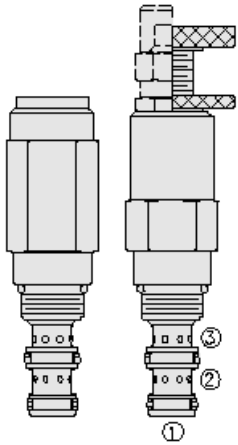




Overview



Description

The PR08-32X is a screw in, cartridge style, direct acting, spool type, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain. It is designed to act as a pressure regulating device for secondary circuits. It is intended for use in stable input flow circuits.

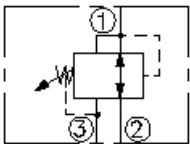
Operation

In its steady state, the PR08-32X allows flow bidirectionally from port 2 to port 1, with the spring chamber constantly drained at port 3. On attainment of a pre-determined pressure at port 1, the cartridge shifts to block flow at port 2, thereby regulating pressure at port 1. In this mode, the valve will also relieve port 1 to port 3 at a variable value over the set reducing pressure.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 152 bar (2200 psi).
- Hardened spool and cage for long life.
- Compact, industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	241.3 bar (3500 psi)	- Note: Port 1
	241.3 bar (3500 psi)	- Note: Port 2
	103.4 bar (1500 psi)	- Note: Port 3
Proof pressure	517.1 bar (7500 psi)	
Burst pressure	896.3 bar (13000 psi)	
Crack pressure defined	Pressure evident at 0.95 lpm (0.25 gpm) attained port 1 to port 2	

Flow Ratings

Flow rating	11.4 lpm (3 gpm)	
Maximum internal leakage	82 ml/min (5 in ³ /min)	- Note: Port 2 to 3 at to 90% of nominal setting 206.8 bar (3000 psi)

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
	-54 to 107 °C (-65 to 225 °F)	- Note: With urethane 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	PR08-32X type iii clear zinc plating per ASTM b633 gpr08-32x 960 hr salt spray per ASTM b117
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Operating Parameters

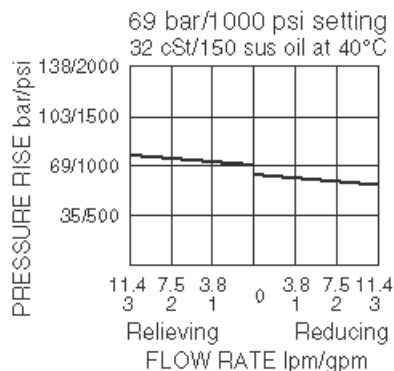
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



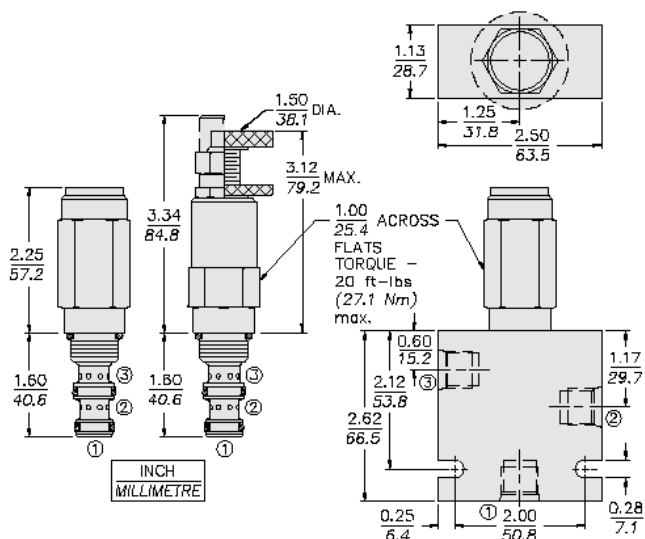
Properties

Unit weight	0.23 kg (0.51 lb)	- Note: PR08-32A
	0.28 kg (0.61 lb)	- Note: Pr08-32c/l
	0.25 kg (0.56 lb)	- Note: PR08-32B
	0.22 kg (0.48 lb)	- Note: Pr08-32f/h
Internal wetted surface area	130 cm ² (20.1 in ²)	- Note: Pr08-32a/b/c/l
	140 cm ² (21.7 in ²)	- Note: Pr08-32f/h

Performance



Dimensions



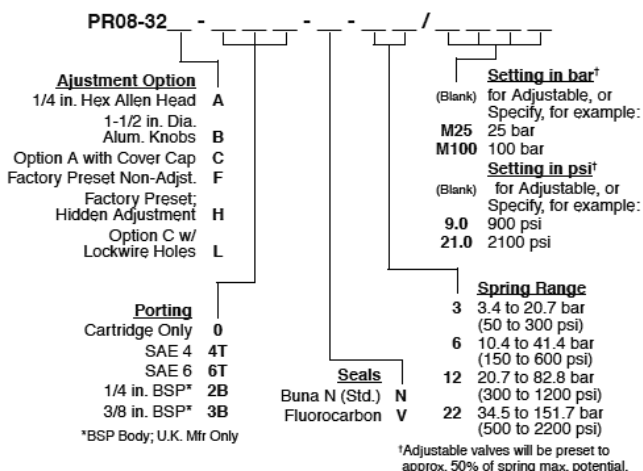
Installation Specifications

Cavity	VC08-3
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
Maximum allowable torque	47.5 N-m (35 ft-lb)
H style plug torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-3X-BM	- Note: X = N and V seal options
	SK08-3U-OO	- Note: U seal option

Order Code



Model Options

PR08-32F-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
03	3.4 to 20.7 bar (50 to 300 psi) Spring Range
06	6.9 to 41.4 bar (100 to 600 psi) Spring Range
12	20.7 to 82.8 bar (300 to 1200 psi) Spring Range
22	34.5 to 151.7 bar (500 to 2200 psi) Spring Range



S Setting

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