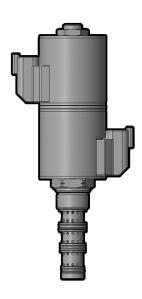


Overview



Description

The HSV10-47A is a high pressure, 4 port, 3 position, spool type, screw-in, cartridge style, hydraulic solenoid valve.

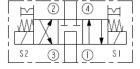
Operation

When de-energized, the HSV10-47A blocks cylinder ports, while allowing flow from 3 to 1. When coil #1 is energized, flow is allowed from 3 to 2, and from 4 to 1. When coil #2 is energized, flow is allowed from 3 to 4, and from 2 to 1. in circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port 2. NOTE: Orifice disc should not be used with this product.

Features

- Continuous-duty rated solenoid.
- · Hardened precision spool and cage for long life.
- · Optional coil voltages and terminations.
- · Manual override option.
- · Corrosion-resistant plating.
- Waterproof Eâ€'Coils rated up to IP69K.
- · All ports may be fully pressurized.
- · Unitized, molded coil design.
- · Industry common cavity.
- All HyPerformance products are tested to the rigorous standards of the NFPA specification T2.6.1.
- · All HyPerformance valves are tested at a verification level of 90% and an assurance of 99%.

Symbol



Ratings

Pressure Ratings

Pressure rating 350 bar (5075 psi) 420 bar (6090 psi) - Note: (10% cycle life) 690 bar (10000 psi)

Proof pressure Burst pressure 1380 bar (20000 psi)

Flow Ratings

Flow rating See performance graph

156 ml/min (9.5 in³/min) - Note: Ports 3-1: at 350 bar (5075 psi) S1 coil Maximum internal leakage energized. - Note: Ports 3-1: at 350 bar (5075 psi) S2 coil

185 ml/min (11.3 in³/min)

energized.

Other Ratings

One million cycles Cycle life

Temperature Ratings

- Note: With Buna N seals -40 to 100 °C (-40 to 212 °F) Operating fluid temperature -26 to 204 °C (-15 to 400 °F) -54 to 107 °C (-65 to 225 °F) - Note: With fluorocarbon seals - Note: With urethane seals

-40 to 70 °C (-40 to 160 °F) Storage temperature -40 to 90 °C (-40 to 194 °F) Ambient temperature

Operating Parameters

Mineral based or synthetic hydraulic fluid with lubricating properties Fluids

7.4 to 420 cSt Fluid viscosity range

Maximum operating contamination 18/16/13 per ISO 4406

level

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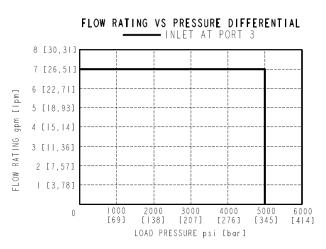


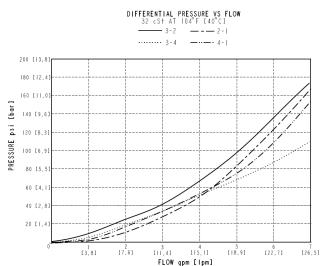
Properties

Unit weight 0.31 kg (0.68 lb) - Note: HSV10-47A without coil and nut

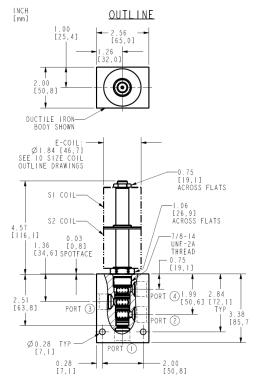
Internal wetted surface area 257 cm² (39.8 in²) - Note: HSV10-47A

Performance





Dimensions



ALL DIMENSIONS ARE FOR REFERENCE ONLY.

Installation Specifications

Cavity HVC10-4

Cartridge installation torque 102 to 115 N-m (75 to 85 ft-lb) - Note: Steel/ductile iron cavity 81 to 88 N-m (60 to 65 ft-lb) - Note: Aluminum cavity

Coil nut torque 5.4 to 6.8 N-m (4 to 5 ft-lb)

Orientation restriction None

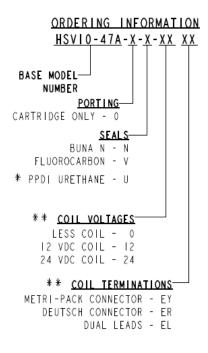


Accessories

Seal kit

SK10-4N-MMM
SK10-4V-MMM
SK10-4U-OOO
- Note: Buna N
- Note: fluorocarbon
- Note: urethane

Order Code



* URETHANE SEALS RECOMMENDED FOR OPERATING PRESSURES ABOVE 3500 psi [241 bdr].

Model Options

HSV10-47AE-H-J-L

E Manual Override

CODE	DESCRIPTION
В	Momentary Push/Pull Override, 1.5" Diameter Aluminum Knob
BLANK	NONE
K	Three Position Override, 1.5" Diameter Aluminum Knob
M	Momentary Push/Pull Override, Red Knurled Knob

H Line Body

CODE	DESCRIPTION
0	No Body
8HT	Ductile Iron SAE 8

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
U	PPDI Urethane

L Coil

CODE	DESCRIPTION
0E	No Coil, E-Coil Spacer



TOBE DESCRIPTION 10EL 10 VDC, E-Coil, Dual Lead Wires 10ER/Z 10 VDC, E-Coil, Deutsch 10ER/Z 10 VDC, E-Coil, Deutsch with Zener Diode 12EG 12 VDC, E-Coil, DIN 43650 12EJ 12 VDC, E-Coil, AMP Jr. 12EL 12 VDC, E-Coil, Dual Lead Wires, 18 inches long 12EL/36 12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode 12EL/W/Z 12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode 12EL/Z 12 VDC, E-Coil, Dual Lead Wires with Zener Diode 12ER/Z 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 20ER 20 VDC, E-Coil, Deutsch 24EG 24 VDC, E-Coil, Dual Lead Wires, 18 inches long 24EL/36 24 VDC, E-Coil, Dual Lead Wires, 36 inches long 24EL/36 24 VDC, E-Coil, Dual Lead Wires, 36 inches long		
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24EL/36 24 VDC, E-Coil, Dual Lead Wires, 36 inches long 24EL/W/Z 24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode	24EJ	24 VDC, E-Coil, AMP Jr.
24EL/W/Z 24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode	24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
Diode	24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
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Z4 VDO, E-COII, Deutscri	24ER	24 VDC, E-Coil, Deutsch
24ER/Z 24 VDC, E-Coil, Deutsch with Zener Diode	24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24EY 24 VDC, E-Coil, Metri-Pack 150	24EY	24 VDC, E-Coil, Metri-Pack 150
24EY/Z 24 VDC, E-Coil, Metri-Pack 150 with Zener Diode	24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode

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