ECON PILOT VALVE NAMUR

3- AND 5-WAY Fig. 33580

Content

1. ERIKS operating companies

ECON 3- and 5-way NAMUR pilot valves fig. 33580 are being delivered by several ERIKS operating companies on a worldwide basis.
In this manual these will be referred to as 'ERIKS', the individual terms of delivery of the ERIKS operating company having executed the order are applicable.

2. Product description

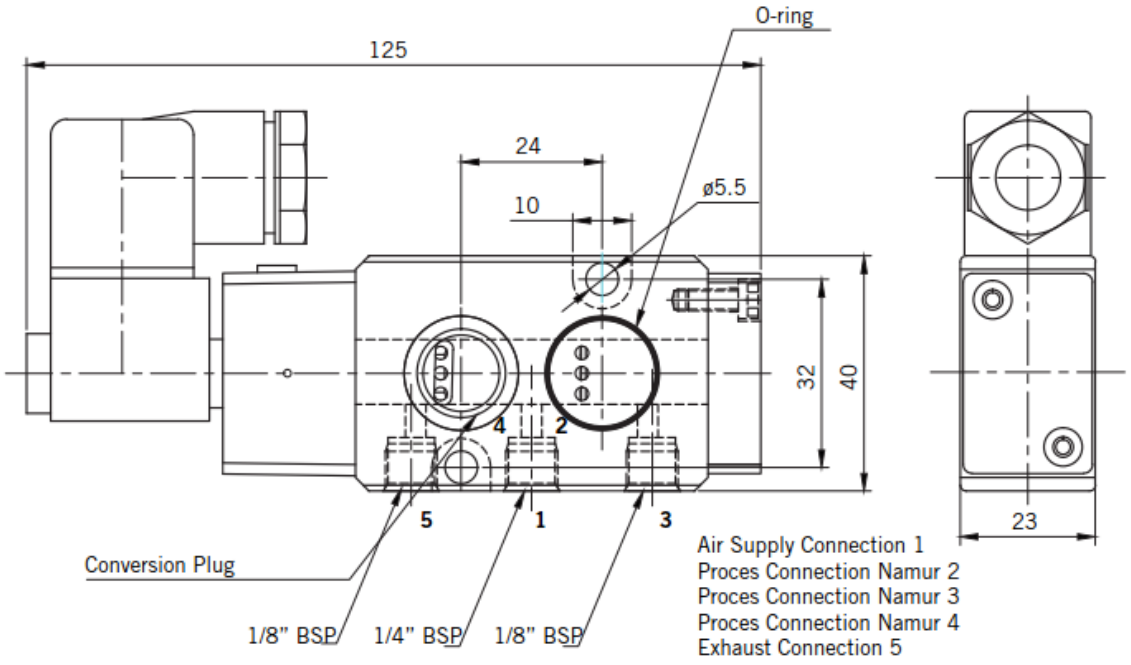
The ECON 3- and 5-way NAMUR pilot valves fig. 33580 are designed according the information on our website www.eriks.com and should be used in accordance with the applicable pressure-temperature rating as stated on this website. The NAMUR pilot valves are provided with marking.

The marking makes the identification of the valve easier and contains:

- Fig. number: **33580**
- Production date
- Temperature range: -20 .. +60°C
- Pressure range: 2 .. 10 bar(g)
- Type of media: air, filtered at minimum 50 um
- ECON logo
- Supply voltage (on coil): 230VAC 50-60Hz
  115VAC 50-60Hz
  24VAC 50-60Hz
  24VDC

Features;
The instrument air should be clean, dry and free of dust.
Material of the body: Anodized aluminum
Material of seals: NBR and PTFE
Nominal capacity Qn at 6 bar: 680 l/min
Capacity Kvs value 10 l/min
Coil power: DC; 2.5W, in hot condition; AC: 8W (11.5 VA at inrush)
Temperature class of coil: class F insulation
Coil rating: 100% ED
Electrical connector: Spade plug acc. EN 175301-803B, IP65

Dimensions



3. Requirements for maintenance staff

The staff assigned to assembly, operating and maintenance tasks should be qualified to carry out such jobs and in any circumstance, ensure personal safety

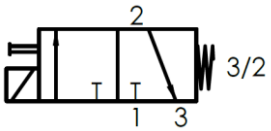
4. Transport and storage

The valves should be stored in an unpolluted space and should also be protected against all atmospheric circumstances. There should be taken care of the temperature and humidity in the room, in order to prevent condensate formation.

5. Function

ECON NAMUR pilot valves are designed to operate pneumatic actuators with ¼" NAMUR connection.

i. The pilot valve pressurizes the pneumatic actuator when its energized and the actuator de-aerates when the pilot valve is de-energized (3/2 function, normally closed).



ii. The pilot valve pressurizes 1 chamber of the pneumatic actuator and de-aerates the other chamber when its energized. When the pilot valve is de-energized it de-aerates the pressurized chamber and pressurizes the other chamber (5/2 function).

The pilot valves can be operated by the Push & Turn manual override as well.

