

# INSTALLATION, OPERATION AND MAINTENANCE MANUAL

# 5/2 Ways Solenoid Valve Namur Connection with Intrinsic Safety Coil



Ref. GENEBRE: 4521



# Installation, operation and maintenance instructions

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# 1. Product Description.

The 5/2 ways solenoid valve is used for rotary valve operations with pneumatic actuators using air pressure.

- Design according NAMUR VDI / VDE 3845.
- Universal application 5 / 2 ways.
- Port sizes; pressure in and exhaust 1/4" GAS.
- Single stable version.
- Manual override as standard.
- Connector, O-Rings and screw for mounting.

#### 2. Data and Technical Features

#### Technical Data

Standard voltage = DC = 24V

 $Voltage\ tolerance = \pm 10\%$ 

Insulation class = "F" (for nylon coil)

Duty cycle = 100% ED

Protection class = IP65 acc. IEC 144

DIN 40050 EN 60529 with connector assembled.

Operating pressure = min. 1,5 bar - máx. 8 bar

Max Pressure = 12 bar

Connector = EN 175301-803-A (form A)

Flow factor Cv = 1.4

Max operating frequency = 300/1'

Activate time: < 0,05 s.

Working Temperature: - 5° C + 60° C

Coil Width = 30 mm

Weight = 300 gr.

Certification: Ex II 2G EEx ia IIC T6



#### 3. Storage

During storage it is recommended to keep the product in the included protective wrapping to avoid damages or dirt accumulation. The wrap must not be removed until element is to be installed. As much as possible, it must be stored in a dry and clean environment.



Transport and storage of these devices must be done in their original wrapping.

#### **VISUAL INSPECTION**

Check whether during transport, unloading and placement, devices have suffered no damages.

#### **MECHANICAL INSPECTION**

Check whether all mobile parts of the different devices, as well as the screws and other elements, are accomplishing their purpose.

If you notice any kind of anomaly during reception of the goods, contact immediately with GENEBRE in order to determine the possible responsibilities on the issue and make the devices fully operational.

#### **IMPORTANT NOTE:**

Before installing and/or manipullating these pneumatical elements, READ CAREFULLY these instructions for use and OBSERVE all contained information. If you fail to understand any of their content, please contact GENEBRE, S.A.

User is responsible for the safe use of these devices, as established in present instructions for use and in the specific technical documentation of the device.



#### 4. Installation instructions

### 4.1) Preparation

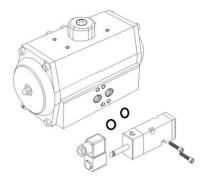
Remove any material remains of the element wrapping. Prepare a clean working area.

Plan beforehand enough space for future maintenance operations.

It is recommended to perform this task under qualified professional surveillance.

#### 4.2) Installation on the actuator

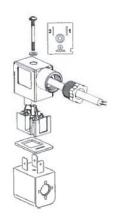
Design according NAMUR VDI / VDE 3845.



Verify that the o'rings are well placed on the back of the solenoid valve and fix it to the actuator with the two screws that come in the box.

#### 4.3) Electrical connection

Be extremely cautious before powering the equipment and take into account the power tension for which it is indicate the coil.



Wiring must be done with a cable clamp:



#### Available voltage:

Voltage	Туре	Consumption
24 V	DC	115 mA

### 4.4) Pneumatic connection

IMPORTANT: Power air has to be CLEAN and DRY.

Respect minimum and maximum power pressure (1,5-8 bar)



Port sizes: pressure in and exhaust 1/4" GAS threaded

# **5. Operational instructions**

# 5.1) Usage

Before starting the equipment, you have to read the Technical Specifications and never exceed the Power limit values (electrical and air).

# 5.2) Manual operation

Rotary manual override device, with interlocking





## 6. Maintenance operations

The solenoid valve does not require maintenance.



¡Use only components/spare parts original or recommended by GENEBRE, S.A!

#### 7. Reparation instructions

Available spare coils (ref.4821 C24V).

Before starting to repair it, disconnect all pneumatic and electrical solenoid valve.



¡Use only components/spare parts original or recommended by GENEBRE, S.A

# 8. Hygiene and Safety Instructions:

When operating any kind of element, you must follow the security instructions and it is recommended to use personal protection gadgets:

- 1) Protect your eyes.
- 2) Wear gloves and appropriate working clothes.
- 3) Wear safety footwear.
- 4) Wear a helmet.
- 5) Have running water at hand.