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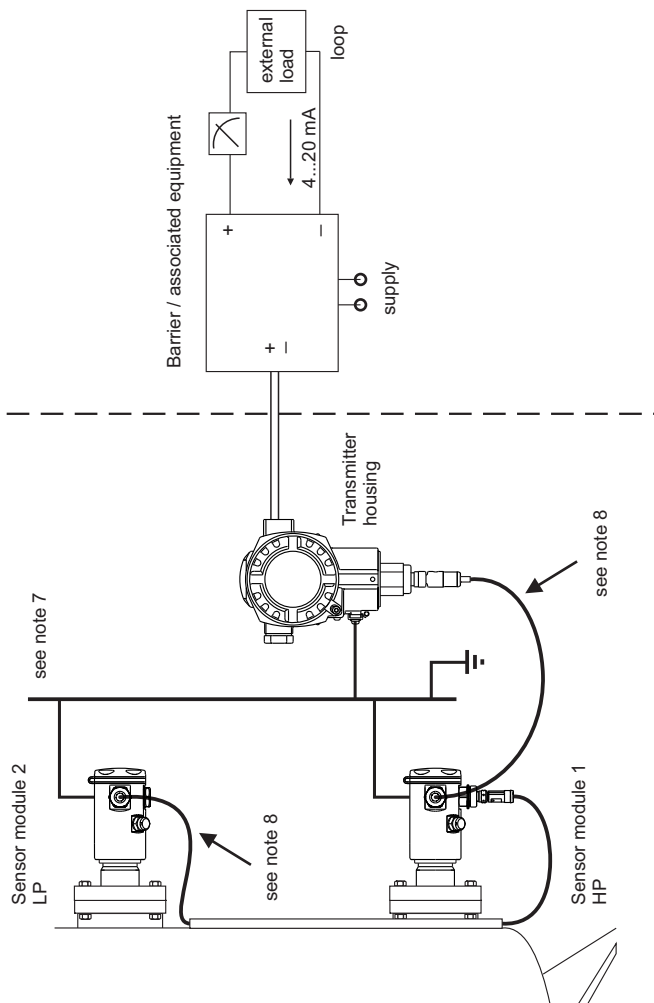
## FM Control Drawing XA00628P-C

Deltabar FMD71  
4-20 mA HART (IS)

Hazardous location

Class I, Div. 1, Groups A, B, C, D  
Zone 0

Non hazardous location



Entity parameter:

$U_i / V_{max} = 30 \text{ VDC}$   
 $i_i / I_{max} = 300 \text{ mA}$   
 $P_i / P_{max} = 1 \text{ W}$   
 $C_i \leq 11.8 \text{ nF}$   
 $L_i = 0$

Table: Permissible ambient temperature and temperature code

| Temperature code | Permissible ambient temperature, electronic compartment |
|------------------|---|
| T6               | -40 °C...40 °C  |
| T4               | -40 °C...70 °C  |
| T3               | -40 °C...70 °C (for high temperature version)           |

### Intrinsically Safe Installation

Intrinsically Safe (entity), Class I, II, III, Div. 1, Groups A, B, C, D, AE/Ex ia IIC T6  
Hazardous Location Installation

- Control room equipment may not use or generate over 250 V.
- Use approved intrinsic safety barrier with  $V_{oc}$  or  $V_t \leq V_{max}$ ,  $I_{sc}$  or  $I_t \leq I_{max}$ ,  $C_a \geq C_i + C_{cable}$ ,  $L_a \geq L_i + L_{cable}$ .  
Barrier must be capable of delivering more than 1 Watt to a matched load.  
Transmitter entity parameters are as follows:  $V_{max} = 30 \text{ VDC}$   
 $I_{max} = 300 \text{ mA}$   
 $C_i \leq 11.8 \text{ nF}$   
 $L_i = 0$   
For T-code see table
- Installation should be in accordance with National Electrical Code (ANSI/NFPA 70) or Canadian Electrical Code, Part I as applicable.
- Warning: Substitution of components may impair intrinsic safety.
- Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment: The configuration of the intrinsic safety barrier(s) must be FMRC approved.
- Use supply wires suitable for 5 °C above surrounding ambient.
- Transmitter housing and sensor modules must have the same ground potential (e.g. transmitter housing and sensor modules all mounted to the same metal structure). If potential equalisation can not be achieved by the installation, the devices must be interconnected with a suitable bonding conductor using the external ground connections.
- Transmitter provides Intrinsically Safe (type of protection 'ia') circuits for connection to and between HP Sensor module 1 and LP Sensor module 2.
- Sensor modules may only be connected to the transmitter and interconnected to each other. Any further connections are not allowed.

10. Remark: Versions with optional terminal block with integrated overvoltage protection have an isolation voltage greater than 290 Vrms/420 VDC between terminal connection and potentially grounded metal parts.

The devices are FM-approved as Single Seal per ANSI/ISA 12.27.01 as tabulated below; therefore installation of external secondary seals is not required.

| Single Seal | Model | Limited to:      |                       |
|-------------|-------|------------------|-----------------------|
|             |       | MWP*             | Process temperature** |
|             | FMD71 | 40 bar (580 psi) | -40 °C...+125 °C      |

\* Limitations of the Maximum Working Pressure (MWP) are marked on the nameplate and must be considered!

\*\* Limitations of the process temperature range depending on the used version are specified in the applicable technical information of the manufacturer and must be considered!