6. Application

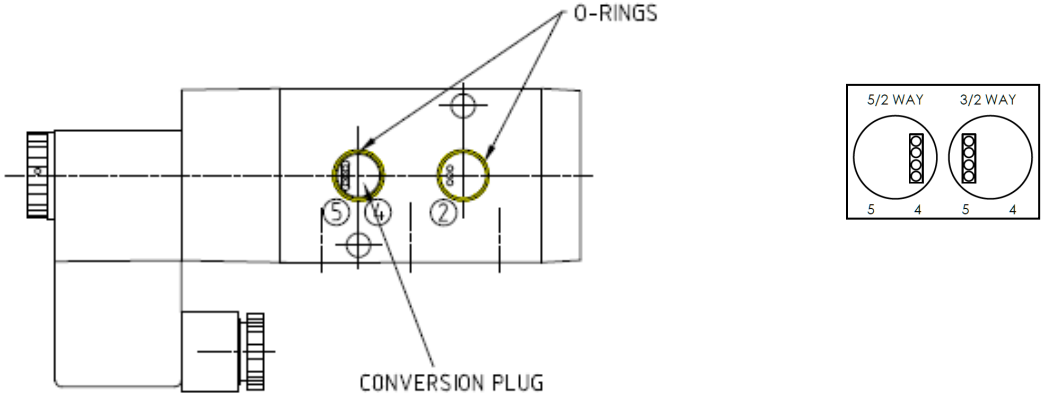
The ECON 3- and 5-way NAMUR pilot valves are widely used to operate pneumatic actuators which operate quarter turn valves (ball valve/ butterfly valve) or linear valves (eg. gate valves). The pilot valves are designed for standard operating conditions. For the use of extreme conditions e.g. extreme weather conditions, it is recommended to mention this at the ordering stage, to verify whether the valve is suitable. The installation designer is responsible for the pilot valve selection, suitable for the working conditions. The valves are **unsuitable** to apply in hazardous surrounding (ATEX).

7. Installation

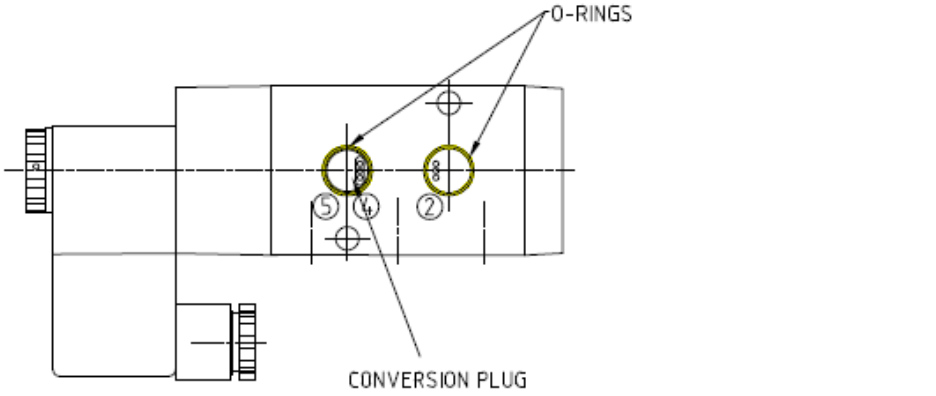
During the installation of the pilot valves, the following rules should be observed:

- make sure before an installation that the valves were not damaged during the transport or storage.
- make sure that applied valves are suitable for working conditions, medium used in the plant and the right system connections, according to pressure and temperature limits.
- make sure to not modify the device.
- make sure to take off dust caps if the valves are provided with them.
- make sure to clean the conduits which will connect to the pilot valve.
- make sure that the conversion plug is positioned correctly, 3/2 or 5/2 function, before mounting the pilot valve to the pneumatic actuator.

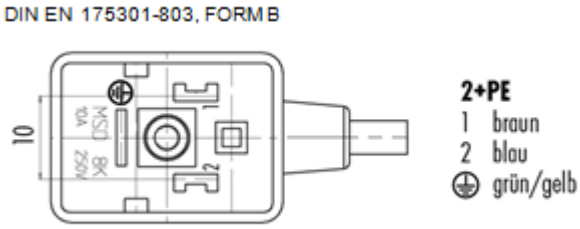
NAMUR SOLENOID VALVE WITH COVERSION PLUG AT 3/2 WAY POSITION AND PLACED O-RINGS



NAMUR SOLENOID VALVE WITH COVERSION PLUG AT 5/2 WAY POSITION AND PLACED O-RINGS



- make sure to install the supply voltage wire to the connector (EN175301-803-B) properly; brown wire terminal 1 (+), blue wire terminal 2 (-), green/yellow wire earth.



- make sure that you use the rubber seal between the connector and the coil.

8. Maintenance

Before starting any service jobs, make sure to depressurize the system and turn the electrical power off the installation. Make sure that the supplied air to the pilot valve is cut off. Always keep safety instructions in mind and take all personal safety precautions.

Make sure that you periodically check the correct operation of the pilot valve.
Interval depends on process situation and working environment.

During maintenance, the following rules should be observed:

- always keep personal safety precautions in mind and always use appropriate protection.
- dust and grease must be frequently cleaned of the valve body and inner parts.

9. Troubleshooting

It is essential that the safety regulations are observed when identifying the fault.

Problem	Check	Corrective measures
Port not changing over	Is the operating pressure under the minimum of 2 bar?	Get pressure above 3 bar
	Is the inside of the pilot valve free of dirt?	Clean the valve and inner parts
	Is the voltage and the operating pressure switched ON?	Switch the voltage and pressure ON
Leakage through exhaust during coil de-energized	Is the inside of the pilot valve free of dirt?	Clean the valve and inner parts
	Is the operating pressure under the minimum of 2 bar?	Get pressure above 3 bar
Leakage through exhaust during coil energized	Seals jamming due to dirt	Clean the valve and inner parts
General malfunction	Is the pilot valve installed according the instructions?	
	Is the right voltage supplied?	
	Is the electrical connector installed properly?	
	Is the air pressure supplied to port 1?	
	Is the conduit, which supplies the air, clean?	

10. Removal

All dismantled and rejected valves cannot be disposed with household waste. The valves are made of materials which can be re-used and should be delivered to designated recycling centers.

If you have any questions about this product,
Please contact the nearest ECON distributor.
You can find them on www.eriks.com

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