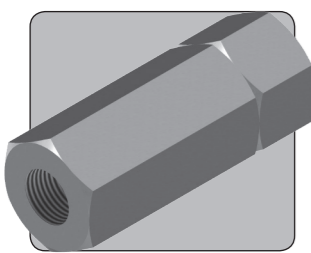


NR50 -12K CHECK VALVE

1/2" UP TO 828 BAR 12,000 PSI



The NR50 is a 1/2" 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

NR50

SYMBOL



MAX WORKING PRESSURE (LIQUID)

828 bar
(12,000 psi)

MAX WORKING PRESSURE (GAS)

414 bar
(6,000 psi)

CV (FLOW CAPACITY)

1.6 - 3.1
See Product Selector opposite

FLUID

Liquids and Gases
See materials section

TEMPERATURE RANGE

See Product Selector opposite and Technical Data section

PORT SIZE

1/2"

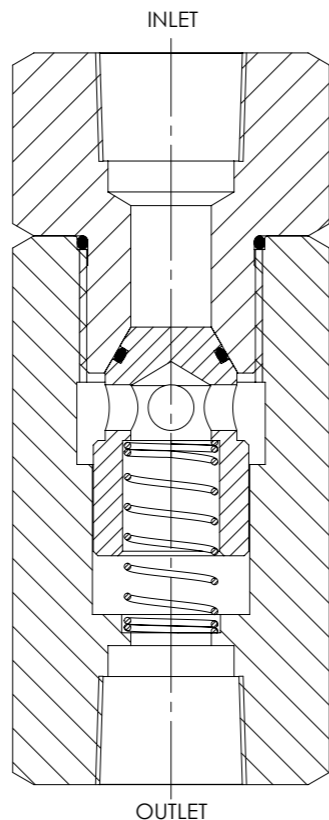
CRACKING PRESSURE

0.1 - 0.3 bar
(2 - 5 psi)

WEIGHT

0.9 kg
(2.0 lb)

Specifications may change without notice



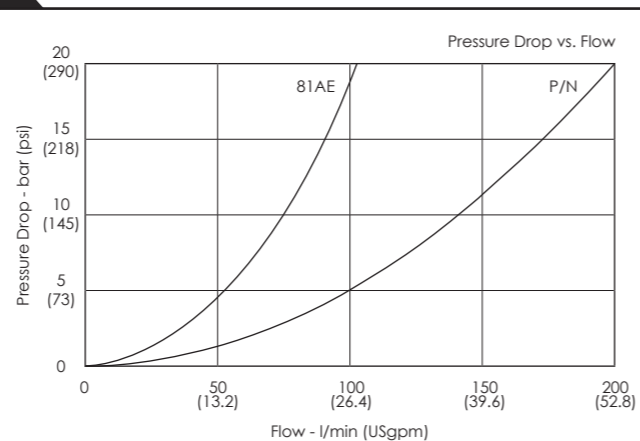
Materials

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.

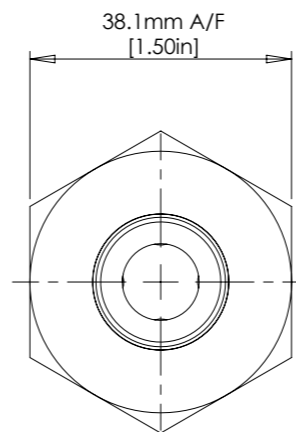
⚠ The standard valve has Viton® seals. Further seal options are available via the Product Selector. Compatibility with the working fluid at the operating temperature must be considered.

Typical Performance

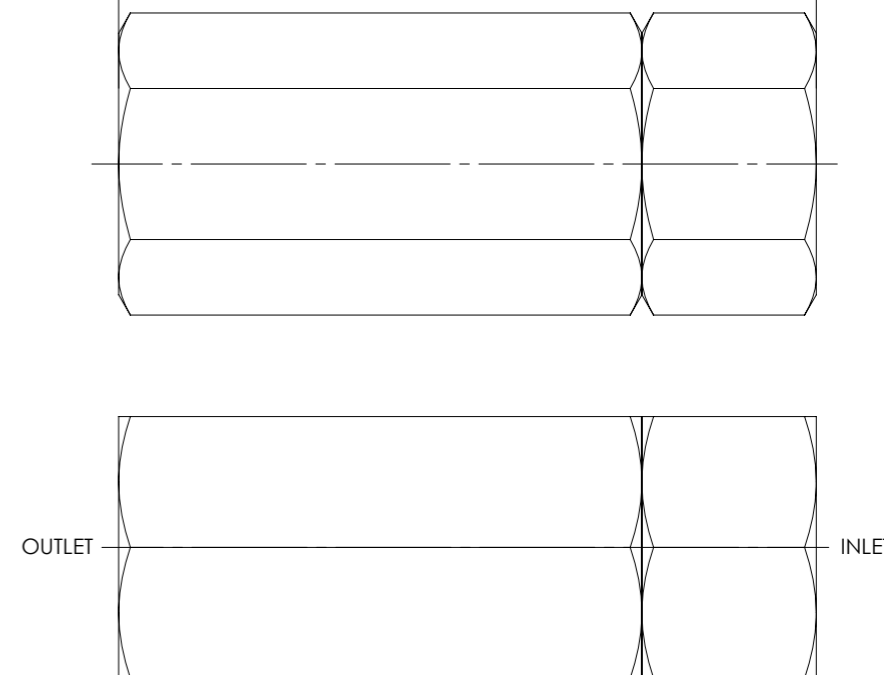


Typical performance based on water

Installation Diagram



101.6mm [4.00in] NPT & BSP VERSIONS
120.7mm [4.75in] 81AE VERSION



Product Selector

NR50 P - NBR - SWD - 12K

VALVE TYPE	PORTING OPTIONS	SEAL OPTIONS	VALVE OPTIONS	MAX WORKING PRESSURE
NR50	<p>P 1/2" BSPP female 3.1CV</p> <p>N 1/2" NPT female 3.1CV</p> <p>-81AE 9/16" OD medium pressure tube port 1.6CV</p>	<p>Leave blank for Viton® seals -10°C to +160°C</p> <p>NBR Nitrile seals -30°C to +105°C</p> <p>EP EPDM seals -45°C to +150°C</p> <p>KLZ Kalrez® seals -25°C to +200°C</p> <p>HNBR Hydrogenated Nitrile seals -20°C to +150°C</p> <p><i>Further seal options are available on request</i></p>	<p>Leave blank if not required</p> <p>SWD Materials compatible with sea water</p> <p>NACE Materials comply with NACE MR01-75</p>	<p>12K 828 bar (12,000 psi) Liquid</p> <p>414 bar (6,000 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



Catalogue also available on digital media
Visit our website for a full online search facility
www.bisvalves.co.uk

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