



80638  
03-2025

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 TR CU 012/2011 standard and to European standards EN IEC 60079-0:2018, EN 60079-11:2012, EN 60079-26:2015

Protection mode: group II, category 0

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<sub>200</sub>85°C, T<sub>200</sub>100°C, T<sub>200</sub>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



0722

0 Ex ia IIC T6, T5, T4 Ga

0 Ex ia IIIC T<sub>200</sub>85°C, T<sub>200</sub>100°C, T<sub>200</sub>110°C Da IP65

**0722** = number of Notified Body for ATEX supervision (CESI)

**0** = group II (surface area), category --0

**Ex ia IIC T6/T5/T4 Ga** = protection mode, gas, temperature classes, EPL -20...+60°C / +75°C / +85°C

**Ex ia IIIC T<sub>200</sub>85°C, T<sub>200</sub>100°C, T<sub>200</sub>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 (Atex)

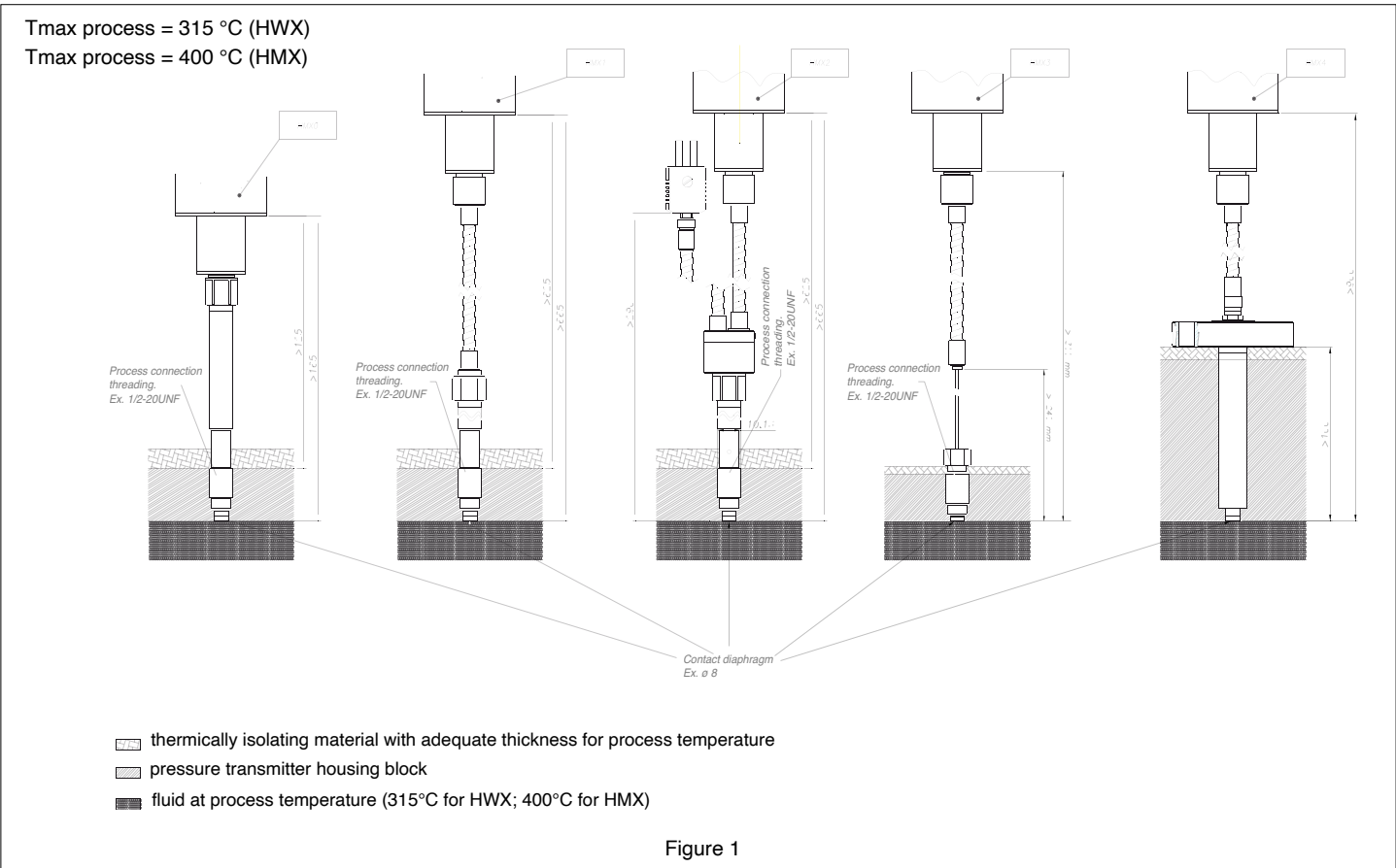
Dangerous zone		Category Directive 2014/34/EU	EPL Equipment
Gases, vapors or mists	Zone 0	1G	Ga
Gases, vapors or mists	Zone 1	2G or 1G	Gb or Ga
Gases, vapors or mists	Zone 2	3G, 2G or 1G	Gc, Gb o Ga
Dust	Zone 20	1D	Da
Dust	Zone 21	2D or 1D	Db or Da
Dust	Zone 22	3D, 2D or 1D	Dc, Db or Da

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 $U_0$	= 30V
maximum current $I_0$	= 100mA
maximum power $P_0$	= 0.75W

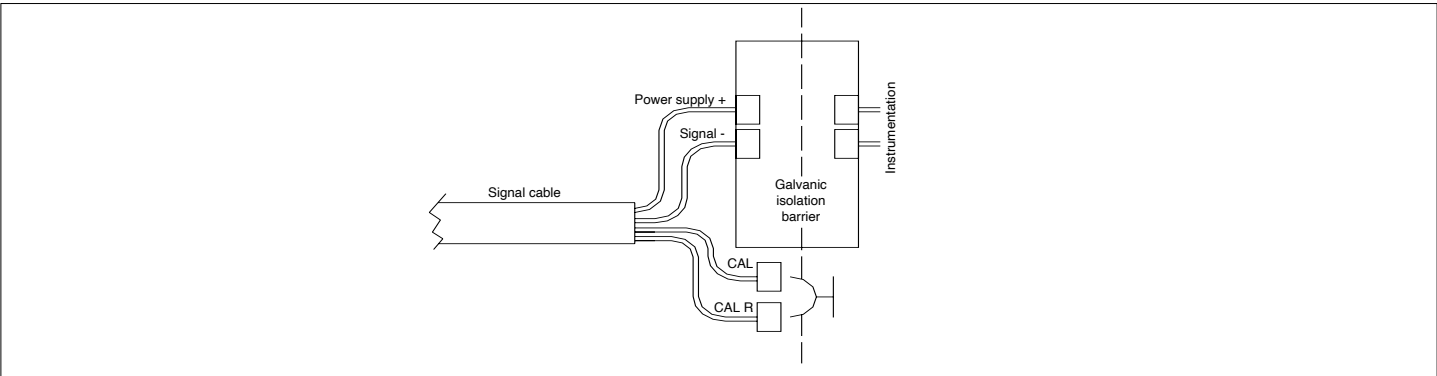
Based on the application, HMX and HWX series Melt pressure transmitters must be installed according to the instructions in figure 1



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.

**GEFRAN spa** reserves the right to make aesthetic or functional changes at any time and without notice.

# GEFRAN

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