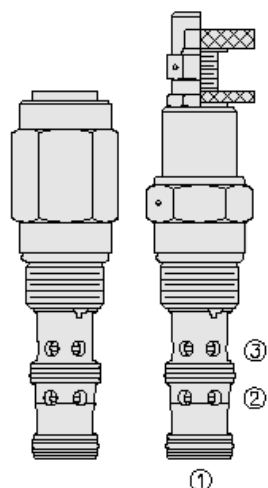




Overview



Description

The PR12-36X 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.

Operation

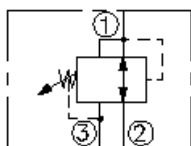
In its steady state, the PR12-36X allows flow to pass bidirectionally from port 2 to port 1, with the spring chamber constantly drained at port 3. Upon attainment of a predetermined pressure at port 1, the spool shifts to restrict inlet flow from port 2, thereby regulating pressure at port 1. In this mode the valve will also relieve port 1 to port 3.

note: tank pressure is additive to regulated pressure.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 207 bar (3000 psi).

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)	- Note: At all ports
Burst pressure	1034 bar (15000 psi)	

Flow Ratings

Flow rating	189.2 lpm (50 gpm)	
Maximum pilot flow	0.170 lpm (0.045 gpm)	- Note: With maximum adjustment setting and with inlet pressure of 241 bar (3500 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N 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	960 hr salt spray per ASTM b117 (gpr12-36x)
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Operating Parameters

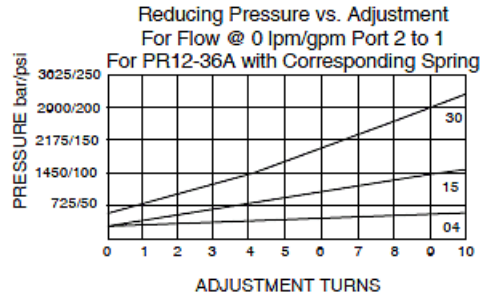
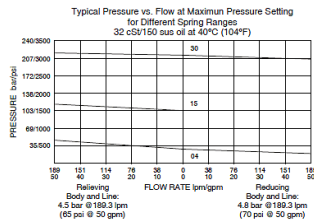
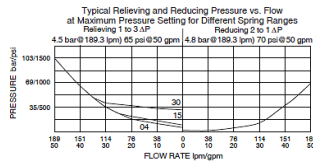
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406 - Note: All surfaces in contact with working fluid to meet jds-g169, 5.6 cleanliness level 0.5 mm (0.02 in) - Note: Absolute maximum particle size. Packaging to maintain cleanliness level during shipping and handling 1.1 mg - Note: Maximum allowable contaminant



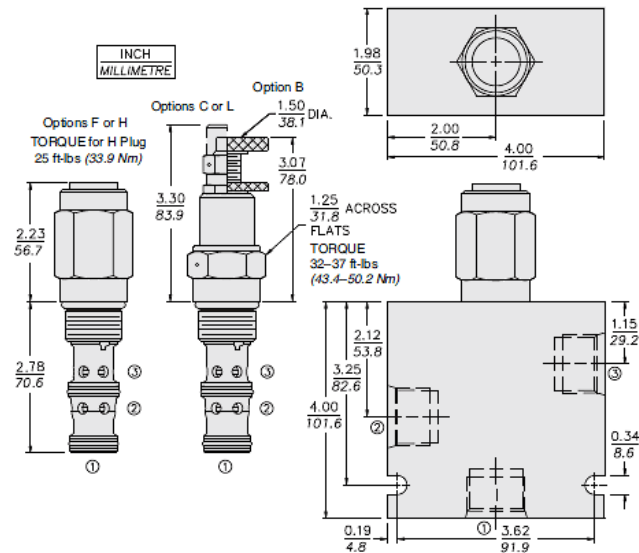
Properties

Unit weight	0.41 kg (0.90 lb)	- Note: PR12-36A
	0.43 kg (0.94 lb)	- Note: PR12-36B
	0.45 kg (0.99 lb)	- Note: Pr12-36c/l
	0.46 kg (1.01 lb)	- Note: Pr12-36f/h
Internal wetted surface area	260 cm ² (40.3 in ²)	- Note: Pr12-36a/b/c/l
	279 cm ² (43.2 in ²)	- Note: Pr12-36f/h

Performance



Dimensions



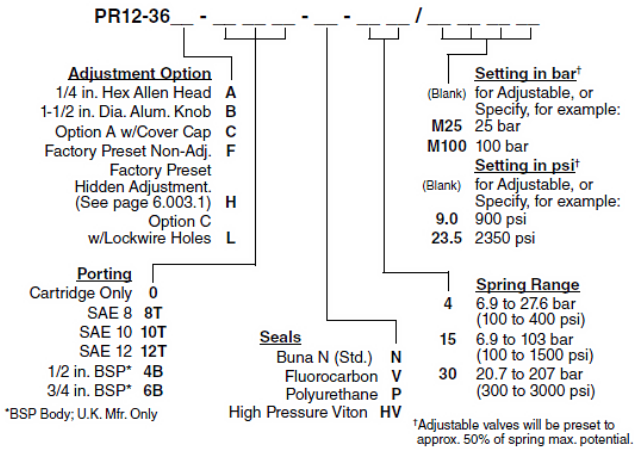
Installation Specifications

Cavity	VC12-3
Cartridge installation torque	44.8 to 50.2 N-m (33 to 37 ft-lb)
H style plug torque	33.9 N-m (25 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK12-3X-BM	- Note: X=seal options
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Order Code



Model Options

PR12-36DFG-H-J-R/S

D Rapid Response Option

CODE	DESCRIPTION
BLANK	Standard
R	Rapid Response

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
8T	Aluminum SAE 8
10T	Aluminum SAE 10
12T	Aluminum SAE 12
12TD	Ductile Iron SAE 12
6B	Aluminum BSPP 3/4" (6)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

R Spring

CODE	DESCRIPTION
04	6.9 to 27.6 bar (100 to 400 psi) Spring Range



CODE	DESCRIPTION
15	10.3 to 103 bar (150 to 1500 psi) Spring Range
30	20.7 to 207 bar (300 to 3000 psi) Spring Range

S Setting

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