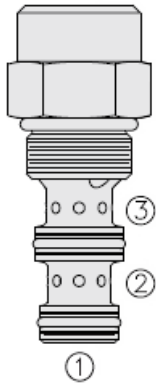


Piloted directional valve

Overview



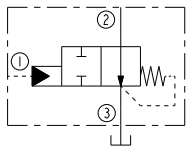
Description

The PD08-35 is a screw-in, cartridge style, pilot-operated, spool type, normally open, hydraulic directional valve.

Operation

In neutral position the valve allows flow from port 2 to 3. The spring bias chamber is internally vented to port 3. On remote pilot signal at port 1, the valve's spool shifts to block flow from port 2 to 3. Pressure on port 3 will directly (1:1) affect the pilot pressure required and must be added to the bias spring value.

SYMBOL



Ratings

Pressure Ratings

Pressure rating: 3500 psi [241 bar]

Flow Ratings

Flow rating: 5 gpm [18.9 lpm]

Maximum internal leakage: 4 in³/min [65 ml/min] note: At 3500 psi [241 bar]

Zero leakage from port 1 to 2 note: With Sealed spool

Temperature Ratings

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

Ambient temperature: -40 °f to 194 °f [-40 °c to 90 °c]

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 seals

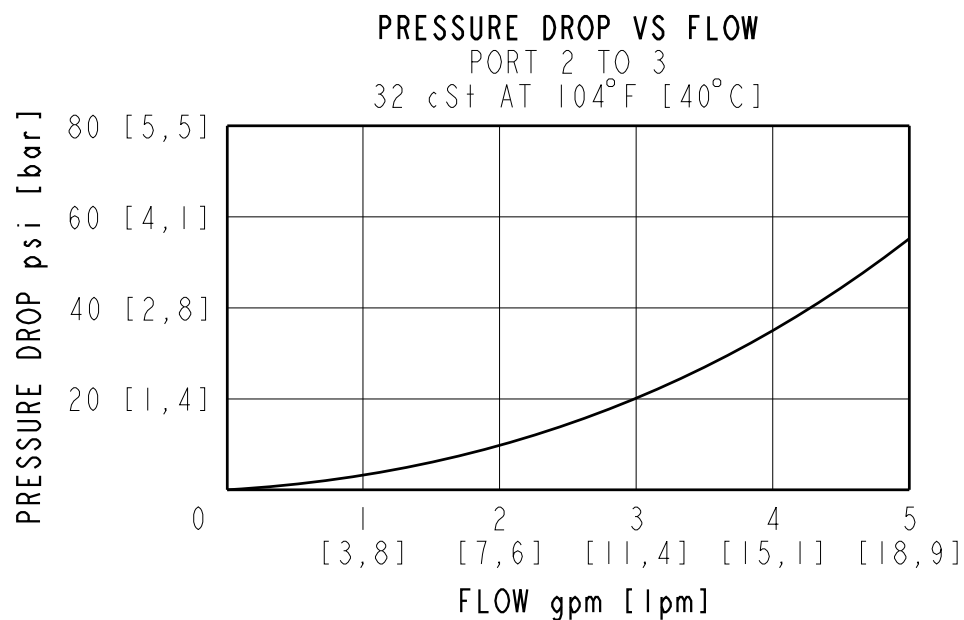
Properties

Unit weight: 0.22 lb [0.10 kg]

Internal wetted surface area: 16.0 in² [103 cm²]

