assembly and operating instruction for solenoid valves

Solenoid valves work in the operation versions directly-, pilot- or combined acting. These valves are fully automatic, glandless and practically maintenance-free.

Following application types and installation features have to be considered with the different types or type series of the valve:
flow medium, operating pressure, operating temperature, installation position, materials of the valve, electrical and pipe connections.

1 Before installation

1.1	Check valves for possible transport damages.
1.2	Compare indications on the label with operating data (type, voltage, frequenzy and operating pressure)
1.3	Rinse the pipe before the installation of the valve. In case of contamination malfunctions have to be expected. We recommend the general installation of a mud flap with the mesh size of 0,35mm previous to the valve.

2 Mechanical mounting:

2.1	Valves have to be installed in flow direction. They are only in this direction tight.
2.2	If it is possible and not differently prescribed, the valve should be installed with standing magnet. Thus deposits in the tube can be avoided.
2.3	during the assembly it must be considered that a later conversion, coil and spare part exchange must be possible.
2.4	Never use a part of the valve or coil as a lever, that can cause damages.
2.5	Stress of the valve housing has to be avoided.

3 electrical connection

3.1	The valves have to be connected according to the relevant regulations by authorised specialists.
3.2	Before loading with pressure, check the electrical function of the valve. Then release the liquids throttled into the valve. pilot operated valves can still be open shortly.

4 maintenance

4.1	Before inspection of the valve, disconnect the power supply and drain the pressure out of the system.
4.2	All inner parts have to be tested and cleaned. If necessary they have to be replaced by original parts.
4.3	Reassemble all parts of the solenoid valve accurately and in right order.
4.4	The tightness and the correct function has to be tested before starting of operation.

5 Operation in explosive areas

5.1	Valve bodies delivered with the solenoid system Y1 are always certified and suitable for operation in explosive areas as one unit. This unit is suitable for explosive areas of zone 1, 2, 21 and 22.
5.2	Valve bodies do not have an own potential ignition source. The conditions of application of these valve bodies in explosive areas result exclusively from the conditions of application of the solenoids that are approved with the EC-Type-Examination Certificate.
5.3	The bodies of the valves are conductive connected to the tube with the electrical part and so grounded.
5.4	In addition, the coil has to be grounded potential-free by protective earth conductor.
5.5	No potentially explosive media may be piped through the valves.
5.6	The maximum temperature of the medium is 70°C.
5.7	A copy of the EX-approval of the solenoid is delivered with every solenoid valve or every delivery note.