

(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: **KEMA 00ATEX1090 X**

(4) Equipment or protective system: **Digital No Flow Timer Type DNFT-XXXX-XX**

(5) Manufacturer: **Terra Metrics, Inc. dba, Whitlock Instrument**

(6) Address: **1300 North Texas, Odessa TX 79761, USA**

(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) KEMA, notified body number 0344 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 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. 2005601.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997

EN 50028 : 1987

(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 2 G EEx m II T5**

Arnhem, 20 February 2001
by order of the Board of Directors of N.V. KEMA


L.M.J. Vries
Certification Manager

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(13)

SCHEDULE

(14)

to EC-Type Examination Certificate KEMA 00ATEX1090 X

(15) **Description**

The Digital No Flow Timer Type DNFT-XXXX-XX is a totally enclosed battery supplied electronic device used to monitor the movement of the divider valve piston in a lubrication system.

A LED or an optional LCD indicates the completion of a cycle of the lubrication system. If a cycle is not completed within a predetermined time, the solid state output is switched to allow an alarm or system shut down.

The DNFT is supplied by a non replaceable lithium battery.

Ambient temperature range -40 °C ... +80 °C

Electrical data

Supply	lithium battery; 3,6 V
Solid state output switch	max. 240 Vdc, 2,5 VA

Routine tests

The electrical apparatus, after encapsulation, must be subjected to the routine tests as described in clause 7 of EN 50028: 1987.

(16)

Report

KEMA No. 2005601

(17)

Special conditions for safe use

The solid state output switch must be protected with a fuse in accordance with the rated current. The breaking capacity of the fuse must be in accordance with the prospective short circuit current of the supply.

(18)

Essential Health and Safety Requirements

Essential Health and Safety Requirements not covered by the standards listed at (9)	
Clause	Subject
1.0.5	Marking
1.0.6 b) and d)	Instructions

These Essential Health and Safety Requirements are examined and positively judged. The results are laid down in the report listed at (16)

(13)

SCHEDULE

(14)

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(19) **Test documentation**

signed

1. Description (12 pages)
2. Drawing No.

TM1001, Rev. A	10.10.99
TM1009, Rev. B	25.01.01
TM1010, Rev. A	10.10.99
TM1011, Rev. B	25.01.01
TM1022, Rev. A)
TM1023, Rev. A) 10.10.99
TM1024, Rev. A)
c:\dnft\mf_prog.dwg, figure7	26.03.96
c:\dnft\mf_prog.pcb, figure 8) 19.04.96
c:\dnft\mf_prog.pcb, figure 9)
3. Samples