

GOVERNMENT APPROVED TEST LABORATORY
IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: **01 Jan 2020**
*Expiry date: **01 Jan 2023**
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Issue: 5

Ex – Type Examination Certificate

Certificate Number: **S-XPL/12.1427 X**
Equipment: **Valve Position Monitor**
Model / Type: **Series QX**
Applicant: **Neles South Africa (Pty) Ltd**
PO Box 264114
Three Rivers
1935

Manufacturer: **StoneL**

Serial No: All serial numbers imported between issued- and expire date and all serial numbers covered by a valid report or acceptable product certification mark.

Supplied by
Neles South Africa (Pty) Ltd
Identified by Inspection Authority number
S-XPL/12.1427 X

And as described in the Explolabs file number **XPL/13797/12.1427** is hereby certified "Explosion Protected (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of South African Standards.

SANS 60079-0: 2012 Ed 5

IEC 60079-0: 2011 Ed 6

SANS 60079-1: 2015 Ed 5

IEC 60079-1: 2014 Ed 7

BS EN 13463-1: 2009

BS EN 13463-5: 2011

SANS 60529: 2013 Ed 1.2

IEC 60529: 2013 Ed 2.2

Explosive atmospheres Part 0: Equipment — General requirements

Explosive atmospheres Part 1: Equipment protection by flameproof enclosures "d"

Non-electrical equipment for use in potentially explosive atmospheres. Basic method and requirements

Non-electrical equipment intended for use in potentially explosive atmospheres. Protection by constructional safety 'c'

Degrees of protection provided by enclosures (IP Code)

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	T5 (100°C) T6 (85°C)

1. GENERAL

The marking of the Valve Position Monitor shall include the following:

Ex db IIC T5 Gb Ta = -40°C to +80°C; IP67

Ex db IIC T5 Gb Ta = -25°C to +68°C; IP67 (_N sensors)

Ex db IIC T5 Gb Ta = -40°C to +69°C; IP67 (_A sensors)

Ex db IIC T6 Gb Ta = -40°C to +65°C; IP67

Ex db IIC T6 Gb Ta = -25°C to +70°C; IP67 (_E and _F sensors)

Ex db IIC T6 Gb Ta = -25°C to +56°C; IP67 (_N sensors)

Ex db IIC T6 Gb Ta = -40°C to +57°C; IP67 (_A sensors)

Description of Equipment or Protective System:

The Series QX enclosure is a single flameproof compartment. The material of the base and all covers are fabricated from aluminum alloy A356 with an Mg content < 0.45%. Each cover is prevented from opening by means of an M4 set-screw that locks the cover to the base. Up to three; M20 X 1.5 6H, ½ NPT, or ¾ NPT; threaded entries can be provided. The base-to-cover joint and the operating shaft are sealed with Buna-N O-rings.

A series of different function modules may be mounted in the enclosure to provide different monitoring of a valve's position.

The electrical ratings vary by function module, but are clearly specified on the product nameplate. The specific markings can be found on drawing 105221.

The specific models described by this Certificate are as follows:

QXabcde f g. Valve Position Monitor

- a = Function 2A, 4A, 5A, 7A, BA, CA, TA, 2J, 4J, 5J, 7J, BJ, CJ, 2M, 4M, 5M, 7M, BM, CM, 2N, 4N, 5N, 6N, 7N, BN, CN, TN, 2V, 4V, 5V, 6V, 7V, BV, CV, TV, 8V, 2W, 4W, 5W, 6W, 7W, 8W, BW, CW, TW, 14, 2P, 4P, 5P, 7P, BP, CP, 2L, 4L, 5L, 7L, BL, CL, 2H, 4H, 5H, 7H, 8H, BH, CH, 2S, 4S, 5S, 7S, BS, CS, 8Y, 2G, 4G, 5G, 7G, BG, CG, 2E, 4E, 5E, 7E, BE, CE, TE, 2F, 4F, 5F, 7F, BF, CF, TF, 33, 53, 73, B3, C3, 35, 5T, 7T, BT, CT, TT, 44, 54, 74, B4, C4, 45, 5R, 7R, BR, CR, TR, 82, 83, 86, 87, 92, 93, 96, 97, 5O, 7O, TO, BO, CO, 2X, 4X, 6X, 5X, 7X, BX or CX.
- b = Enclosure K, N, R, or T.
- c = Junction 02, 03, 05 or 06.
- d = Shaft output X, S, N, or H.
- e = Visual Indicator R, G, C, 1, 2, 3, 4, 5, X, B, E, Y, H, J, K, M, P, N, D, A, S, T, U, V, W, or O.
- f = Branding A or M.
- g = Options 'Special Unit Digits'.

Note: 'Special Unit Digits' do not affect the integrity of the housing, the electrical safety, or the title plate.

SQa. Valve Position Monitor (Imtex).

a = Construction 1695SR, 1795SR, 2595SR, 4095SR, 4295SR, 5595SR, 7095SR, or 9695SR.

See also FM10ATEX0039X for series QX with type of protection "i".

Based on the following documentation: FM08ATEX0008X up to Supplement 8

2. INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

3. SPECIAL CONDITIONS FOR SAFE USE *(denoted by "X" after certificate number)*

To minimize the risk of electrostatic sparking, the equipment shall be cleaned only with a damp cloth. Consult the manufacturer if dimensional information on the flameproof joints is necessary.

4. SCHEDULE OF LIMITATIONS *(denoted by "U" after certificate number)*

None.

5. CONDITIONS OF CERTIFICATION

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

DOCUMENT No: XPL0213	RELEASE DATE: 29/05/2018	REV : 7
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This report supersedes all previous documents bearing the reference no XPL/13797/12.1427 Issue 4.

6. MARKING

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Neles South Africa (Pty) Ltd
 Manufacturer : StoneL
 Equipment : Valve Position Monitor
 Model/Type : Series QX
 Serial No. : ---
 Ex Rating : Ex db IIC T5 Gb Ta = -40°C to +80°C; IP67
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 Ex db IIC T6 Gb Ta = -40°C to +65°C; IP67
 Ex db IIC T6 Gb Ta = -25°C to +70°C; IP67 (_E and _F sensors)
 Ex db IIC T6 Gb Ta = -25°C to +56°C; IP67 (_N sensors)
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IA Certificate No : S-XPL/12.1427 X

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:

- i) SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
- ii) Any conditions mentioned in the above report;
- iii) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
- iv) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- v) A revision certificate replaces all previous version of the certificate.
- vi) * - Only covers equipment Imported between the "Issued" and "Expire" dates.
- vii) If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd

Responsible Testing Officer:

P van Staden**Testing Officer****EXPLOLABS EXPLOSION PREVENTION SERVICES**

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