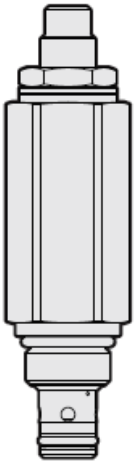




## Overview



### Description

The CR08-28X is a screw in, cartridge style, direct acting, differential area, poppet type, internally vented, bidirectional hydraulic relief valve intended for use as a pressure limiting device for common hydraulic circuit protection.

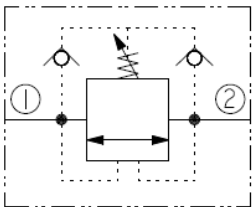
### Operation

The CR08-28X blocks flow from either port 1 or port 2. on attainment of a predetermined pressure at either port 1 or port 2, the spring-opposed poppet is forced from its seat. The cartridge offers fast response to load changes in typical hydraulic circuits requiring low hysteresis, low pressure rise and low internal leakage.

### Features

- Range of adjustment options
- Pressure setting range of 138-276 bar (2000-4000 psi)
- Corrosion-protection of 960 hours salt spray per ASTM B117.
- Hardened parts for long life.
- Industry common cavity.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	276 bar (4000 psi)	
Proof pressure	689.7 bar (10000 psi)	
Burst pressure	827.6 bar (12000 psi)	
Crack pressure defined	Pressure evident at 0.95 lpm (0.25 gpm)	
Reseat pressure	Nominal 85% of crack pressure leakage to drops/min	- <b>Note:</b> Leakage to 1 ml/min (20 drops/min)

### Flow Ratings

Flow rating	37.9 lpm (10 gpm)
Maximum internal leakage	1 ml/min (20 drops/min)

### 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 polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

### Other Ratings

Corrosion protection	960 hr salt spray per ASTM b117
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## 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



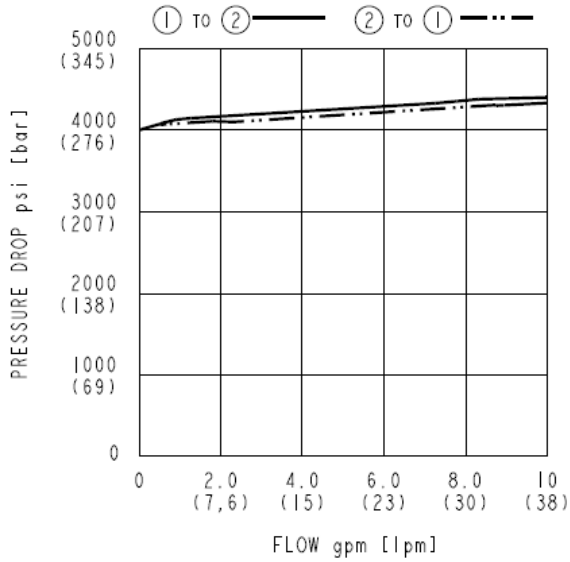
Properties

Unit weight	0.26 kg (0.57 lb)	- <b>Note:</b> Adjuster option A
	0.28 kg (0.62 lb)	- <b>Note:</b> Adjuster option B
	0.30 kg (0.67 lb)	- <b>Note:</b> Adjuster option C, L
	0.24 kg (0.52 lb)	- <b>Note:</b> Adjuster option F, H

