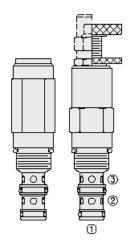


Overview



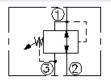
Description

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.
- o 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)
206.8 bar (3000 psi)
68.9 bar (1000 psi)

Proof pressure

517.1 bar (7500 psi)
517.1 bar (7500 psi)
103.4 bar (1500 psi)

Note: Port 1
Note: Port 3
Note: Port 2
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 in³/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)
-26 to 204 °C (-15 to 400 °F)
-54 to 107 °C (-65 to 225 °F)

-40 to 100 °C (-40 to 212 °F)
-54 to 107 °C (-65 to 225 °F)

-50 to 100 °C (-40 to 212 °F)
-50 to 200 °C (-40 to 212 °F)
-50 to

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 18/16/13 per ISO 4406

level

hydraforce.com 25SEP2024 16:38 PR10-32

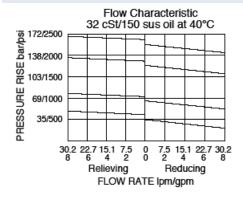
- Note: Pr10-32f/h



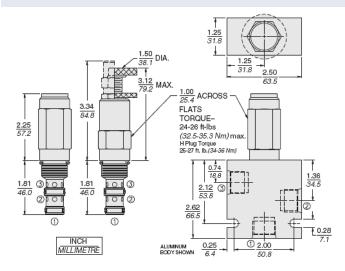
Properties

0.25 kg (0.56 lb) - Note: PR10-32A Unit weight 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 148 cm² (22.9 in²) 163 cm² (25.2 in²) - Note: Pr10-32a/b/c/l Internal wetted surface area

Performance



Dimensions



Installation Specifications

VC10-3 Cavity

32.5 to 35.3 N-m (24 to 26 ft-lb) Cartridge installation torque

33.9 N-m (25 ft-lb) H style plug torque

Orientation restriction None

Accessories

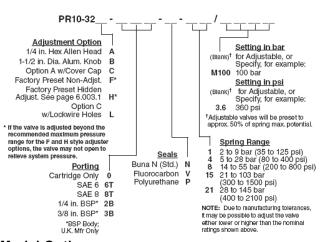
- Note: X = seal option Seal kit SK10-3X-BM

Order Code

PR10-32 25SEP2024 16:38 hydraforce.com

PRESSURE REDUCING / RELIEVING CARTRIDGE VALVE





Model Options

PR10-32F-H-J-R/S

F Adjustment Option

CODE	DESCRIPTION
Α	1/4" Hex Allen Head
В	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
С	1/4" Hex Allen Head with Cover Cap
F	Factory Preset Non-Adjustable
Н	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
Р	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

hydraforce.com 25SEP2024 16:38 PR10-32

PRESSURE REDUCING / RELIEVING CARTRIDGE VALVE



S Setting

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

hydraforce.com 25SEP2024 16:38 PR10-32