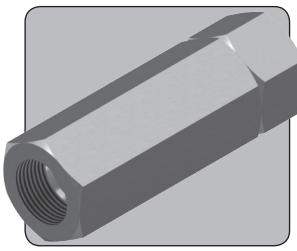


# NR100 CHECK VALVE

1"

UP TO 621 BAR 9,000 PSI



The NR100 is a 1" nominal bore check valve. It will allow flow in one direction, and blocks flow in the opposite direction. It may also be referred to as a non-return valve.

The valve uses sealed poppet technology to give virtually zero leakage with liquids and gases.

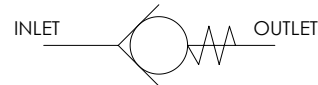
- Check or Non-Return valve
- Stainless steel construction
- Sealed poppet design
- Virtually zero leakage
- Can be used subsea
- Suitable for liquid or gas
- Suitable for use with air, nitrogen, sweet natural gas, mineral oils, water glycols, water and sea water
- Suitable for many other media, contact us for advice
- NACE MR01-75 compliant version available
- High cracking pressure variants available, contact us for details
- Various seal options available
- Various porting options available

## Specifications

**BASIC MODEL NUMBER**

**NR100**

**SYMBOL**



**MAX WORKING PRESSURE (LIQUID)**

621 bar  
(9,000 psi)

**MAX WORKING PRESSURE (GAS)**

276 bar  
(4,000 psi)

**CV (FLOW CAPACITY)**

7.7

**FLUID**

Liquids and Gases  
See materials section

**TEMPERATURE RANGE**

See Product Selector opposite  
and Technical Data section

**PORT SIZE**

1"

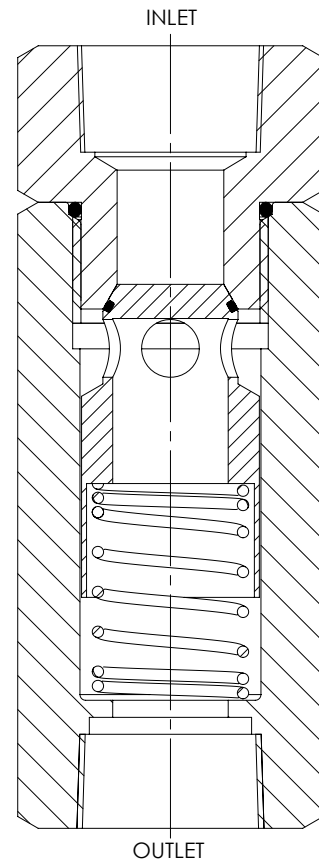
**CRACKING PRESSURE**

0.1 - 0.3 bar  
(2 - 5 psi)

**WEIGHT**

1.9 kg  
(4.2 lb)

Specifications may change without notice



## Materials

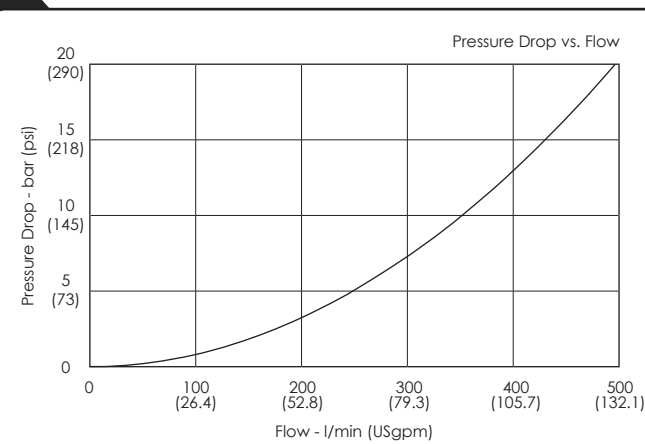
Externally Exposed Parts: 316 stainless steel.

Internally Wetted Parts: 316 stainless steel with 302 stainless steel spring. The spring is inconel for SWD and NACE variants.

The standard valve is designed for use with air, nitrogen, sweet natural gas, mineral oil, water glycols and plain water, and may also be used with a wide variety of media compatible with the materials of construction.

