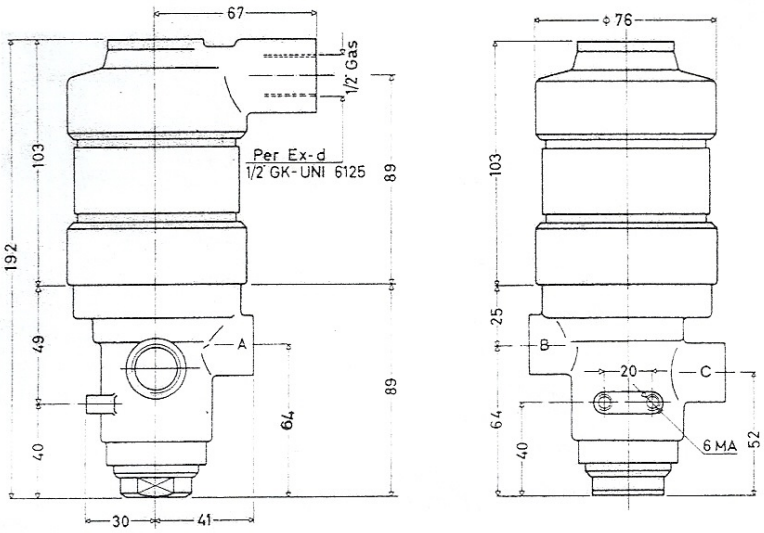
DIRECT ACTING THREE WAY SOLENOID VALVES

Model ED 300

Table 308



Model	Maximum Operating Pressure Kg/sq.cm.	Kv flow factor	Operation
ED 300 - 55 U	10	7,4	
ED 300 - 65 U	7	10	
ED 300 - 55 C	15	7,4	
ED 300 - 65 C	12	10	

Identification symbols

ED 300	N	55	U	R	O	E

Model

Gasket material
N - Synthetic rubber
V - Viton

Diameter in tenths of mm
55 or 65

Operation
U - Universal
C - Normally closed
A - Normally open

Housing
E = Ex-d
S = IP55
G = Eexd II BT5 + H2

Body
O - Brass
D - Stainless steel

Connection threads
P - 1/4 Gas
R - 1/4 NPT
T - 3/8 Gas
Y - 3/8 NPT
Q - 1/2 NPT

Specifications

Solenoid valves model ED/300 are specifically designed for fluid systems, and in particular for systems operated by dry air. Their rugged construction makes them suitable for field installation.

The absence of any packing gland and the fact that moving parts are in direct contact with the controlled fluid prevent any possibility of trouble due to oxidation caused by atmospheric substances.

Construction

Valve-seat gaskets consist of O-ring not subject to axial movements. Internal parts in stainless steel, brass body. Weight: 3,15 Kg.

Electrical characteristics

Solenoid coil wound with double-enamel Class H wire, absorbed power 28 Watts. 12 to 380 V voltage. 10% tolerance. Due to their particular design, these valves can only operate with direct current. In case of alternating current, a terminal board can be provided which includes a bridge rectifier and a recycling diode.

Model R2/L for normal and waterproofing sealing, R2/E for Ex-d. (CESI Certificate AD/82-204).

Optionals

IP55 waterproof solenoid enclosure.

Ex-d explosion-proof solenoid enclosure (CEI Standards 31.1 IIB T5) CESI Certificate AD82-203 and AD83-231 for Gr. IIb + H2 T5.

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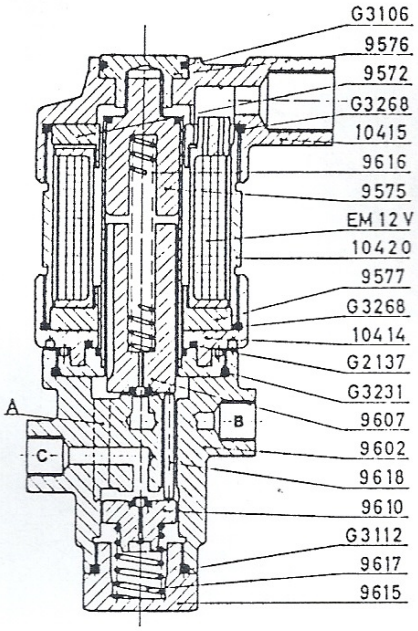
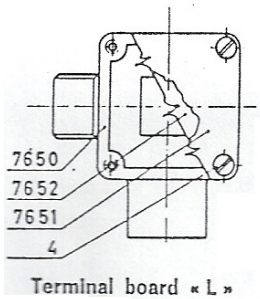
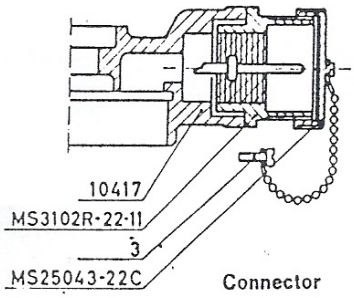
Model ED 300

Table 308 A

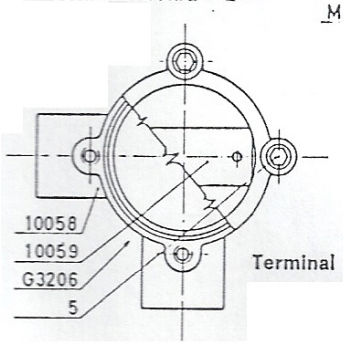




Terminal board « L »



Connector



Terminal board « E »

Nomenclature

9602	Body
9572	Upper washer
10415	Upper electromagnet cover
9575	Core guide
9576	Electromagnet locking ring
9577	Lower washer
10414	Lower electromagnet cover
9607	Movable core
9610	Lower plug
9615	Stopper
9616	Upper spring
9617	Lower spring
9618	Pins (3 pieces)
EM12	Coil
G2137	OR gasket
G3106	OR gasket
G3112	OR gasket
10420	Skirt
G3231	OR gasket
G3268	OR gaskets (2 pieces)
R2	Rectifier plate for AC operation
3	3MA x 10 UNI 6107 screw (4 pieces)
10417	Upper electromagnet cover
MS3102	Connector
MS25043	Terminal board « L »
7650	Connector cover
7651	Terminal board « L » cover
7652	Terminal board « L » gasket
4	TCB 2.9 x 13 screws (4 pieces)
10058	Terminal board « E »
10059	Terminal board « E » cover
G3206	Terminal board « E » gasket
5	DIN 912 - 5MA x 15 screws

Operation

The three 9618 pins transmit the axial movement of movable core 9607 to plug 9610. Spring 9616, having a higher load, keeps spring 9617 compressed, passegeway A-C open and passageway A-B closed. By exciting the coil, core 9607 is withdrawn, spring 9616 is compressed, valve seat 9610 is displaced and blocks passageway A-C while opening passageway A-B.

Maintenance

Due to the absence of friction and parts requiring lubrication, this valve can operate for long periods of time with no maintenance. Should foreign matter penetrate within the valve, it can be removed after the latter is disassembled.

Use a spanner to unscrew locking ring 9576 and core guide 9575.

The coil assembly can be completely withdrawn after removal of ring 9576.

The lower locking ring can be removed after stopper 9615 has been unscrewed.

Valve seat O-rings need not be replaced because they are practically not subjected to mechanical stresses and their wear is therefore irrelevant.

Should any part need replacement, address your requests to Morrel S.r.l. making reference to drawing no. 9601, indicating the relevant part number and specifying the full valve model number.

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