XA01160P-B/00/EN/02.17
CCS/FM10
FM/B 14.10.16

71356446

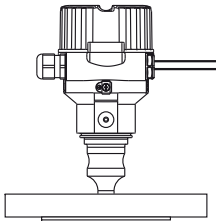
FM Control Drawing
960009543-B

Cerabar M PMP51, PMP55
HART
(IS + XP)

Endress+Hauser
People for Process Automation

Hazardous location

Class I, Div. 1, 2, Groups A, B, C, D
Class I, Zone 0, IIC
AEx ia IIC T6
Class II, Div. 1, 2, Groups E, F, G
Class III



Entity parameter:

V_{max} = 30 VDC
I_{max} = 300 mA
P_{max} = 1 W
$C_i \leq$ 10 nF
L_i = 0

Areas of application

The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Non hazardous location

Any FM approved barrier / associated equipment

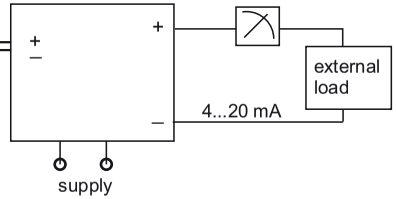


Table: Permissible ambient temperature and temperature code:

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

option for $T_{a,min}$: -50°C

Intrinsically safe installation

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

1. Control room equipment may not use or generate over 250 V.
2. Use Factory Mutual Entity-approved intrinsic safety barrier with Voc or Vt ≤ V_{max}, Isc or It ≤ I_{max}, Ca ≥ Ci + C_{cable}, La ≥ Li + L_{cable}.
   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} = 300 mA
   $C_i \leq$ 10 nF
   L_i = 0
   for T-code see table
3. 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).
4. Warning: Substitution of Components may impair intrinsic safety.
5. 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.
6. Use supply wires suitable for 5°C above surrounding ambient.
7. Avoid electrostatic charging of plastic surfaces, plastic process connections or coatings.

This device is suitable to be installed in accordance with the wiring methods of Division 1/ Zone 0 resp. Zone 20 for intrinsic safety (as defined above) and for Division 1/ Zone 1 for explosionproof protection.

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

Explosionproof for Cl.I Div.1 Gp. ABCD
Conduit seal is not required!

Max. supply voltage:
45 VDC
P ≤ 1.1 W

Ambient temperature range: -40°C...+75°C (optional $T_{a,min}$ -50°C)
Warning: Conductors shall be rated 10°C above ambient.

Warning: Keep cover tight, while circuit is alive.
Warning: Changing the type of protection after first installation may impair the explosion protection.

The devices are FM Certified 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*	Limited to: Process Temperature**
	PMP51, PMP55	400 bar (5800 psi)	-40°C...+100°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!
PMP55 allows higher process temperatures depending on the used diaphragm seal.
This is allowable provided the above specified process temperatures are guaranteed at the sensor close to the enclosure (location of primary seal) for these types.