode
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EG/Z	24 VDC, E-Coil, DIN 43650 with Zener Diode
24EJ	24 VDC, E-Coil, AMP Jr.
24EL/D	24 VDC, E-Coil, Dual Lead Wires with Diode
24ER	24 VDC, E-Coil, Deutsch
24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24EY	24 VDC, E-Coil, Metri-Pack 150
24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode
36DG	36 VDC, D-Coil, DIN 43650
36DS	36 VDC, D-Coil, Dual Spade
115AG	115 VAC, D-Coil, DIN 43650
115AP	115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires
230AG	230 VAC, D-Coil, DIN 43650
230AP	230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires