

EC-TYPE EXAMINATION CERTIFICATE



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

- [3] EC-Type Examination Certificate Number: **DEMKO 09 ATEX 0816092X Rev. 0**
- [4] Equipment or Protective System: **Position Indicator, Models 371MT73 and 371MT75**
- [5] Manufacturer: **Barksdale Inc.**
- [6] Address: **3211 Fruitland Ave. Los Angeles, CA 90058 USA**
- [7] This equipment or protective system and any acceptable variation thereto are 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. **13NK05816**
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 60079-0:2012 EN 60079-1:2007**
EN 60079-11:2012 EN 60079-31:2009
- [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 the certificate.
- [12] The marking of the equipment or protective system shall include the following:

II 2 G Ex d IIC T6 Gb
 II 2 G Ex ib IIC T6 Gb
 II 2 D Ex tb IIIC T80°C Db IP66

Certification Manager
Jan-Erik Storgaard

Notified Body

This is to certify that the sample(s) of the Product(s) described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured products. UL has not established Follow-Up service or other surveillance of the product. The Applicant/Manufacturer are solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2009-05-25

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UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



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Schedule
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Description of Equipment or protective system

Models 371MT73 and 371MT75 are stationary position indicators employing reed switches housed in a flameproof and dust-tight enclosure.

The flameproof and dust-tight construction of the devices consists of the sensor body, actuator and end cap. A cylindrical joint is formed between the sensor body and actuator. A threaded joint is formed between the end cap and the sensor body. Models 371MT73 and 371MT75 differ between the sensor body and the interface screw in overall dimensions.

The differences between the Models 371MT73 and 371MT75 are the overall assembly size and the types of valves on which the devices are suitable for installation.

Temperature range

The ambient temperature range is -40°C to +60°C.

Electrical data

Intrinsically safe specifications:

U_i : 24 VDC
 I_i : 50 mA
 P_i : 10 W
 L_i : 0 mH
 C_i : Negligible

Electrical Ratings for General Use: 200 VDC, 0.5 A, 10 VA maximum

Installation instructions

For intrinsic safety applications, the devices are to be installed in accordance with the manufacturer's control drawing number 272263.

The devices are intrinsically safe "ib" when installed in accordance with the manufacturer's control drawing 272263. For installations not in accordance with the intrinsic safety guidelines, the devices employ the protection offered by the flameproof "d" and dust-tight "tb" enclosures.

Routine tests

Routine tests according to EN 60079-1 cl. 16 are required, as the enclosures have a welded construction between the sensor body and the NPT connection. Reference test procedure TP99358 for further details.

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Report No.

Project Report No.: 13NK05816 (Hazardous Location Testing)

Documents:

Description:	Drawing No.:	Rev. Level:	Date:
371MT73 Position Indicator	371MT73	J	2013-06-27
371MT75 Position Indicator	371MT75	H	2013-06-25
Sensor Body Assembly	371MT404	C	2009-06-24
Assembly Drawing (371MT73) (2 sheets)	9005A000	L	2013-06-18
Assembly Drawing (371MT75) (2 sheets)	9006A000	L	2013-06-18
Sensor Body (371MT73)	90040001	J	2011-11-08
Sensor Body (371MT75)	90060001	G	2011-11-08
Female NPT	90040011	D	2008-12-22
Flameproof Joint Tolerances	977970	X3	2009-01-19
End Cap	90040007	E	2011-11-08
Actuator	90040002	E	2008-12-19
Cable	239499	A	2009-01-15
Reed Switch	90060007	D	2009-01-05
PCB, Bare (371MT73)	90050003	C	2008-12-23
PCB Assembly (371MT73)	371PC116	A	2008-12-19
PCB, Bare (371MT75)	90060006	D	2009-01-05
PCB Assembly (371MT75)	371PC119	A	2008-12-19
O-Ring (End Cap)	90040016	B	2009-01-16
Nameplate, UL/ATEX	2501012	D	2013-06-18
Nameplate, I.D.	B250997	C	2009-07-17
Conduit Size Nameplates	2501035	A	2009-06-24
I.S. Control Drawing	272263	C	2008-08-05
Installation Manual	272245	D	2013-06-25
External Ground Screw	256132	D	2005-02-09
Fitting, Male 1/2"NPT	208660	D	2012-09-25



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Special conditions for safe use:

- Dimensions of flameproof joints are other than the relevant minimum or maximum specified in Table 2 of EN 60079-1:2007. Position indicators are marked with an "X" and manufacturer's Drawing No. 977970 details the dimensions of the flameproof joints.
- Position indicators are constructed with permanently connected un-terminated cables and the free end of the cable needs to be connected in accordance with the installation manual.
- Do not remove end cap as damage to threads could occur.
- The devices are certified independently as intrinsically safe or flameproof and dust-tight. Particular attention should be paid to the installation instructions for each application.

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Essential Health and Safety Requirements

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

Additional information

The Position Indicators have, in addition, passed the tests for Ingress Protection to IP66 in accordance with EN60529: 1991/A1 2001.

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.

