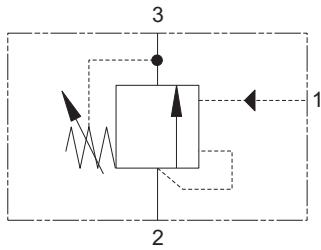


# PUV3-10 - Pilot Unloading Valve

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



## Operation

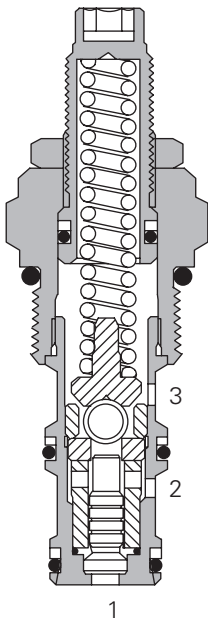
This valve blocks flow from port 2 to port 3, until either the predetermined spring setting has been reached, or an external pilot has been applied to port 1. At this time flow is then allowed from port 2 to port 3.

The valve will reseal 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®

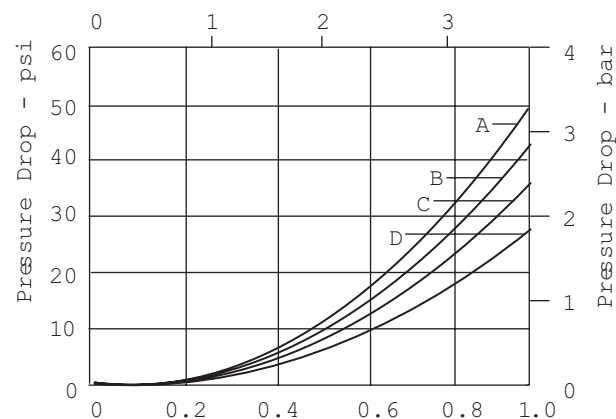
Viton is a registered trademark of E.I. DuPont

## 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



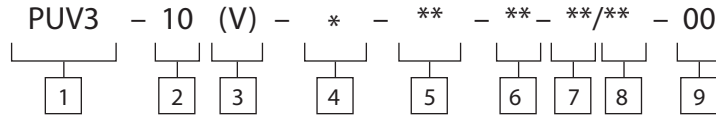
A - 75%  
B - 80%  
C - 85%  
D - 90%

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:  
1530

**8** Unloading Pressure Setting

Within ranges in   
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

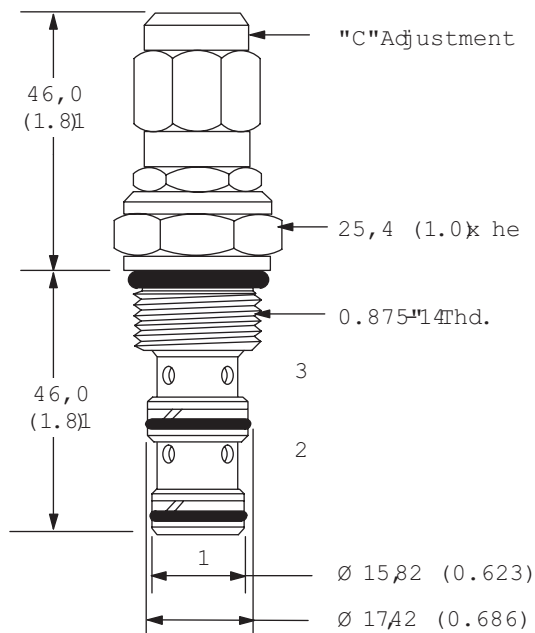
00 - None  
(Only required if valve has special features, omitted if "00.")

## Dimensions

mm (inch)

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

## Cartridge Only



## Installation Drawing

