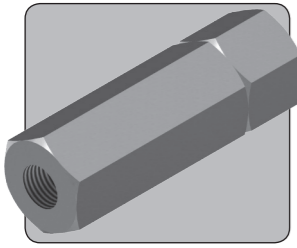# NR25 -12K

CHECK VALVE

1/4" **UP TO 828 BAR 12,000 PSI**

The NR25 is a 1/4" 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	NR25
SYMBOL	INLET ⊳ OUTLET
MAX WORKING PRESSURE (LIQUID)	828 bar (12,000 psi)
MAX WORKING PRESSURE (GAS)	414 bar (6,000 psi)
CV (FLOW CAPACITY)	0.2 - 1.0 *See Product Selector opposite*
FLUID	Liquids and Gases *See materials section*
TEMPERATURE RANGE	*See Product Selector opposite and Technical Data section*
PORT SIZE	1/4"
CRACKING PRESSURE	0.1 - 0.3 bar (2 - 5 psi)
WEIGHT	0.3 kg (0.7 lb)

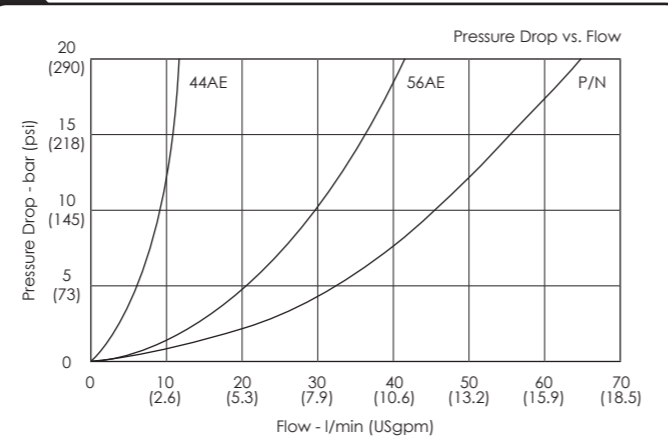*Specifications may change without notice*
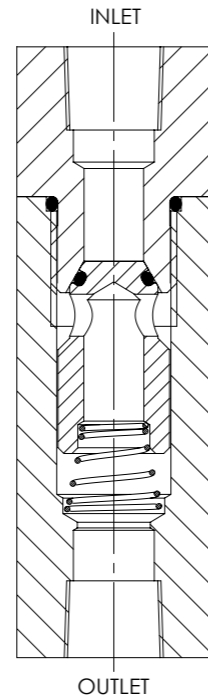
Materials

Externally Exposed Parts: 316 stainless steel.
Internally Wetted Parts: 316 stainless steel with 302 stainless steel spring. The spring is monel for SWD variants, and inconel for NACE variants.
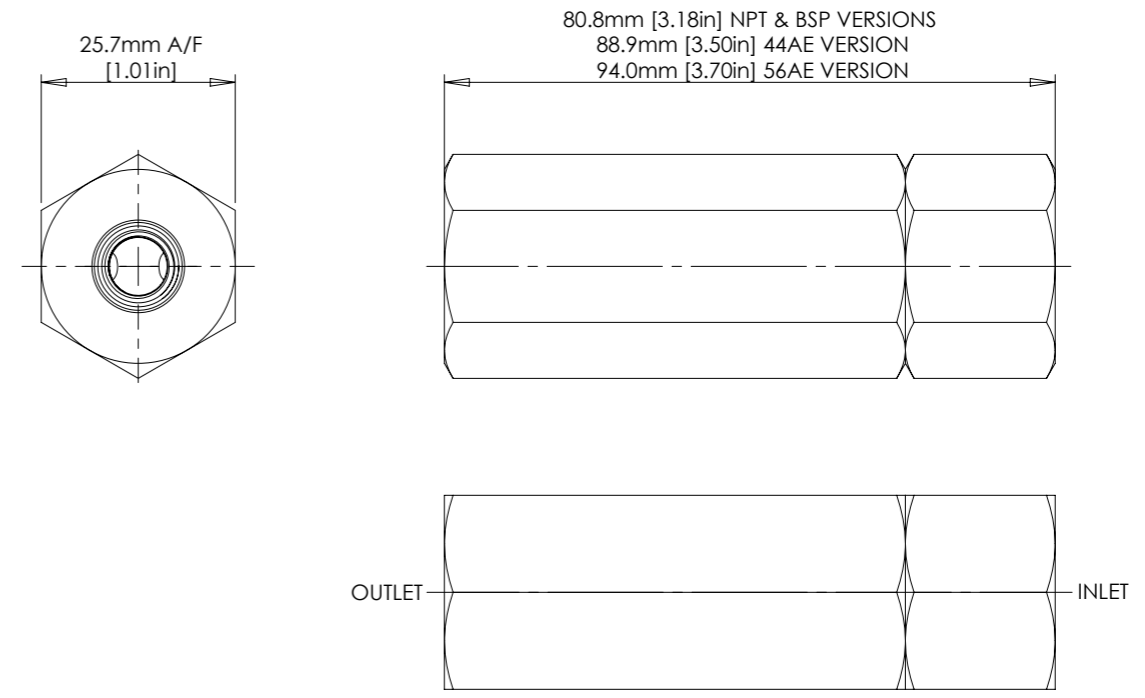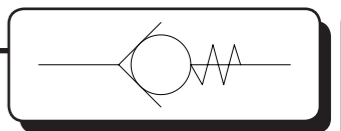
The standard valve is designed for use with air, nitrogen, sweet natural gas, mineral oil, water glycols and plain water, and may also be used with a wide variety of media compatible with the materials of construction.

⚠ 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

Pressure Drop vs. Flow

Typical performance based on water

Installation Diagram

25.7mm A/F [1.01in]

80.8mm [3.18in] NPT & BSP VERSIONS
88.9mm [3.50in] 44AE VERSION
94.0mm [3.70in] 56AE VERSION

OUTLET — INLET

INLET

OUTLET

Product Selector

NR25 P - NBR - SWD - 12K

VALVE TYPE	PORTING OPTIONS	SEAL OPTIONS	VALVE OPTIONS	MAX WORKING PRESSURE
		Leave blank for Viton® seals -10˚C to +160˚C	*Leave blank if not required*	
NR25	**P** 1/4" BSPP female 1.0CV	**NBR** Nitrile seals -30˚C to +105˚C	**SWD** Materials compatible with sea water	**12K** 828 bar (12,000 psi) Liquid
	N 1/4" NPT female 1.0CV	**EP** EPDM seals -45˚C to +150˚C	**NACE** Materials comply with NACE MR01-75	414 bar (6,000 psi) Gas
	-44AE 1/4" OD medium pressure tube port 0.2CV	**KLZ** Kalrez® seals -25˚C to +200˚C		
	-56AE 3/8" OD medium pressure tube port 0.65CV	**HNBR** Hydrogenated Nitrile seals -20˚C to +150˚C		

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

Further seal options are available on request

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