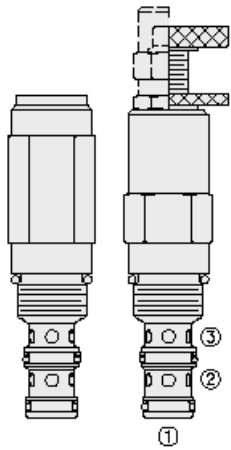




Overview



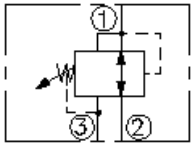
Description

The PR10-32X 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. In its steady state, the PR10-32X 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 145 bar (2100 psi).
- Hardened spool and cage for long life.
- Industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	206.8 bar (3000 psi)	- Note: Port 1
	206.8 bar (3000 psi)	- Note: Port 2
	68.9 bar (1000 psi)	- Note: Port 3
Proof pressure	517.1 bar (7500 psi)	- Note: Port 1
	517.1 bar (7500 psi)	- Note: Port 2
	103.4 bar (1500 psi)	- Note: Port 3
Burst pressure	1034 bar (15000 psi)	
Crack pressure defined	Pressure evident at 0.95 lpm (0.25 gpm) attained port 1 to port 2	

Flow Ratings

Flow rating	30.3 lpm (8 gpm)	
Maximum internal leakage	82 ml/min (5 in ³ /min)	- Note: Port 2 to 3 at 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 viton seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

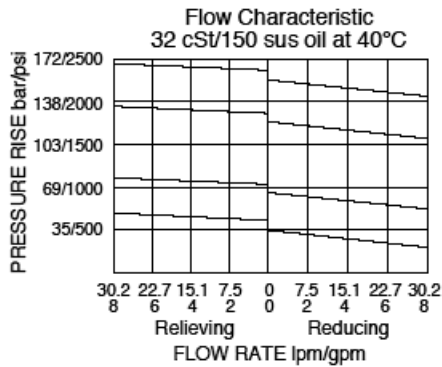
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



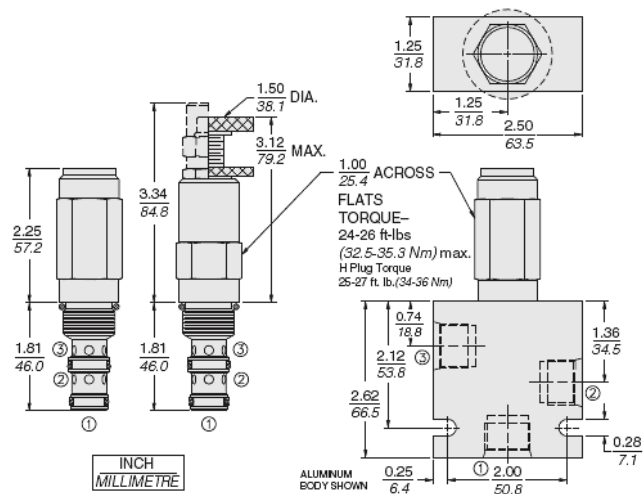
Properties

Unit weight	0.25 kg (0.56 lb)	- Note: PR10-32A
	0.29 kg (0.65 lb)	- Note: Pr10-32c/l
	0.28 kg (0.61 lb)	- Note: PR10-32B
	0.24 kg (0.54 lb)	- Note: Pr10-32f/h
Internal wetted surface area	148 cm ² (22.9 in ²)	- Note: Pr10-32a/b/c/l
	163 cm ² (25.2 in ²)	- Note: Pr10-32f/h

Performance



Dimensions



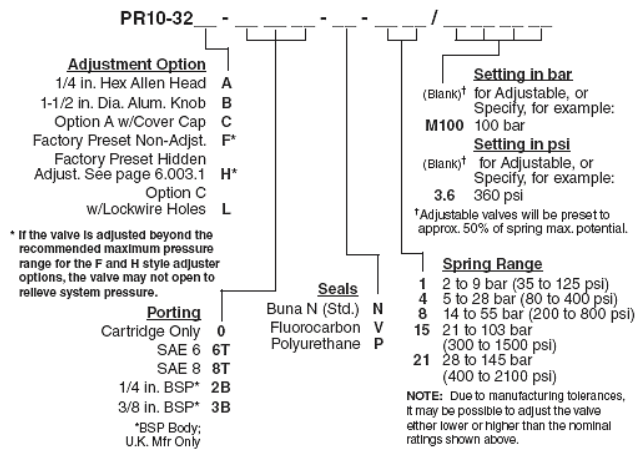
Installation Specifications

Cavity	VC10-3
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
H style plug torque	33.9 N-m (25 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-3X-BM	- Note: X = seal option
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Order Code



Model Options

PR10-32F-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
6T	Aluminum SAE 6
8T	Aluminum SAE 8
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
01	2.4 to 8.6 bar (35 to 125 psi) Spring Range
04	5.5 to 27.6 bar (80 to 400 psi) Spring Range
08	13.8 to 55.2 bar (200 to 800 psi) Spring Range
15	20.7 to 103.4 bar (300 to 1500 psi) Spring Range
21	27.6 to 144.8 bar (400 to 2100 psi) Spring Range



S Setting

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