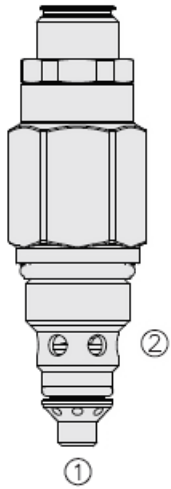
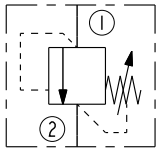


Relief valve

Overview



SYMBOL



Description

The RVD58-20X is a screw-in, cartridge style, direct acting poppet type relief valve intended for use as a pressure limiting device for common hydraulic circuit protection.

Operation

The RVD58-20X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to force the poppet off its seat. The cartridge offers fast response to load changes in circuits requiring low hysteresis, low pressure rise, and low internal leakage.

Ratings

Pressure Ratings

Pressure rating: 5076 psi [350 bar] note: Port 1

3000 psi [207 bar] note: Port 2

Proof pressure: 10000 psi [689 bar] note: Port 1

Burst pressure: 20000 psi [1379 bar]

Flow Ratings

Flow rating: 10 gpm [37.9 lpm] note: Port 1 to 2 at Max pressure

Maximum internal leakage: 5 drops/min [0.25 ml/min] to 85% of crack pressure

Temperature Ratings

Operating fluid temperature: -40 °f to 212 °f [-40 °c to 100 °c] note: With Buna N seals

-15 °f to 400 °f [-26 °c to 204 °c] note: With fluorocarbon seals

-65 °f to 225 °f [-54 °c to 107 °c] note: With polyurethane seals

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

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

Pressure Ratings

Crack pressure defined: pressure evident at at 0.95 lpm (0.25 gpm)

Operating Parameters

Control pressure setting: Pressure evident at 0.25 gpm [0.95 lpm]

Reseat pressure: Nominal 90% of crack pressure

Relief valve

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

Properties

Corrosion protection: 230 hr salt spray per ASTM B117 note: RVD58-20X

960 Hr salt spray per ASTM B117 note: GRVD58-20X

Unit weight: 0.28 lb [0.13 kg]

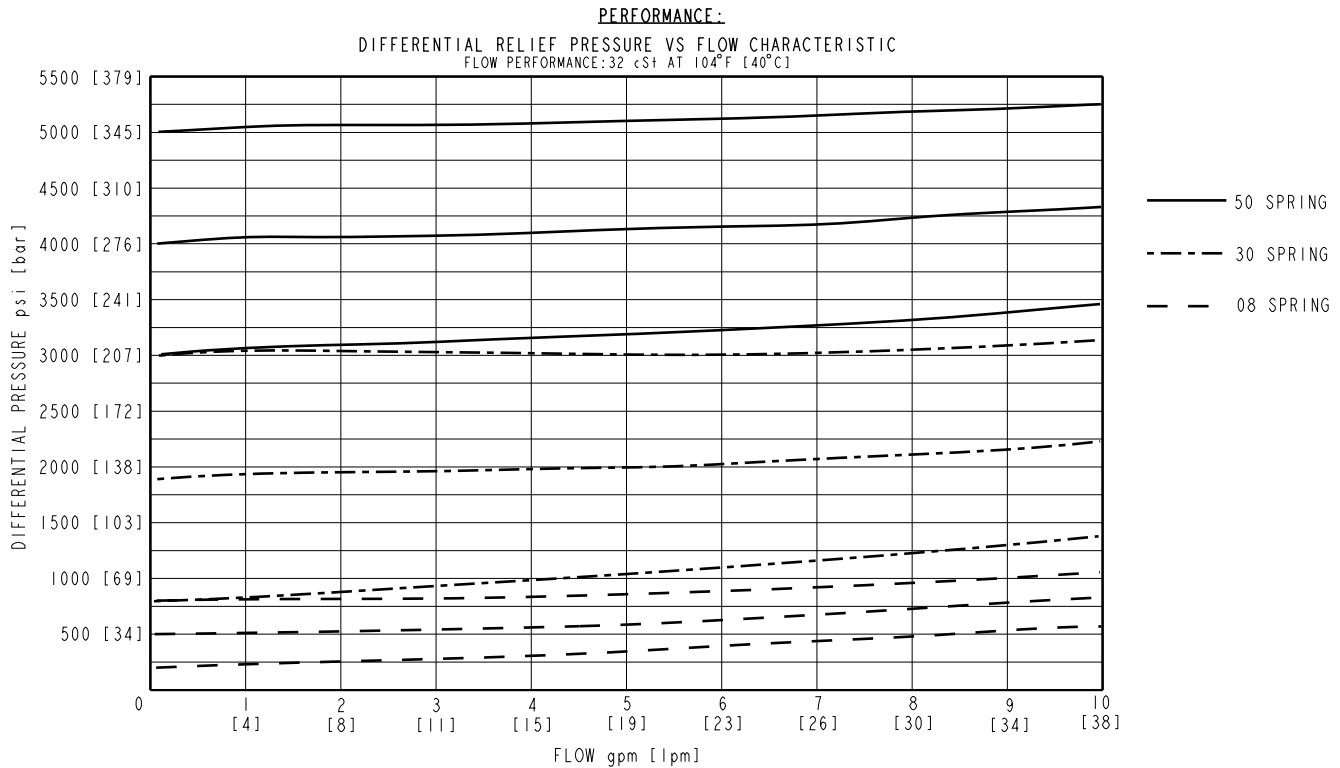
Internal wetted surface area: 13.8 in [89.0 cm]

Approximate pressure increment per adjuster turn: 138 psi [9.5 bar] note: Spring code 08

