

[1] EC-TYPE EXAMINATION CERTIFICATE

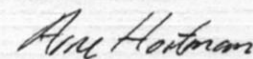
**[2] Equipment or Protected System Intended for use
in Potentially explosive atmospheres
Directive 94/9/EC**

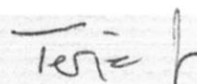
- [3] EC-Type Examination Certificate Number :** Nemko 00ATEX305
- [4] Equipment or Protective System :** Positioners
- [5] Applicant:** Smar Equipamentos Industriais Ltda.
- [6] Address :** Av. Dr. Antonio Furlan Jr., 1028
Sertãozinho -SP-14160.000
Brazil
- [5] Manufacturer:** Smar Equipamentos Industriais 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. : 200005319
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:**
- EN 50014:97 + A1:99 + A2:99
EN 50018:94
- [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 2 G

EEx d IIC T6

Oslo, 2000-09-27


for Rolf Hoel
Certification Manager


Terje Johansen
Certification Engineer

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

[13] Schedule**[14] EC-TYPE EXAMINATION CERTIFICATE No Nemko 00ATEX305****[15] Description of Equipment or protective system**

The FY's are valve positioners for single (spring return) or double acting linear motion type control valves and rotary motion control valves.

Type Designation

FY 290
FY 301
FY 302
FY 303

It's minor differences between the positioners. The electronic board's and the software in the Eprom memory are the only things that differ. The electronic boards are shown in the descriptive documents.

Data

FY 290 and FY 301: 45VDC, 25mA, Pressure: 20-100 psi
FY 302/303 : 32VDC, 12mA, Pressure: 20-100 psi

[16] Report No 200005319 composed in total of 26 pages.

Descriptive Documents

101E008205	Rev.:5	02.07.2000	
101A453500		12/09/2000	
101A453600		12/09/2000	
101A453700		12/09/2000	
101A453800		12/09/2000	
102B004305	Rev.:5	21/01/00	2 sheets
102A022702	Rev.:2	17/02/00	4 sheets
102B028308	Rev.:8	22/12/99	2 sheets
102A031603	Rev.:3	21/11/98	4 sheets
102B042804	Rev.:04	27/01/00	2 sheets
102A032602	Rev.:2	21/01/00	4 sheets
102B028406	Rev.:6	17/03/00	
102A031704	Rev.:4	21/10/99	4 sheets
102B010103	Rev.:03	06/10/98	
102A026701	Rev.:01	17/05/00	2 sheets
102B013801	Rev.:01	29/05/97	2 sheets
102A026801	Rev.:1	31/05/00	3 sheets
102B050701	Rev.:01	21/12/98	2 sheets
102B050601	Rev.:01	21/12/00	2 sheets

[18] Essential Health and Safety Requirements

See item 9

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Supplement 1 to EC-TYPE EXAMINATION CERTIFICATE

[15] Description

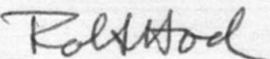
The certificate is extended to include minor modifications of components and the PCBs. The modifications do not alter the safety characteristics of the transmitter.


[16] Report No 200140161 consisting of 4 pages and the listed descriptive documents.

Descriptive Documents

Title	Number	Sheets	Rev.	Date
GLL1012 Top Silk, -Top,-Bottom, -Bottom Silk	102A031705	4	5	2000-03-17
Field devices Main Board GLL1034	102B042806	6	06	2000-12-22
GLL1034 Top Silk, -Top,-Bottom, -Bottom Silk	102A032603	4	3	2000-11-22

Oslo, 2001-10-15


Rolf Hoel
Certification Manager


Arne Hortman
Certification Engineer