

1 - Coil 2 - Diaphragm 3 - Nut G1/8

4 - Spring

5 - Core guider 6 – O-ring

8 - Body

7 - Flange

9 - Connector

10 - Shell of manual control 11 - Screw for manual control

12 - Label

13 - Washer 10.5

14 - Seal

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

2-WAY SOLENOID VAI VES PILOT OPERATED WITH INVERSE FUNCTION Type: 2VE6IDA, 2VE10IDA 2VE12IDA, 2VE13IDA 2VE16IDA. 2VE25IDA 2VE32IDA, 2VE40IDA 2VE50IDA

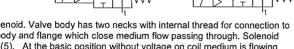


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Application

Two-way solenoid valves pilot operated with inverse function 2VF6IDA up-to 2VF50IDA are electromagnetic shutoff valves with on-off function which can be used for flow control of water air and other medium, suitable for applied materials. Valves are open at the basic position without voltage. After bringing of voltage to the coil the valve is closed.

Operation description



Valve consists of body (8), flange (7) and solenoid. Valve body has two necks with internal thread for connection to pipeline. There is a diaphragm (2) inside of body and flange which close medium flow passing through. Solenoid consists of coil (1) and core guider with core (5). At the basic position without voltage on coil medium is flowing through the seat of valve. Pressure over the diaphragm is lower than pressure below the diaphragm, valve is open. After voltage bringing core is closing auxiliary hole. Pressure differential caused closing of the valve; medium is not flowing through the valve.

Operating

Technical valve data according to TP 75 0349/03

Type	Version	Flow factor [m³/h]	Connection Diameter [mm]	pres	rating ssure IPa] Max.	Medium temperature [°C]	Seal	Weight [kg]	Voltage	Power consum ption
2VE6IDA	N1	0,95	G 1/4 6	0,02	1,6	90	NBR EPDM	111 11	AC	25 VA
								- 0,8	DC	18,5 W
	E1, EP	·				130			AC	25 VA
									DC	18,5 W
2VE10IDA	N1	1,6	G 3/8 10	0,02	1,6	90	NBR	0,75	AC	25 VA
							NDIX		DC	18,5 W
	E1, EP					130	EPDM		AC	25 VA
						100			DC	18,5 W
2VE12IDA	N1	2,2		0,02	1,6	90	NBR	0,75	AC	25 VA
	I IN I		G 3/8 12						DC	18,5 W
	E1, EP		12			130	EDDM		AC	25 VA
	L1, L1					130	EPDM		DC	18,5 W
	N1			0,02		90	NBR	1,13	AC	25 VA
2VE13IDA		3	G 1/2 13		1,6		TADIX		DC	18,5 W
ZVETSIDA	E1, EP					130 EPDM	EDD).4		AC	25 VA
	L1, L1						ELDIÁI		DC	18,5 W
2VE16IDA	N1		G 3/4 16	0,02	1,6	90	NBR	1,04	AC	25 VA
	- '`'					90			DC	18,5 W
	E1, EP	3,6				130	EPDM		AC	25 VA
									DC	18,5 W
2VE25IDA	N1	8,5	G 1 25	0,02	1,6	90	NBR	1,74	AC	25 VA
									DC	18,5 W
	E1, EP					130	EPDM		AC	25 VA
									DC	18,5 W
2VE32IDA	N1	EP 17,5	G 1 ¼ 32	0,02	1,6	90	NBR		AC	25 VA
	E1, EP					130	EPDM		DC	18,5 W
2VE40IDA	N1	18,5	G 1 ½ 40	0,02	1,6	90	NBR EPDM 3,63	2.62	AC	25 VA
	E1, EP					130		3,03	DC.	18,5 W
2VE50IDA	N1	38	G 2 50	0,02	1,6	90	NBR F.00	AC	25 VA	
ZVLJUIDA	E1, EP	20				130	EPDM	EPDM 5,26	DC	18,5 W

Applied materials:

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Body, flange	brass
Internal parts	
Seals	standard (version N1) – NBR (operator FPM)
	special request (version E1) - EPDM (operator FPM)
	special request (version EP) – EPDM (operator EPDM)
Coil	insulation class F according to STN IEC 60085

Installation

Clean pipeline system before valve installing. Dirt causes malfunction. Necessary fit filter with 0.2 mm filtration. softness upstream of valve inlet. The valve will not open or close if the control ducts or the armature are blocked by

Mounting position of valve is optional. Preferentially recommended is mounting with coil over the hody to horizontal pipeline. Medium has to flow through in direction of arrow. Valve is running correctly only in marked flow direction.

Flectrical connection

Connect the coil in accordance with National electrical Engineering Standards, Before 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.

Coil duty rating is 100%. Coil warming up by permanent operation without media flow can be not higher than 130°C by 10% voltage increasing and 115°C by 6% voltage increasing.

Max. valve switching on frequency:

_	2VE6IDA up to 2VE25IDA for air	120 switching on / min.
-	2VE6IDA up to 2VE25IDA for liquids	40 switching on / min.
-	2VE32IDA, 2VE40IDA for air	100 switching on / min.
-	2VE32IDA, 2VE40IDA for liquids	30 switching on / min.
-	2VE50IDA for air	30 switching on / min.
-	2VE50IDA for liquids	10 switching on / min.

Coil voltage (Nass Magnet):

_	standard version	230 V / 50 Hz; 24 V / DC
-	possible version	. 110 V / 50Hz; 24 V / 50 Hz; 12 V / DC
_	voltage deviation	+10%

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

At valves that are equipped with manual control, it is possible to emergency close by screwed bolt of manual control (pos.11) clockwise to stop. During operation this bolt must be unscrewed in opened position. according to sketch (see next page).

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. Valve should be use inside. operating ambient temperature is -10 °C up to +50°C. Maximum viscosity of flowing medium is 20 mm².s⁻¹.

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 initialising 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).