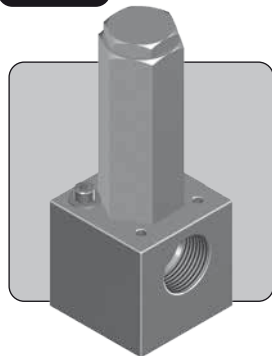


# RL100 RELIEF VALVE

1"

UP TO 207 BAR 3,000 PSI



The RL100 is a 1" ported relief valve. Designed for emergency relief applications, it may be used to protect systems up to 207 bar (3,000 psi).

The valve is a proportional metering style relief valve, and is approved as a safety accessory to category IV of the Pressure Equipment Directive, enabling its use in the most demanding applications.

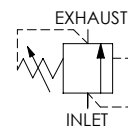
- Approved to category IV of the Pressure Equipment Directive (2014/68/EU)
- Available preset via internal adjustment or with an external handwheel adjustment option
- Wire locking and tagging available on request
- Minimal leakage at 90% of set pressure
- Reseat within 20% of set pressure
- Repeatably within ±5% of set pressure
- Subsea variants available, contact us for advice
- Suitable for use with mineral oils, water glycols and plain water, with option for sea water duty
- Suitable for many other media, contact us for advice
- Various spring ranges available

## Specifications

**BASIC MODEL NUMBER**

**RL100**

**SYMBOL**



**MAX WORKING PRESSURE**

207 bar  
(3,000 psi)

**MAX OUTLET PORT PRESSURE**

69 bar  
(1,000 psi)  
*Note: Any outlet port pressure is directly additive to the set pressure*

**ORIFICE SIZE**

Ø11.1mm (Ø0.437")

**FLUID**

Liquids only  
*See materials section*

**TEMPERATURE RANGE**

*See Product Selector opposite and Technical Data section*

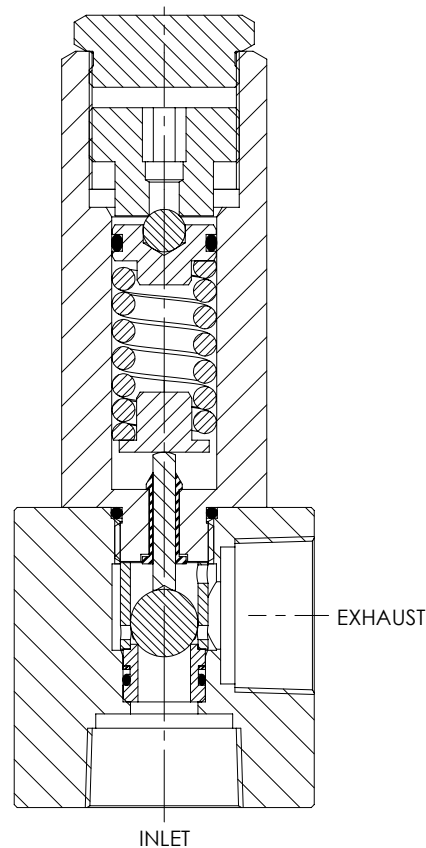
**PORT SIZE**

1"

**WEIGHT**

2.5 kg  
(5.5 lb)

*Specifications may change without notice*



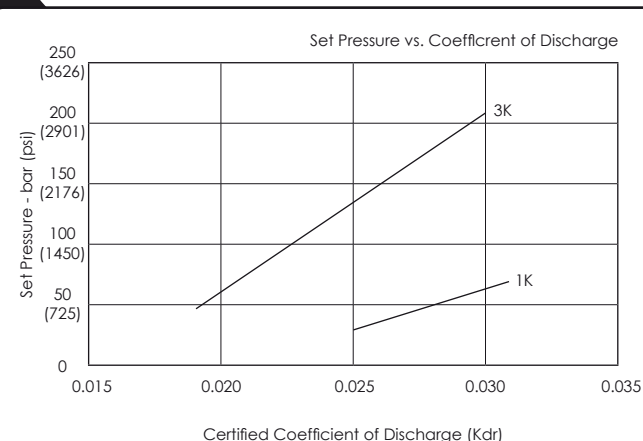
## Materials

Externally Exposed Parts: 316 stainless steel on all pressure retaining components. 300 series stainless steel is used for the external adjuster. The non-wetted and enclosed internal adjuster is chrome steel and brass.

Internally Wetted Parts: 316 and 302 stainless steel, silicon nitride and acetal. The standard valve is designed for use with mineral oil, water glycols and plain water. Contact us for advice when use with other media is required. Note that use with water above 100°C is not recommended.

