

85173A - COMPLEMENTARY DOCUMENTATION SAFETY NOTE MX3GD/WX3GD

MX0/WX0



Ex nA IIC T4 -20...+60°C
Ex tc IIIC T135°C -20...+60°C

DESCRIPTION

Melt pressure transmitters are mercury-filled (MX series) or oil-filled (WX series).

The transmitters are designed and built according to European standards EN60079-0, EN60079-15, EN60079-31

The marking is 3 G/D T4, T5/T135°C, T100°C, ambient temperature

-20°C/+70°C (T4)

-20°C/+60°C (T4)

-20°C/+55°C (T5)

For an use in zone 2 and zone 22.

MX1/WX1



Ex nA IIC T4 -20...+70°C; T5 -20...+55°C
Ex tc IIIC T135°C -20...+70°C;
T100°C -20...+55°C

ELECTRICAL CHARACTERISTICS

Nominal voltage Vn:	12/30V
Maximum current In:	4/20mA
Maximum current Imax:	30mA
Ambient temperature:	-20...+55°C/+60°C/+70°C

MX3/WX3



Ex nA IIC T4 -20...+70°C; T5 -20...+55°C
Ex tc IIIC T135°C -20...+70°C;
T100°C -20...+55°C

MARKING

II 3G Ex nA II C T4, T5 Gc
II 3D Ex tc III C T135°C, T100°C Dc, IP65

- II** = Group II (surface)
- 3** = Category 3 (for zone 2 or 22)
- G** = Type of explosive gas atmospheres
- nA** = Type of protection nA (non-sparking)
- IIC** = Apparatus grouping
- T4, T5** = Temperature class
- Gc** = IEC equipment protection level
- D** = Type of explosive dust atmospheres
- tc** = Type of protection tc (flame proof enclosure)
- IIIC** = Apparatus grouping
- T135°C, T100°C** = Maximum temperature
- Dc** = IEC equipment protection level
- IP65** = IP classification

MX4/WX4



Ex nA IIC T4 -20...+70°C; T5 -20...+55°C
Ex tc IIIC T135°C -20...+70°C;
T100°C -20...+55°C

Substances	Zone	Categories Directive 94/9/CE
Gases, fumes or mists	Zone 0	1G
Gases, fumes or mists	Zone 1	2G or 1G
Gases, fumes or mists	Zone 2	3G, 2G or 1G
Dust	Zone 20	1D
Dust	Zone 21	2D or 1D
Dust	Zone 22	3D, 2D or 1D

SAFETY INSTRUCTIONS FOR INSTALLATIONS IN DANGER ZONES

The Melt pressure transmitters must be installed and services in accordance with the system and maintenance standards for environments classified against the risk of explosion due to the presence of gas and/or dust (example :EN 60079-14 and EN 60079-17 or other national regulations/standards).

The user must check that the ignition temperatures of combustible gases or dust (clouds and/or layers) present in the area of use of the transmitter are not lower than the maximum process temperature, always within the due safety limits (400°C for the MX series and 315°C for the WX series).

The forming of layers must be avoided in environments with presence of combustible dust.

The operator must provide therefore for a regular ambient cleaning.

The Melt pressure transmitters can be connected to ground through the metal structure they are connected to and the user must check the suitability of such connection.

