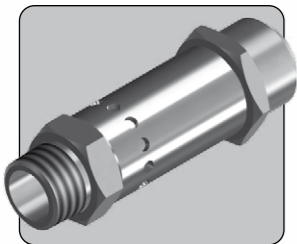


# BS100

## SAFETY RELIEF VALVE

1"

UP TO 18 BAR 261 PSI



The BS100 is a vent to atmosphere safety relief valve. Designed with an elastomeric seat seal the valve combines excellent leakage performance with a high discharge flow capacity from its pop-open characteristic.

The valve is approved as a safety accessory to category IV of the Pressure Equipment Directive, and is manufactured primarily from brass to offer cost effective pressure protection.

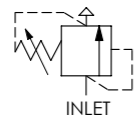
- Approved to category IV of the Pressure Equipment Directive (2014/68/EU)
- Pop-open characteristic for maximum discharge capacity
- Vents to atmosphere – no need for exhaust side pipework
- Available preset and internally adjustable. Wire locking and tagging available on request
- Available with relieving gear to enable manual release of pressure
- Virtually zero leakage at 90% of set pressure
- Reseat within the greater of 5 psi or 7.5% of set pressure when valve has opened and not popped
- Reseat within 50% of set pressure once popped
- Repeatability within the greater of 2 psi or ±3% of nominal set pressure

### Specifications

**BASIC MODEL NUMBER**

**BS100**

**SYMBOL**



**MAX WORKING PRESSURE**

18 bar  
(261 psi)

**ORIFICE SIZE**

Ø20.8mm  
(Ø0.819")

**FLUID**

Liquids and Gases  
See materials section

**TEMPERATURE RANGE**

See Product Selector opposite  
and Technical Data section

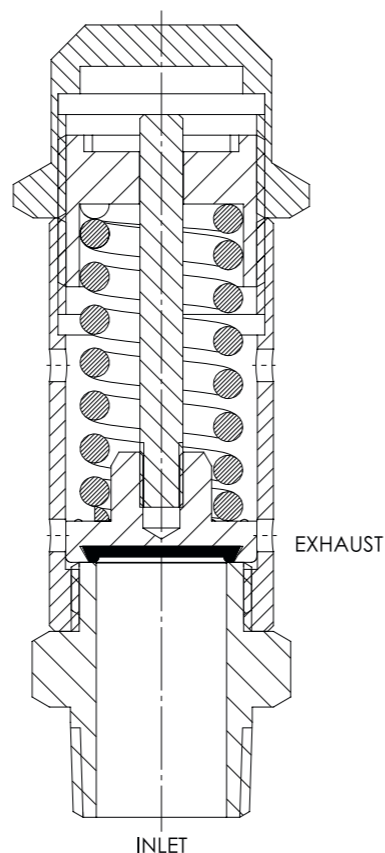
**PORT SIZE**

1"

**WEIGHT**

0.9 kg  
(2.0 lb)

Specifications may change without notice



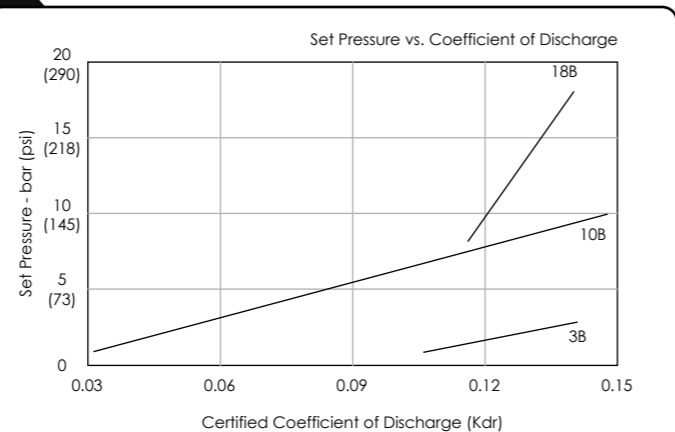
### Materials

Externally Exposed and Internally Wetted Parts: Brass, 316 and 302 stainless steel.