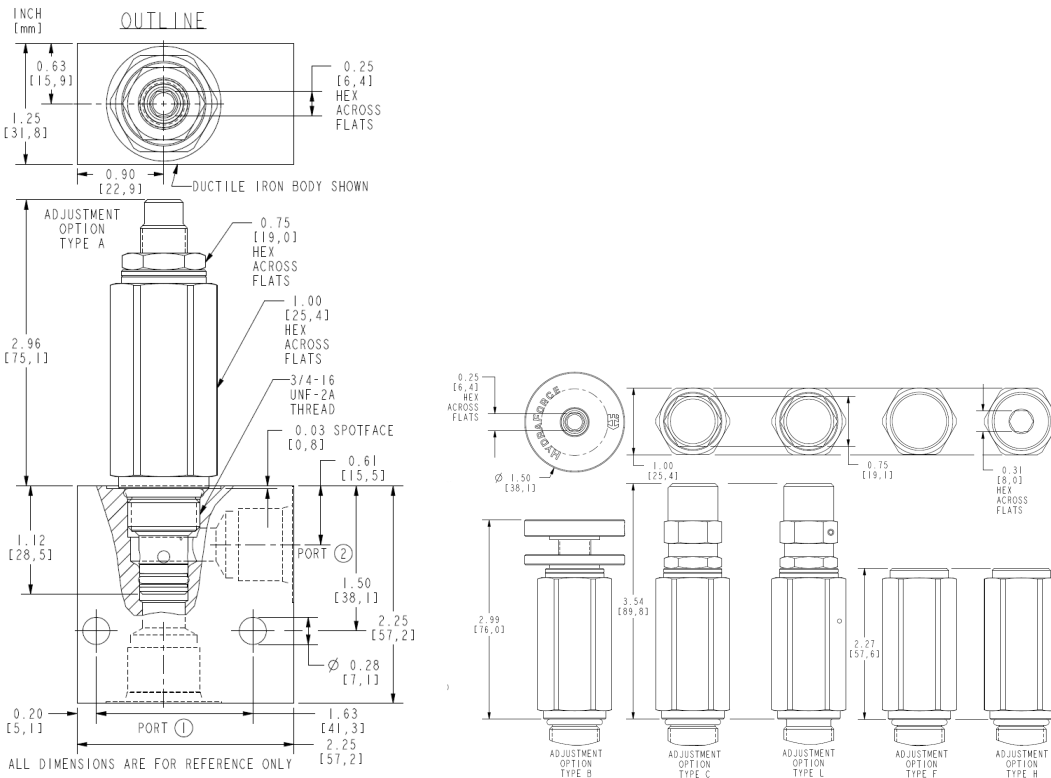
Performance

RELIEF PRESSURE VS. FLOW CHARACTERISTIC:

FLOW PERFORMANCE: 32 cSt AT 104°F [40° C]



Dimensions





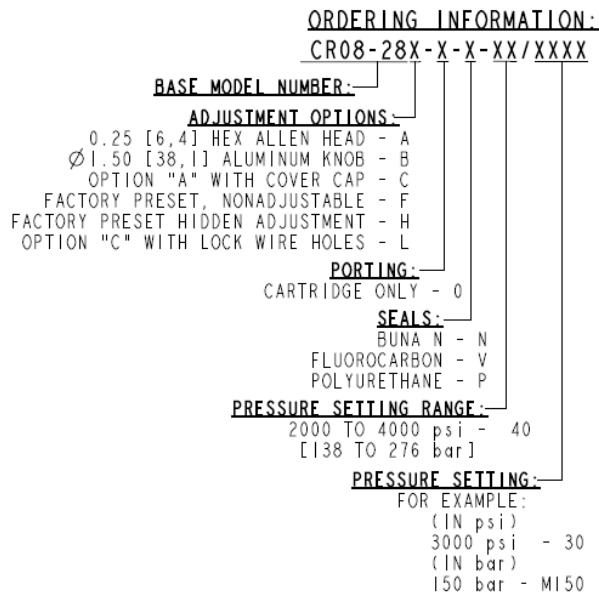
## Installation Specifications

Cavity	VC08-2
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
H style plug torque	32.5 to 35.2 N-m (24 to 26 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK08-2X-M	- <b>Note:</b> X = seal option
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## Order Code



### Model Options

#### CR08-28F-H-J-R/S

#### F Adjustment Option

CODE	DESCRIPTION
A	1/4" Hex Allen Head
B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
C	1/4" Hex Allen Head with Cover Cap
F	Factory Preset Non-Adjustable
H	Factory Preset Hidden Adjustment
L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes

#### H Line Body

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)



CODE	DESCRIPTION
3BD	Ductile Iron BSPP 3/8" (3)

### J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

### R Spring

CODE	DESCRIPTION
40	137.9 to 275.9 bar (2000 to 4000 psi) Spring Range

### S Setting

CODE	DESCRIPTION
MXXX	Spring Setting in XXX bar
XX	Spring Setting in XX psi (x 100)