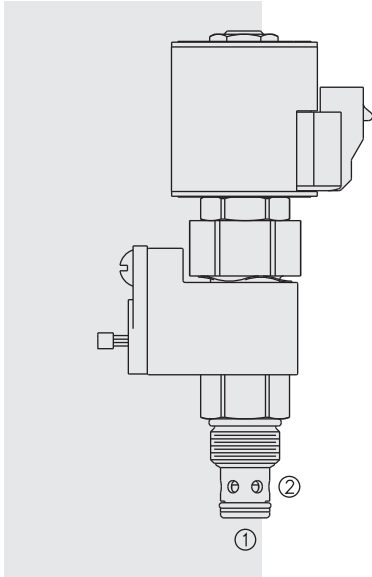
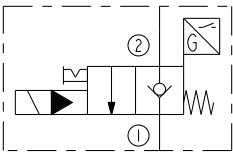


# SV58-P20A Poppet, 2-Way, Normally Closed

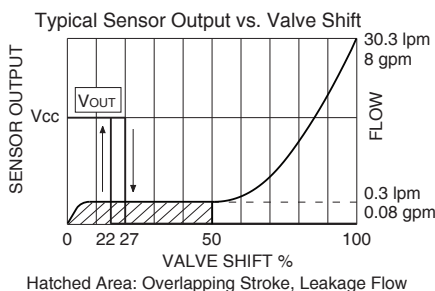
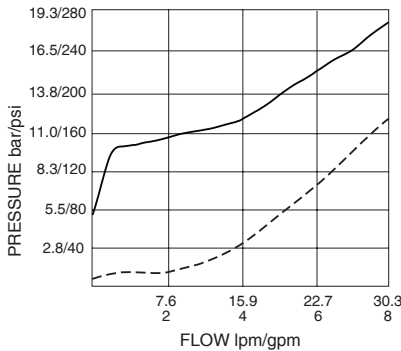


## SYMBOL



## PERFORMANCE (Cartridge Only)

**SV58-P20A with Sensor**  
 1 to 2 de-energized ———  
 2 to 1 energized - - - -  
 32 cSt/150 sus oil at 40°C



## DESCRIPTION

A solenoid-operated, 2-way, normally closed, poppet-type, screw-in hydraulic cartridge valve with integral neutral sensor, designed to function as a load-holding or blocking valve in applications requiring low internal leakage.

## OPERATION

When de-energized, the **SV58-P20A** acts as a check valve, allowing flow from 1 to 2, while blocking flow in the reverse direction. The neutral sensor will transmit an “Off” signal. When energized, the poppet lifts to open the 2 to 1 flow path. In this mode, flow from 1 to 2 is severely restricted. The neutral sensor will transmit an “On” signal.

## FEATURES

- Continuous-duty rated solenoids with optional coil voltages and terminations.
- Hardened seat for long life and low leakage.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Integral position sensor, EMI/RFI CE-rated.
- Unitized, molded coil design — optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.

## RATINGS

**Operating Pressure:** 345 bar (5000 psi)

**Proof Pressure:** 483 bar (7000 psi)

**Burst Pressure:** 634 bar (9200 psi)

**Flow:** 22.7 lpm (6 gpm)

**Internal Leakage:** In Neutral: 0.15 cc/min. (5 drops/min.) max. at 345 bar (5000 psi)

**Typical Flow (Leakage) in Transition:** 0.3 lpm (0.8 gpm) at 345 bar (5000 psi); see Flow vs. Valve Shift graph.

**Temperature:** -54°C to 107°C (-65°F to 225°F) with polyurethane seals;

Sensor Option: -40°C to 110°C (-40°F to 230°F)

**Coil Duty Rating:** Continuous from 85% to 115% of nominal voltage

**Pull-In Response Time:** 70 ms (first indication of change when 100% voltage is applied to the coil)

**Drop-Out Response Time:** 104 ms (first indication of change when voltage goes to zero)

**Initial Coil Current Draw at 20°C:** Standard Coil: 1.67 amps at 12 VDC;

0.18 amps at 115 VAC (full wave rectified).