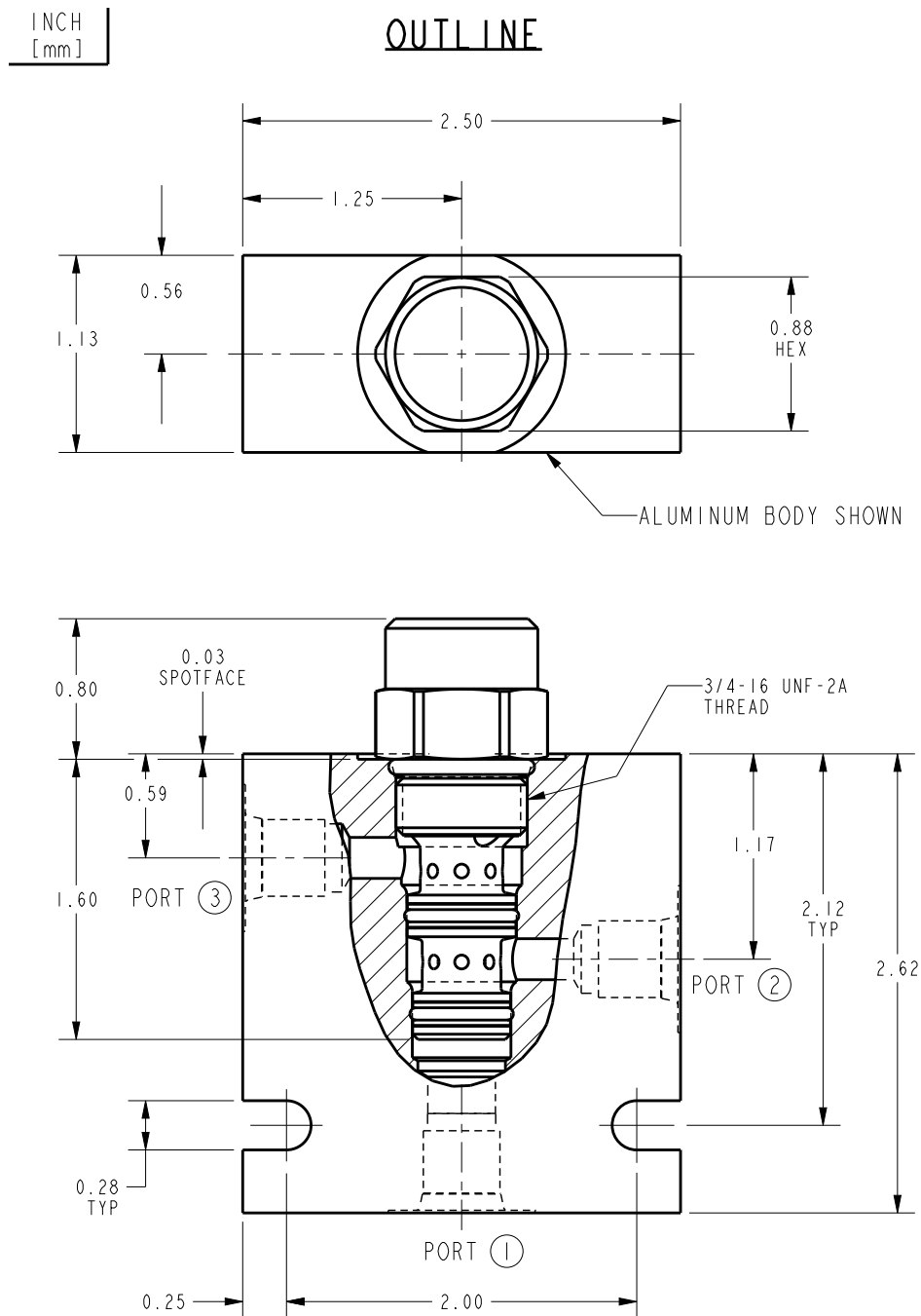
Piloted directional valve

Performance



Piloted directional valve

Dimensions



ALL DIMENSIONS ARE FOR REFERENCE ONLY

Installation Specifications

Cavity: VC08-3

Cartridge installation torque: 19-21 ft-lb [25.8-28.5 N-m]

Maximum allowable torque: 35 ft-lb [47.6 N-m]

Orientation restriction: None

Piloted directional valve

Accessories

Seal kit: SK08-3X-MM note: X = seal option

Order Code

ORDERING INFORMATION:

PD08-35-X-XX-XXX

BASE MODEL NUMBER

PORTING

CARTRIDGE ONLY - 0

SEALS

BUNA N - N
FLUOROCARBON - V
POLYURETHANE - P
BUNA N - NS
FLUOROCARBON - VS
POLYURETHANE - PS

} SEALED
SPOOL *

BIAS SPRING VALUE

20 psi [1,4 bar] - 20
40 psi [2,8 bar] - 40
60 psi [4,1 bar] - 60
110 psi [7,6 bar] - 110
170 psi [11,7 bar] - 170

* NS, VS AND PS SEAL OPTIONS REQUIRE
170 psi [11,7 bar] BIAS SPRING MINIMUM

Model Options

PD10-35-H-J-R

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
NS	Buna-N with a Sealed Spool
V	Fluorocarbon
VS	Fluorocarbon with a Sealed Spool
P	Polyurethane

Piloted directional valve

CODE	DESCRIPTION
PS	Polyurethane with a Sealed Spool
U	PPDI Urethane
US	PPDI Urethane with a Sealed Spool

R Spring

CODE	DESCRIPTION
20	20 psi Bias Spring
40	40 psi Bias Spring
60	60 psi Bias Spring
110	110 psi Bias Spring
170	170 psi Bias Spring