

[1] EC-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC

[3] EC-Type Examination Certificate Number: NEMKO 03 ATEX 111 Issue 7

[4] Equipment or Protective System: Digital Valve positioner

[5] Applicant/ Manufacturer: Palmstierna International AB

[6] Address: Korta Gatan 9
SE-171 54, Solma,
Sweden

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

[8] Nemko AS, notified body number 0470 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. D0001611

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012 (IEC 60079-0:2011) , EN 60079-1:2007 (IEC 60079-1:2007) and
EN 60079-31:2009 (IEC 60079-31:2008)

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC.
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 the following:



II 2G
II 2D

Ex d IIB+H2 T6 Gb (-20°C to +60°C.)

Ex tb IIIC T100°C Db (-20°C to +80°C) IP66

Oslo, 2015-03-30

Asle Kaastad
Certification Manager, Ex-products

This certificate may only be reproduced in its entirety and without any change, schedule included.

[13] Schedule**[14] EC-TYPE EXAMINATION CERTIFICATE No.** Nemko 03 ATEX 111 Issue 7**Description of Equipment or Protective System**

- [15]** Models D3E, D20E & APEX 9000 are digital positioners designed primarily to control modulating valves. The positioner can be used with single or double action actuators with either rotary or linear movement. These positioners comprise an electronic board with microprocessor, hart modem, display etc, a valve block, a positional feedback with potentiometer and a compartment for electrical connections. The pushbuttons and display are accessible from underneath the threaded lid cover. The whole assembly is contained in a flameproof aluminium enclosure with two threaded lids and two threaded openings for cable glands/conduits. Flame arresters are integrated in the enclosure in each air inlet and outlet. The alternate material used is stainless steel with two same threaded lids and two threaded openings for cable glands (NPT & M20).

Type Designations

D3E, D20E, APEX 9000

The additional letters and digits in the type reference concern different accessories and functions of the instrument.

a: Air pipe connection thread type, b: Surface treatment, c: Function, de: Spindle, fgh: Cover and indicator, i: Temperature/Seals, j: Input signal/protocol, k: Feedback option, l: Accessories

Input signal / Protocols for APEX 9000:4-20mA / None
4-20mA / HART**Input signal / Protocols for D20E:**4-20mA / None
4-20mA / HART
Profibus PA
Foundation Fieldbus**Electrical Data**

28V, 24mA

Ingress Protection CodeIP 66 according to IEC 60529
Type 4X according to Nema 250**[16] Report No. D0001611****Descriptive Documents**

| Name/Title | Drawing No. | Rev. | Date | Sheets |
|---------------------|-------------|------|------------|--------|
| Technical File D3EX | - | 0 | 2015-02-20 | 1 |

Certificate History and Associated Nemko Reports

| Issue | Date | Report | Description |
|---------|------------|--------|--|
| | 2003-08-18 | 11049 | Prime Certificate released |
| Suppl.1 | 2004-07-12 | 26025 | Model variant Logix 800si-15 added. |
| Suppl.2 | 2005-11-16 | 53988 | Alternative design of the PCB and applicant and manufacturers name has been changed to Flowsolve Sweden/Palmstierna International AB |
| Suppl.3 | 2007-06-04 | 80777 | Tested and upgrade to Dust std. |
| Suppl.4 | 2009-02-26 | 121315 | Changes concern to include stainless steel as an alternative material of the enclosure, and minor modifications of the design. |

This certificate may only be reproduced in its entirety and without any change, schedule included.

| | | | |
|---------|------------|----------|--|
| Suppl.5 | 2009-06-26 | 128662 | Upgrade to following standards: CENELEC EN 60079-0:2006 CENELEC EN 60079-1:2007 |
| Issue 6 | 2010-12-20 | 163406 | New variants as type name D20E and APEX 9000 added. New issue to include |
| Issue 7 | 2015-01-26 | D0001611 | 1) M20 cable entry in the stainless steel enclosure & 2) Updated to new version standard EN 60079-0:2012 (IEC 60079-0:2011) 3) Removal of type Logix 800si-15. |

Routine Test

None.

[17] Specific Condition for Use

None.

[18] Essential Health and Safety Requirements

Not applicable.

This certificate may only be reproduced in its entirety and without any change, schedule included.