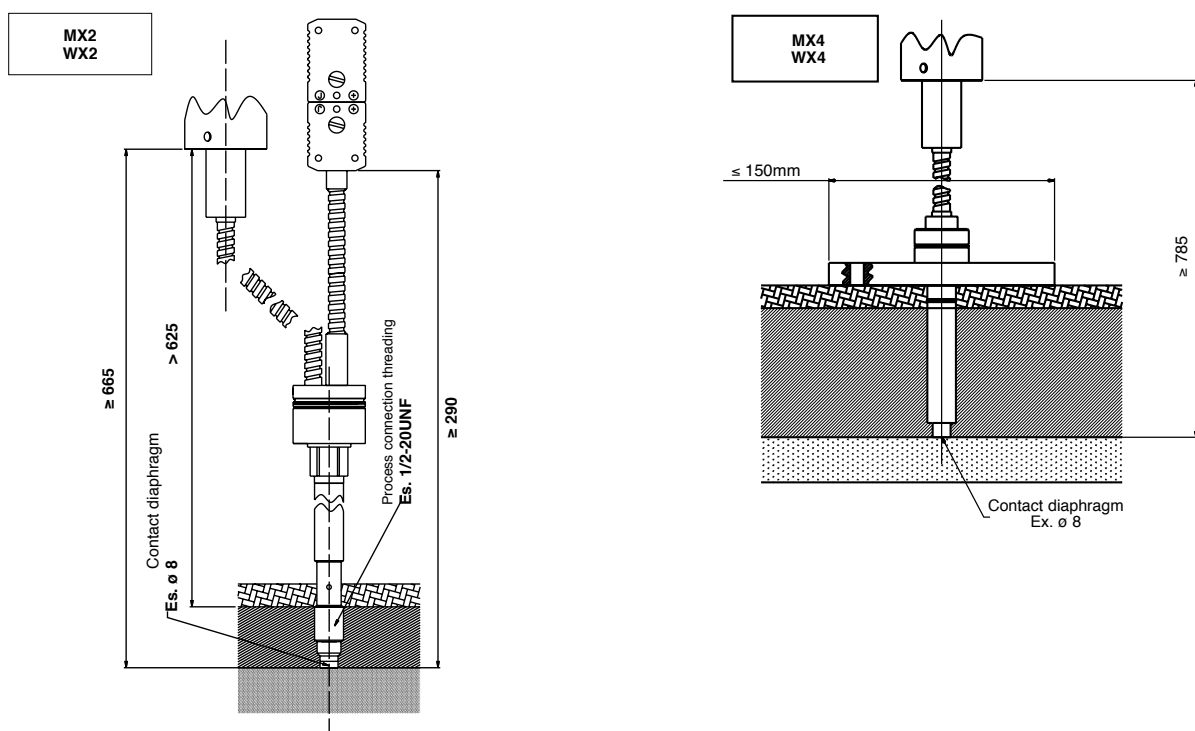
Provision shall be made to provide the transient protection device to be set at a level not exceeding 140% of the peak rated voltage value of 30 Vdc ($V_{max} \leq 42 \text{ Vdc}$).


The product does not have to be removed when energized.

MOUNTING INSTRUCTIONS FOR INSTALLATIONS IN DANGEROUS ZONES


Based on the application, the Melt pressure transducers have to be installed according to the instructions shown in the following figures.

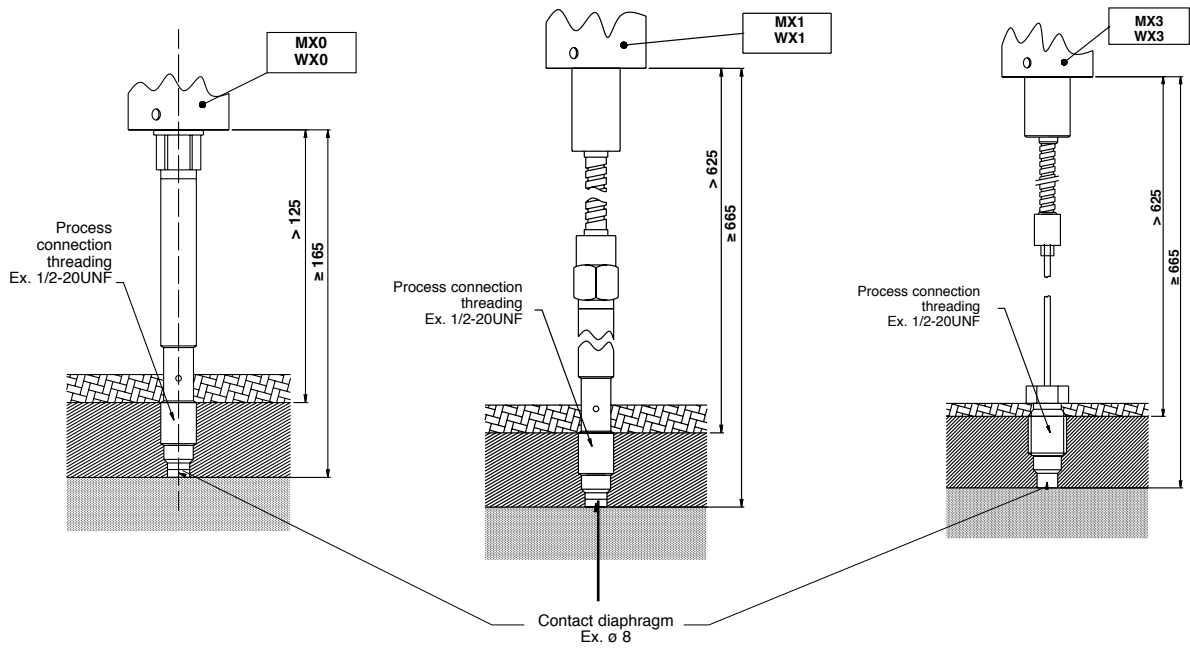
Also it is necessary to protect all electrical connections (ie connectors and cable glands) against a mechanical impact of 7 joule, according to standard EN 60079-0 and EN 60079-15.





 thermal isolating material with adequate thickness for the process temperature


 pressure transmitter housing block

 fluid at temperature (400°C for series MX; 315°C for series WX)



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