EXPLOLABS Explosion Prevention Services (Pty) Ltd
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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**

Issue: 1

Ex – Type Examination Certificate

Certificate Number: **S-XPL/19.0448 X**
Equipment: **Valve Position Sensor**
Model / Type: **Series HX**
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/19.0448 X

And as described in the Explolabs file number **XPL/20424/19.0448** 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**	Explosive atmospheres Part 0: Equipment — General requirements
SANS 60079-1: 2009 Ed 4 **IEC 60079-1: 2007 Ed 6**	Explosive atmospheres Part 1: Equipment protection by flameproof enclosures "d"
SANS 60079-31: 2014 Ed 2 **IEC 60079-31: 2013 Ed 2**	Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure "t"

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL) Group	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
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)
High	Db Group III		Equipment remains functioning in zones 21 and 22	T100 °C

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

This report supersedes all previous documents bearing the reference no XPL/20424/19.0448.

1. GENERAL

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

Ex db IIC T5 Ta = -40°C to +80°C Gb
Ex db IIC T6 Ta = -40°C to +65°C Gb
Ex tb IIIC T100°C Ta = -40°C to +80°C Db
IP66 / IP68
See Section 1 for specific applicability
See also FM15ATEX0045X for Series HX with Type of Protection "i"

Description of Equipment or Protective System:

General - The Hawkeye Series HX Magnetic Proximity Sensor is intended for point sensing in an explosive atmosphere. The sensing head triggers on a magnetic target at distances up to 4-6 mm, depending on target material.

Construction - The sensor body is machined from 316 stainless steel.

Field Wiring – For the Level of Protection "db", "ia", and "tb" models, an integral cable is provided and exits the enclosure via a Cooper Capri cable gland, Type ADE1N0502SSS.

Gaskets and Seals – Silicone seals in the cable gland, rated -60°C to +140°C, are employed to provide IP66 / IP68 (3 m / 48 h) ingress protection.

The specific models described by this Certificate are as follows:

HXaT03Se-xxx. Valve Position Sensor.

a = Function 35 or 45.
e = Branding A or M.
xxx = Options "Special Unit Digits"

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

Based on the following documentation: FM 15 ATEX 0038X up to Supplement 1

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)*

- The integral supply cable shall be mechanically protected and terminated in a suitable terminal or junction facility.
- Using the box provided on the HX45T03 nameplate, the user shall permanently mark the Type of Protection chosen for the specific installation. Once the Type of Protection has been marked it shall not be changed.
- The earth bonding connection shall be maintained by either the external mounting thread and/or the earthing wire of the integral cable.

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.

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 Sensor
Model/Type : Series HX
Serial No. : ---
Ex Rating : Ex db IIC T5 Ta = -40°C to +80°C Gb
Ex db IIC T6 Ta = -40°C to +65°C Gb
Ex tb IIIC T100°C Ta = -40°C to +80°C Db
IP66 / IP68
See Section 1 for specific applicability
See also FM15ATEX0045X for Series HX with Type of Protection "i"
IA Certificate No : S-XPL/19.0448 X

Responsible Testing Officer:

P van Staden
Technical Specialist
EXPLOLABS EXPLOSION PREVENTION SERVICES