

Electromagnetic Compatibility (EMC) Directive 2014/30/EU, Directive 2014/34/EU on equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) and Directive (RoHS) 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

a) The manufacturer

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b) The Products Covered by this Declaration

Capacitive level transducer

DLS-27Xi (XiT, XiM, XiMT)

c) Product brief

The capacitive level transducer type DLS-27 is designed to bistable level indication in tanks or containers. It allows level sensing and indication of electric conductive and non-conductive liquids, bulky materials, granulate and grain.

d) The Basis on which Conformity is being Declared

Intrinsic safety: EN IEC 60079-0:2018
EN 60079-11:2012

Electromagnetic compatibility: EN 55022-class B
EN 61326-1
EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6

e) Details of accredited person

Intrinsic safety: Notified Body No. NB 1026, FTZÚ (Physical-Technical Testing Institute),
Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic.
EC-Type Examination Certificate No. FTZÚ 02 ATEX 0234X from 8. 10. 2002, Supplement No. 1 from 9. 2. 2004, supplement No. 2 from 15. 8. 2007, supplement No. 3 from 15. 8. 2012, supplement No. 4 from 3. 8. 2017 and supplement No. 5 from 10. 6. 2022.

Electromagnetic compatibility: Accredited testing laboratory No. 1032, Mesit QM, spol. s.r.o.,
Sokolovská 573, 686 01 Uherské Hradiště, Czech Republic, ID: 47910381.
EMC protocol No. 3665/0 from 11.12. 2000.

f) Special conditions for safe use

Version DLS-27Xi: II 1G Ex ia IIB T6...T5 Ga, II 1D Ex ia IIIC T₂₀₀ 80 °C ...T₂₀₀ 90 °C Da
Version DLS-27XiT: II 1G Ex ia IIB T6...T2 Ga, II 1D Ex ia IIIC T₂₀₀ 80 °C ...T₂₀₀ 205 °C Da
Version DLS-27XiM, XiMT: I M2 Ex ia I Mb

Intrinsically safe parameters:

$U_i = 12 \text{ V}$; $I_i = 15 \text{ mA}$; $P_i = 45 \text{ mW}$; $C_i = 28 \text{ nF}$; $L_i = 10 \text{ }\mu\text{H}$

If the apparatus is used as device of Group I or Group II it shall be supplied by approved power supply device, which output parameters comply with required input parameters, it is necessary to have an galvanic separation or in case of apparatus without galvanic separation (Zener barriers) it is necessary to provide equipotential equalizing between sensor and barrier earthing point.

If the apparatus is used in coal mine as device of Group I and with is used with an approved supply device, which output parameters comply with required input parameters it is necessary to have an galvanic separation.

Temperature class and maximal surface temperature depends on process media temperature.

Version Xi:

Temperature class for EPL Ga:

T5 ... for maximal process media temperature $T_m = 85^\circ\text{C}$.

T6 ... for maximal process media temperature $T_m = 75^\circ\text{C}$.

Maximal surface temperature for EPL Da:

Maximal process media temperature range is from -25°C to $+85^\circ\text{C}$.

Maximal surface temperature shall be calculated as $T_{200} = T_m + 5^\circ\text{C}$.

Version XiT:

Temperature class for EPL Ga:

T2 ... for maximal process media temperature $T_m = 200^\circ\text{C}$.

T3 ... for maximal process media temperature $T_m = 190^\circ\text{C}$.

T4 ... for maximal process media temperature $T_m = 125^\circ\text{C}$.

T5 ... for maximal process media temperature $T_m = 90^\circ\text{C}$.

T6 ... for maximal process media temperature $T_m = 75^\circ\text{C}$.

Maximal surface temperature for EPL Da:

Process media temperature range is from -40°C to $+200^\circ\text{C}$.

Maximal surface temperature shall be calculated as $T_{200} = T_m + 5^\circ\text{C}$.

Version XiM, XiMT:

Maximal temperature of process media is 145°C .

Equipment for application in explosive dust atmosphere must be installed in such a manner that the risk of propagating brush discharges is avoided. This restriction applies only to the part of the equipment where the label, cable gland or connector is located.

Ambient temperature for head part of the product:

$20^\circ\text{C} \leq T_a \leq +75^\circ\text{C}$

Ambient temperature of sensor part of product: T_m - measured process media temperature.

g) Ensure production quality

Manufacturer's quality management system was found conform with the requirements of EN ISO 9001: 2016. The company is holder of the certificate of quality management system, reg. number CQS 2201/2021 dated 13.10.2021 and valid until 12. 10. 2024, issued by certification body CQS (IQNet). The certificate is valid for the development, manufacture and sales of electronic components and systems for measurement, control and industrial automation.

For products in potentially explosive atmospheres are to quality management system according to ISO 9001 applied special requirements according to EN ISO/IEC 80079-34:2020. The manufacturer got QUALITY ASSURANCE NOTIFICATION No. "FTZÚ 02 ATEX Q 016", issued by the Notified Body NB 1026 FTZÚ Ostrava-Radvanice. The notification is issued for protective systems intended for use in potentially explosive atmospheres acc. to Directive 2014/34/EU. The notice applies to a group of products with the type of explosion protection – Intrinsic safety "i" Protection with enclosure "t" and was issued on the basis of the audit protocol No. FTZÚ 02/ATEXQ/016 issued on 18. 06. 2020 and valid until 30. 06. 2023.

h) Manufacturer confirmation

The manufacturer identified in paragraph a) of this statement confirms that the properties of the product identified in point b) and c) of this declaration, meet the requirements, concretized in European technical standards identified in paragraph d) of this statement.

The product is under manufacturer's intended use safe. The manufacturer confirms that he has taken actions to ensure conformity of all products put on the market with technical documentation and the basic requirements.

Issued in Zlín, on 10. 7. 2022



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General manager