536 psi [37 bar] note: Spring code 30

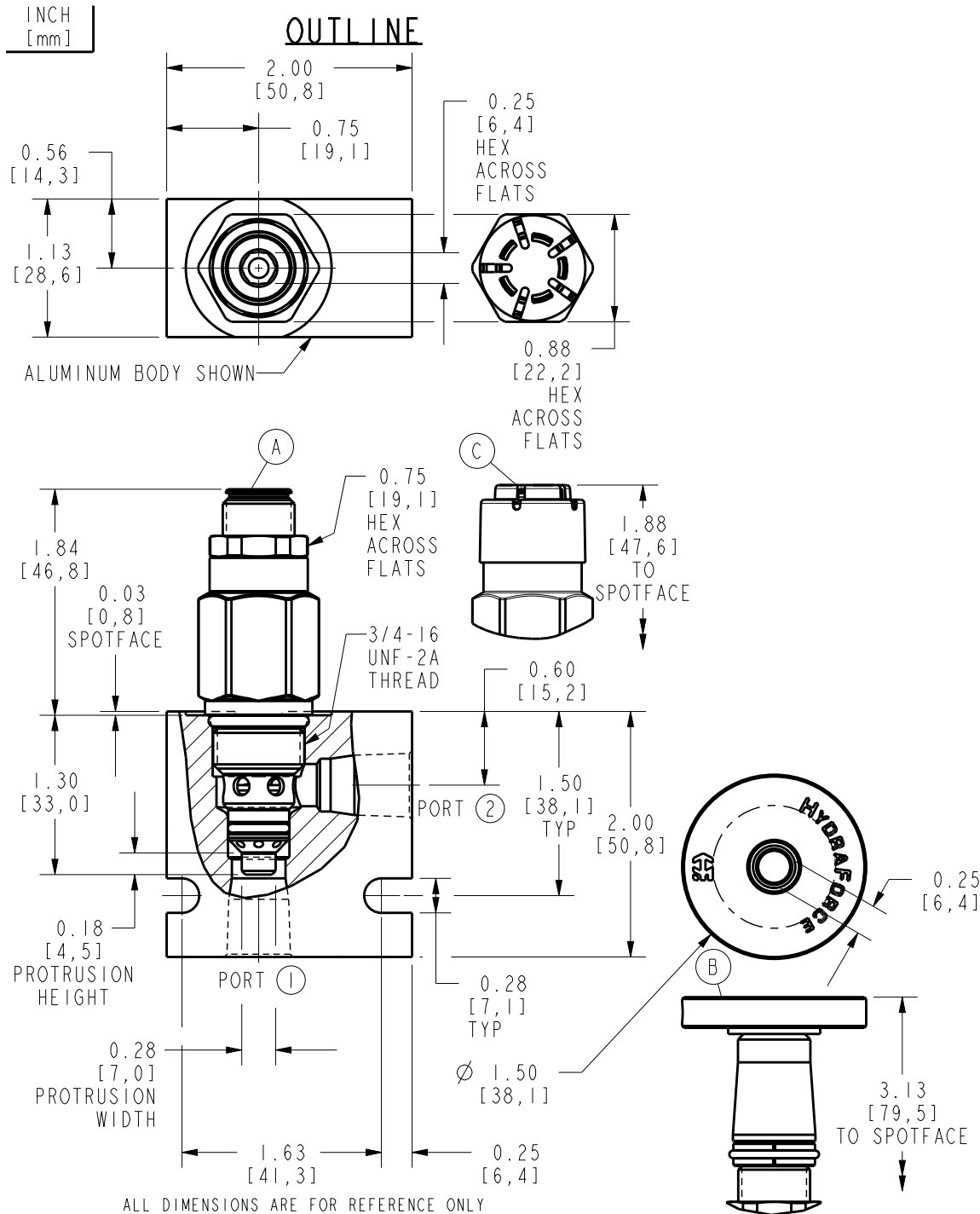
949 psi [65.5 bar] note: Spring code 50

Performance



Relief valve

Dimensions



Installation Specifications

Cavity: VC08-2 note: Variation B

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

Orientation restriction: None

Adjuster torque: 17.6 N-m (13 ft-lb) note: Maximum torque to apply when backing out adjuster

Relief valve

Hex nut torque: 10 ±1.0 ft-lb [13.6 ±1.4 N-m]

Accessories

Seal kit: SK08-2HN-O

SK08-2HV-O

SK08-2P-O

Black Tamper-proof Cap: Part No. 4618450

Order Code

ORDERING INFORMATION:

XRVD58-20X-0-X-XX/XXXX

PLATING OPTIONS:

230 Hr PROTECTION - STANDARD
960 Hr PROTECTION - G

BASE MODEL NUMBER:ADJUSTMENT OPTIONS:

0.25 [6,4] HEX ALLEN HEAD - A
OPTION A WITH ADJUSTMENT KIT - B
OPTION A WITH COVER CAP - C

PORTING:

CARTRIDGE ONLY - 0

SEAL OPTION:

BUNA N - N
FLUOROCARBON - V
POLYURETHANE - P

SPRING CODE:

200 TO 800 psi - 08
[13,7 TO 55,1 bar]
800 TO 3000 psi - 30
[55,1 TO 206,8 bar]
3000 TO 5076 psi - 50
[206,8 TO 350,0 bar]

PRESSURE SETTING:

FOR EXAMPLE:
(IN psi)
3000 psi - 30.0
(IN bar)
210 bar - M210

Model Options

RVD58-20F-H-J-R/S*F Adjustment Option*

CODE	DESCRIPTION
A	1/4 in Allen Head

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

Relief valve

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

R Spring

CODE	DESCRIPTION
8	14 to 55 bar (200 to 800 psi) Spring Range
30	55 to 207 bar (800 to 3000 psi) Spring Range
50	207 to 350 bar (3000 to 5075 psi) Spring Range

S Setting

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