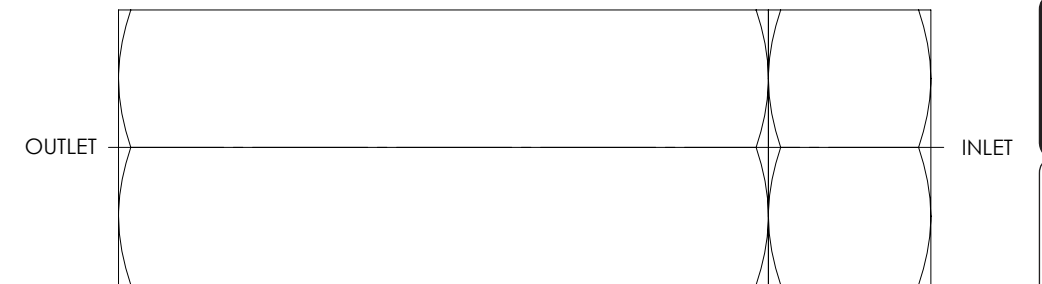
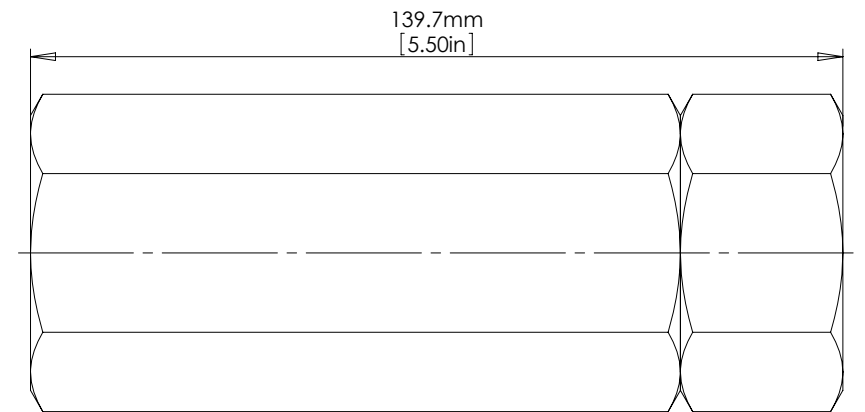
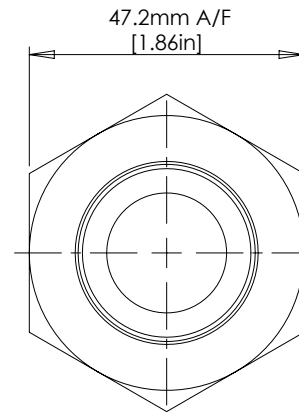
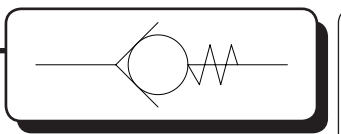
⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

## Typical Performance



Typical performance based on water

## Installation Diagram



## Product Selector

NR100 P - NBR - SWD - 9K

VALVE TYPE	PORTING OPTIONS	SEAL OPTIONS	VALVE OPTIONS	MAX WORKING PRESSURE
NR100	<p><b>P</b> 1" BSPP female</p> <p><b>N</b> 1" NPT female</p>	<p>Leave blank for Viton® seals -10°C to +160°C</p> <p><b>NBR</b> Nitrile seals -30°C to +105°C</p> <p><b>EP</b> EPDM seals -45°C to +150°C</p> <p><b>KLZ</b> Kalrez® seals -25°C to +200°C</p> <p><b>HNBR</b> Hydrogenated Nitrile seals -20°C to +150°C</p> <p>Further seal options are available on request</p>	<p>Leave blank if not required</p> <p><b>SWD</b> Materials compatible with sea water</p> <p><b>NACE</b> Materials comply with NACE MR01-75</p>	<p><b>9K</b> 621 bar (9,000 psi) Liquid</p> <p>276 bar (4,000 psi) Gas</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



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[www.bisvalves.co.uk](http://www.bisvalves.co.uk)

**BS VALVES**  
The Specifier's Catalogue

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