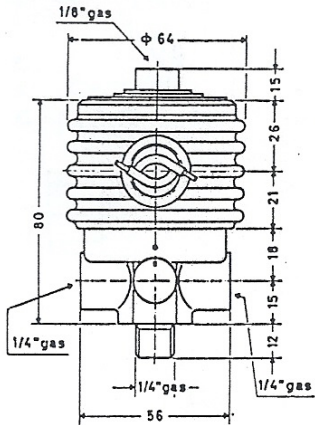


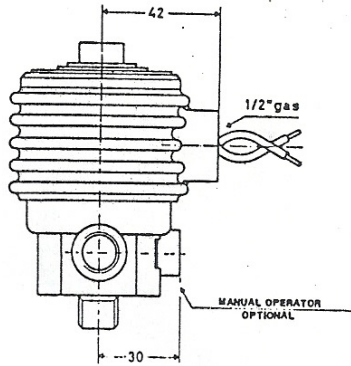
DIRECT ACTING THREE WAY SOLENOID VALVES

Model E/303

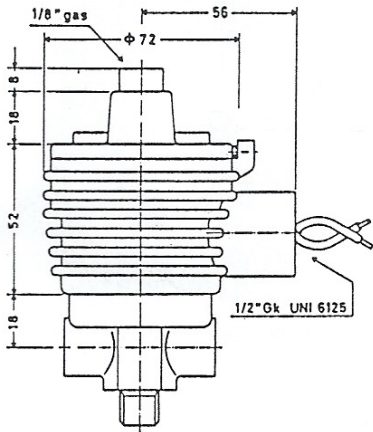
Table 302



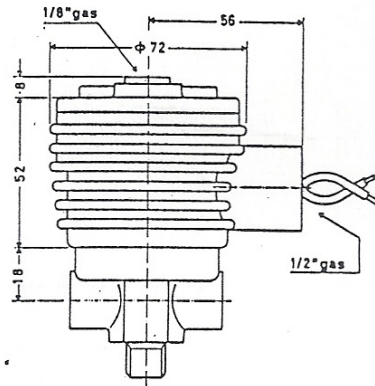
Standard Type.



Morrel

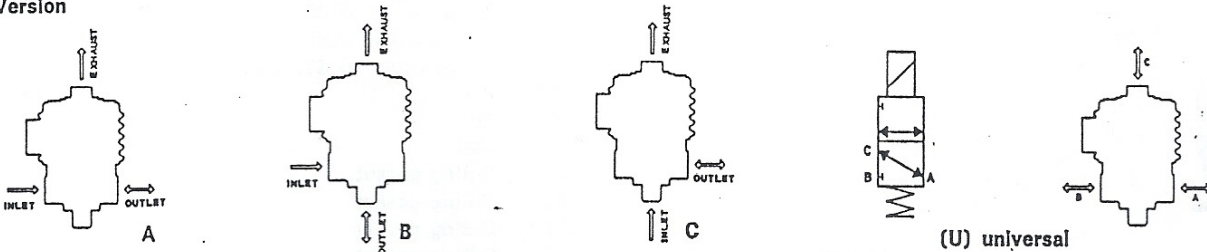


Ex-d Type



TS IP 55 Type

Version



Specifications

Direct acting three-way solenoid valves model E/303 are particularly suitable for controlling small simple-action pistons or spring-loaded, pneumatically operated valves. Version B can be directly screwed on top of pneumatically operated valves.

The absence of a packing gland and the fact that internal parts are in direct contact with the controlled fluid prevent any possibility of trouble due to oxidation caused by atmospheric substances.
1/4" body joints and 1/8" outlet joints.

Use

Suitable for air, water, oil or other fluids compatible with the materials used in the valve construction. Operating pressure from 0 to 12 Kg/sq.cm. for normally-closed and normally open valves, from 0 to 4 Kg/sq.cm. for universal valves.

Construction

Gaskets in Buna N (Viton optional on request). Internal parts in stainless steel, forged brass body. Weight 1 Kg.

Electrical characteristics

Solenoid coil wound with double-enamel Class H wire. Absorbed power for AC operation is 15 VA on closing and 50 VA at start, 12 Watts for DC operation. 12 to 380 V voltage. 10% tolerance.

