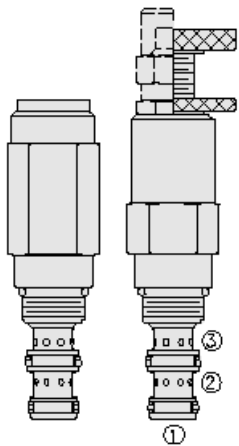




Overview



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

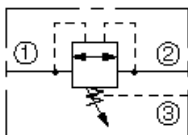
Operation

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)	- Note: Port 1
	207 bar (3000 psi)	- Note: Port 2
	103 bar (1500 psi)	- Note: 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)	- Note: At 75% of crack pressure

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: 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

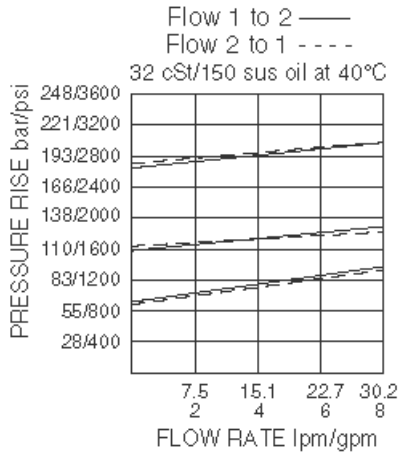
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

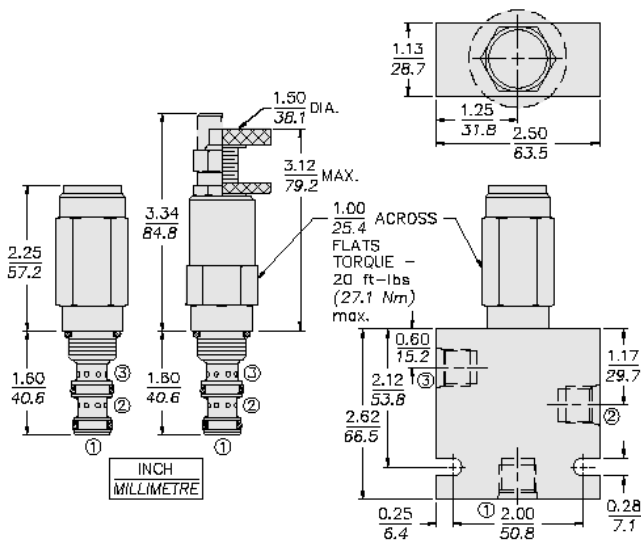
Unit weight	0.24 kg (0.54 lb)	- Note: "a"
	0.28 kg (0.61 lb)	- Note: "b"
	0.27 kg (0.60 lb)	- Note: "c"/"l"
	0.25 kg (0.56 lb)	- Note: "f"/"h"
		- Note: "a"/"b"/"c"/"l"
Internal wetted surface area	159 cm ² (24.6 in ²)	- Note: "a"/"b"/"c"/"l"
	176 cm ² (27.3 in ²)	- Note: "f"/"h"



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.14 kg. (0.30 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and TFE back-up standard. Anodized aluminum knobs.

Standard Ported Body: Weight: 0.27 kg. (0.60 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ.

Adjustment Option Details: See [adjustment options](#)

Note: Orifice Disc should not be used with this product.

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) - Note: Up to maximum of
H style plug torque	33.9.8 to 36.6 N-m (25 to 27 ft-lb)
Orientation restriction	None

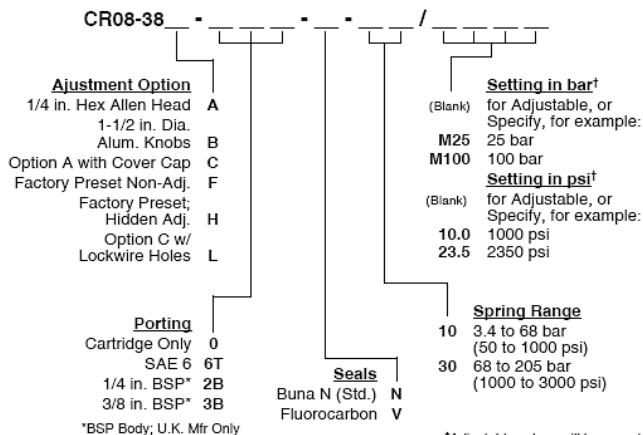
Accessories

Seal kit	SK08-3X-BM - Note: X = seal option
Housings	



Order Code

POSITION	CODE	DESCRIPTION
		CR08-38F-H-J-R/S
F		Adjustment Option
F	A	1/4" Hex Allen Head
F	B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
F	C	1/4" Hex Allen Head with Cover Cap
F	F	Factory Preset Non-Adjustable
F	H	Factory Preset Hidden Adjustment
F	L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes
H		Line Body
H	0	No Body
H	4T	Aluminum SAE 4
H	6T	Aluminum SAE 6
H	6TD	Ductile Iron SAE 6
H	8TD	Ductile Iron SAE 8
H	3B	Aluminum BSPP 3/8" (3)
H	3BD	Ductile Iron BSPP 3/8" (3)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
R		Spring
R	10	3.4 to 68 bar (50 to 1000 psi) Spring Range
R	30	68 to 205 bar (1000 to 3000 psi) Spring Range
S		Setting
S	MXXX	Spring Setting in XXX bar
S	XX	Spring Setting in XX psi (x 100)



[†]Adjustable valves will be preset to approx. 50% of spring max. potential, unless specified.