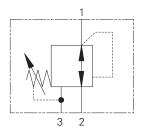
# PRV1-10-Pressure Reducing/Relieving Valve

Spool, direct acting 15 L/min (4 USgpm) • 165 bar (2400 psi)



## Operation

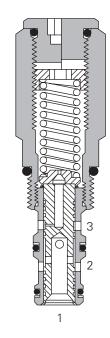
Normally open, the valve throttles or closes to maintain constant pressure in the regulated line.

As in the other direct acting valves, the spring force holds the valve open.

### **Features**

Hardened steel working parts are individually match ground to assure long life, reliability and high accuracy.

#### 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)                | 165 bar (2400 psi)  |
| Cartridge fatigue pressure (infinite life)              | 210 bar (3000 psi)  |
| Rated flow  | 15 L/min (4 USgpm)  |
| 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:<br>MIL–H–5606, SAE 10, SAE 20, etc. |
| Filtration  | Cleanliness Code 18/16/13   |
| Weight cartridge only                                   | 0,24 kg (0.54 lbs)  |
| Seal kits   | 565804 Buna–N<br>889599 Viton°  |
|   |   |

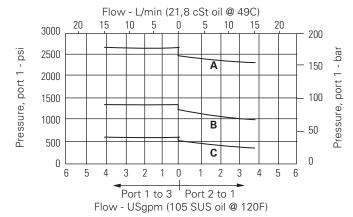
Viton is a registered trademark of E.I. DuPont

# Description

This is a direct acting, screw in cartridge pressure reducing valve designed to provide an adjustable regulated pressure which is lower than supply pressure. Direct acting models are suited to lower flow applications and regulated pressures to 165 bar (2500 psi). This valve also acts as a relief valve, relieving from regulated line to tank if shock or surge pressures occur in the regulated line.

# **Pressure Override Curves**

## Cartridge only



**A** - 24 spring **B** - 12 spring

C - 6 spring





# PRV1-10-Pressure Reducing/Relieving Valve

Spool, direct acting 15 L/min (4 USgpm) • 165 bar (2400 psi)

#### Model Code

PRV1 - 10 (V) - \* - \*\* - \*\*/ \*\* - 00

1 Function

PRV1 - Pressure reducing/ relieving valve

2 Size

10 - 10 size

3 Seal material

Blank - Buna-N V - Viton<sup>®</sup>

4 Adjustment

C - Cap

F - Factory set

l - Internal

K - Knob

S - Screw

5 Port Size

0 - Cartridge only

| Code | Port Size | Housing Number         |                           |
|------|-----------|------------------------|---------------------------|
|      |           | Aluminum<br>Light duty | Aluminum<br>Fatigue rated |
| 3B   | 3/8" BSPP | 02-173358              | -                         |
| 6T   | SAE 6     | 566162                 | -                         |
| 2G   | 1/4" BSPP | -                      | 876705                    |
| 3G   | 3/8" BSPP | -                      | 876714                    |
| 6H   | SAE 6     | -                      | 876704                    |
| 8H   | SAE 8     | _                      | 876711                    |
|      |           |                        |                           |

See section J for housing details.

6 Pressure range

Note: Code based on pressure in psi.

2 - 3,5-14 bar (50-200 psi)

6 - 7-40 bar (100-600 psi)

12 - 14-85 bar

(200-1200 psi) 24 - 30-165 bar (400-2400 psi) 7 Factory Set Reduced Pressure

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:

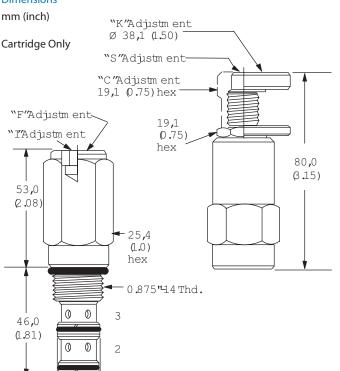
10 - 70 bar (1000 psi) 10.5 - 72,4 bar (1050 psi)

8 Special Features

00 - None

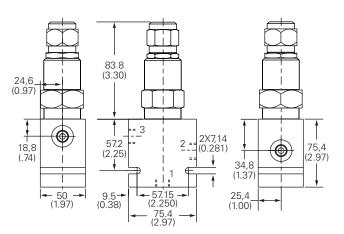
(Only required if valve has special features, omitted if "00.") SS - 316 Stainless Steel external components

### **Dimensions**



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

## Installation Drawing







Ø 15,80 (0.622) Ø 17,40 (0.685)