1 EU - Type Examination Certificate

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: ExVeritas 15ATEX0080X Issue: 3

4 Equipment: Optical Shaft Encoder

5 Manufacturer: Hohner Automation Ltd

6 Address: Units 14-16,
Whitegate Industrial Estate,
Wrexham,
LL13 8UG, UK

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018 EN 60079-1:2014 EN 60079-31:2014

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, construction, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

Ex II 2 G D / I M2

Ex db IIC T5 Gb
Ex db I Mb
Ex tb IIIC T92°C Db
Ta -40°C or -20°C to + 60 °C

DANAK
PROD Reg.No. 7044
Member of EA MLA

On behalf of ExVeritas

Peter Lauritzen
Managing Director

Schedule

13 Description of Equipment or Protective System

The R and M Series Optical Shaft Encoders are manufactured from stainless steel; they are cylindrical in shape and comprise a main body and a cover. The cover is secured to the main body by five, M3, socket head cap screws. The main body contains a PCB assembly and has options for up to three M16, M20 or M25 threaded entries either in its sidewall (radial) and/or three towards the base (axial). The cover contains a shaft and bearing assembly to facilitate the equipment's measuring function. There is an optional dual compartment version, which contains a PCB/connector assembly to allow the user access via a top cover. The top cover has options for up to three M16 threaded entries.

Fasteners used to secure the end caps which form spigot joints on the enclosures are of the hexagon socket head type and are made of 316 stainless steel (A4-70) with a minimum yield stress of 450 N/mm^2.

R series are typically 72mm in diameter
M series are typically 82mm in diameter

13.1 Details of changes

Issue 3 (Variation 1)
Minor variation to remove the originally applied non-electrical standards for construction 'c'. The directive coding was updated to reflect the change. EN 60079-0 was updated to the latest 2018 version at the same time.

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R0725/A/1	20/11/2015	0	Initial issue of the Prime Certificate
N/A	14/07/2016	1	Re-issue against Directive 2014/34/EU
R0725/A/1	25/01/2021	2	Certificate transferred from ExVeritas 2585 to ExVeritas 2804 Report and certificate numbers remain unchanged.
R4047/A/1	29/09/2022	3	Issue of Variation 1

14.2 Compliance Drawings:

Issue 3

Title	Drawing No	Rev	Sheets	Date
R/M Series Assembly	RR-AS-001-03	3	1 of 5	2015/11/06
R/M Series Body	RR-BD-001-03	3	2 of 5	2015/11/06
R/M Series Lid	RR-LD-001-03	3	3 of 5	2015/11/06
R/M Series Shaft	RR-SS-001-03	3	4 of 5	2015/11/06
R/M Series Label	RR-LB-003-01	1.0	5 of 5	25 August 2022
M Series Lid for Profibus Openable	ME-LD-PBS-02	2	1 of 1	2015/11/06
M Series Top Lid for Profibus Openable	ME-TL-PBS-02	2	1 of 1	2015/11/06

Schedule

15 Conditions of Certification

15.1 Special Conditions for Safe Use

- Fasteners shall be hexagon socket head type, 316 stainless steel (A4-70) and with a minimum yield stress of 450 N/mm2.
- Flameproof joints are not intended to be repaired.

15.2 Conditions for Use (Routine tests)

- None

16 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform the Notified Body of any modifications to the design of the product described by this schedule.