






# DET NORSKE VERITAS

## 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: **DNV-2007-OSL-ATEX- 1346X**
- [4] Equipment or Protective System: **V-series pressure and differential pressure transmitters**
- [5] Applicant – Manufacturer or Authorized representative: **Satron Instruments Inc.**
- [6] Address: **Patamäenkatu 5  
33900 Tampere  
Finland**
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV, notified body number 0575 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. : **2007-3104**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 60079-0:2006 and EN 50020: 2002, EN50284:1999 and EN50281-1-1:1998**
- [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 and construction of the specified equipment or protected system. If applicable, further requirements of this Directive apply to the manufacturer and supply of this equipment or protective system.
- [12] The marking of the equipment or protective system shall include the following :
-  II 1 GD T135°C EEx ia IIC T4 -20°C ≤ Tamb ≤ 50°C
-  II 2 GD T135°C EEx ia IIC T4 -20°C ≤ Tamb ≤ 50°C

Høvik, 2007-03-08  
for Det Norske Veritas Certification AS

  
Line Gangeskar  
Head of Section

  
Bjørn Spongsveen  
Senior Engineer

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[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE No.:** DNV-2007-OSL-ATEX-1431X

[15] **Description of Equipment or Protective System**

The V-series pressure transmitter is meant for pressure and differential pressure measurements. The sensor consist of a transmitter (casted in resin) inside the metal enclosure and mechanical probe elements. There are transmitters for different pressure ranges. The transmitter communicates in a 2-wire system and the transmitter's sensor is piezoresistive. The enclosure is of stainless steel. The metal parts of the enclosure shall be grounded.

**Type Identification**

V-series: VG-, VT-, VV- VL- VD-, and VDL-series.

**Electrical Data**

The maximum input values of V-series pressure transmitter are:

$I_i$	$P_i$	$C_i$	$U_i$	$L_i$
28 V	93 mA	0,651 W	5 nF	0,2mH

**Degrees of protection (IP Code)**

IP 66

[16] **Report No.:** 2007-3104

**Project No.:** 44210341

**Descriptive Documents**

Number	Title	Rev.	Date
1300.3.1.1.002A_EN	Direct translation of original document: 1300.3.1.1.001B with ATEX modifications. (This document also contains drawings and document list)	NA	2007-02-19

**Routine Test(s)**

None

[17] **Special Conditions for Safe Use**

The enclosure with plastic window and the plastic DIN43650 connector must not be installed in potentially explosive atmosphere requiring category I apparatus. The non-conducting surface of the sensor element may be charged by the flow of non-conducting media, so there may be electrostatic hazard with IIC-gases. These units should be marked 2GD.

The equipment shall be installed and connected according to the manufacturers instructions.

[18] **Essential Health and Safety Requirements**

See part 9 of this certificate

END OF CERTIFICATE

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

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