





## 13. Description of Equipment or Protective System

The Encoder Type 2REX is a small cylindrical unit (68mm in diameter with length dependent on model) containing low voltage electronic components. The enclosure is manufactured from either aluminium, stainless steel or acid-proof stainless steel. The enclosure comprises of cylindrical flamepaths between the End Cap & Cover Tube and Cover Tube & Housing. The rotating shaft forms a cylindrical flamepath through the housing controlled by k & m factors and is held in place with 2 precision roller element bearings. The enclosure has one threaded cable entry fitted with either a certified M20x1.5, M25x1.5, 1/2" NPT or 3/4" NPT cable gland or an M15 integral cable gland. Both internal and external earthing is provided.

## 14. Report Number

Intertek Report 103276072CHE-001 dated March 2018.

## 15. Special Conditions of Certification

### (a). Specific Conditions of Safe Use

- Minimize the risk from electrostatic discharge - clean only with a damp cloth.
- Temperature at the cable gland or branching point could exceed 70°C or 80°C respectively - suitably rated cable must be utilized.
- It is a condition of certification that the flamepaths have to comply with the manufacturers drawings and can only be repaired by the manufacturer.
- The fasteners used to secure enclosure body to end shields shall have a minimum yield stress of 450 MPa.
- For models without integral cable gland use only suitably certified Ex db IIC Gb and Ex tb IIC Db cable glands, thread adaptors and blanking elements.
- It is a condition of certification that precautions must be taken to avoid dust from forming layers on the encoder.

### (b). Conditions of Manufacture - Routine Tests

- None.

## 16. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report 103276072CHE-001 dated March 2018.

## 17. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
*Certification drawing – H.Shaft/shaft for 2REX/REXM Ex dwg	00131738C	3	29-11-2017
*Certification drawing – Housing for 2REXI-2REX-REXM Ex dwg	00132210C	8	29-11-2017
*Certification drawing – End Cap for 2REX/REXM Ex-dwg	00132416C	3	29-11-2017
*Certification drawing – Cover Tube 2REX/REXM Ex-dwg	00132417C	2	29-11-2017
*Certification drawing – Cap 2REX/REXM Ex dwg	00132573C	2	29-11-2017
*Certification drawing – Cap 2REX/REXM Ex dwg	00132616C	2	29-11-2017
*Seal Ø4,5 ZruElast 70189 Ex dwg	00141224	4	29-11-2017
*Certification drawing – Cable Gland M15x1	00142425C	2	29-11-2017
*Warning Label Label for mining and surface Ex-dwg.	00142898	7	17.05.2017
*Seal Ø7 ZruElast 70189 Ex dwg	00143108	7	29-11-2017
*Internal / external earthing 2REX-REXM	00230838C	1	29-11-2017
*Allen screw M4x16 ISO4762 A4-80	07130086	5	06-07-2017

# EU-Type Examination Certificate



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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX16847X Issue 1

*Allen screw M4x10 ISO4762 A4-80	07130091	4	29-11-2017
*Allen screw M4x12 ISO4762 A4-80	07130094	3	17-05-2017
*Allen screw M4x35 ISO4762 A4-80	07130097	4	17-05-2017
*Ring Cable Shoe Yellow – M4	06300054	1	09-07-2013
*Allen screw M4x10 ISO4762 A2-70	07130056	3	18-10-2012
*Allen screw M4x12 ISO4762 A2-70	07130059	3	18-10-2012
*Allen Screw M4x35 ISO4762 A2-70	07130063	3	18-10-2012
Encoder type 2REXI, 2REX, REXM. M&k calculation Ex-dwg	00132087	2	11.10.04
Washer Ø7/Ø13/x1	07150039	1	29-09-2009
*Certification drawing – Rotary-Shaft Seal	00230847C	1	18-01-2018
*Certification drawing – O-ring Ex dwg	00230849C	1	16-01-2018
*2REX ordering code Ex-dwg.	00141621	11	29.11.2017
*2REX marking label Ex-dwg.	00141622	5	29.11.2017
*Type 2REX Installation Guide	00142574	5	29 Nov. 2017

*Note: An \* is included before the title of documents that are new or revised.*

## 18. Details of Certificate changes

Issue/Variation No	Date	Details of change
Original Issue	13 <sup>th</sup> April 2010	Original issue. Report Number INT-CH3588 – 09 042179/1/2/3 dated April 2010.
Variation 1	6 <sup>th</sup> December 2012	1. Increase of upper ambient from +54°C to +70°C. 2. Update to EN 60079-0:2012. 3. Update to EN 60079-31:2009. Report Number 10045119 dated November 2012.
Variation 2	28 <sup>th</sup> April 2015	Change of address. Report Number 101936470MAN-001 dated March 2015.
Issue 1	This issue	1. Inclusion of new type of rotary seal. 2. Inclusion of alternative type of O-ring. 3. Update to EN 60079-1:2014. 4. Update to EN 60079-31:2014. 5. Change of QAN issuer. 6. Minor drawing changes not compromising the IECEx certification. Report Number 103276072CHE-001 dated March 2018.

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