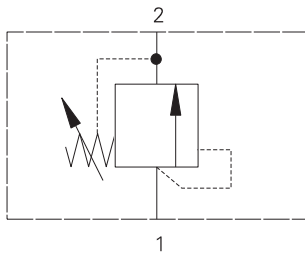


# RV1-10 - Relief valve

Poppet, direct acting  
30 L/min (8 USgpm) • 250 bar (3600 psi)



## Operation

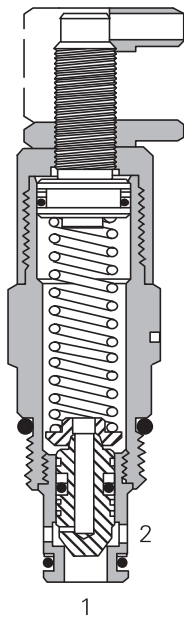
This valve remains closed from port 1 to port 2 until the predetermined setting has been reached at port 1.

The poppet is unseated and allows flow out of port 2.

## Features

Fast acting, low pressure rise.  
Low internal leakage, high flow rate for compact design

## 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)	250 bar (3600 psi)
Cartridge fatigue pressure (infinite life)	250 bar (3600 psi)
Rated flow	30 L/min (8 USgpm)
Internal leakage	0.3 L/min (5 drops/min) @ 85% of Pressure Setting
Cavity	C-10-2
Standard housing materials	Aluminum or steel
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	0,22 kg (0.48 lbs)
Seal kits	565803 Buna-N 566086 Viton®

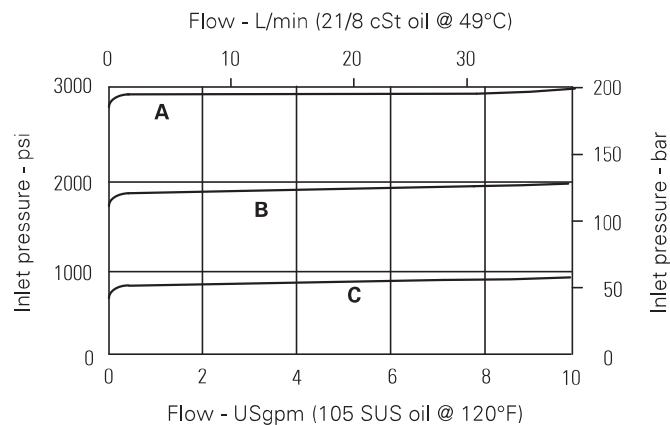
Viton is a registered trademark of E.I. DuPont

## Description

This is a direct acting, poppet style screw in cartridge relief valve ideal for low cost small flow applications to limit the pressure in the system.

## Pressure override curves

Cartridge only

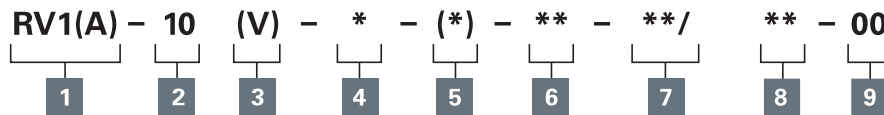


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

# RV1-10 - Relief valve

Poppet, direct acting  
30 L/min (8 USgpm) • 250 bar (3600 psi)

## Model code



### 1 Function

**RV1** - Relief valve - Standard  
**RV1A** - Relief valve - with 1/2 thickness back-up ring on each side of o-ring (for cross port relief applications)

### 2 Size

**10** - 10 size

### 3 Seal material

**Blank** - Buna-N  
**V** - Viton®

### 4 Adjustment

**C** - Cap  
**F** - Factory set  
**I** - Internal  
**K** - Knob  
**S** - Screw

### 5 Valve housing material

**Blank** - Aluminum  
**S** - Steel

### 6 Port size

Code	Port size	Housing		
		Aluminum Light duty	Aluminum Fatigue rated	Steel Fatigue rated
<b>0</b>	Cartridge only			
<b>3B</b>	3/8" BSPP	02-175462	-	-
<b>2G</b>	1/4" BSPP	-	876702	02-175102
<b>3G</b>	3/8" BSPP	-	876703	02-175103
<b>6H</b>	SAE 6	-	876700	-
<b>8H</b>	SAE 8	-	876701	-
<b>6T</b>	SAE 6	566151	-	02-175100
<b>8T</b>	SAE 8	-	-	02-175101

See section J for housing.

### 7 Cracking pressure range

**Note:** Code based on pressure in psi.  
**3** -3,5-20 bar (50-300 psi)  
**9** -7- 62 bar (100-900 psi)  
**18** - 17-124 bar (250-1800 psi)  
**30** - 34-210 bar (600-3000 psi)  
**36** - 124-250 bar (1800-3600 psi)

### 8 Setting pressure

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)  
**10.5** -72,4 bar (1050 psi)

### 9 Special features

**00** - None  
(Only required if valve has special features, omitted if "00.")  
**SS** - 316 Stainless Steel external components

### Warning

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).

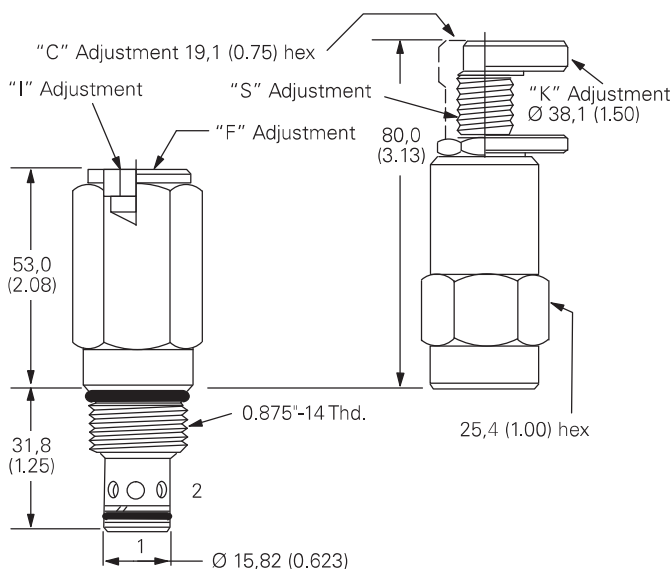
## Dimensions

mm (inch)

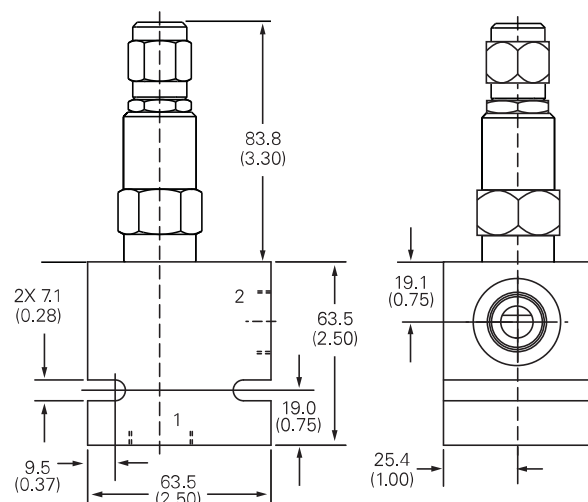
Torque cartridge in housing

**A** - 47-54 Nm (35-40 ft. lbs)  
**S** - 68-75 Nm (50-55 ft. lbs)

## Cartridge only



## Installation drawing (Aluminum)



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