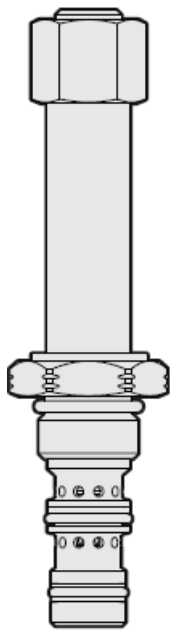




**Overview**



**Description**

The HTS38-36X is a screw-in, cartridge style, pilot-operated, spool-type, proportional pressure reducing/relieving valve which can be infinitely adjusted across a prescribed range using a variable electric input. The regulated pressure is proportional to the input electrical current applied to the valve coil.

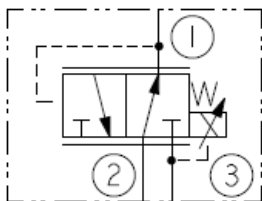
**Operation**

The HTS38-36X allows flow from port 2 to port 1 until sufficient pressure is present at port 1 to open the pilot section by off setting the electrically induced solenoid force. If the pressure at port 1 exceeds the regulated pressure set by the input electrical current, flow from port 1 is relieved to tank via port 3. With no current applied, the valve will relieve at approximately 115 psi [7,9 bar] (pressure code A) OR 80 psi [5,5 bar] (pressure code C). Pressure at port 3 is additive to regulated pressure.

**Features**

- Multifunction proportional relief valve with vented logic element
- Low pressure drop.
- Rated for high pressure operation
- Pressure can be set at factory at range between 55.2 to 345 bar (800 to 5000 psi)
- High flow rating
- Port 2 can be pressurized for logic applications
- Corrosion-resistant plating
- 12- or 24-volt environmental 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%.

**Symbol**



**Ratings**

**Pressure Ratings**

Pressure rating	350 bar (5075 psi)	- <b>Note:</b> Port 1, 2
	420 bar (6090 psi)	- <b>Note:</b> Port 1, 10% cycle life
	68.9 bar (1000 psi)	- <b>Note:</b> Port 3
Proof pressure	689 bar (10000 psi)	
Burst pressure	1379 bar (20000 psi)	
Pressure setting range	7.9 to 350 bar (115 to 5075 psi)	- <b>Note:</b> From zero to maximum control current, pressure code A
	5.54 to 209.6 bar (80 to 3040 psi)	- <b>Note:</b> From zero to maximum control current, pressure code C

**Flow Ratings**

Flow rating	56.8 lpm (15 gpm)	
Maximum internal leakage	0.115 lpm (0.04 gpm)	- <b>Note:</b> Maximum de-energized at deadhead condition with inlet pressure of 350 bar (5075 psi) including pilot flow

**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

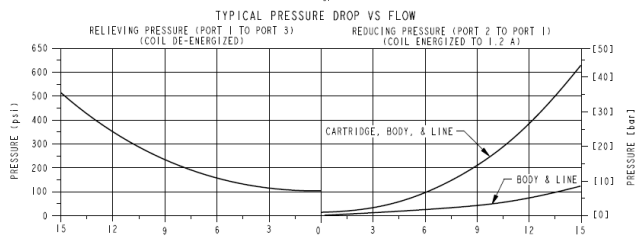
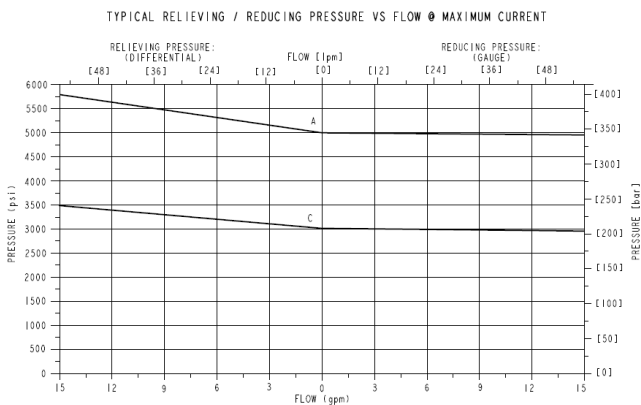
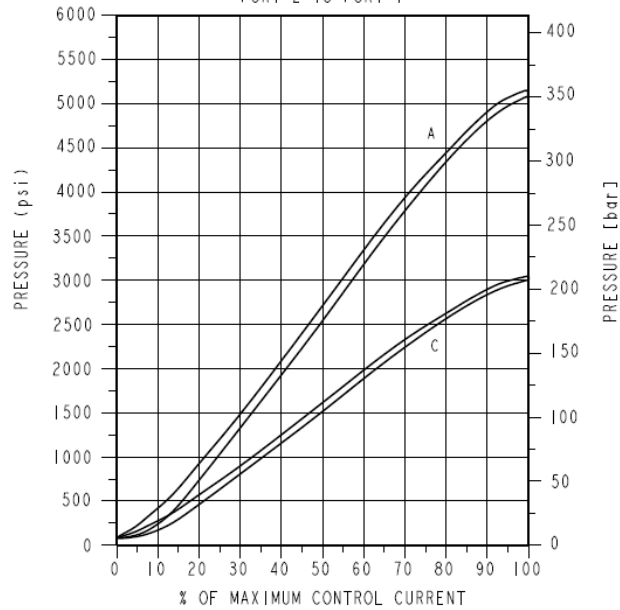
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

