



**HALE HAMILTON®**

Excellence in Pressure & Flow Control

A CIRCOR International, Inc. Company

## RS Differential Relief Valve (9.5mm)

### Description

The RS series is a range of differential relief valves suitable for general industrial (compressed air) or for Oxygen applications.

The valve is operated by an internal piston that is larger than the flow area. The process pressure acts on the difference in these areas (hence “differential”). This means that the spring can be small for high pressures.

Each valve is adjustable within a range of pressures. The range depends on the size of the piston and the strength of the spring.

RS valves are available with either direct or banjo bolt mounting.



### Standard Specification

See next page for specification of individual types

- Working pressure: up to 350 bar (5075 psi)
- Nominal Bore: 9.5 mm
- Exhaust port: G3/8 female (other ports such as NPT are available)
- Inlet port – direct mounting type: G3/8 female (other ports such as NPT are available)
- Inlet port – banjo bolt type: G3/8 male
- Temperature range: -20 to +70°C (extended temperature range versions can be supplied)

### Options

Please contact us for details

- Ports: alternative port configurations can be supplied
- Operation: wire locked variants can be supplied
- Materials: suitable combinations of materials can be supplied for various applications such as marine or petrochemical (NACE).
- Certification: variants are available for ATEX service or as a “Safety Accessory” to PED Category 4

### Standard Materials

Alternative materials can be supplied

- Body: Nickel Aluminium Bronze or Brass
- Valve/Piston: Stainless Steel or Phosphor Bronze
- Seals: Nitrile (a PTFE O ring is used on the piston in some variants)

### Ordering Information

Please supply the following information when ordering

- Relief pressure range
- Relief set pressure – we can supply valves pre-set to your required pressure
- Wire locking required (please state set pressure)
- Flow medium
- Port configuration
- Operating and storage temperature ranges
- Certification and QA requirements

In addition to our standard product range, we have an extensive range of special designs and offer a custom build service. Contact our Sales office if you don't see what you want in our catalogue. The information contained within this catalogue is for reference purposes only and is subject to change.

When selecting a product, the total system design must be considered to ensure safe, trouble free performance. Component function, material compatibility, adequate ratings, proper installation, operation and maintenance are the responsibility of the system designer and user.

Hale Hamilton (Valves) Ltd  
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Tel: 01895 236 525  
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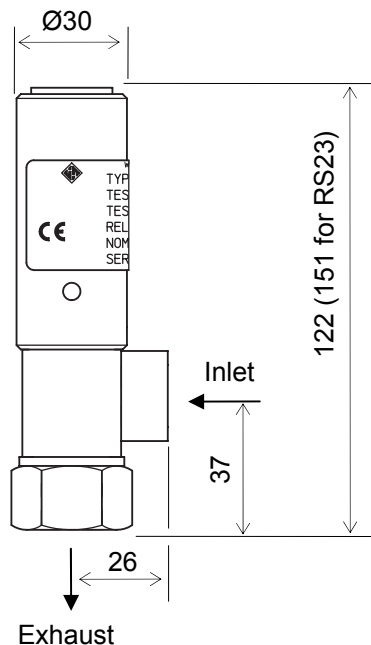
## Specification

| Type                  | RS9                     | RS11                                      | RS12                         | RS23         | RS32         |
|-----------------------|-------------------------|-------------------------------------------|------------------------------|--------------|--------------|
| Piston Size (inch)    | 11/16"                  | 1/2"                                      | 7/16"                        | 7/16"        | 7/16"        |
| Piston Size (mm)      | 17.5                    | 12.7                                      | 11.1                         | 11.1         | 11.1         |
| Pressure Ranges (bar) | 3.5 to 7<br>7 to 17     | 17 to 34.5<br>34.5 to 69<br>69 to 120     | 120 to 172<br>172 to 248     | 248 to 310   | 251 to 350   |
| Pressure Ranges (psi) | 50 to 100<br>100 to 250 | 250 to 500<br>500 to 1000<br>1000 to 1750 | 1750 to 2500<br>2500 to 3600 | 3600 to 4500 | 3640 to 5075 |
| Weight (kg)           | 0.5                     | 0.5                                       | 0.5                          | 0.8          | 1.1          |

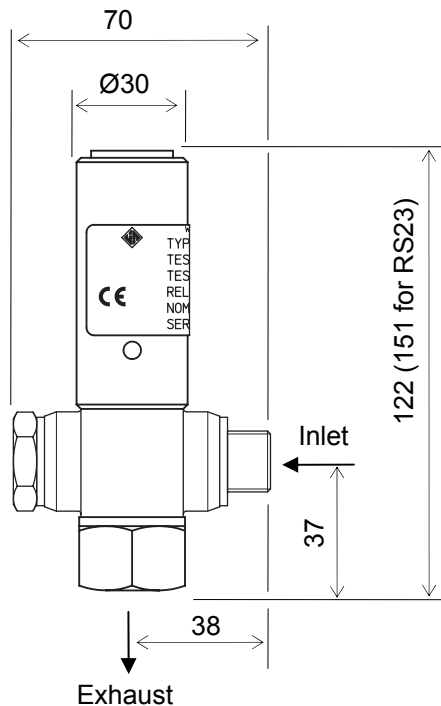
## Typical Dimensions

in mm except where shown otherwise

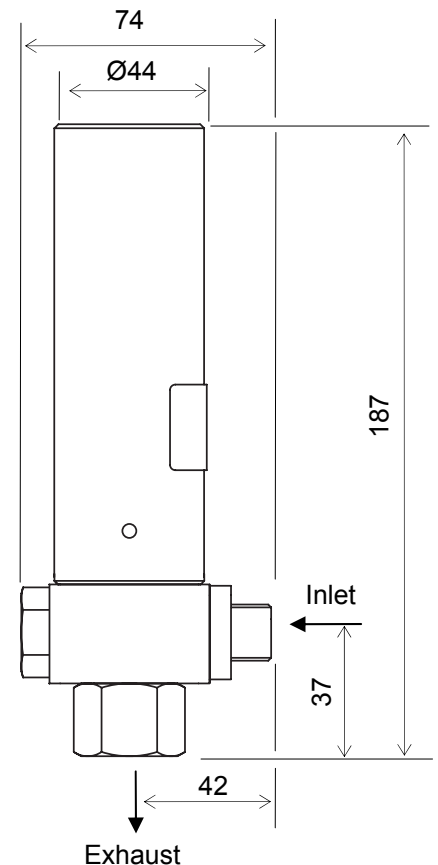
### Direct Mounting Type



### Banjo Bolt Type



### RS32 only



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