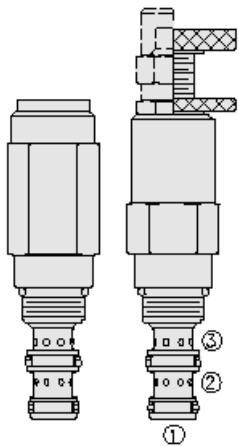




Overview



Description

The pr58-38xxx is a screw in, cartridge style, direct acting, spool type, hydraulic pressure reducing/relieving valve with internal spring chamber drain, and spool damping chamber.

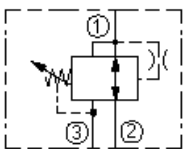
Operation

It is designed to act as a pressure regulating device for secondary circuits. In its steady state, the pr58-38xxx 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 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.. Port 2 may be protected by a 60 x 60 mesh screen.

Features

- Adjustments cannot be backed out of the valve.
- Adjustments prohibit springs from going solid.
- Optional spring ranges to 248 bar (4200 psi)
- Optional 233 micron screen.
- Hardened spool and cage for long life.
- Compact, industry-common size.

Symbol



Ratings

Pressure Ratings

Pressure rating	344.7 bar (5000 psi) 68.9 bar (1000 psi)	- Note: Maximum tank port pressure
Proof pressure	379.2 bar (5500 psi)	
Burst pressure	896.3 bar (13000 psi)	

Flow Ratings

Flow rating	18.9 lpm (5 gpm)
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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 polyurethane and urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

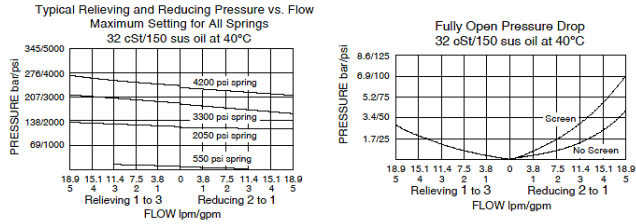
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406 (tank port pressure is additive to pressure setting at ratio of 1:1)

Properties

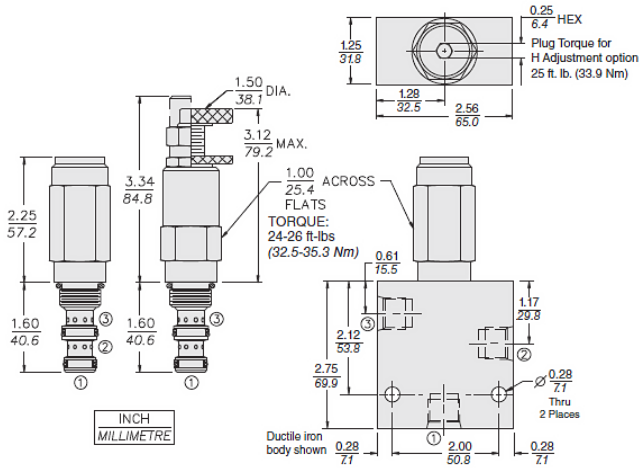
Unit weight	0.23 kg (0.52 lb)	- Note: A
	0.26 kg (0.57 lb)	- Note: B
	0.28 kg (0.61 lb)	- Note: C I
	0.22 kg (0.49 lb)	- Note: F h
	0.22 kg (0.49 lb)	- Note: F h
Internal wetted surface area	141 cm ² (21.9 in ²)	- Note: A b c I
	166 cm ² (25.7 in ²)	- Note: F h



Performance



Dimensions



Installation Specifications

Cavity	VC08-3
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb) 47.5 N-m (35 ft-lb) - Note: Maximum
Plug torque	47.5 N-m (25 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-3X-BM - Note: X = seal option SK08-3U-OO - Note: X = seal option
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Order Code

PR58-38 /

Spool Option Standard (Blank) Rapid Response R	Adjustment Option 1/4 in. Hex Allen Head A 1-1/2 in. Dia. Alum. Knobs B Option A with Cover Cap C Factory Preset Non-Adj. F* Factory Preset Hidden Adjustment H* Option C w/Lockwire Holes L	Screen Option None (Blank) 233µ on Inlet Port 2 S	Relief setting in bar† (Blank) for Adjustable, or Specify, for example: M25 25 bar M100 100 bar	Relief setting in psi† (Blank) for Adjustable, or Specify, for example: 10.0 1000 psi 23.5 2350 psi	Spring Range 05 10.3 to 37.9 bar (150 to 550 psi) 20 34.5 to 141.4 bar (500 to 2050 psi) 32 55.2 to 227.5 bar (800 to 3300 psi) 42 227.2 to 269.6 bar (3301 to 4200 psi)	Seals Buna N (Std.) N Fluorocarbon V Polyurethane P Urethane U
Porting Cartridge Only SAE 6 SAE 6 1/4 in. BSP* 2B 1/4 in. BSP* 2BD 3/8 in. BSP* 3B 3/8 in. BSP* 3BD	Seals Note: Polyurethane or urethane seals are required for operation over 241 bar (3500 psi).	Note: Due to manufacturing tolerances, it may be possible to adjust the valve either lower or higher than the nominal ratings shown above.				

* If the valve is adjusted beyond the recommended maximum pressure range for the F and H style adjuster options, the valve may not open to relieve system pressure.

† Adjustable valves will be preset to approximately 50% of spring max.

*BSP Body, U.K. Mfr Only

Model Options

PR58-38DFG-H-J-R/S

D Rapid Response Option

CODE	DESCRIPTION
BLANK	Standard



CODE	DESCRIPTION
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

G Screen

CODE	DESCRIPTION
BLANK	NONE
S	60 Mesh Screen

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
05	10.3 to 37.9 bar (150 to 550 psi) Spring Range
20	34.5 to 141.3 bar (500 to 2050 psi) Spring Range
32	55.2 to 227.5 bar (800 to 3300 psi) Spring Range
42	227.6 to 289.6 bar (3301 to 4200 psi) Spring Range

S Setting

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