## Properties

Unit weight	0.19 kg (0.41 lb)
Internal wetted surface area	166 cm <sup>2</sup> (25.7 in <sup>2</sup> )

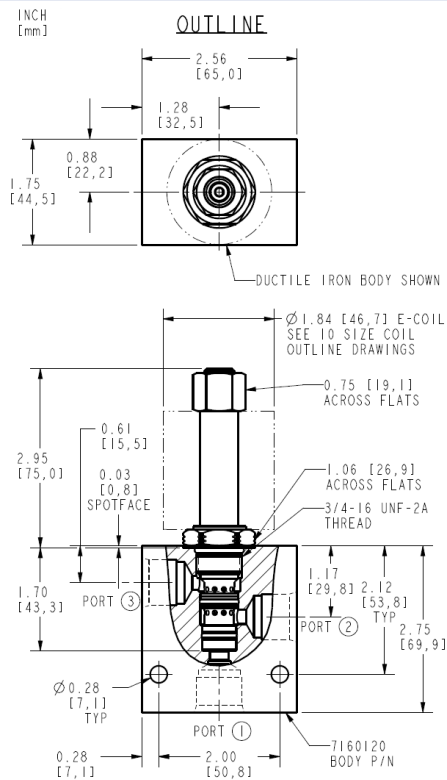
## Performance

TYPICAL REDUCING PRESSURE VS CURRENT (200 Hz PWM)  
PORT 2 TO PORT 1





## Dimensions



## Materials

### Materials

**Cartridge:** Steel with hardened work surfaces. Zinc-plated exposed surfaces. Single piece urethane seal standard.

**Ported Body:** Weight: 5.34 kg (11.77 lb) H-series ductile iron, rated to 345 bar (5000 psi).

**E-Coil:** Weight: 0.41 kg (0.9 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

## Installation Specifications

Cavity	HVC08-3
Cartridge installation torque	54 to 61 N-m (40 to 45 ft-lb)
Coil nut torque	9.5 to 13.6 N-m (7 to 10 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK08-3X-BM	- <b>Note:</b> X = N, V seal option
	SK08-3U-OO	- <b>Note:</b> Urethane seal option
Housings		
Coils		

## Order Code



**ORDERING INFORMATION:**

**HTS38-36X-X-X-XXXX**

**BASE MODEL NUMBER:**

**PRESSURE CODE:**

115-5075 psi - A  
[7,9-350 bar]

80-3040 psi - C  
[5,5-209,6 bar]

**PORTING:**

CARTRIDGE ONLY - 0

**SEAL OPTION:**

BUNA N - N  
FLUOROCARBON - V  
URETHANE - U

**COIL VOLTAGE:**

LESS COIL - 00  
12 VDC COIL - 12  
24 VDC COIL - 24

**COIL TERMINATIONS:**

DIN 43650 - EG  
LEAD WIRES (18 GAUGE) - EL  
DEUTSCH DT04-2P - ER  
METRI-PACK 150 - EY

POSITION	CODE	DESCRIPTION
		HTS38-36D-H-J-L
D		Regulating Pressure Range
D	A	7.9 to 350 bar (115 to 5075 psi) Pressure Range
D	C	5.5 to 209.6 bar (80 to 3040 psi) Pressure Range
H		Line Body
H	0	No Body
H	8HT	Ductile Iron SAE 8
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, 18 inches long
L	10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	10ER	10 VDC, E-Coil, Deutsch
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	12ER	12 VDC, E-Coil, Deutsch
L	12EY	12 VDC, E-Coil, Metri-Pack 150
L	20ER	20 VDC, E-Coil, Deutsch
L	24EG	24 VDC, E-Coil, DIN 43650
L	24EJ	24 VDC, E-Coil, AMP Jr.
L	24ER	24 VDC, E-Coil, Deutsch
L	24EY	24 VDC, E-Coil, Metri-Pack 150