



Keeping the World Flowing
for Future Generations



The VRT fluid proportional relief valves have been designed primarily to provide overpressure protection in systems subject to fluid thermal expansion, but it can also be reliably used as the primary relief valve in systems with low volume pump flow rates.

A unique feature of this valve is the lock down facility that eliminates the need to remove or disconnect the valve during proof testing of the system. Provision is made in the cap for a special lock down screw to be inserted to disable the valve and hold it closed against the increasing pressures applied during testing of the system pipe work and components. This eliminates the need to remove or disconnect the valve during test procedures. When the lock down screw is removed, the valve reverts to its as set condition without further adjustment or re-calibration.

The thread in the cap is a non-preferred size, thereby preventing unauthorised insertion of other types of screw. Lock down screws are not provided with each valve to prevent unauthorised use; they are available on request.

Application

Pressure relief valves are used to provide overpressure protection in systems subject to fluid thermal expansion, but it can also be reliably used as the primary relief valve in systems with low volume pump flow rates.

VRT Range

Pressure Relief Valve



Features

- No need to remove from the system for proof testing
- Unique lock down screw facility
- Set point repeatability $\pm 3\%$
- Set point range – user specified up to 1300 bar
- Sealing re-seat pressure – virtually zero leakage re-seat pressure $\geq 90\%$ of cracking pressure
- Flow capacity – flow rates up to 2 l/min at 10% overpressure
- Back pressure – set point is not affected by vent back pressure. Maximum permissible back pressure is 100 bar
- Operating media – mineral oils, water glycol fluids and some chemicals
- Long life and repeatable performance

Bifold[®]
A rotork Brand

Environmental Specification

Material	Minimum Temperature	Maximum Temperature
Nitrile (Standard)	-20 °C	80 °C
Viton	-10 °C	80 °C
Nitrile (Low Temperature)	-40 °C	80 °C
Silicone	-20 °C	80 °C
Kalrez	-20 °C	80 °C

Options

All control valves in this range are available in the following materials:

- Nitrile (Standard)
- Viton
- Nitrile (Low Temperature)

Sizing Data

Pressure Range:

- 0 - 1300 bar (0 - 18,850 psig)

Flow Rate:

- Up to 2 l/min

Orifice Size:

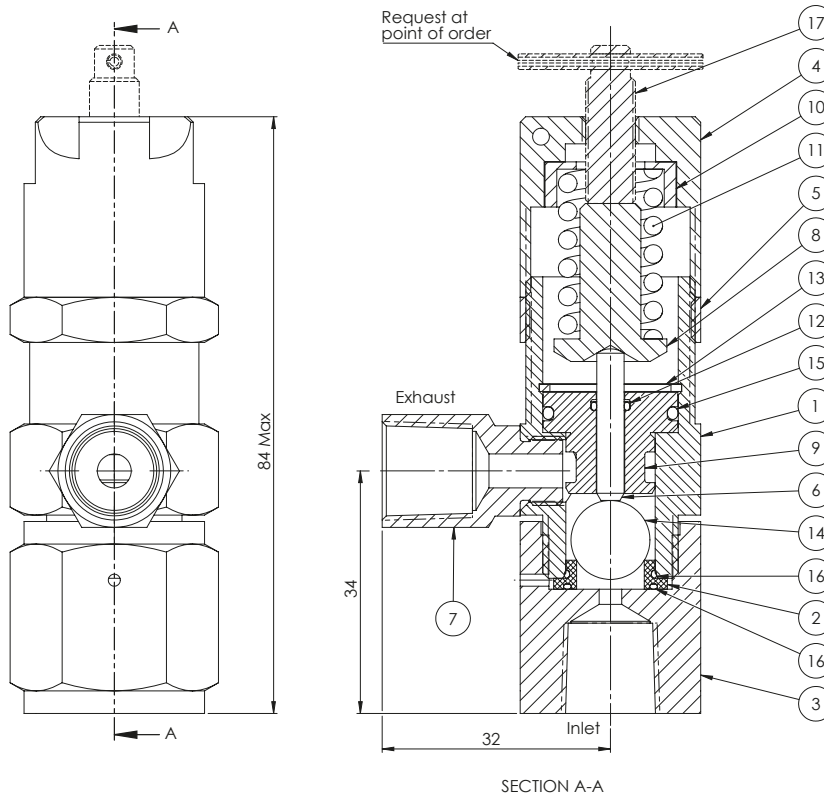
- 4 mm

Ports:

- ¼" NPT up to 9/16" MP

Drawing and Material Specification

The image shown below is an example of one of the many sizes and options that we can offer. We can offer a range of sizes from ¼" NPT to ½" NPT. There are also some options on materials for some items.



ITEM NO.	MATERIAL	QTY.
1	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
2	Peek Natural 450g	1
3	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
4	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
5	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
6	M340 Stainless Steel	1
7	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
8	BS EN 10088-3 1.4404 Stainless Steel to NACE MR-01-75 (316S11)	1
9	Aluminium Bronze to BS2874: CA104	1
10	316S11 Stainless Steel BSEN10088- 3 1.4404 to NACE MR-01-75	1
11	302S26 Stainless Steel	1
12	Nitrile 70 Shore	1
13	1.4122 (X39CrMo17-1)	1
14	Stainless Steel to AISI 440C	1
15	Nitrile 90 Shore	1
16	Nitrile 70 Shore	2
17	EN3B mild steel	1

A full listing of the Rotork sales and service network is available on our website.

www.rotork.com

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rotork®

Electric Actuators and Control Systems
Fluid Power Actuators and Control Systems
Gearboxes and Gear Operators
Precision Control and Indication
Projects, Services and Retrofit