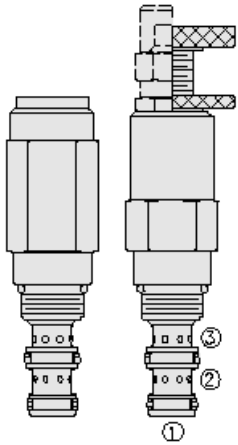




Overview



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.

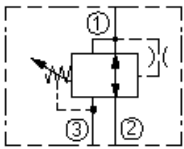
Operation

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) -26 to 204 °C (-15 to 400 °F) -54 to 107 °C (-65 to 225 °F)	- Note: With buna N seals - Note: With fluorocarbon seals - 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

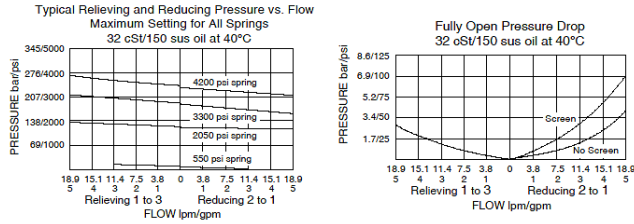
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406 (tank port pressure is additive to pressure setting at ratio of 1:1)

Properties

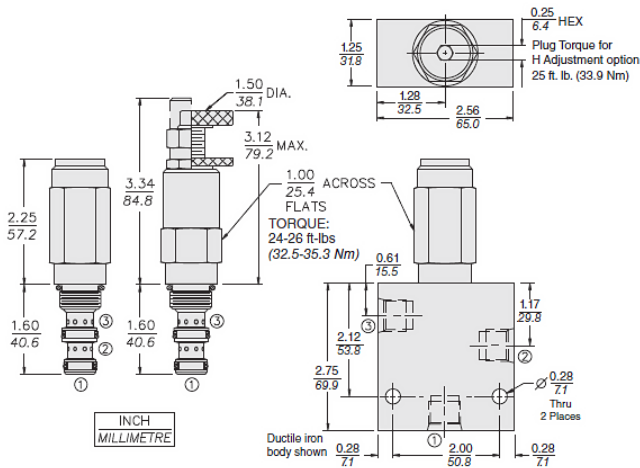
Unit weight	0.23 kg (0.52 lb)	- Note: A
	0.26 kg (0.57 lb)	- Note: B
	0.28 kg (0.61 lb)	- Note: C I
	0.22 kg (0.49 lb)	- Note: F h
Internal wetted surface area	141 cm ² (21.9 in ²)	- Note: A b c I
	166 cm ² (25.7 in ²)	- Note: F h



Performance



Dimensions



Installation Specifications

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

Accessories

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

Order Code

PR58-38

- Spool Option**
 - Standard (Blank)
 - Rapid Response R
- Adjustment Option**
 - A 1/4 in. Hex Allen Head
 - B 1-1/2 in. Dia. Alum. Knobs
 - C Option A with Cover Cap
 - F* Factory Preset Non-Adj.
 - H* Factory Preset Hidden Adjustment
 - L Option C w/Lockwire Holes
- Screen Option**
 - None (Blank)
 - S 233µ on Inlet Port 2
- Porting**
 - Cartridge Only 0
 - SAE 6 6T
 - SAE 6 6TD
 - 1/4 in. BSP* 2B
 - 1/4 in. BSP* 2BD
 - 3/8 in. BSP* 3B
 - 3/8 in. BSP* 3BD
- Seals**
 - Buna N (Std.) N
 - Fluorocarbon V
 - Polyurethane P
 - Urethane U
- 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 289.6 bar (3301 to 4200 psi)

* 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.

Note: Polyurethane or urethane seals are required for operation over 241 bar (3500 psi).

*BSP Body: U.K. Mfr Only

POSITION	CODE	DESCRIPTION
		PR58-38DFG-H-J-R/S
D		Rapid Response Option
D	BLANK	Standard
D	R	Rapid Response



POSITION	CODE	DESCRIPTION
F		Adjustment Option
F	A	1/4" Hex Allen Head
F	B	1-1/2" Diameter Aluminum Knob with Aluminum Lock Knob
F	C	1/4" Hex Allen Head with Cover Cap
F	F	Factory Preset Non-Adjustable
F	H	Factory Preset Hidden Adjustment
F	L	1/4" Hex Allen Head with Cover Cap and Lockwire Holes
G		Screen
G	BLANK	NONE
G	S	60 Mesh Screen
H		Line Body
H	0	No Body
H	4T	Aluminum SAE 4
H	6T	Aluminum SAE 6
H	6TD	Ductile Iron SAE 6
H	8TD	Ductile Iron SAE 8
H	3B	Aluminum BSPP 3/8" (3)
H	3BD	Ductile Iron BSPP 3/8" (3)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
R		Spring
R	05	10.3 to 37.9 bar (150 to 550 psi) Spring Range
R	20	34.5 to 141.3 bar (500 to 2050 psi) Spring Range
R	32	55.2 to 227.5 bar (800 to 3300 psi) Spring Range
R	42	227.6 to 289.6 bar (3301 to 4200 psi) Spring Range
S		Setting
S	MXXX	Spring Setting in XXX bar
S	XX	Spring Setting in XX psi (x 100)