

## INSTALLATION GUIDE to Ivdt's with onboard electronics to provision of electromagnetic compatibility

### V1300.4463

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### 1. Power Supply

The utilized power supply has to comply with the EMC - standards (CE - sign, certificate of conformity).

Relais and solenoids operating from the same supply circuit than the valve electronics has to be fitted by surge protection elements.

### 2. Connecting cable

Between control cabinet and inductive transducer a cable with a common cable screen is to be used. The quantity of the single cable connections must be chosen according to the wiring diagram in the dimensional drawing. Additional single cable connections must be potential free on both sides. The max. cable length = 50m. Min. cross section up to 25 m = 0.25mm<sup>2</sup>. Min. cross section larger than 25m = 0.5mm<sup>2</sup>. The capacity should not exceed 130 pF/m (wire/wire). Power lines resp. PWM cables must not be routed in parallel to the connecting cables of the transducer. The cable screen is to be grounded on both sides (see section „grounding“) whereby ground loops must not occur.

### 3. Connectors

The connectors has to be installed according the connection diagram, the cable shield has to be tied on the whole periphery to the provided coupling clamp in the connector.

### 4. Grounding

The housing of the linear stroke transducer has to be connected to the grounded magnet/valve metal machine frame. The cable shield of the linear stroke transducer has to be tied with the earth ground in the control cabinet. A low-ohmic potential compensation wire has to be provided between the control cabinet and the machine frame (cable wire > 10 mm<sup>2</sup> cross section) to prevent Ground-loops.

