

ELECTROMAGNETIC (SOLENOID) VALVE
Type 0920200.0900
Normally opened; indirect effect; G ½; 2/2 way
PRINCIPLE OF OPERATION

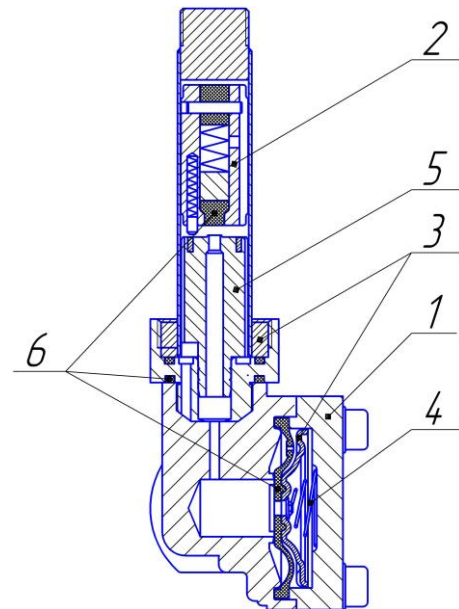
The electromagnetic valves of this type are devices providing by means of electromagnetic drive control of flowing and stopping of fluid on the pipelines. In the automatic regulation systems they serve as relay bodies for remote control and regulation. The electromagnetic valves are intended for integration in automatic systems in machine building, energy, chemical industry etc. The electromagnetic valves of these series are two-way, two-positioned, normally opened, with indirect effect. The valves have a certain direction of fluid flow, which is indicated on the article. Many of the electromagnetic valves are operating on digital principle. Because of this they have two states - when to the electromagnet (coil) is supplied electrical signal and when the valves are in idle state (no voltage is supplied). The valves function is determined of their state in which they are at the moment.


GENERAL TECHNICAL FEATURES

Working pressure (ΔP) from 0,7 to 16 Bars	Time for valve bedding-in Up to 2 seconds (at air DP = 16 Bars)
Maximum permissible pressure (ΔP) 16 Bars	Working fluid water; air; gas; petrol products
Ambient temperature (°C) From minus 30 to +60	Temperature range of the working fluid(°C) From minus 30 to +80
Viscosity of the working fluid maximum 25 sSt (mm ² /c)	Gaskets NBR (Nitrile Butadiene Rubber)

CONSTRUCTION

- | | | |
|--------------------------|---|-----------------|
| 1. Body | - | brass |
| 2. Tongue | - | stainless steel |
| 3. Internal parts | - | brass |
| 4. Spring | - | stainless steel |
| 5. Seat | - | stainless steel |
| 6. Gasket | - | NBR |


ELECTRICAL FEATURES

Electromagnet conductor copper	Coupling specification ISO 4400
Coil insulation class F	Connection flat
Protection degree IP 65	Standard voltages 12V, 24V, 48V, 110V, 220V DC/AC

Specification for connection at degree of protection IP 65

Connector type	Blocking system
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DIN 43650-A	bolts
Connector plug	Maximum current 16 A
Installation On cable	Conformity with standard DIN 43650-A, ISO 4400
Nominal pressure 250 V	External conductor diameter from 6 to 9 mm
Structure of batten terminals 2+PE	Conductor section 1,5 mm ²

SPECIFICATION

Connection dimensions (G)	Passage section (mm)	Throughput capacity Kv		Working pressure ΔP (Bar)		Coil type	Catalogue number	Gaskets
		(M ³ /H)	(L/MIN)	MINIMUM	MAXIMUM			

INSTALLATION

- The electromagnetic valves of this type may be installed arbitrarily.
- These valves do not have installation openings provided in the body.
- The pipe connection (G) standard threading in conformity with ISO 228/1 and ISO 7/1.
- Other connection - by order.
- Installation/operation instructions are attached at every valve.

MARKING AND LABELLING

Each name of products is in conformity with the EU and Bulgarian legislation. They conform to the following standards:

2006/95/EC - Directive of the European Union 2006/95/EC dated 12 December 2006 regarding harmonization of legislations of the member-states, regarding electrical facilities intended for use in particular voltage limits.

„Conformity mark“ The CE mark represents sign for conformity placed on particular products intended for the European market and which declares that the products conform to the European safety requirements.

CONTROL METHOD

The control method is performed as provided in the company standard of the manufacturer. Each electromagnetic valve passes through 100% control, pressure resistance test, leak-tightness and working pressure.

INSTALLATION INSTRUCTIONS

The installation place shall not be put under impact load and the working conditions shall conform to the requirements indicated above. Connection to the system shall provide a good compaction and absence of leakages.

At valves installation the direction of fluid flowing shall coincide with the mark on the body.

At operation with contaminated fluids a filter shall be compulsory installed in front of the valve.

The connection of the electromagnet to the electrical circuit is made by supplying cable which passes through the gasket outlet of the coupling. Current-carrying cores of the cable shall have section affording the conduction of the consuming power and conforming to the requirements of the Technical Safety Rules. The installation shall be performed at shut-off voltage in the electrical network. The grounding is obligatory and is made by the third core of the cable and the tab marked with grounding sign.

The passage opening of the ring-shaped rubber gasket of the coupling is provided by 2 degrees for the diameter size - $\varnothing 9$; $\varnothing 13$ (by cutting). On this shall correspond the diameter of the external cable cover in view of achieving protection degree IP 65.

TECHNICAL SERVICE

The electromagnetic valves do not require special service. It is necessary to be observed the leak tightness of the connecting pipelines and each fluid leakage to be immediately removed as well as to be observed the working order of current carrying cable and its sealing. The electromagnetic valves of these series are with protection degree IP 65 and their use at other conditions is not permitted. The duration of switching-in is 100%.

REGULAR STORAGE

The valves shall be stored in dry ventilated premises with temperature from minus 25⁰C to plus 55⁰C and relative humidity up to 80%. In the premises shall not be substances which would cause corrosion of parts.

TRANSPORTATION

The valves may be transported in package at temperature from -20⁰C to +50⁰C. After unpacking they should stay at least two hours at temperature from +5⁰C to +40⁰C before their operation.

GUARANTEES

The producing company undertakes for period of 24 months as of the date of dispatch by the company, to replace or repair the devices free of charge, if by the consumer is found inconformity with the requirements of the Company Standard of the producing company. The replacement or repair are made only if at the transportation, storage, installation and operation of devices have been conformed all requirements of the installation, operation and maintenance instructions of the devices by the producing company.

DIMENSIONS (mm) , WEIGHT - 0,750 kg

