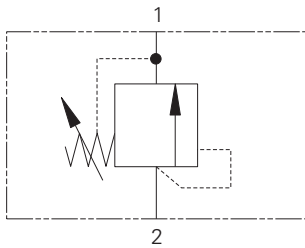


# RV8-16 - Relief valve

Poppet, direct acting, differential area  
 30-303 L/min (8-80 USgpm) • 350 bar (5000 psi)



## Operation

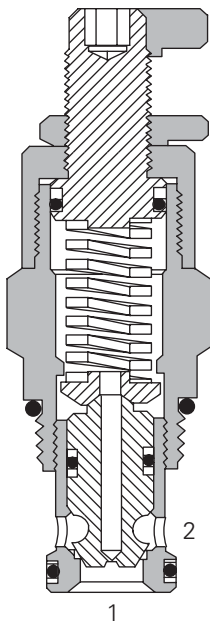
This valve remains closed from port 2 to 1 until the predetermined setting has been reached at port 2.

The pressure acts on the differential area between the seat and the seal diameter on the poppet.

## Features

Hardened and ground working parts. Low leakage poppet design. High flow rate for a compact cartridge.

## 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               | 350 bar (5000 psi)   |
| Cartridge fatigue pressure (infinite life) | 350 bar (5000 psi)   |
| Rated flow                                 | 30-303 L/min (8-80 USgpm)  |
| Cavity                                     | C-16-2   |
| 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/ <b>16/13</b>  |
| Weight cartridge only                      | 0,71 kg (1.57 lbs)   |
| Seal kits                                  | 565810 Buna-N<br>889609 Viton®   |

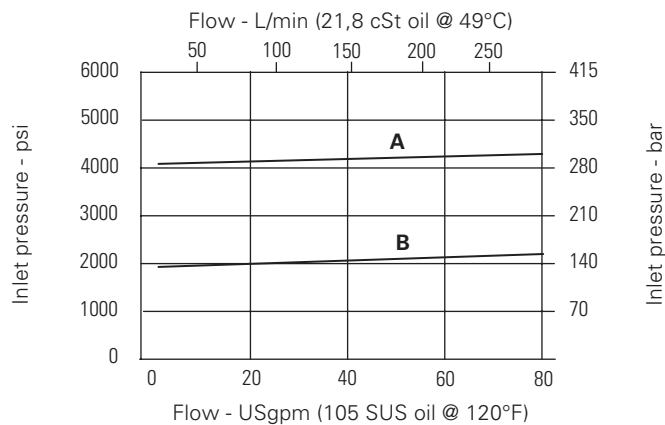
Viton is a registered trademark of E.I. DuPont

## Description

This is a fast, direct acting differential area screw-in cartridge relief valve. The valve is ideal for the protection against shock pressures that can damage actuators.

## Pressure override curves

Cartridge only



**A** - 50 spring

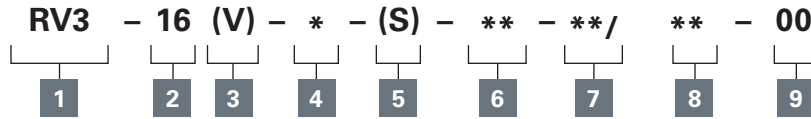
**B** - 35 spring

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

# RV8-16 - Relief valve

Poppet, direct acting, differential area  
30-303 L/min (8-80 USgpm) • 350 bar (5000 psi)

## Model code



### 1 Function

RV3- Relief valve

### 2 Size

16 - 16 size

### 3 Seal material

Blank - Buna-N  
V - Viton®

### 4 Adjustment

C - Cap  
K - Knob  
S - Screw

### 5 Valve housing material

Blank - Aluminum  
S - Steel

### 6 Port size

0 - Cartridge only

| Code | Port size | Housing number      |                        |                     |
|------|-----------|---------------------|------------------------|---------------------|
|      |           | Aluminum light duty | Aluminum fatigue rated | Steel fatigue rated |
| 6B   | 3/4" BSPP | 02-175463           | -                      | -                   |
| 4G   | 1/2" BSPP | -                   | 876716                 | 02-175106           |
| 6G   | 3/4" BSPP | -                   | 876718                 | 02-175107           |
| 10H  | SAE 10    | -                   | 876717                 | -                   |
| 12H  | SAE 12    | -                   | 866113                 | -                   |
| 10T  | SAE 10    | -                   | -                      | 02-175104           |
| 12T  | SAE 12    | 566149              | -                      | 02-175105           |

See section J for housing.

### 7 Cracking pressure range

**Note:** Code based on pressure in psi.  
5 - 3,5-35 bar (50-500 psi)  
13 - 35-90 bar (300-1300 psi)  
35 - 83-240 bar (1200-3500 psi)  
50 - 140-350 bar (2000-5000 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

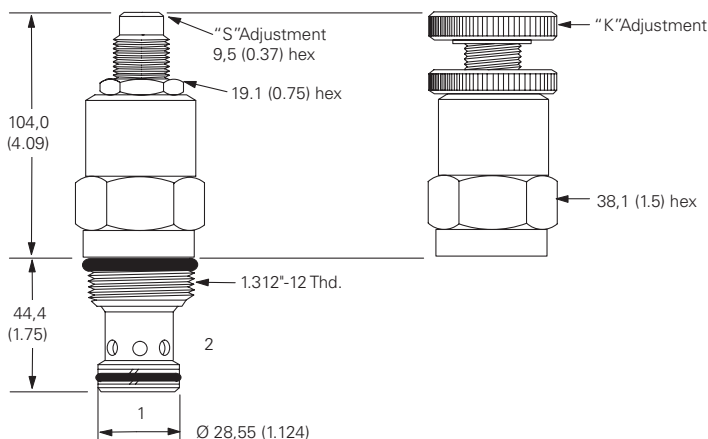
### Warning

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).

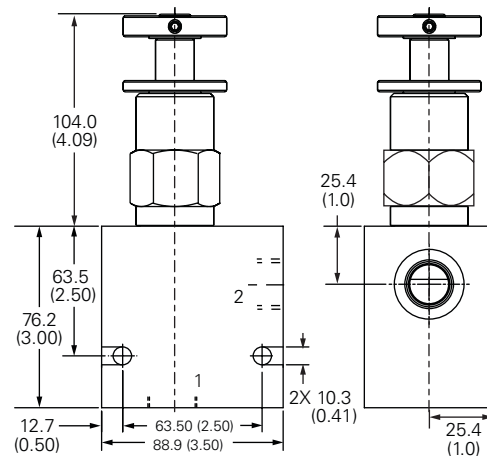
## Dimensions

mm (inch)

### Cartridge only



### Installation drawing (Steel)



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