

# [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 00ATEX308X Issue 6

[4] Equipment or Protective System: Pnuematic Converter

[5] Applicant/ Manufacturer: Smar Equipamentos Industriais Ltda.

[6] Address: Av. Dr. Antonio Furlan Jr., 1028  
Sertãozinho -SP-14160.000  
Brazil

[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] 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. D0002425

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012, EN 60079-1: 2007

[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

Ex d IIC T6 Gb Ta : -20°C to +60°C

Oslo, 2016-04-19

Asle Kaastad  
Certification Manager, Ex-products

## [13] Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE No**    **Nemko 00ATEX308X**    **Issue 6**

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

The SMAR FP Series is a flameproof enclosure, intended to signal pneumatic converter and consist in housing and electronic circuit.

The equipment is manufactured in AISI316/CF-8M or SAE305 or SAE336/ANSI356, closed by removable screwed covers with M76 x 1,27 threads, with or without visor, and the cable entry for electronic circuits is mounted in the wall of the housing with options 1/2"-14 NPT or M20x1,5. Under the one cover, being equipped with an inspection glass, an alphanumeric LCD-display is arranged optionally; under the other cover, terminals for the signal-circuit are arranged.

The FP300 Series converters are used on a FOUNDATION™ fieldbus - FP302, or PROFIBUS-PA - FP303 - systems providing an pneumatic output according to the digital commands coming from the network. The equipment is a converter mainly intended for interface of a fieldbus system to pneumatically actuated control valve, or a positioner.

Only cable glands certified according to EN 60079-0 and EN 60079-1 must be used.

**Type Designations**

FP302 and FP303

**Technical Data**

Electrical: 9-32 VDC

Pressure: 18-100 psi.

**Ingress Protection Code**

IP66W tested in a saturated solution of NaCl 5% w / w, at 35°C for a period of 200 h

[16] **Report No. D0002425**

**Descriptive Documents**

Title:	Drawing No.:	Rev. Level:	Sheet	Date:
Boards Arrangements FP302/303	102A-0339	06	1	15-11-24
PCB Interconnection FP302/303	102B-0443	06	1	15-11-24
LM FP302/303	LM-102-1159	00	1	15-11-25
LM General Components Fieldbus/Profibus PA	LM-102-0232	03	1	06-05-10
Label Plate FP302 NEMKO/EXAM IP66	102A-1273	03	1	16-04-18
Label Plate FP302 NEMKO/EXAM IP66W	102A-1488	03	1	16-04-18
Label Plate FP303 NEMKO/EXAM IP66	102A-1274	03	1	16-04-18
Label Plate FP303 NEMKO/EXAM IP66W	102A-1489	03	1	16-04-18
Mechanical Drawing FP NEMKO	101-E-0379	01	1	10-07-26



### Certificate History and Associated Nemko Reports

Issue	Date	Report	Description
0	2000-09-27	200003101	Prime Certificate released
1	2001-10-15	200140161	The certificate is extended to include minor modifications of components and the PCBs. The modifications do not alter the safety characteristics of the transmitter.
2	2006-06-01	63432	Revised documents. Minor changes of electronic components and PCB layout.
3	2006-07-13	70124	Revised documents. Minor changes of electronic components and PCB layout.
4	2010-05-31	126748	The Certificate is extended to include an upgrade to IP66W and pressure to 18-100 psi.
5	2011-02-15	152560	The Certificate is extended to include an update to new standards.
6	2014-04-19	D0002425	Inclusion of new PCB, updated documents, and update to the latest standard of EN 60079-0: 2012.

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

Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and 2 of EN/IEC 60079-1.

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

See item 9