

**2-way solenoid valves
normally closed with operating solenoid in Ex version**

Application

Three way solenoid valves are used for control of water, air and other media, suitable for applied materials. Valves are closed at the basic position without voltage. After bringing of voltage to the coil the valve is opened. These equipments are used in areas where probability of an **explosive atmosphere** (consisting of a mixture of air and gases, vapours or mixture of dust and air) will occur– Group II in terms of directive of European parliament No. 94/09/ES from 23. March 1994.

Technical data

Type	Diameter DN [mm]	Connection	Operating pressure [MPa]		Medium temperature [°C]	Flow factor Kv [m ³ /h]	Ambient temperature [°C]	Weight [kg]		
			Min	Max.						
2VE2F F-Ex	2	G 1/4	0,0	1,2	80	0,12	-10 ÷ +50	0,36		
2VE2FJ F-Ex										
2VE2,5F F-Ex	2,5								1,0	0,18
2VE2,5FJ F-Ex										
2VE3F F-Ex	3								0,6	0,25
2VE3FJ F-Ex										
2VE4F F-Ex	4								0,4	0,3
2VE4FJ F-Ex										
2VE6DF N-Ex	6								1,2	0,56
2VE6DFJ N-Ex										

Applied materials:

Body, flange.....brass
 Internal partsstainless steel
 Seal.....FPM (type 2VE6DF(J) – NBR)
 Coil (explosive atmosphere group II)..... Nass Magnet , type 13-36 : II 2G EEx m II T4 ; II 2D IP65 T130°C
IEC Ex m II T4

Installation

Clean pipeline system before installing valve. Dirt causes malfunction. If it is 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 pipeline. Medium has to flow through in direction of arrow. Valve is running correctly only in marked flow direction.

Electrical connection

Connect the solenoid in accordance with National electrical Engineering Standards. By coil connection check electric data on coil and mains voltage. Electric cable is safety connected to connector and together with connector it is a part of solenoid. Connector provides enclosure IP 65. Coil is mounted to valve rotated in 360°. Coil has to be mounted to valve before voltage bringing, otherwise, it can be damaged.

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 joints tightness. By pilot operated type of valves there is differential pressure between input and output of valve required. In case of manual override of valve it is possible emergency opening of the valve by turning a button to position 1. By running of valve this button has to be always in position 0. Manual override is not suitable for standing change of closed and opened position of valve. Frozen medium causes a damage of valve and coil. Valves are not frost-proof.

Maintenance

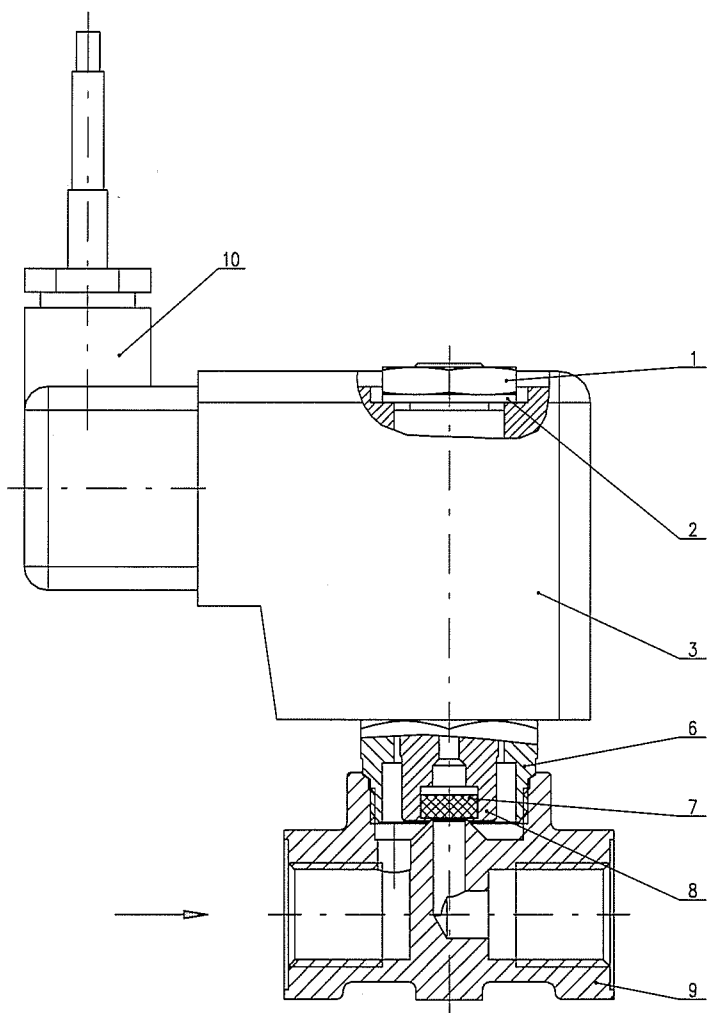
Maintenance is necessary in case of valve failure only (no function rightness, no tightness). Preventive maintenance is advised in case of worse operating conditions, often initialising of valve or by medium pollution.