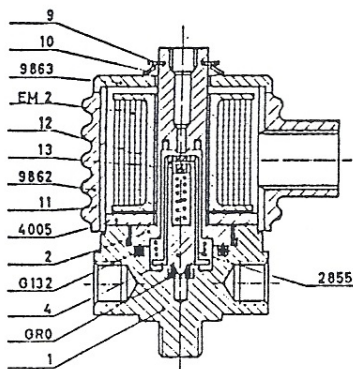
Optionals

- AISI 316 or 304 stainless steel body.
- IP55 waterproof solenoid enclosure.
- Model EM2.A explosion-proof solenoid enclosure (CEI Standards 31.1 Gr. IIB T5).
- CESI Certificate AD-910/74.

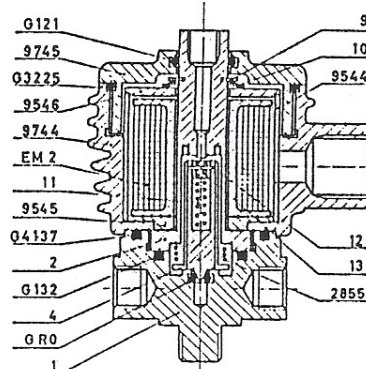
DIRECT ACTING THREE WAY SOLENOID VALVES

Model E/303

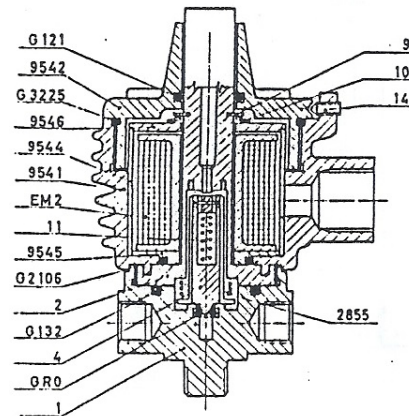
Table 7611



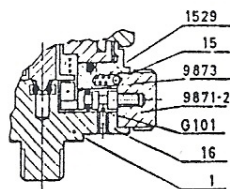
Standard Type



IP 55 Type



Ex-d Type



Manual Operator

Nomenclature

1	Body	9545	Lower cover of Ex-d TS electromagnet
2	Core guide	9546	Upper cover of Ex-d TS electromagnet
4	Core	9744	External TS skirt
9	Fastener	9745	Cover of TS skirt
10	Spring washer	9862	External STD skirt
11	Internal spring	9863	Upper cover of STD electromagnet
12	Pin	9871-2	Pin
13	Bush	9873	Pin
14	UNI5927 M4x6 screw	EM2	Coil
15	3/16" ball	GR0	O-Ring gasket
16	DIN915 M3x5 dowel	G101	O-Ring gasket
1529	Spring	G121	O-Ring gasket
2855	Spring	G132	O-Ring gasket
4005	Lower cover of STD electromagnet	G2106	O-Ring gasket
9541	Ex-d outer skirt	G3225	O-Ring gasket
9542	Cover of Ex-d skirt	G4137	O-Ring gasket
9544	External TS skirt		

Operation

Core 4, which is an integral part of solenoid, bears the inlet block and the outlet gasket. Spring 11 provides the stress for the preload of the outlet gasket. By exciting the coil, core 4 is drawn upwards. The inlet is thus connected with the using circuit and the outlet is closed by gasket 6. De-excitation of the coil causes spring 2855 to move the core back to its original position, connecting the using circuit with the outlet. The reciprocal operation applies in case of normally open models.

Maintenance

The simple design of these valves and the absence of a packing gland ensure long periods of operation not re-

quiring any maintenance. Should some component be replaced or the interior cleaned, proceed as follows. Remove fastener 9 and withdraw the whole electromagnet assembly. In case of waterproofed TS valves or explosion-proof Ex-d valves, you must first unscrew housing cover 9745 or 9542, respectively. Unscrew core guide 2 using a spanner using only the two holes at the base of this component. After having performed the required maintenance, reassemble following the same steps in reverse. Should any component part need replacement, contact Morrel Srl making reference to drawing No. 7611, indicating the relevant component number and the full model and version numbers of the valve.