The standard valve is designed for use with air and plain water. Note that use with water above 100°C is not recommended. Other media compatible with the materials of construction may be used, although consideration must be given to the safety of such fluids when vented to atmosphere.

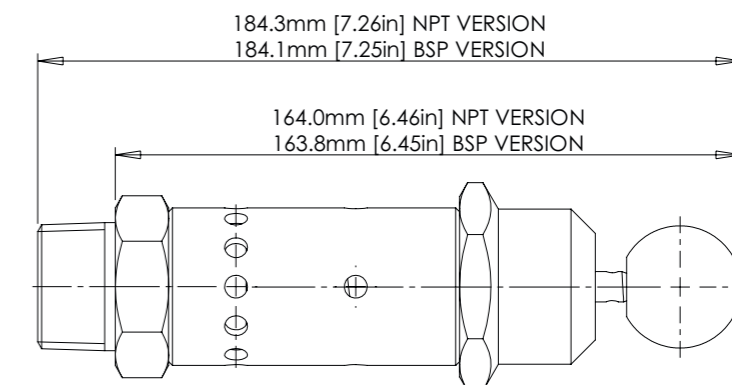
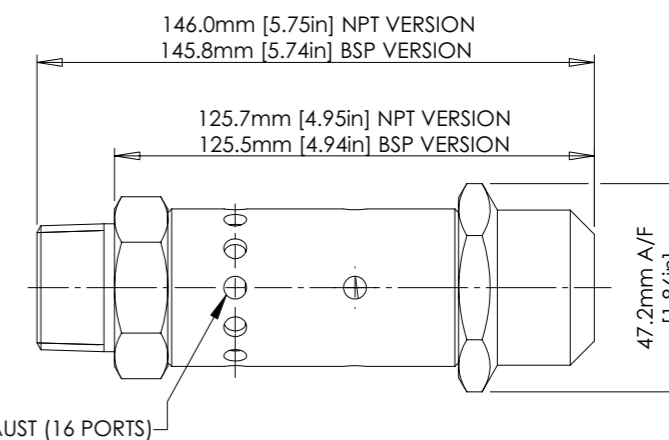
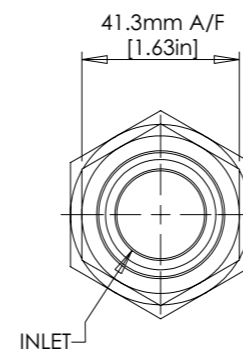
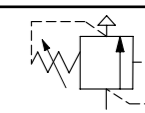
⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

### 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



RG - RELIEVING GEAR OPTION

### Product Selector

BS100 P - RG - EP - 3B

VALVE TYPE	PORTING OPTIONS	VALVE OPTIONS	SEAL OPTIONS	SET PRESSURE RANGE
BS100	<p><b>P</b> 1" BSPP male</p> <p><b>N</b> 1" NPT male</p>	<p><b>RG</b> Relieving gear</p> <p>⚠ Exposure to high and low fluid temperatures will influence handle temperature. Operator safety must be considered.</p>	<p><b>EP</b> EPDM seals -45°C to +150°C</p> <p><b>NBR</b> Nitrile seals -30°C to +105°C</p> <p>Further seal options are available on request</p> <p>⚠ The safety of venting high and low temperature fluids to atmosphere must be considered</p>	<p><b>3B</b> 0.7 - 3 bar (10 - 44 psi)</p> <p><b>10B</b> 0.7 - 10 bar (10 - 145 psi)</p> <p><b>18B</b> 8 - 18 bar (116 - 261 psi)</p> <p>Advise us of set pressure if factory pre-setting is required</p>

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



CATALOGUE ALSO AVAILABLE ON CD  
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[www.bisvalves.co.uk](http://www.bisvalves.co.uk)



**BS VALVES**  
The Specifier's Catalogue Page ???

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