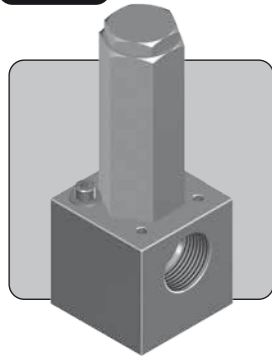


# RL100-G RELIEF VALVE

1"

UP TO 207 BAR 3,000 PSI



The RL100-G 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 with soft seats enabling its use with both liquids and gases, and is approved as a safety accessory to category IV of the Pressure Equipment Directive.

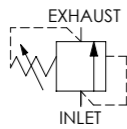
- Approved to category IV of the Pressure Equipment Directive (2014/68/EU)
- Available preset via internal adjustment or with an external handwheel adjustment option
- Wire locking and tagging available on request
- Minimal leakage at 90% of set pressure
- Reseat within 20% of set pressure
- Repeatably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

## Specifications

**BASIC MODEL NUMBER**

**RL100-G**

**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 and Gases  
*See materials section*

**TEMPERATURE RANGE**

*See Product Selector opposite and Technical Data section*

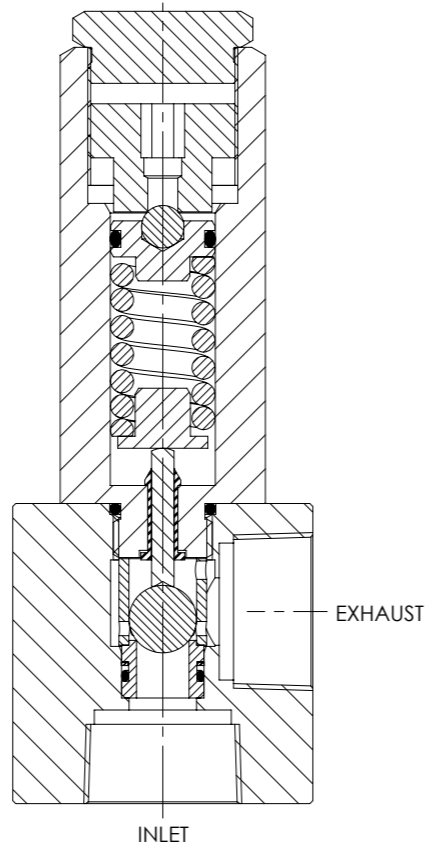
**PORT SIZE**

1"

**WEIGHT**

2.5 kg  
(5.5 lb)

*Specifications may change without notice*



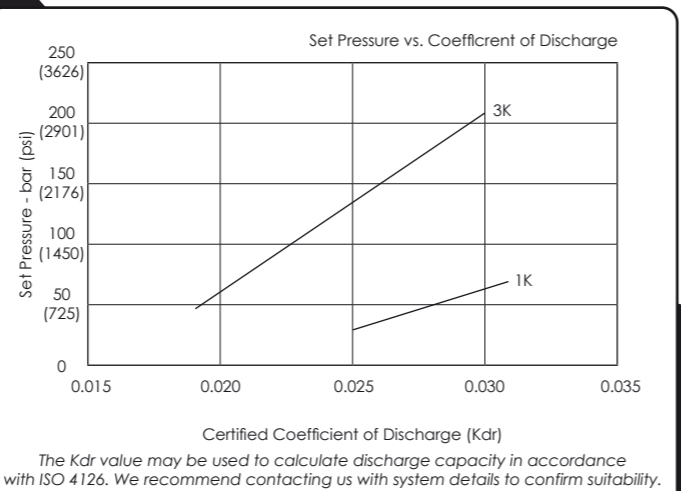
## Materials

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.

