4.08 E A4 ® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approv

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere Directive 2014/34/EU
- (3) EU-Type Examination Certificate Number

TÜV 19 ATEX 8457 X

Issue: 00

(4) Equipment: TX5001 RockMonitor XR Telltale

(5) Manufacturer:

Trolex Limited

(6) Address:

Unit 10a, Newby Road, Hazel Grove

Stockport, SK7 5DY United Kingdom

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex 8457.00/19

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018

EN 60079-11:2012

EN 50303:2000

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

 $\langle \epsilon_x \rangle$

IM1 Ex ia I Ma -20°C ≤ Tamb ≤ 50°C

TÜV Rheinland, Zertifizierungsstelle für Explosionsschutz

Cologne, 2020-02-12

Dipl.-Ing Klauspeter Graffi

This EU-Type Examination Certificate without signature and stamp shall not be valid.

This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln

Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114







(13)

Annex

TÜV 19 ATEX 8457 X Issue: 00

(15) <u>Description of equipment</u>

15.1 Equipment and type:

TX5001 RockMonitor XR Telltale

15.2 Description / Details of Change

General product information

The TX5001 RockMonitor XR Telltale is installed in the roof or rib of an underground mine. It measures displacement of the strata at up to four anchor points and communicates the data back to the TX5002 RockMonitor XR Controller or a TX5003 RockMonitor XR Reader. Mechanical movement in the strata is converted to an electrical signal and visual indication. Visual indication of displacement is provided using a mechanical displacement scale.

The TX5001 RockMonitor XR Telltale may also optionally be configured for convergence pole applications for monitoring relative movement of the roof and floor.

It is connected to associated intrinsically safe equipment using an integral cable.

Technical Data

The equipment has the following parameters, which shall be observed when connecting in an intrinsically safe circuit:

Supply and/or HART/FSK wrt 0 V	
Ui	17.64 V
Ci	Negligible
Li	0 μΗ
Uo	9.5V
lo	0 A
Со	1000 μF
Lo	200 mH

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The equipment is provided with one or two integral cables (each 3 core) with the following maximum capacitance (Cc) and inductance to resistance (Lc/Rc) ratio per cable:

Cc = 200 pF/m $Lc/Rc = 30 \mu H/\Omega$

Ambient temperature:

Tamb -20°C ≤ to ≤ +50°C

(16) Test-Report No.

557/Ex 8457.00 / 19

(17) Special Conditions for safe use

The technical data shall be observed.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2020-02-12

Dipl.-Ing

Igi Mauspeter Gran

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