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MELT PRESSURE TRANSMITTERS FOR APPLICATIONS IN POTENTIALLY EXPLOSIVE ATMOSPHERE (HMX, HWX SERIES)

CE

80532C
04-2021

Complementary documentation

HMX-HWX SAFETY NOTE

DESCRIPTION

HMX and HWX series Melt pressure transmitters are mercury-filled (HMX) or oil-filled (HWX).
The transmitters are designed and built in conformity to EN IEC 60079-0:2018, EN 60079-11:2012, EN 60079-26:2015
Protection mode: group II, category 1G, 1D
GAS protection mode: Ex ia IIC T6, T5, T4 Ga (Ambient Temperature: -20°C...+60°C / +75°C / +85°C)
DUST protection mode: Ex ia IIIC T_{200}85°C, T_{200}100°C, T_{200}110°C Da IP65 (Ambient Temperature: -20°C...+60°C / +75°C / +85°C)

ELECTRICAL DATA

Maximum voltage Ui:	30 V
Maximum current Li:	100 mA
Maximum power Pi:	0,75 W
Maximum capacity Ci:	10 nF
Maximum inductance Li:	17 μH
Ambient temperature:	-20...+60 °C / +75 °C / +85 °C

MARKING

CE 0722 Ex

II 1 G Ex ia IIC T6, T5, T4 Ga
II 1 D Ex ia IIIC T_{200}85°C, T_{200}100°C, T_{200}110°C Da IP65

0722 = number of Notified Body for ATEX supervision (CESI)
II 1 = group II (surface area), category 1
G = explosive atmosphere with presence of gases, vapors or mists, dust
D = explosive atmosphere with presence of dust
Ex ia IIC T6/T5/T4 Ga = protection mode, gas, temperature classes, EPL -20...+60°C / +75°C / +85°C
Ex ia IIIC T_{200}85°C / T_{200}100°C / T_{200}110°C Da IP65 = protection mode, dust, max surface temp, EPL -20...+60°C / +75°C /+85°C

Correspondence between hazardous areas and categories, EPL

Dangerous zone		*Category Directive 2014/34/EU*	*EPL Equipment*
Gases, vapors or mists	Zone 0	1G	Ga
Gases, vapors or mists	Zone 1	2G or 1G	Gb or Ga
Gases, vapors or mists	Zone 2	3G, 2G or 1G	Gc, Gb o Ga
Dust	Zone 20	1D	Da
Dust	Zone 21	2D or 1D	Db or Da
Dust	Zone 22	3D, 2D or 1D	Dc, Db or Da

SAFETY INSTRUCTIONS FOR INSTALLATIONS IN DANGEROUS ZONES

The HMX and HWX series Melt pressure transmitter must be installed and serviced in conformity to plant engineering and maintenance standards for environments classified at risk of explosion due to the presence of gases (example: EN 60079-14, EN 60079-17 or other national standards) and dust. Please avoid any dust accumulation on the transmitter.

The HMX and HWX series Melt pressure transmitter must be connected to other equipment (galvanic isolation barriers) with individual ATEX certification such as [Ex ia Ga] IIC having the following characteristics:

maximum voltage Uo = 30V
maximum current Io = 100mA
maximum power Po = 0.75W

MOUNTING INSTRUCTIONS FOR INSTALLATIONS IN DANGEROUS ZONES

Based on the application, HMX and HWX series Melt pressure transmitters must be installed according to the instructions in figure 1