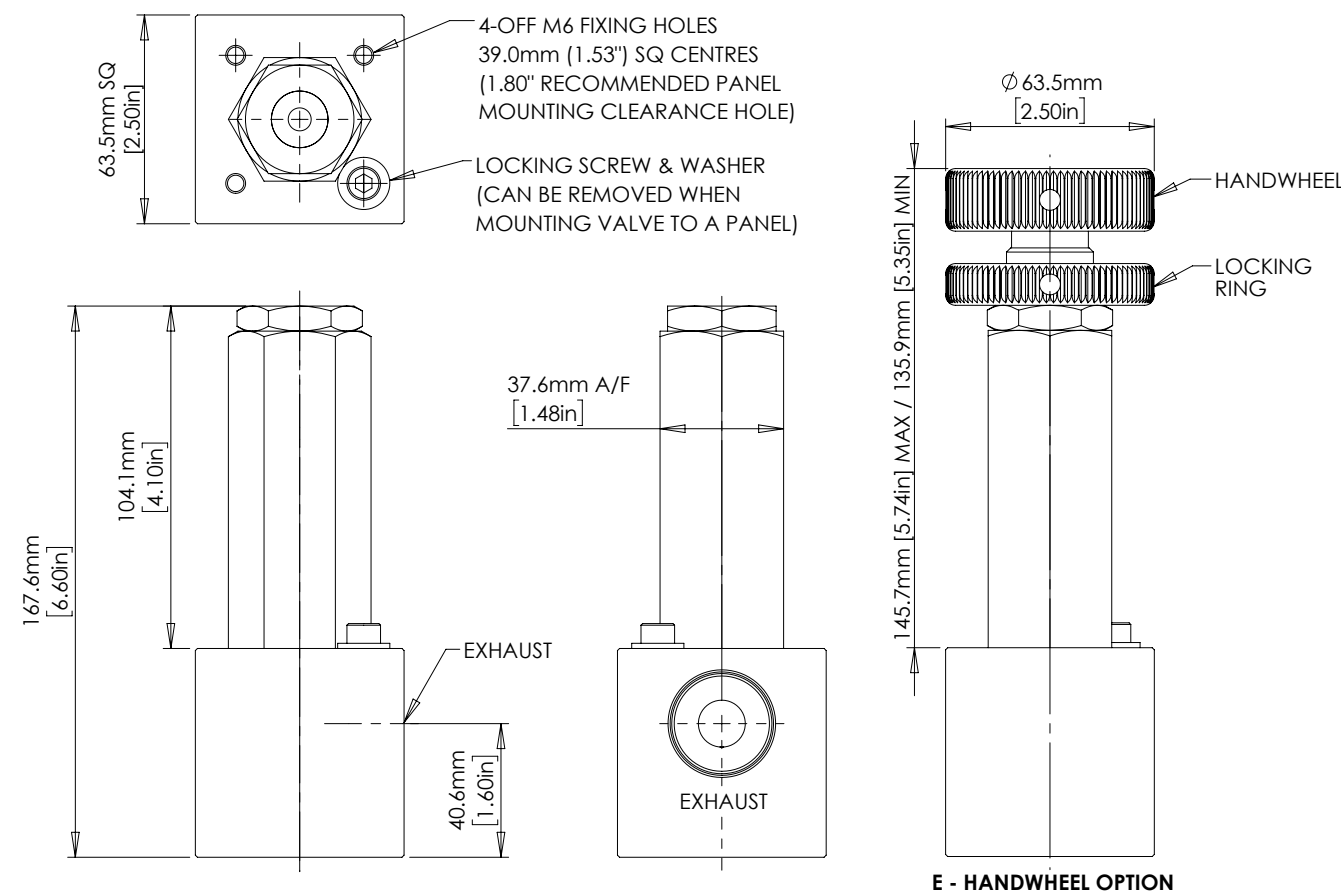
⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

## Typical Performance



The Kdr value may be used to calculate discharge capacity in accordance with ISO 4126. We recommend contacting us with system details to confirm suitability.

## Installation Diagram



## Product Selector

RL100 P - E - SWD - NBR - 1K

VALVE TYPE	PORTING OPTIONS	VALVE OPTIONS	WORKING FLUID OPTIONS	SEAL OPTIONS	SET PRESSURE RANGE
<b>RL100</b>	<b>P</b> 1" BSPP female inlet and exhaust <b>N</b> 1" NPT female inlet and exhaust	Leave blank if none required <b>E</b> Handwheel (external) adjustment  Exposure to high and low fluid temperatures will influence handle temperature. Operator safety must be considered	Leave blank if none required <b>SWD</b> Sea water duty	Leave blank for Viton® seals -10°C to +120°C <b>NBR</b> Nitrile seals -30°C to +105°C <b>EP</b> EPDM seals -40°C to +120°C <b>KLZ</b> Kalrez® seals -25°C to +120°C <b>HNBR</b> Hydrogenated Nitrile seals -20°C to +120°C  Further seal options are available on request	<b>1K</b> 28 - 69 bar (400 - 1,000 psi) <b>3K</b> 48 - 207 bar (700 - 3,000 psi)  Advise us of set pressure if factory pre-setting is required

Repair and seal kits are available on request

For a seal kit add SK at the end of the model code and for a repair kit add RK



SOLENOID  
FLOW CONTROL  
3 PORT DIRECTIONAL CONTROL  
4 PORT DIRECTIONAL CONTROL  
CHECK AND SHUTTLE  
PILOT OPERATED CHECK  
RELIEF  
EXCESS FLOW  
FILTERS  
PRESSURE SENSING  
PUMPS  
ACTUATORS  
TECHNICAL DATA