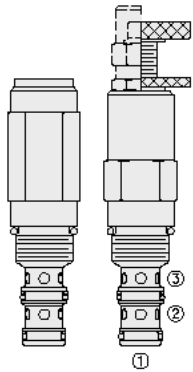
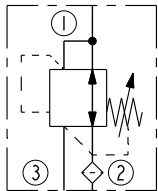


Pressure reducing relieving valve

Overview



SYMBOL



Description

PR50-36XX is a spool type, pilot operated, hydraulic pressure reducing/relieving valve with internal pilot and internal spring chamber drain, designed to act as a pressure regulating device for secondary circuits. Port 2 may be protected by 60 mesh, 250 micron rated screen with option S.

Operation

In its steady state, the PR50-36XX allows flow to pass bidirectionally from port 2 to port 1, with the spring chamber constantly drained at port 3. Upon attainment of a predetermined pressure at port 1, the spool shifts to restrict inlet flow from port 2, thereby regulating pressure at port 1. In this mode the valve will also relieve port 1 to port 3.

Ratings

Pressure Ratings

Pressure rating: 5000 psi [344.7 bar] note: Ports 1 and 2

1000 psi [69 bar] note: Port 3

Proof pressure: 7000 psi [482.6 bar]

Burst pressure: 14000 psi [965.3 bar]

Flow Ratings

Flow rating: 15 gpm [56.8 lpm]

Maximum internal leakage: 0.045 gpm [0.170 lpm] note: With maximum adjustment setting and with inlet pressure of 3500 psi [241 bar]

Temperature Ratings

Operating fluid temperature: -65 °f to 225 °f [-54 °c to 107 °c] note: Polyurethane

Storage temperature: -40 °f to 160 °f [-40 °c to 70 °c]

Ambient temperature: -40 °f to 194 °f [-40 °c to 90 °c]

Flow Ratings

Maximum pilot flow: 0.170 lpm (0.045 gpm) note: With maximum adjustment setting and with inlet pressure of 241 bar (3500 psi)

Operating Parameters

Fluids: Mineral based or synthetic hydraulic fluid note: With Lubricating properties.

Fluid viscosity range: 7.4 to 420 cSt

Maximum operating contamination level: 20/18/14 per ISO 4406

Pressure reducing relieving valve

Properties

Corrosion protection: 960 hr salt spray per ASTM B117 note: GPR50-36XX

Unit weight: 0.57 lb [0.26 kg] note: PR50-36A

0.62 lb [0.28 kg] note: PR50-36B

0.66 lb [0.30 kg] note: PR50-36C

0.55 lb [0.25 kg] note: PR50-36F

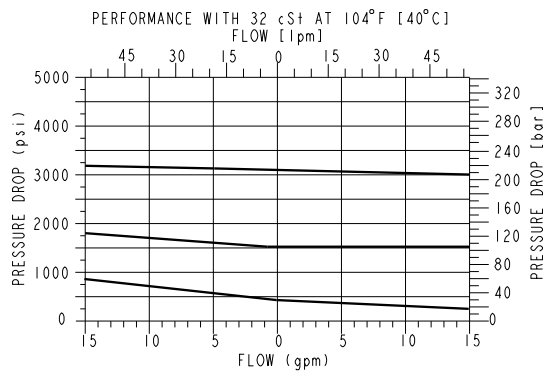
0.55 lb [0.25 kg] note: PR50-36H

0.66 lb [0.30 kg] note: PR50-36L

Internal wetted surface area: 22.4 in² [145 cm²] note: "A", "B", "C" and "L"

