1 # EU-TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No:** **FM08ATEX0015X**

4 **Equipment or protective system: (Type Reference and Name)** **MODEL EN44 AND EG44 SERIES VALVE POSITION MONITORS**

5 **Name of Applicant:** **Neles USA Inc. dba StoneL**

6 **Address of Applicant:** **26271 US Hwy 59**
Fergus Falls, MN 56537,
United States of America

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3031598EC dated 08th July 2008

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012+A11:2013; EN 60079-11:2012 and EN 60529:1991+A1:2000+A2:2013

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, 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 or protective system shall include:

II 1 G Ex ia IIC T5 Ga Ta= -40°C to 80°C

IP67

Damien Mc Ardle

Damien Mc Ardle
Certification Manager, FM Approvals Europe Ltd.

Issue date: 16th December 2020

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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13 **Description of Equipment or Protective System:**

The EN44 and EG44 are valve position monitors which consist of one printed circuit board mounted in a polycarbonate enclosure with two NAMUR proximity sensors. The circuitry of the Model EN44 and EG44 monitors are identical. The differences between the two models are described below.

The external connection of the EN44 models consist of screw terminals with wiring brought into the enclosure via cable glands or conduit entries. The external connections of the EG44 models consist of plug connectors.

The electronic components are encapsulated under Conathane EN-14 black Urethane potting compound manufactured by Cytec Industries. The EG44 models are completely potted and the EN44 models are fully potted up to the terminals for wire connections. LEDs are potted within the polycarbonate enclosure, which has a clear polycarbonate window cemented into the side to allow the LEDs to be visible under the potting.

EN44abcd-e. Valve Position Monitor.

Energy Limitation Parameters:
U_i = 22V, I_i = 120mA, P_i = 2W, C_i = 98nF, L_i = 1.56mH.

a= Enclosure: D or A
b= Junction: 02, 05 or 11
c= Visual Indication: X, G, R, F, 1, 2, N, D, L, S, T or 0
d = Branding: A or M
e = Options: X.
Note: X = 'Special Unit Digits' not to affect the integrity of the housing, the electrical safety, the electrical components, or the title plate.

EG44a23bc-d. Valve Position Monitor.

Energy Limitation Parameters:
U_i = 22V, I_i = 120mA, P_i = 2W, C_i = 98nF, L_i = 1.56mH.

a= Enclosure: D or A
b= Visual Indication: X, G, R, F, 1, 2, N, D, L, S, T or 0
c = Branding: A or M
d = Options: X.
Note: X = 'Special Unit Digits' not to affect the integrity of the housing, the electrical safety, the electrical components, or the title plate.

14 **Specific Conditions of Use:**

Parts of the enclosure are non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions which might cause a build up of electrostatic charge on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

15 **Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

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16 **Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard (s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 **Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	**Description**
08th July 2008	Original Issue.
02nd October 2008	Supplement 1: Report Reference: - 3031598supp1 dated 02nd October 2008 Description of the Change: • Alternative cover gasket material and application method. Alternative LED manufacturer.
26th March 2009	Supplement 2: Report Reference: 3031598supp2 dated 02nd October 2008 Description of the Change: Change to internal PCB to improve RF immunity.
23rd September 2014	Supplement 3: Report Reference: 3048434 dated 18th September 2014 Description of the Change: Updated the certificate to reflect the latest standards • EN 60079-0:2012 • EN 60079-11:2012 Updated Company Name and Address
15th December 2015	Supplement 4: Report Reference: RR203249 dated 14th December 2015 Description of the Change: Drawing updates and addition of "Ga" to markings.
02nd August 2017	Supplement 5: Report Reference: RR210256 dated 31st July 2017 Description of the Change: Drawing updates and removal of "Branding: N". Remove EN60079-26.
16th December 2020	Supplement 6: Report Reference: RR225500 dated 15th December 2020 Description of the Change: Company name change to Neles USA Inc. dba StoneL. Minor design and drawing changes not affecting compliance. Certificate transferred from FM Approvals Ltd., notified body No. 1725, to FM Approvals Europe Ltd., notified body No.2809.

Blueprint Report

Neles USA Inc. dba StoneL (1000001486)

Class No 3610

Original Project I.D. 3031598

Certificate I.D. FM08ATEX0015X

Drawing No.	Revision Level	Drawing Title	Last Report
000082	D	MODEL DESCRIPTION, ECLIPSE, EN, ATEX Ex ia	RR225500
000094	C	MODEL DESCRIPTION, ECLIPSE, EG, ATEX Ex ia	RR225500
105043	D	PRODUCT LABELING, ECLIPSE EN/EG Ex ia	RR225500
105073	H	EN Series Installation Manual	RR225500
105148	D	Electrical Information, Eclipse EN/EG series	RR225500
105149	E	EG Series Installation Manual	RR225500
200134	A	SCHEMATIC, DUAL NAMUR SENSOR, EXT. RANGE	3031598
409101	B	Hex Adaptor, SS Male, M12 X 1 to 1/2-28	RR225500
418028	I	BOARD, UNPOPULATED, NAMUR	RR210256
418280	I	BOARD, POPULATED, NAMUR ECLIPSE	RR225500
432029	A	URETHANE POTTING, CONATHANE EN-14, MIXED	3031598
434145	A	CONNECTOR, DC Male Insert, 4 PIN	3031598
434282	B	ASSEMBLY, SENSOR HEAD, 150 T	RR203249
434302	A	Connector, 5 Pin mini SS, Male RSFV50-0.3M/M20	RR225500
434359	A	LED, Green, LUMEX SSL-LX3054SUGC	RR225500
434360	A	LED, Red, LUMEX SSL-LX3054SIC	RR225500
434365	C	Terminal Block, 8 Point, Horizontal, Ex ec	RR225500