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).

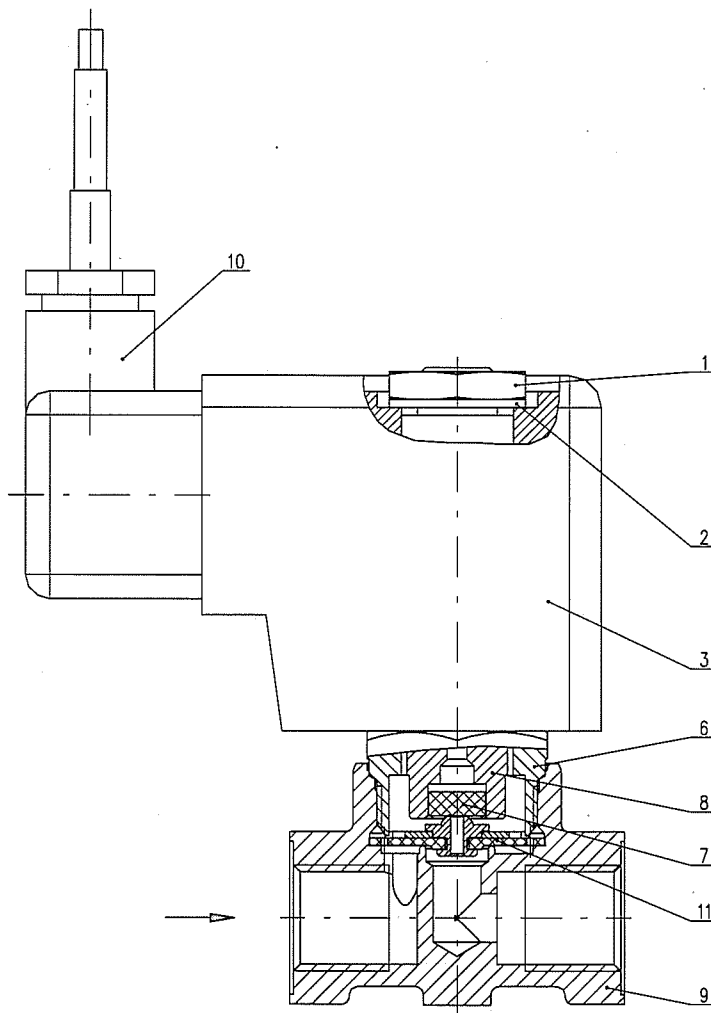
Cut of direct acting valve

Type : 2VExF F-Ex
2VExFJ F-Ex



Cut of pilot operated valve

Type : 2VE6DF N-Ex
2VE6DFJ N-Ex



Legenda:

1 – Nut
2 – Washer
3 – Coil

6 – Core guider
7 – Seal

8 – Core
9 – Body
10 – Connector
11 – Membrane