E-Coil: 1.7 amps at 12 VDC; 0.85 amps at 24 VDC

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of

7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC08-2; See page 9.108.1

**Cavity Tool:** CT08-2XX; See page 8.600.1

**Seal Kit:** SK08-2P-T; See page 8.650.1

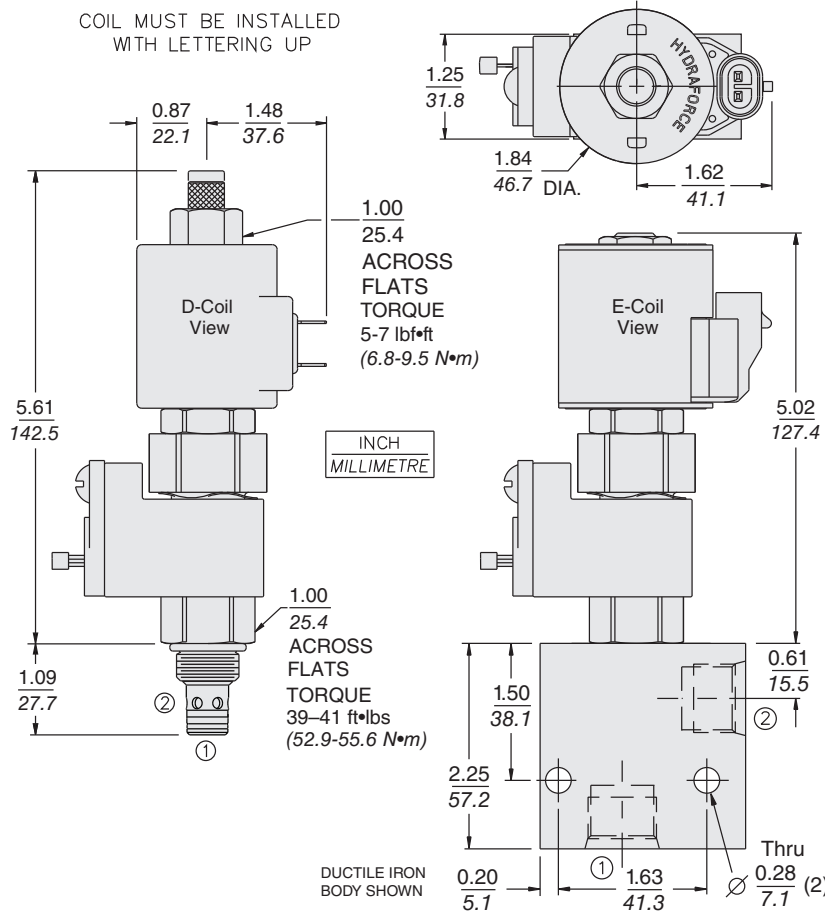
**Coil Nut:** Part No. 7004400

**Position Sensor Ratings:** See Sensor Option page 3.010.1

# with Neutral Sensor

# SV58-P20A

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.48 kg. (1.05 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Polyurethane O-rings and polyester elastomer back-up standard.

**Standard Ported Body:** Ductile iron (code 'D') standard. Rated to 345 bar (5000 psi). See page 8.008.1.

**Standard Coil:** Weight: 0.27 kg. (0.60 lbs.); Unitzed thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1.

**E-Coil:** Weight: 0.41 kg. (0.9 lbs.); Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors. See page 3.400.1.

## TO ORDER

**SV58-(P)20(A) -- - - - - -** Sensor Option: See page 3.010.1

<b>Position Indicator</b>	(Blank)	<b>Voltage</b>	(Blank)	<b>Sensor Type</b>
None	(Blank)	<b>0</b> Less Coil**	3	None
Switch	<b>P</b>	<b>12</b> 12 VDC		Dual Output, N.C./N.O.
Restricted Flow	<b>A</b>	<b>24</b> 24 VDC		
	<b>Option</b>	**Includes Std. Coil Nut.		<b>Sensor</b>
	None (Blank)	<b>E-Coils:</b> 12 or 24 VDC only.		(Blank) None
	Manual Override <b>M</b>			<b>N</b> Neutral Sensor/DT04-4P
	For other Manual Override options see page 1.001.1			<b>M</b> Neutral Sense/M12-4P
				<b>Mating Connectors:</b>
	<b>Porting</b>			DT06-4S: Part No. 4001953
	Cartridge Only <b>0</b>			M12-4S: available at <a href="http://www.turck.com">www.turck.com</a> or <a href="http://www.binder-usa.com">www.binder-usa.com</a>
	<b>Aluminum</b>			
	SAE 8 <b>8T</b>	<b>Coil Termination</b>	<b>E-Coil</b>	<b>D-Coil</b>
	3/8 in. BSP* <b>3B</b>	Deutsch DT04-2P	<b>ER</b> (IP69K)	—
		Metri-Pack® 150	<b>EY</b> (IP69K)	—
	<b>Ductile iron</b>	Dual Lead Wires	—	<b>DL</b> (IP65)
	SAE 6 <b>6TD</b>	DIN 43650	—	<b>DG</b> (IP65)
	3/8 in. BSP* <b>3BD</b>	Dual Spades	—	<b>DS</b> (IP65)
	*BSP Body; U.K. Mfr. Only			
	<b>Seals</b>			
	Polyurethane <b>P</b>			

For Coils with Zener Diode, add "Z" to option code.  
 For example: "ER/Z" Not available on all models.  
 See coil option info. on pages 3.200.1 & 3.400.1