



Český metrologický institut

Notifikovaná osoba č 1383, Okružní 31
638 00 Brno

EC-TYPE EXAMINATION CERTIFICATE

Number: TCM 142/08 - 4627

Issued by: **Český metrologický institut**
Okružní 31
638 00 Brno
Czech Republic

Notified Body No. 1383

In accordance with: point 3 of annex 2 to Government Order No. 464/2005 Coll. (annex B of the Directive 2004/22/EC) from 19 October 2005 that lays down technical requirements on measuring instruments and implements in Czech Republic Directive 2004/22/EC of the European Parliament and of the Council.

Applicant: **MADDALENA S.p.A.**
Via G. B. Maddalena 2/4
33040 Povoletto (UD)
Italy

In respect of: **water meter - single jet**
type: CD ONE TRP
manufacturer: MADDALENA S.p.A.
Accuracy class: 2
Temperature class: T30 and T50

Valid until: **8 October 2018**

Document number: **0115-CS-A028-08**

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate. This certificate contains 7 pages.

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RNDr. Pavel Klenovský

Notified Body No.1383

1. Measuring device description

Single jet water meter with protected registered drums type CD ONE TRP are designed to measure, memorise and display the volume at metering conditions of water passing through the measurement transducer in the sense of the Directive of the European Parliament and of the Council no. 2004/22/EC of measuring instruments, as amended.

The water meters type CD ONE TRP consist of a hot pressing brass body, an inlet strainer, a wet measuring unit with a rotary vane wheel, a indicating device with gears, pointers and protected drums, the upper glass disc and a brass closing ring with a cover. The numbered drums are installed in capsule filled by special liquid.

The water meters CD ONE TRP can be equipped with an external adjusting device, realized by adjusting screw. The access to the adjusting screw is protected by the plastic cover.

The water meters type CD ONE TRP can be equipped by the reed impulse transmitter or others certified optionally or pre-equipped for a further installation.

The water meters type CD ONE TRP shall be installed to operate in horizontal and vertical position (with up and down flow direction) with the indicating device positioned at the top or on site.

The water meters type CD ONE TRP are manufactured according to assembly drawings of the company MADDALENA, No. 225011M from 26. 5. 2008.

2. Basic technical data

Nominal diameter (DN) [mm]:	15		20		25	
Orientation limitation:	H	V	H	V	H	V
Overload flowrate (Q_4) [m^3/h]:	3.13		5.00		7.88	
Permanent flowrate (Q_3) [m^3/h]:	2.50		4.00		6.30	
Transitional flowrate (Q_2) [m^3/h]:	0.0200	0.0400	0.0320	0.0640	0.0504	0.101
Minimum flowrate (Q_1) [m^3/h]:	0.0125	0.0250	0.0200	0.0400	0.0315	0.0630
Ratio Q_3 / Q_1 :	200 for H installation 100 for V installation					
Ratio Q_2 / Q_1 :	1.6					
Ratio Q_4 / Q_3 :	1.25					
Accuracy class:	2					
Maximum permissible error for the lower flowrate zone (MPE _l):	± 5 %					
Maximum permissible error for the upper flowrate zone (MPE _u):	± 2 % for water having a temperature ≤ 30 °C ± 3 % for water having a temperature > 30 °C					
Temperature class:	T30 and T50					
Water pressure classes:	MAP 16					
Pressure-loss classes:	ΔP 63					
Indicating range [m^3]:	99999					
Resolution of the indicating device [L]:	0.05					
Resolution of the device for the rapid testing [pulse/L]:	66.133		50.822		27.833	
Flow profile sensitivity classes:	U0 D0					
Length [mm]:	110 to 120		130		160	
Connection type – Screw thread size:	G ¾ B or G 1 B		G 1 B		G 1 ¼ B	
Reed switch power supply (U_{max} / I_{max}):	max. 24 V / 0.1 A					
Reed switch K-faktor [impulse / L]:	1; 0.1; 0.01 or 0.001					

3. Test

Technical tests of the CD ONE TRP water meters were performed in compliance with the International Recommendation OIML R 49 Edition 2006 (E) with conformity to EN 14154:2005, Test Report No. 6015-PT-P015-08 from September 3, 2008.

