1/2"

UP TO 690 BAR 10,000 PSI



The CC50 is a 1/2" nominal bore cartridge 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.

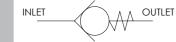
The valve uses sealed poppet technology to give virtually zero leakage with liquids and gases.

- Check or Non-Return valve
- Cartridge design ideal for installation in manifold systems
- Internally threaded for easy extraction
- Stainless steel construction
- Sealed poppet design
- Virtually zero leakage
- 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
- Various seal options available

Specifications

BASIC MODEL NUMBER

CC50



MAX WORKING	690 bar
PRESSURE (LIQUID)	(10,000 psi)
MAX WORKING	345 bar
PRESSURE (GAS)	(5,000 psi)
CV (FLOW CAPACITY)	2.2
	Liquids and Gases

FLUID Liquids and Gases
See materials section

TEMPERATURE RANGE

See Product Selector opposite and Technical Data section

NOMINAL SIZE 1/2"

CRACKING PRESSURE 0.1 - 0.3 bar

0.1 kg (0.2 lb)

Specifications may change without notice

ALTERNATIVE OUTLET OUTLET

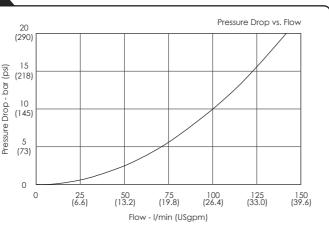
Materials

316 stainless steel with 302 stainless steel spring, and acetal. The spring is inconel for SWD 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

ALTERNATIVE

OUTLET

MEANS OF

RETENTION MUST BE PROVIDED

51.69mm ±0.13 [2.035in ±0.005]

Ø12.0mm

0.47in

Ø22.26mm ±0.04

[0.8765in ±0.0015]



STOP AND METERING

3 PORT DIRECTIONAL CONTROL

4 PORT DIRECTIONAL CONTROL

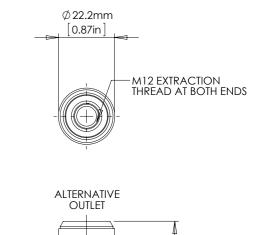
PILOT OPERATED CHECK

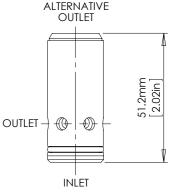
EXCESS

FILTERS

PRESSURE SENSING

ACTUATORS





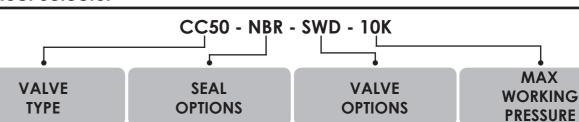
NOTE: CONTACT BIS FOR DETAILS OF CAVITY WITH THREADED PLUG RETENTION.

CAVITY DETAIL

40.0°

INLET

Product Selector



Leave blank if not required

SWD

Materials compatible with

38.6mm MAX [1.52in]

CC50

NBR
Nitrile seals
-30°C to +105°C

Ø24.6mm

0.97in

Ø12.0mm [0.47in]

OUTLET

Ø12.0mm/ [0.47in]

[0.025in]

R0.6mm MAX

EPEPDM seals
-45°C to +120°C

Leave blank for Viton® seals

-10°C to +120°C

KLZKalrez® seals
-25°C to +120°C

These valves are not internally serviceable. Seal kits containing external seals are available on request

For a seal kit add SK at the end of the model code

to +120°C **/17**

-25°C to +120°C

HNBR

Hydrogenated

Nitrile seals
-20°C to +120°C

Further seal options are available

on request

sea water (10,000 psi) Liquid 345 bar

(5,000 psi)
Gas
aximum working pr

10K

690 bar

The maximum working pressure of an installed valve is dependent on the housing design. Contact us for advice if in doubt regarding the suitability of any housing design



www.bisvalves.co.uk

Catalogue also available on digital media Visit our website for a full online search facility



(2 - 5 psi)