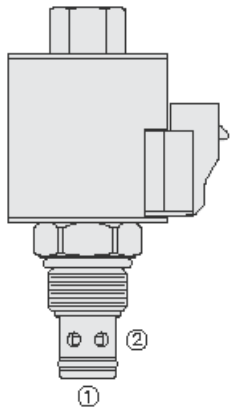
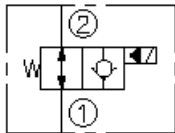




## Overview



### Symbol



### Description

The HSV10-23X is a high pressure 2-way, piloted, poppet-type, normally open screw in hydraulic cartridge valve designed for low leakage in load holding applications.

### Operation

When de-energized, the HSV10-23X allows flow bi-directionally. When energized, the valve's poppet closes on its seat, blocking flow from ports 2-1. In this mode the cartridge will allow flow from ports 1-2 after overcoming the actuator and spring forces (see performance graph).

### Manual Override Operation

To shift the valve manually, push and hold down manual override button/knob.

**note:** the manual override feature is intended for emergency use, not for continuous-duty operation.

### Features

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- 960 hour salt-spray rated solenoid tubes and coils.
- 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%.

## Ratings

### Pressure Ratings

Pressure rating	350 bar (5075 psi) 420 bar (6090 psi)	<b>- Note:</b> 10% cycle life
Proof pressure	690 bar (10000 psi)	
Burst pressure	1380 bar (20000 psi)	

### Flow Ratings

Flow rating	75.7 lpm (20 gpm)
Maximum internal leakage	5 drops/min <b>- Note:</b> With 350 bar (5075 psi) at port 2

### Other Ratings

Cycle life	One million cycles
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### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	<b>- Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	<b>- Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	<b>- Note:</b> With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

## Operating Parameters

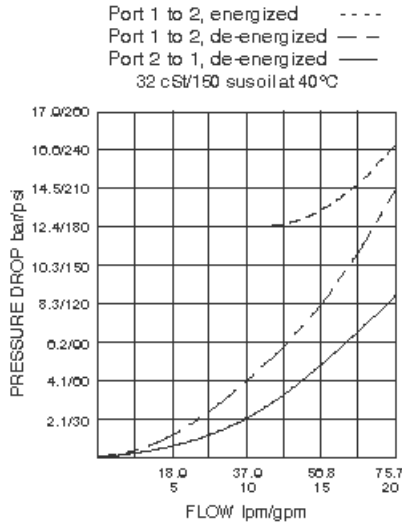
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

## Properties

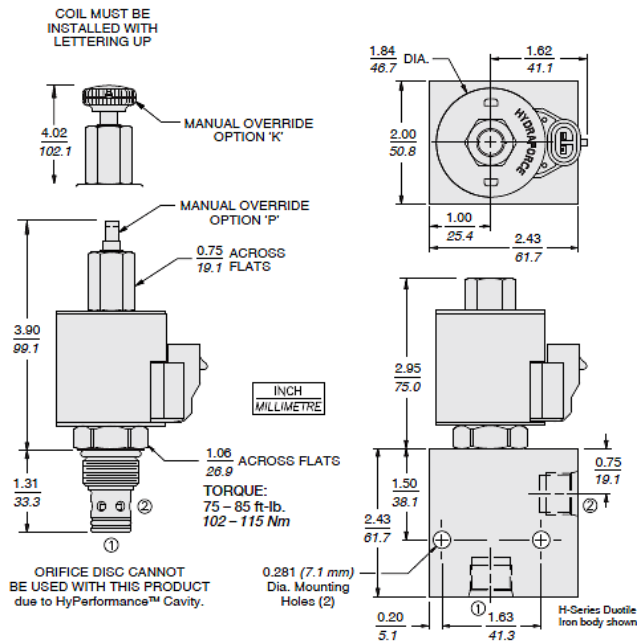
Unit weight	0.19 kg (0.42 lb)	<b>- Note:</b> Without coil and nut
Internal wetted surface area	157 cm <sup>2</sup> (24.3 in <sup>2</sup> )	<b>- Note:</b> HSV10-23
	159 cm <sup>2</sup> (24.6 in <sup>2</sup> )	<b>- Note:</b> Hsv10-23p/23k



## Performance



## Dimensions



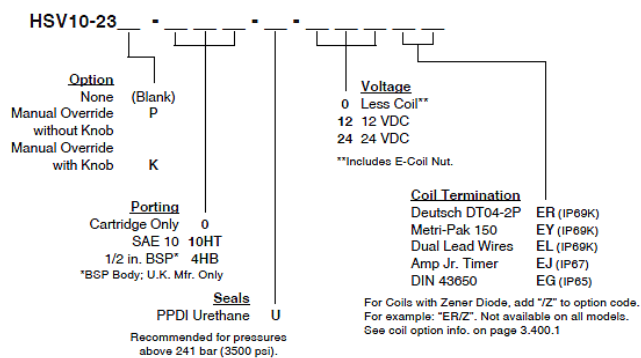
## Installation Specifications

Cavity	HVC10-2	
Cartridge installation torque	102 to 115 N-m (75 to 85 ft-lb) 81 to 88 N-m (60 to 65 ft-lb)	- <b>Note:</b> Steel/ductile iron cavity - <b>Note:</b> Aluminum cavity
Orientation restriction	None	

## Accessories

Seal kit	SK10-2N-M SK10-2V-M SK10-2U-0	- <b>Note:</b> Buna N - <b>Note:</b> Fluorocarbon - <b>Note:</b> Urethane
Housings		
Coils		

## Order Code



POSITION	CODE	DESCRIPTION
		HSV10-A23AE-H-J-L-M
A		Position Sensor Option
A	23	Standard
A	P23A	Position Indicator Switch with Restricted Flow
E		Manual Override
E	BLANK	NONE
E	K	Momentary Push Override, Knob
E	P	Momentary Push Override, Button
H		Line Body
H	0	No Body
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	U	PPDI Urethane
L		Coil
L	0	No Coil
L	10EL	10 VDC, E-Coil, Dual Lead Wires
L	10ER	10 VDC, E-Coil, Deutsch
L	10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
L	12EG	12 VDC, E-Coil, DIN 43650
L	12EJ	12 VDC, E-Coil, AMP Jr.
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/W/Z	12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode
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	20ER	20 VDC, E-Coil, Deutsch
L	24EG	24 VDC, E-Coil, DIN 43650
L	24EJ	24 VDC, E-Coil, AMP Jr.
L	24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	24EL/W/Z	24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode



POSITION	CODE	DESCRIPTION
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
M		Position Sensor Termination
M	BLANK	No Position Sensor
M	M3	Neutral Sense, M12-4P, Dual Output NC/NO
M	N3	Neutral Sense, DT04-4P, Dual Output NC/NO