



FM Control Drawing 960006404 A

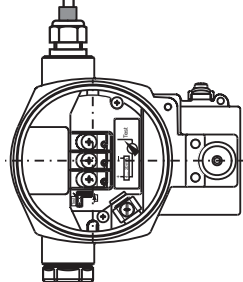
Deltabar S
 FMD77, FMD78, PMD75
 4...20 mA HART



People for Process Automation

Hazardous location

Class I, Div. 1, Groups A, B, C, D
 Class I, Zone 0, IIC
 Class II, Div. 1, Groups E, F, G
 Class III



Entity parameter.

V_{max.} = 30 VDC
 I_{max.} = 200 mA
 P_{max.} = 1 W
 C_i ≤ 11.8 nF
 L_i ≤ 225 µH

Non-hazardous location

Any FM approved barrier / associated equipment

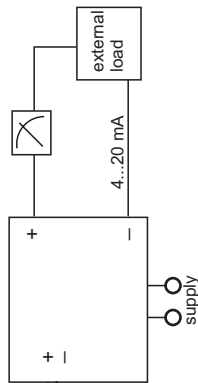


Table.: Permissible ambient temperature and temperature code.

Temperature code	Permissible ambient temperature, electronic compartment
T6	-40°C...+40°C
T4	-40°C...+70°C

option for Ta min: -50°C

This device is suitable to be installed in accordance with the wiring methods of Division 1/ Zone 0 for intrinsic safety (as defined above) and for Division 1/ Zone 1 for explosion proof protection.

For installations in accordance with the requirements of explosion proof protection the device is suitable for:

XP, Cl.I, Div.1 Gp. ABCD, DIP for Cl.III Div.1 EFG, Cl.III
 conduit seal must be installed within 18 inches of enclosure
 max. supply voltage: 45 VDC

ambient temperature range: -40°C...75°C (optional T_{amin} -50°C)

Warning: Changing the type of protection after first installation may impair the explosion protection

Intrinsically safe (entity), Class I, Div. 1, Groups A, B, C, D Class II, III, Div. 1 Groups E, F, G Hazardous Location Installations

- Control room equipment may not use or generate over 250 V
- Use FM Approval Entity-approved intrinsic safety barrier with Voc or Vt ≤ Vmax, Isc or It ≤ Imax, Ca ≥ Ci, La ≥ Li
 Barrier must be incapable of delivering more than 1 Watt to a matched load.
 Transmitter entity parameters are as follows:
 V_{max} = 30 VDC
 I_{max} = 200 mA
 C_i ≤ 11.8 nF
 L_i ≤ 225 µH
 P_{max} = 1W
 for T-code see table
- Installation should be in accordance with ANSI/ ISA RP 12.06.01 „Installation of intrinsically safe systems for hazardous (classified) locations“ and the National Electrical Code (ANSI/ NFPA 70).
- 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 FM Approvals approved.
- Use supply wires suitable for 5°C above surrounding ambient.

DIP for Class II and III, Div. 1 Groups E, F, G Hazardous Location Installation

- Depending on location install per National Electrical Code (NEC) using wiring methods described in Article 500 through 510.
 Intrinsic safety barrier not required
 max. supply voltage 45 VDC
- A dust tight seal must be used at the conduit entry when the transmitter is used in a class II & III location.
- Warning: Explosion Hazard – Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

Agency controlled drawing.
 No changes without prior agency approval.