

80529C
08-2021Complementary documentation
SAFETY NOTE MX3GD/WX3GD

MX0/WX0

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

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

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

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

DESCRIPTION

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

The transmitters are designed and built according to European standards EN IEC 60079:0-2018, EN 60079-15:2010, EN 60079-31:2014

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.

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

MARKING

CE Ex 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

Substances	Zone	Categories Directive 2014/34/EU
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.

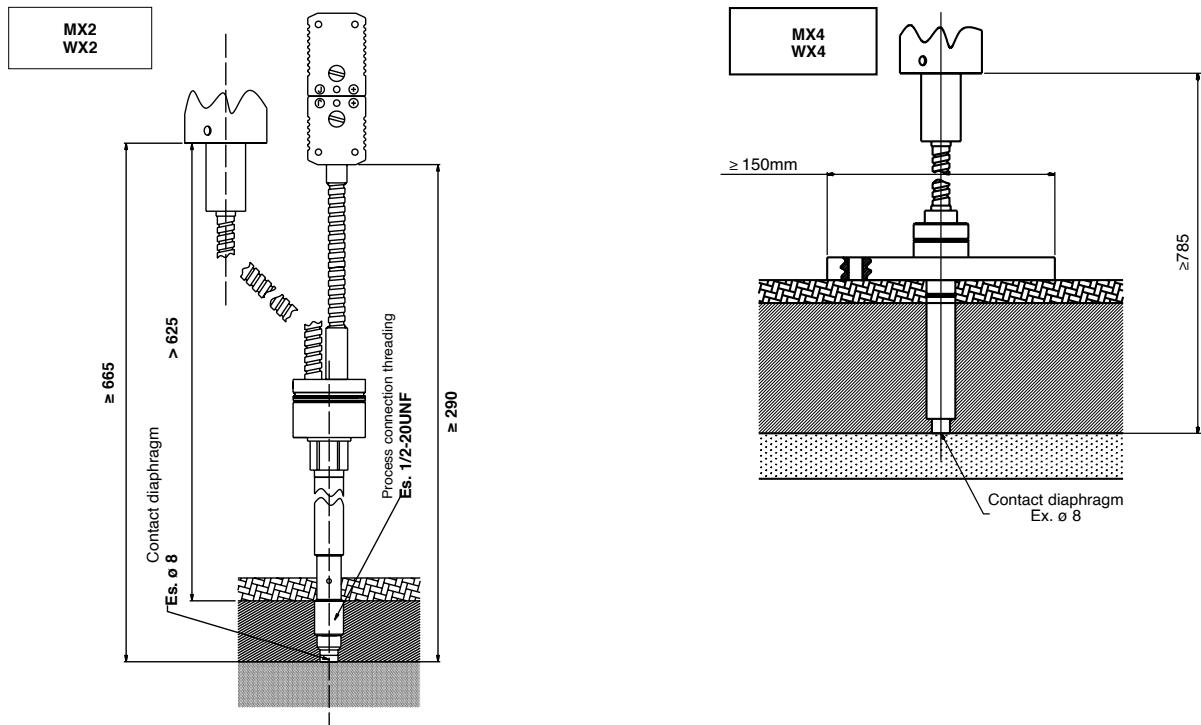
Provision shall be made to provide the transient protection device to be set at a level not exceeding 140% of the peak rated voltage value of 30 Vdc (Vmax ≤ 42 Vdc).

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.

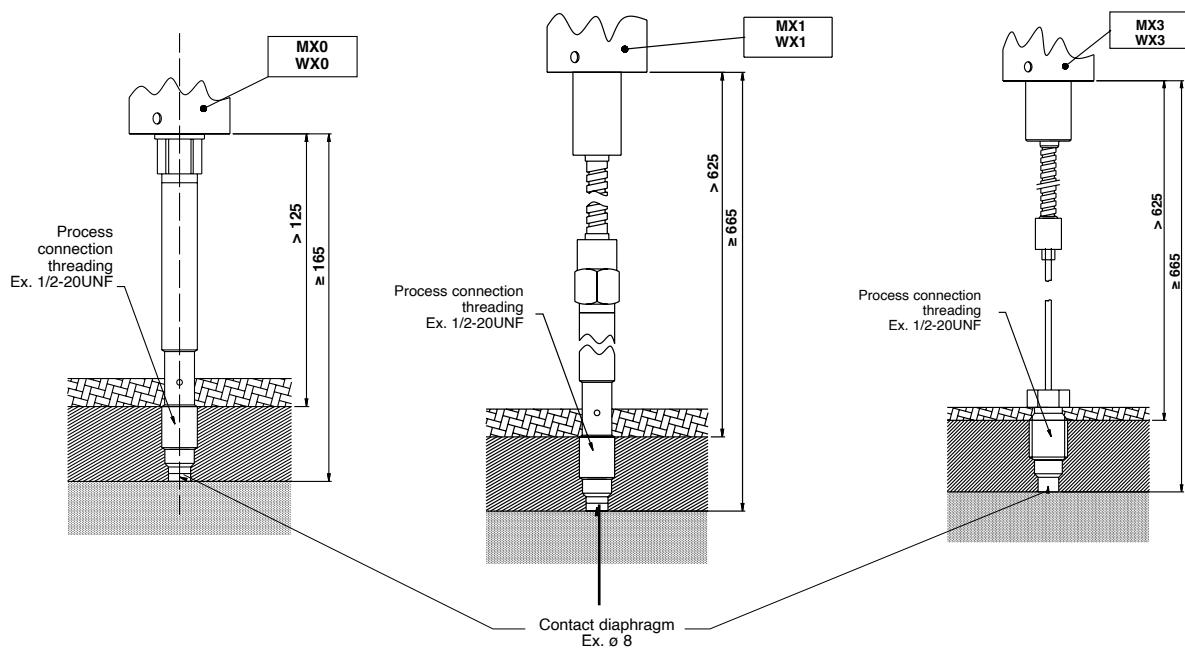
Also it is necessary to protect all electrical connections (ie connectors and cable glands) against a mechanical impact of 7 joule, according to standard EN 60079-0 and EN 60079-15.



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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