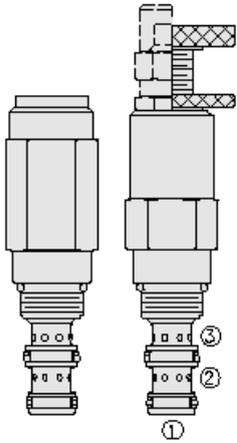




## Overview



### Description

CR08-38X is a screw-in, cartridge style, direct acting, bi-directional, poppet type hydraulic relief valve for use as a pressure limiting device in more demanding hydraulic circuits, requiring low hysteresis and low internal leakage.

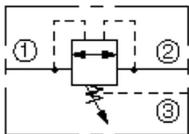
### Operation

The valve blocks flow from port 1 to port 2 bi-directionally with the spring chamber constantly drained at port 3. On attainment of a pre-determined pressure at either port 1 or port 2, the spring-opposed poppet is forced from its seat.

### Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Hardened parts for long life.
- Compact, industry-common size.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	207 bar (3000 psi)	- <b>Note:</b> Port 1
	207 bar (3000 psi)	- <b>Note:</b> Port 2
	103 bar (1500 psi)	- <b>Note:</b> Port 3
Proof pressure	448 bar (6500 psi)	
Burst pressure	896 bar (13000 psi)	
Reseat pressure	90% of crack pressure at 0.95 lpm (0.25 gpm)	

### Flow Ratings

Flow rating	30.3 lpm (8 gpm)	
Maximum internal leakage	0.4 ml/min (8 drops/min)	- <b>Note:</b> At 75% of crack pressure

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

## Operating Parameters

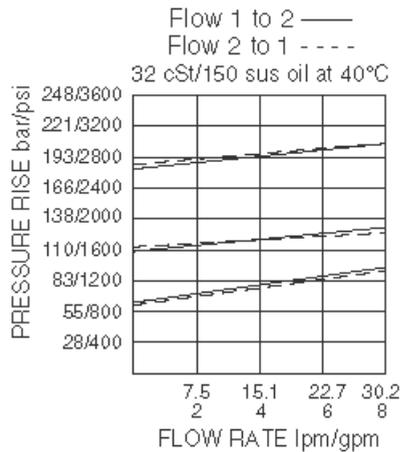
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

## Properties

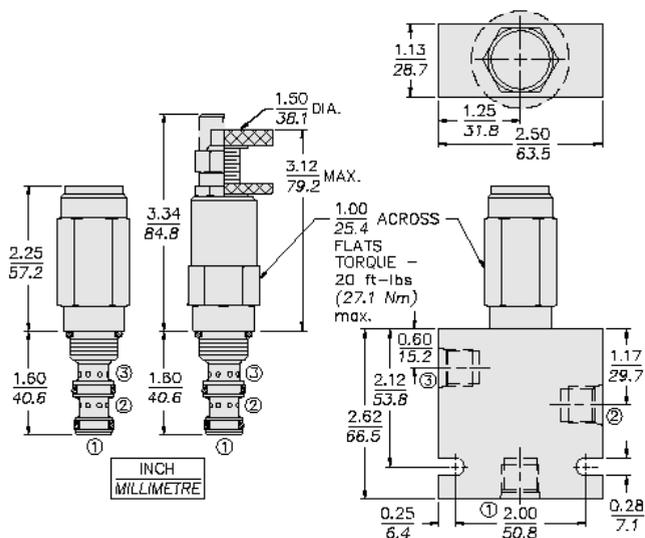
Unit weight	0.24 kg (0.54 lb)	- <b>Note:</b> "a"
	0.28 kg (0.61 lb)	- <b>Note:</b> "b"
	0.27 kg (0.60 lb)	- <b>Note:</b> "c"/"l"
	0.25 kg (0.56 lb)	- <b>Note:</b> "f"/"h"
Internal wetted surface area	159 cm <sup>2</sup> (24.6 in <sup>2</sup> )	- <b>Note:</b> "a"/"b"/"c"/"l"
	176 cm <sup>2</sup> (27.3 in <sup>2</sup> )	- <b>Note:</b> "f"/"h"



## Performance



## Dimensions



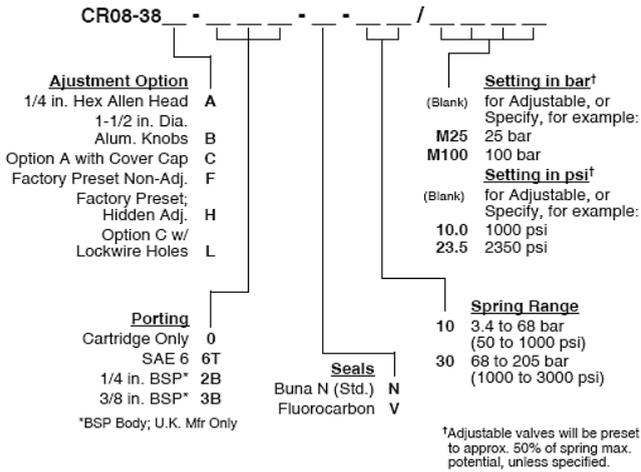
## Installation Specifications

Cavity	VC08-3
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb) 47.5 N-m (35 ft-lb) - <b>Note:</b> Up to maximum of
H style plug torque	33.9.8 to 36.6 N-m (25 to 27 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK08-3X-BM - <b>Note:</b> X = seal option
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## Order Code



**Model Options**

**CR08-38F-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
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
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
10	3.4 to 68 bar (50 to 1000 psi) Spring Range
30	68 to 205 bar (1000 to 3000 psi) Spring Range

**S Setting**

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