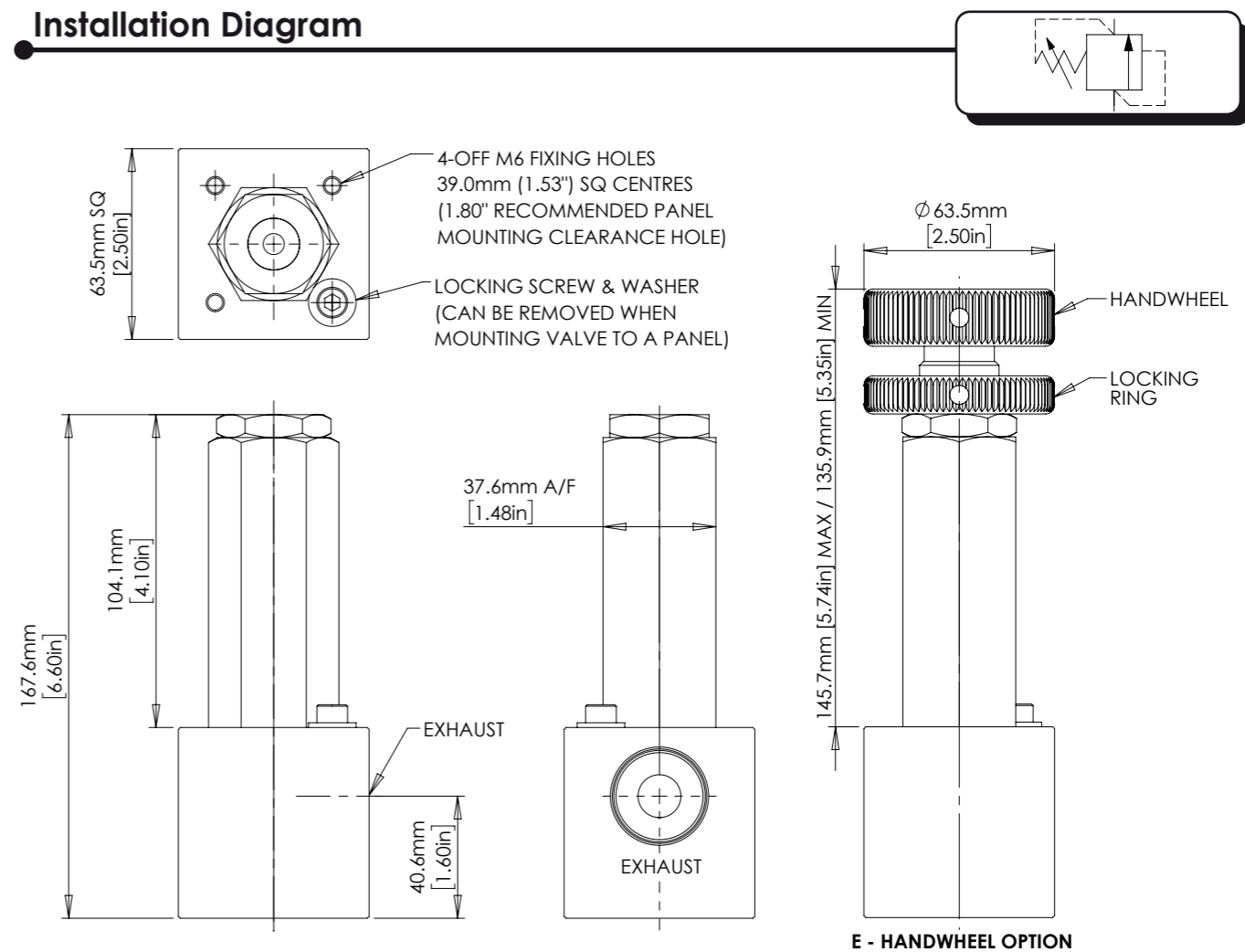
Internally Wetted Parts: 316 and 302 stainless steel, polyamide-imide, silicon nitride and acetal. The standard valve is designed for use with air, nitrogen, sweet natural gas and mineral oils. Contact us for advice when use with other media is required.

⚠ 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



## Installation Diagram



## Product Selector

RL100 P - E - G - NBR - 1K					
VALVE TYPE	PORTING OPTIONS	VALVE OPTIONS	SEAT TYPE	SEAL OPTIONS	SET PRESSURE RANGE
RL100	<b>P</b> 1" BSPP female inlet and exhaust  <b>N</b> 1" NPT female inlet and exhaust	<b>E</b> Handwheel (external) adjustment  ⚠ Exposure to high and low fluid temperatures will influence handle temperature. Operator safety must be considered	<b>G</b> Soft seats  <i>G option must be selected</i>	<b>NBR</b> Nitrile seals -30°C to +80°C  <b>EP</b> EPDM seals -40°C to +80°C  <b>KLZ</b> Kalrez® seals -25°C to +80°C  <b>HNBR</b> Hydrogenated Nitrile seals -20°C to +80°C  <i>Further seal options are available on request</i>	<b>1K</b> 28 - 69 bar (400 - 1,000 psi)  <b>3K</b> 48 - 207 bar (700 - 3,000 psi)  <i>Advise us of set pressure if factory pre-setting is required</i>
<i>Repair and seal kits are available on request</i>		<i>For a seal kit add SK at the end of the model code and for a repair kit add RK</i>			



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