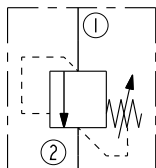


Pilot operated relief valve

Overview



SYMBOL



Description

Is a screw-in, cartridge style, pilot operated (two stage), spool type relief valve, intended for use as a pressure limiting device in demanding hydraulic circuits which require fast response and low hysteresis.

Operation

The RV52-26XX blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the pilot relief off its seat, allowing the main stage to shift, opening port 1 to port 2. Note: this valve cannot be used in cross-over relief applications.

Ratings

Pressure Ratings

Pressure rating: 5000 psi [344.7 bar] note: Port 1

1500 psi [103.4 bar] note: Port 2

Proof pressure: 10000 psi [689.5 bar]

Burst pressure: 20000 psi [1379.0 bar]

Flow Ratings

Flow rating: 50 gpm [189.3 lpm] note: At Max pressure

Maximum internal leakage: 12 in³ /min [197 ml/min] max note: At port 2 at 85% of nominal setting

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 160 °f [-40 °c to 70 °c]

Operating Parameters

Control pressure setting: Pressure evident at 2 gpm [7.6 lpm]

Adjustable pressure range: 600 psi [41.4 bar] to 5000 psi [344.7 bar]

Fluids: Mineral based or synthetic with Lubricating properties.

Fluid viscosity range: 7.4-420 cSt

Maximum operating contamination level: 18/16/13 per ISO 4406

Pilot operated relief valve

Properties

Corrosion protection: 960 hr salt spray per ASTM B117 note: GRV52-26X

Unit weight: 0.78 lb [0.35 kg] note: A

0.83 lb [0.38 kg] note: B

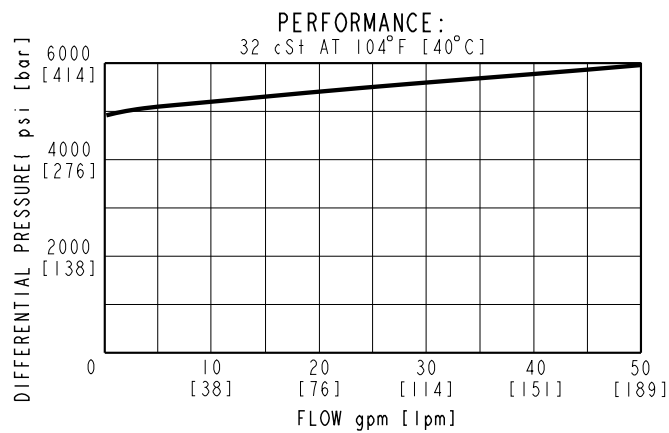
0.88 lb [0.40 kg] note: C, L

0.89 lb [0.40 kg] note: F, H

Internal wetted surface area: 32.4 in² [209 cm²] note: "A, B, C, L"

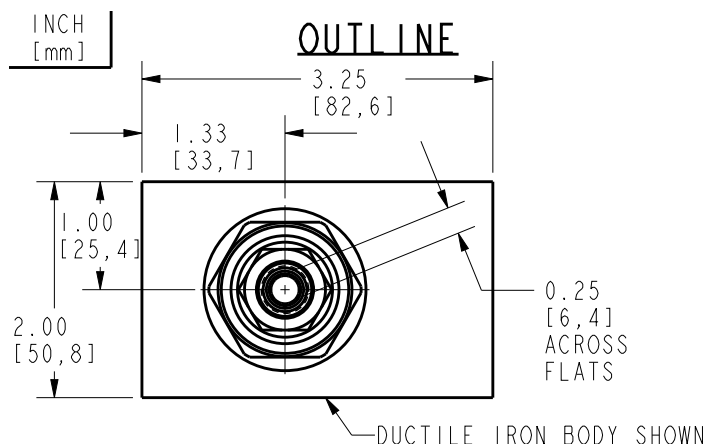
34.3 in² [221 cm²] note: "F, H"

