



(1) **EU-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**
- (3) Certificate number: **SEV 20 ATEX 0490 X**
- (4) Product: Level Radar LCR20
- (5) Manufacturer: Pepperl+Fuchs SE
- (6) Address: Lilienthalstrasse 200, 68307 Mannheim, Germany
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the European parliament and of the council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report no 20CH-00098.X45
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
EN 60079-11:2012
EN 60079-26:2015
EN IEC 60079-0:2018
- Except in respect of those requirements listed at item 18 of the schedule.
- (10) If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign “U” is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:

 **II 1G Ex ia IIC T4...T1 Ga**
II 1/2G Ex ia IIC T4...T1 Ga/Gb

Eurofins Electric & Electronic Product Testing AG
Notified Body ATEX

Martin Plüss
Product Certification



FMR20 option R (4-wire, Modbus RS485):

Supply:

Type of protection Intrinsic Safety Ex ia IIC.

Maximum input voltage	U _i	=	30 V
Maximum input current	I _i	=	100 mA
Maximum input power	P _i	=	650 mW
Inductance	L _i	=	20 µH
Capacitance	C _i	=	10 nF
Inductance cable	L _c	=	0.8 µH/m
Capacitance cable	C _c	=	45 pF/m

RS485-IS-Fieldbus:

Type of protection Intrinsic Safety Ex ia IIC.

Maximum output voltage	U _o	=	4.2 V
Maximum output current	I _o	=	149 mA
Linear characteristic			
Maximum input voltage	U _i	=	4.2 V
Maximum input current	I _i	=	4.8 A
Inductance	L _i	=	negligibly low
Capacitance	C _i	=	97 µF
Inductance cable	L _c	=	0.8 µH/m
Capacitance cable	C _c	=	45 pF/m

Cables (loop resistance) type of cable A or B acc. To IEC 60079-25 with the following parameters per unit length:

$$L'/R' \leq 15 \mu\text{H}/\Omega$$

Concentrated reactances in the cable run of the external RS485-IS-fieldbus system are not permitted.

(16) Specific conditions of use

Because the risk of electrostatic discharges, there are additional measures necessary during installation and operation. The following warning marking is placed on the equipment: **WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS**“

(17) Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
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None	
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(18) Drawings and Documents

See test report “Manufacturer’s Documents”