

[1] **EC-TYPE EXAMINATION CERTIFICATE**



[2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: DEMKO 02 ATEX 133213X

[4] Equipment or Protective System: X700 Shaft Encoder

[5] Manufacturer: W + S Meßsysteme GmbH

[6] Address: Humboldtstraße 11, 78549 Spaichingen, Germany

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

[8] UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the 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 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. 133213

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 E incl. A1+A2 **EN 50018: 2000 E incl.**

[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:

I/II 2 G D EEx d IIC T6 (Tamb +60°C) T4 (Tamb + 100°C)
EEx d I

On behalf of UL International Demko A/S

Herlev, 2003-01-16

Karina Christiansen
Certification Manager

UL International Demko A/S

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Certificate: 02 ATEX 133213

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Schedule

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[15] Description of Equipment or protective system

The X700 Shaft Encoder is a measurement instrument manufactured by W + S Measurement Systems. The unit is a rotating electrical device rated at 50 V dc, 3A for determining rotor angular movement of an industrial electric motor as part of a feedback control system. The unit comprises of a 316 stainless steel shaft, which rotates in a 316 stainless steel stator body with a 316 stainless steel lid, which is screwed on to the main body. On the end of the shaft is an encoder disc, which has an opto-electronic pick up, and conditioning circuit fixed to the body above the rotating disc. The cover has cable entry points in the back, which can be machined to accept M12 or M24 cable glands.

[16] Report No.:

Project No 133213-01
Project No 133213-02

Drawings:

Number	Date	Description
X700LB01IVO	27 Apr 06	EX-Label for T6 classification
X700LB02IVO	27 Apr 06	EX-Label for T4classification
X700LB01WS	17 Oct 06	EX-Label for T4 classification
X700LB02WS	17 Oct 06	EX-Label for T6 classification
X700BH1	16 Jul 98	Body for X700
X700SH1	16 Jul 98	Shaft for X700
X700LD1	16 Jul 98	Lid for IX700 and AX700
X700LBI	16 Jul 98	X700 Label

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

[17] Special conditions for safe use:

The "X" marking of the product is linked to the following:

The shaft encoder must be mounted/installed with special heat resistance cables in T4 version for ambient temperatures of 100°C.

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[13]

Schedule

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Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the Ex standards only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.


Additional information

The X700 has in addition been evaluated and found in compliance with EN 60079-0: 2004 and EN 60079-1: 2004.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

On behalf of UL International Demko A/S

Herlev, 2006-11-23


Karina Christiansen
Certification Manager

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Report: 133213-02

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