

## HSL-PLA SIXTEEN SERIES, LOGIC VALVE

### DESCRIPTION

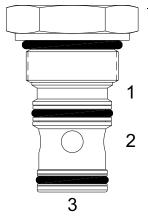
"High Pressure" 16 size, 1 5/16-12 thread, "Sixteen" series, logic valve

#### **OPERATION**

VENT TO OPEN

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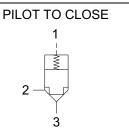
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The HSL-PLA can be configured as a piloted or vented directional flow control valve. The pilot-to-close configuration allows flow from port 3 to port 2 or from port 2 to Port 3 until a pilot signal is applied to port 1, at which point the poppet shifts closed and blocks flow. The vent-to-open configuration blocks flow from port 3 to port 2 or Port 2 to Port 3 until port 1 is vented to tank and the pressure drop across the internal orifice exceeds the spring pressure, at which point the valve shifts open and allows flow.

The crack pressure settings equate to pressure level only at Port 3 to allow opening. Added pressure at Port 2 will reduce this setting. (See Seat Ratio). The crack pressure settings with pressure level only at Port 2 will are roughly 5 times the spring option value listed at which point the **poppet** shifts open and allows flow.

# HYDRAULIC SYMBOL



#### FEATURES

Hardened parts for long life.

Industry common cavity.



For bi-directional applications see HSL-CPD.

# PERFORMANCE

Actual Test Data (Cartridge Only) Flow (LPM) 0 25 50 75 100 125 150 125 Pressure @ Port 3 (BAR) Pressure @ Port 3 (PSI 100 75 50 25 0 n 10 0 5 15 20 25 30 35 40 Flow (GPM) - Port 3 to 2 (Undercut Cavity) - Port 3 to 2 (Standard Cavity) Flow (LPM) ٥ 25 50 75 100 125 150 200 Port 3 (BAR) @ Port 3 (PSI 150 10 100 Pressure @ Pressure ( 50

### **VALVE SPECIFICATIONS**

Nominal Flow	40 GPM (151 LPM)
Rated Operating Pressure	4200 PSI (290 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	0.69 lbs. (0.31 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	115 ft-lbs. (156 Nm)
Cavity	SIXTEEN 3WS
Cavity Form Tool (Finishing)	40500021
Seal Kit	21191409
Seat Ratio	Area of the pilot is 1.2 times the area of the seat at Port 3.

WARNING: the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

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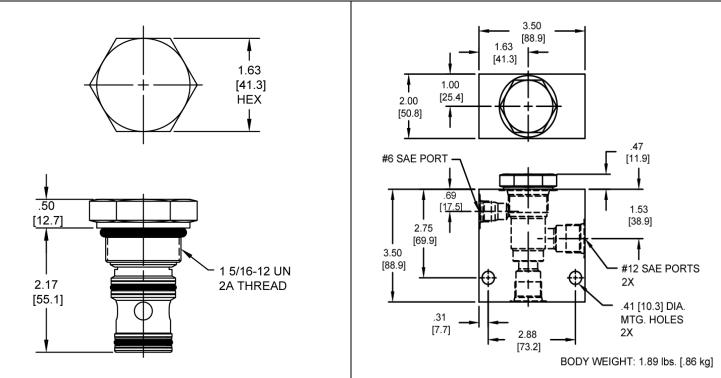
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25 30

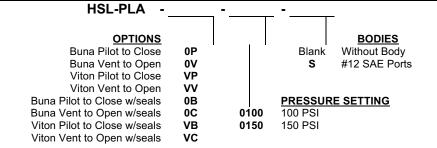
5 20 Flow (GPM)



## DIMENSIONS



#### **ORDERING INFORMATION**



Note: Aluminum **NOT** durability rated for 4200 PSI. Consult factory for body options.

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