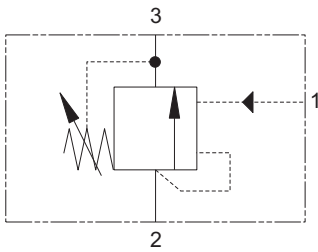


PUV3-10 - Pilot unloading valve

Poppet, internal or external pilot operated, normally closed, unloading
 4 L/min (1 USgpm) • 210 bar (3000 psi)



Operation

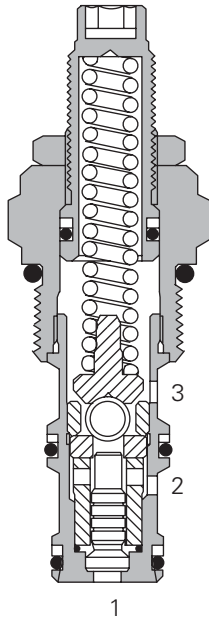
This valve blocks flow from port 2 to port 3, until either the predetermined spring setting has been reached, or an external pilot has been applied to port 1. At this time flow is then allowed from port 2 to port 3.

The valve will reset at a percentage of the unloading setting as called out in the model code. This valve can be used alone for low flow applications or used as the pilot stage of a two-stage unloader valve (see application example). The main stage of the unloader is typically a DPS2 logic element.

Features

Hardened poppet and seat.
 Very low leakage when piloted closed without exerting excessive force on the seat.

Sectional view



Performance data

Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	4 L/min (1 USgpm)
Unloading pressure adjustment range	20-210 bar (300-3000 psi)
Cavity	C-10-3
Standard housing materials	Aluminum
Temperature range	-40° to 120°C (-40° to 248°F)
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness Code 18/ 16/13
Weight cartridge only	0,15 kg (0.33 lbs)
Seal kits	565812 Buna-N 889611 Viton®

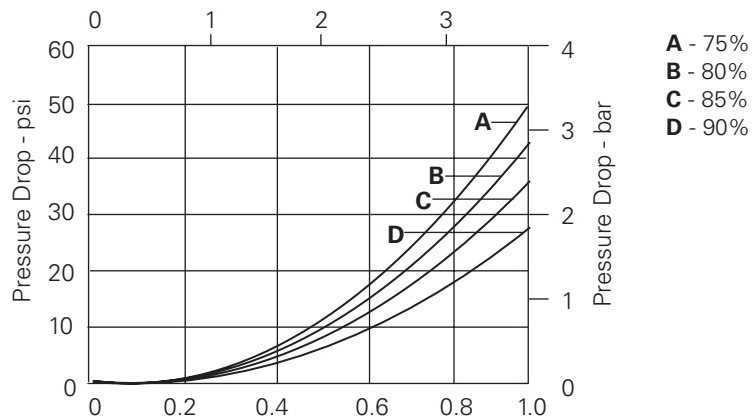
Viton is a registered trademark of E.I. DuPont

Description

The PUV3 is a two-way, normally closed, externally or internally pilot operated screw-in cartridge type pilot unloading valve.

Pressure drop curves

Cartridge only
 Piloted full open

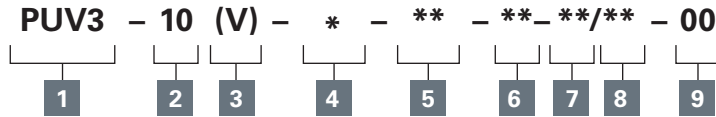


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PUV3-10 - Pilot unloading valve

Poppet, internal or external pilot operated, normally closed, unloading
4 L/min (1 USgpm) • 210 bar (3000 psi)

Model code



1 Function

PUV3 - Pilot unloading valve

2 Size

10 - 10 size

3 Seal

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
S - Screw

5 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminum light duty	Aluminum fatigue rated
6T	SAE 6	566162	-
3B	3/8" BSPP	02-173358	-
6H	SAE 6	-	876704
8H	SAE 8	-	876711
2G	1/4" BSPP	-	876705
3G	3/8" BSPP	-	876714

See section J for housing.

6 Loading (closing) pressure, as percentage of unloading pressure

75 - 75%
80 - 80%
85 - 85%
90 - 90%

7 Pressure range

Note: Code based on pressure in psi.
15 - 20-100 bar.
(300-1500 psi)
30 - 100-210 bar.
(1500-3000 psi)

8 Unloading pressure setting

Within ranges in **7**
Blank - Normal factory setting at approximate mid-range. User requested settings in 3,45 bar (50 psi) steps, Coded as in the following examples:
10 - 70 bar (1000 psi)
9.5 - 65 bar (950 psi)

9 Special features

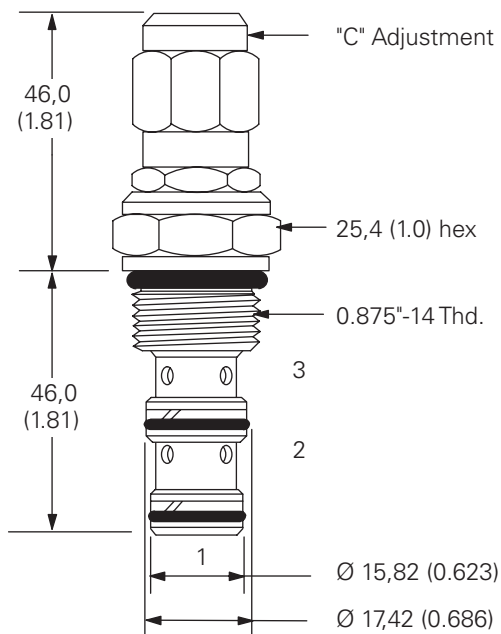
00 - None
(Only required if valve has special features, omitted if "00.")

Dimensions

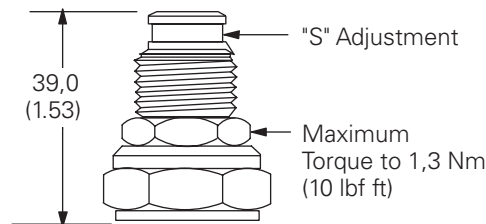
mm (inch)

Torque cartridge in aluminum housing to 47-54 Nm (35-40 ft. lbs).

Cartridge only



Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.