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### Guarantee and Service

The manufacturer is responsible for the solenoid valve properties during 12 months since delivery. In case of any claim it is required to present the solenoid valve, a document about buying (payment receipt) and this Installation, Service and Maintenance Instructions. The guarantee is not approved if the damages are caused by inappropriate impact to the solenoid valve or with not following these instructions.

Under and out-of – guarantee repairs can be performed by the manufactures.

### Product liquidation

Components and pack can be used as source of secondary raw material.

Product is not source of environmental pollution and doesn't include danger scrap.



# INSTALLATION, SERVICE AND MAINTENANCE INSTRUCTION

3-WAY SOLENOID VALVES

*Type: 3VE12MX* 3VE12MX.1



Document number: 75 0392 03

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### Application

Three way solenoid valves are used for control of water, air and other media, suitable for applied materials. Valves are direct acting with electric control signal.

### Basic technical data according to TP 75 0388/06

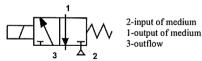
Туре	Diameter DN [mm]	Operating pressure P <sub>B</sub> [ MPa ]	Flow factor Ky [m³/h]	Fluid temperature [°C]	Ambient temperature [°C]	Seal	Voltage	Power consumption	Weight [kg]
3VE12MX	12	0 - 0,2	1,4	0 °C - +130 °C	-10 °C - +50 °C	FPM	24 V / DC 230 V / 50 Hz	18,5 W 22 VA	0,45
3VE12MX.1	12	0 - 0,2	1,4	-30 °C - +130 °C	-30 °C - +50 °C	MVQ	24 V / DC 230 V / 50 Hz	18,5 W 22 VA	0,45

### Applied materials

Body	aluminium, ( stainless steel, brass )
Internal parts	
Seals	FPM ( type 3VE12MX ), MVQ ( type 3VE12MX.1 )
Coil insulation class (EN 60317)	
Relative duty cycle	
Enclosure (EN 60529)	IP 65 ( with connector )

### Possible function of valve

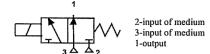
### Normally closed



Coil with voltage 2-1 (3-closed)

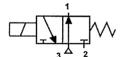
without voltage 1-3 (2-closed)

## Mixing function



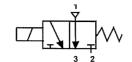
Coil with voltage 2-1 (3-closed) without voltage 3-1 (2-closed)

### Normally opened



Coil with voltage 1-2 (3-closed) without voltage 3-1 (2-closed)

### Distribution function



1-input of medium 2-output 3-output

3-input of medium

1-output of medium

2-outflow

Coil with voltage 1-2 (3-closed) without voltage 1-3 (2-closed)

### Installation

Clean pipeline system before installing valve. Dirt causes malfunction. If necessary, fit filter upstream of valve inlet. The valve will not open or close if the control ducts or the armature are blocked by dirt.

Mounting position of valve is optional. Recommending is mounting with coil over the body to horizontal pineline. According to function, medium flow is connected to input of medium. Individual ways of valve are connected to actuating device (mixing or distribution function) or to outflow (normally closed or normally opened function).

There are two M5 holes on the body of the valve for device fixing.

### Electrical connection

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Connect the solenoid in accordance with National electrical Engineering Standards, By coil connection check electric data on coil and mains voltage. Bring voltage to marked coil connectors. Connect protective wire safety to protective connector. Coil is mounted to valve rotated in 360°. Coil has to be mounted to valve before voltage bringing.

### Instruction for operation

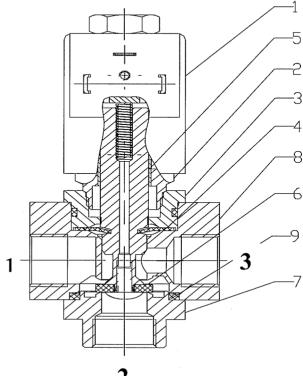
Operating conditions should correspond with valve technical data. Temperature and medium type should correspond with seals and material of valve. By valve running is it necessary to check function rightness, seals and

Frozen medium causes a damage of valve and coil. Valves are not frost-proof.

### Maintenance

Maintenance is necessary in case of valve failure only (no function rightness, no tightness). Preventive maintenance is advised in case of worse operating conditions, often initialising of valve or by medium pollution. Maintenance work must be carried out only by the absence of pressure in the pipeline and with solenoid disconnected from the voltage supply. After valve repair or replacing test the valve with 1.5 multiple of maximum operating pressure. Valve should be not initialise by testing, valve could be opened or closed by testing. Upon request, producer is able to supply some kinds of spare parts and brochures with sectional drawing and assembly instructions. By coil ordering is it necessary to set number and kind of voltage (AC or DC).

### Valve cut



### Legend

1-Coil

2-Core guide

3-Upper flange

4-Membrane

5-Core

6-Core seal

7-Bottom flange

8-Body

9-Gasket