Performance

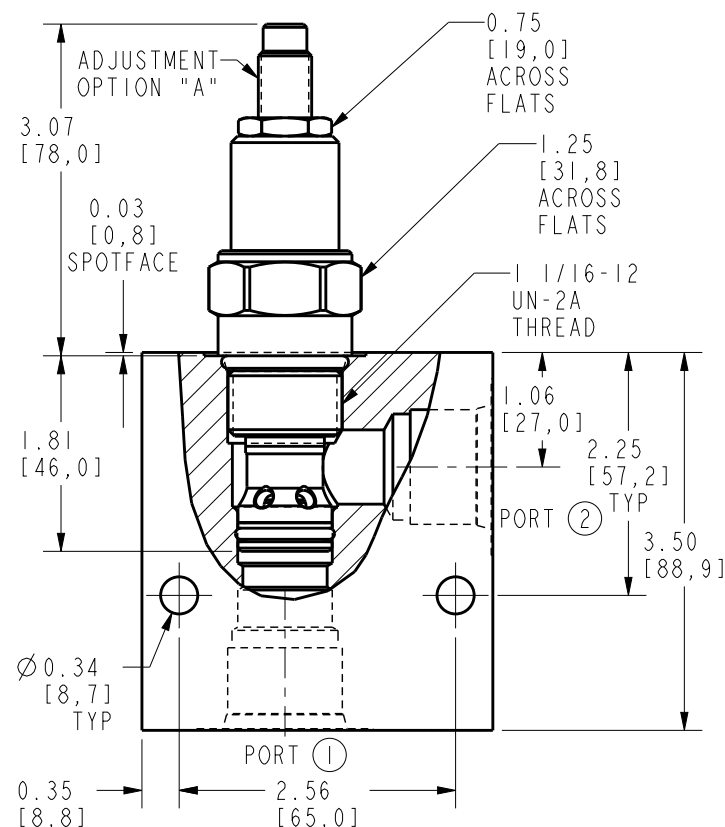


Pilot operated relief valve

Dimensions



FOR OTHER ADJUSTMENT OPTION INFORMATION,
SEE PRESSURE CONTROL ADJUSTMENT OPTION
OUTLINE DRAWING



ALL DIMENSIONS ARE FOR REFERENCE ONLY

Installation Specifications

Cavity: VC12-2

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 torque

Orientation restriction: None

Pilot operated relief valve

H style plug torque: 32.5 to 35.3 N-m (24 to 26 ft-lb)

Accessories

Seal kit: SK12-2P-B

Order Code

ORDERING INFORMATION:

XRV52-26XX-X-X-XX/XXXX

PLATING:STANDARD PLATING - BLANK
PLATING FOR 960 hr - G
SALT PROTECTIONBASE 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* RAPID RESPONSE OPTION:STANDARD - BLANK
RAPID RESPONSE - RPORTING:

CARTRIDGE ONLY - 0

SEAL OPTION:

POLYURETHANE - P

PRESSURE SETTING RANGE:600-5000 psi - 50
[41,4-344,7 bar]PRESSURE SETTING:

FOR EXAMPLE

* THE RAPID RESPONSE OPTION MAY
CAUSE THE VALVE TO BECOME UNSTABLE.
CONSULT FACTORY FOR APPLICATION
ASSISTANCE WHEN SELECTING THIS OPTION
(IN psi) 5000 psi - 50
(IN bar) 350 bar - M230

Model Options

ARV52-26DF-H-J-R/S

A Plating Option

CODE	DESCRIPTION
Blank	Standard
G	960 h Salt-spray rating

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

Pilot operated relief valve

H Line Body

CODE	DESCRIPTION
0	No Body
10T	Aluminum SAE 10
12T	Aluminum SAE 12
16T	Aluminum SAE 16
12TD	Ductile Iron SAE 12
16TD	Ductile Iron SAE 16
8B	Aluminum BSPP 1" (8)
8BD	Ductile Iron BSPP 1" (8)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
50	83 to 344.7 bar (1200 to 5000 psi) Spring Range

S Setting

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