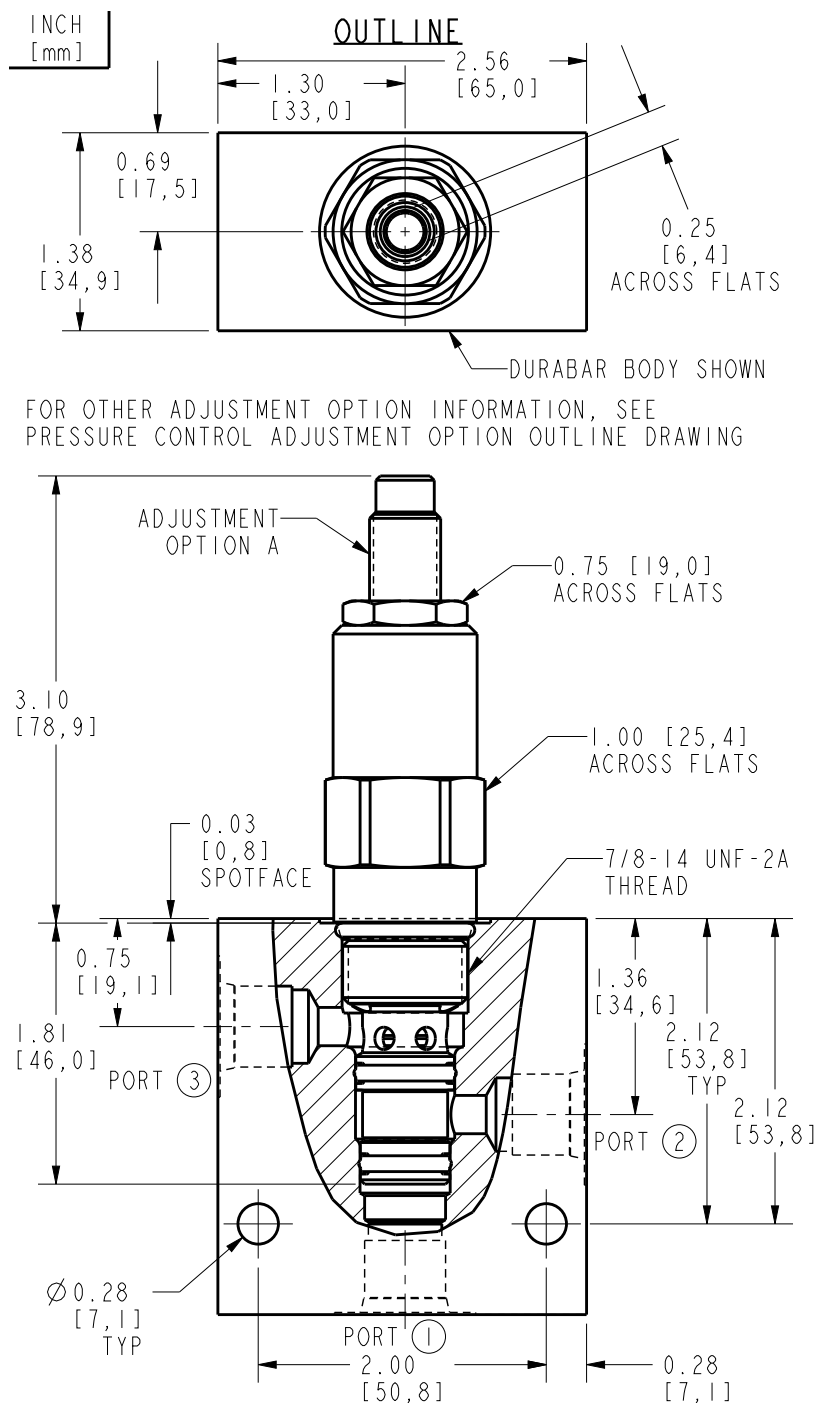
25.1 in² [162 cm²] note: "F" and "H"

Performance



Pressure reducing relieving valve

Dimensions



ALL DIMENSIONS ARE FOR REFERENCE ONLY

Installation Specifications

Cavity: VC10-3

Cartridge installation torque: 33-37 ft-lb [44.7-50.2 N-m]

24-26 ft-lb [32.5- 35.3 N-m] note: "H" plug

Orientation restriction: None

Pressure reducing relieving valve

Accessories

Seal kit: 240 SK10-3P-BM note: Polyurethane

SK10-3U-OO note: Urethane

Order Code

ORDERING INFORMATION:

XPR50-36XX-X-X-XX/XXXX

PLATING:

STANDARD PLATING - BLANK
PLATING FOR 960 hr - G
SALT PROTECTION

BASE MODEL NUMBER:ADJUSTMENT OPTIONS:

0.25" [6,4] HEX ALLEN HEAD - A
Ø 1.50" [38,1] ALUMINUM KNOB - B
OPTION "A" WITH COVER CAP - C
FACTORY PRESET, NONADJUSTABLE - F
FACTORY PRESET, HIDDEN ADJUSTMENT - H
OPTION C WITH LOCK WIRE HOLES - L

SCREEN OPTION:

NONE - BLANK
SCREEN - S

PORTING:

CARTRIDGE ONLY - 0

SEAL OPTION:

POLYURETHANE - P

PRESSURE SETTING RANGE:

400-1500 psi - 15
[27,6-103,4 bar]
1500-3000 psi - 30
[103,4-206,8 bar]
3000-5000 psi - 50
[206,8-344,7 bar]

PRESSURE SETTING:

FOR EXAMPLE:

(IN psi)
3500 psi - 35
(IN bar)
230 bar - M230

Model Options

PR50-36F-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)

Pressure reducing relieving valve

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
15	27.6 to 103.4 bar (400 to 1500 psi) Spring Range
30	103.4 to 206.8 bar (1500 to 3000 psi) Spring Range
50	206.8 to 344.7 bar (3000 to 5000 psi) Spring Range

S Setting

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