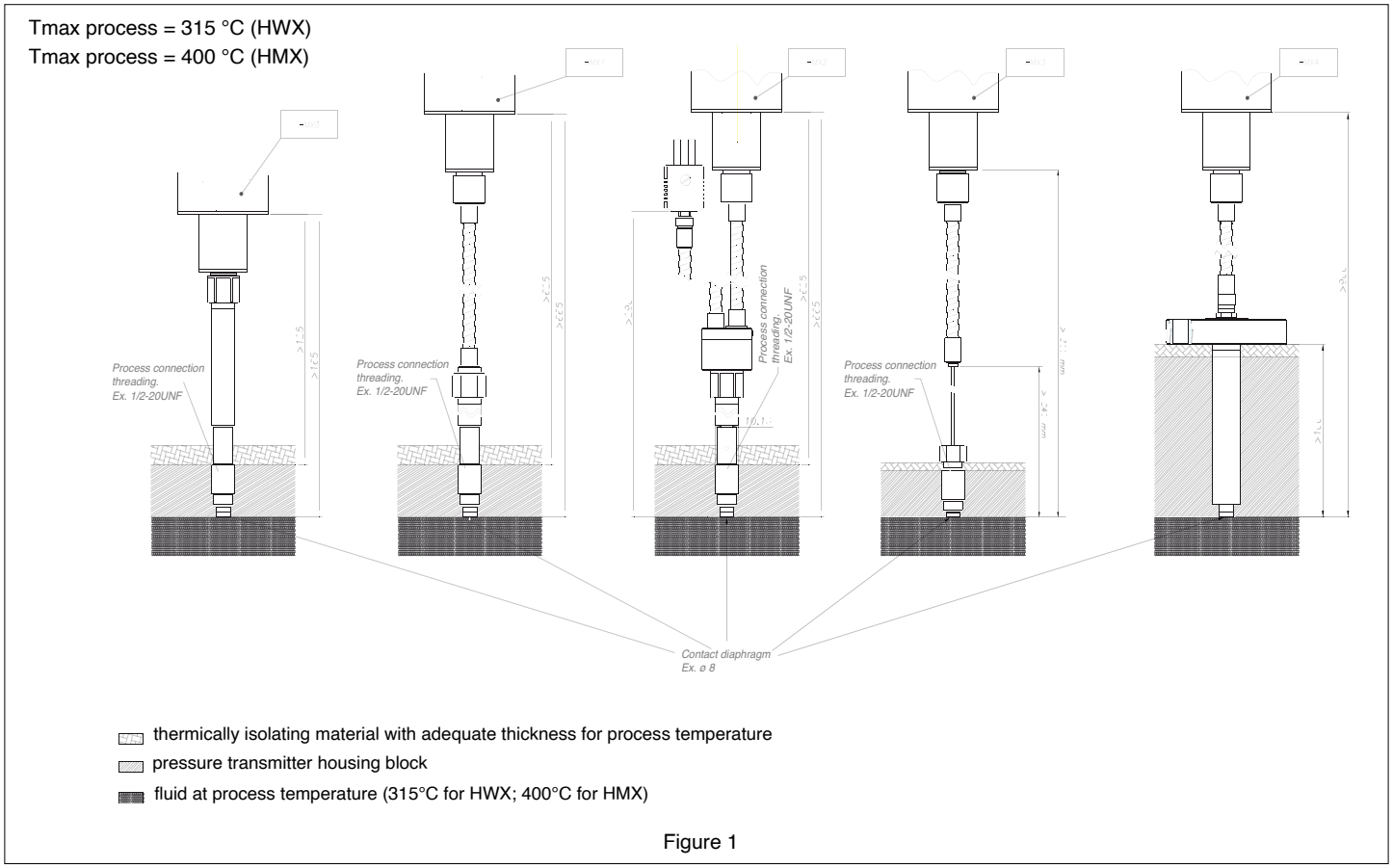
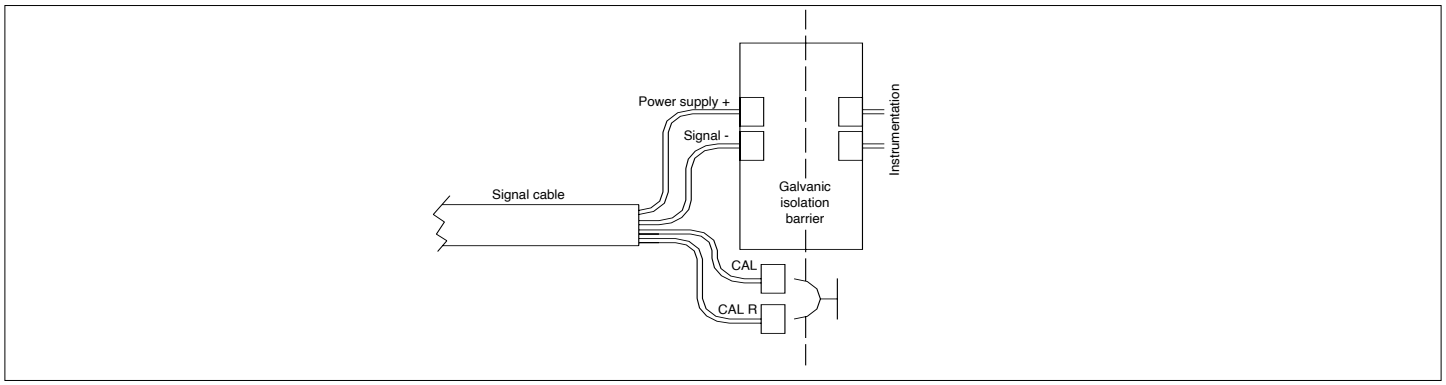


Figure 1

HMX and HWX series transducers must be powered by means of galvanic isolation barriers with a maximum of 30V

The AUTOZERO procedure must be run by means of the transmitters pen by short circuiting the CAL lines as shown in the following figures or by means of HART control.

The CAL procedure must be run by short circuiting the leads directly on the cable or on the connecton terminals.



For models HMX2 and HWX2 with temperature measurement, the thermocouple circuit must be powered by means of galvanic isolation barriers with a maximum of 30V.

Products of HMX series are designed and available in compliance with Directive 2011/65/EU (RoHS II) only for large-scale stationary installation or industrial tools, or for B-to-B laboratory equipments for R&D purposes.

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