



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 02ATEX1229** Issue: **4**

4 Equipment: **NT 3000 Transducer**

5 Applicant: **Flowserve Corporation**

6 Address: 1350 N. Mountain Springs Parkway  
Springville  
Utah 84663  
USA

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

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 the confidential reports listed in Section 14.2.

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

EN 60079-0:2006 EN 61241-0:2006  
EN 60079-1:2004 EN 61241-1:2004

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment 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. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 G D IP66  
Ex d IIB+H<sub>2</sub> T6 T<sub>AMB</sub> -40°C to +40°C  
Ex d IIB+H<sub>2</sub> T5 T<sub>AMB</sub> -40°C to +75°C  
Ex d IIB+H<sub>2</sub> T4 T<sub>AMB</sub> -40°C to +110°C  
Ex d IIB+H<sub>2</sub> T6 T<sub>AMB</sub> -29°C to +40°C  
Ex d IIB+H<sub>2</sub> T5 T<sub>AMB</sub> -29°C to +75°C  
Ex tD A21 IP66 T40°C  
Ex tD A21 IP66 T75°C  
Ex tD A21 IP66 T110°C

Project Number 51A16508  
C. Index 01

C. Ellaby  
Certification Officer

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## SCHEDULE

### EC TYPE-EXAMINATION CERTIFICATE

Sira 07ATEX1234X  
Issue 4

#### 13 DESCRIPTION OF EQUIPMENT

The NT 3000 Transducer flameproof enclosure is manufactured from either aluminium or stainless steel and is designed to house an I/P converter with components mounted on a printed circuit board. The enclosure contains two interference fit sinters which allow pressure transfer to and from the enclosure. The enclosure also incorporates two threaded flamepaths, one between the main housing and the cover and the other between the main housing and certified cable gland.

##### Maximum parameters

Input 4-20 mA

Output 3-15 psi

Supply pressure 30-150 psi

**Variation 1** - This variation introduced the following changes:

- i. The introduction of a replacement circuit board design.
- ii. The introduction of minor changes to drawing notes and additional, informative, dimensional details.
- iii. The masking details for the transducer housing to be added to a new drawing sheet for clarity.

**Variation 2** - This variation introduced the following changes:

- i. The NT 3000 Transducer to be used in the presence of combustible dust.

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	18 December 2002	R51A8964A	The release of prime certificate.
1	8 April 2005	R51A13219A	The introduction of Variation 1.
2	22 August 2005	51V12352A	The introduction of Variation 2.
3	26 January 2006	R51A13950A	The prime certificate was re-issued to incorporate variations 1 and 2 dated 8 April 2005 and 22 August 2005 respectively, the changes described in report number R51A13950A were also introduced.
4	11 May 2007	R51A16508A	This Issue covers the following changes: <ul style="list-style-type: none"><li>• All previously issued certification was rationalised into a single certificate, Issue 4, Issues 0 to 3 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format.</li><li>• The transducers were re-assessed to confirm compliance with the requirements of the latest European standards.</li></ul>

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### Sira Certification Service

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**SCHEDULE**

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**Sira 07ATEX1234X**  
**Issue 4**

- 15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)  
None
- 16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)  
The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.
- 17 **CONDITIONS OF CERTIFICATION**
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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# Certificate Annexe

**Certificate Number:** Sira 02ATEX1229  
**Equipment:** NT 3000 Transducer  
**Applicant:** Flowserve Corporation



## Issue 0 to 3

The drawings associated with this Issue were replaced by those listed in Issue 4.

## Issue 4

Drawing	Sheets	Rev.	Date	Description
089583	1 of 1	2	(Sira Stamp) 4 May 07	DETAIL, FLAMEPATH, I/P MODULE
087607	1 of 1	3	4 May 07	FLAME ARRESTOR - Ø.633, .375 LG., I/P MODULE
087608	1 of 1	3	4 May 07	FLAME ARRESTOR - Ø.508, .375 LG., I/P MODULE
137545	1 of 2	7	4 May 07	HOUSING, NT 3000
137545	2 of 2	7	4 May 07	HOUSING, NT 3000
139736	1 of 1	5	4 May 07	HOUSING, NT 3000, STAINLESS STEEL
141272	1 of 1	4	4 May 07	NAMEPLATE, NT 3000 CENELEC, INTRINSICALLY SAFE Ex d, SCS, NT3000-07 ST. ST. PLATE
163418	1 of 1	2	4 May 07	HOUSING, I/P NT 3000, M20 X 1.5 CONDUIT THREAD
164376	1 of 2	5	4 May 07	MASTER ELECTRONICS ASSEMBLY, NT 3000, I/P TRANSDUCER
164376	2 of 2	5	4 May 07	MASTER ELECTRONICS ASSEMBLY, NT 3000, I/P TRANSDUCER
164380	1 of 1	0	4 May 07	LID, PCB CAN, NT 3000
164400	1 of 1	6	4 May 07	COVER NT 3000 TRANSDUCER
166778	1 of 1	3	4 May 07	COVER, NT 3000, STAINLESS STEEL
195917	1 of 1	0	4 May 07	LABEL, NT 3000, SERIAL NUMBER FORMAT
194350	1 of 2	7	4 May 07	MASTER ELECTRONIC ASSY, NT3000, I/P TRANSDUCER
194350	2 of 2	7	4 May 07	MASTER ELECTRONIC ASSY, NT3000, I/P TRANSDUCER

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