

OIML Member State
The Netherlands

Number R117-1/2007-NL1-15.02
Project number SO15202012
Page 1 of 2

Issuing authority
Person responsible: NMI Certin B.V.
C. Oosterman

Applicant and
Manufacturer Total Control Systems
2515 Charleston Place
Fort Wayne, IN 46805
Unites states of America

Identification of the
certified type **A measurement transducer (rotary meter)**
Type: TCS-700-xx

Characteristics See page 2

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 117-1:2007 "Dynamic measuring systems for liquids other than water"

Accuracy class 0,3; 0,5; 1,0 (for LPG)

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. This Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**
29 May 2015


C. Oosterman
Head Certification Board

NMI Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
the Netherlands
T +31 78 6332332
certin@nmi.nl
www.nmi.nl

This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMI Certin B.V. as Issuing Authority can be verified at www.oiml.org

Parties concerned can lodge objection against this decision, within six weeks after the date of submission, to the general manager of NMI (see www.nmi.nl).



OIML Member State
The Netherlands

Number R117-1/2007-NL1-15.02
Project number SO15202012
Page 2 of 2

The conformity was established by the results of tests and examinations provided in the associated report(s):

- No. 2007/222 dated 20 September 2007 that includes 5 pages;
- No. NMI-10200363-01 dated 16 May 2012 that includes 9 pages;
- No. NMI-12200032-01 dated 16 May 2012 that includes 7 pages;
- No. NMI-10200329-03 dated 12 July 2013 that includes 15 pages;
- No. NMI-12200329-01 dated 7 February 2014 that includes 7 pages;
- No. NMI-13200200-02 dated 28 February 2014 that includes 13 pages.

Characteristics of the measuring instrument

Table 1 gives the general characteristics of the meter type;

Table 2 gives an overview of the general characteristics of the family of meters.

Table 1 General characteristics

Maximum pressure	10 bar
Environmental classes	M2 / E3
Ambient temperature range	-25 – +55 °C; condensing, open location
Product temperature range	-30 – +50 °C
Intended for the measurement of	Liquids other than water, except liquefied gases with viscosity between 1,4 and 1200 mPa·s

Table 2 General characteristics of the family of meters

Model designation	Size [mm]	Minimum flow rate [L/min]	Maximum flow rate [L/min]	MMQ [L]	Remarks
TCS-700-15	37	32	185	50	
TCS-700-20	50	80	475	100	(1)
TCS-700-25	50	80	475	100	
TCS-700-30	75	100	930	100	(1)
TCS-700-35	75	100	930	100	
TCS-700-40	100	438	2271	500	
TCS-700-45	100	438	2271	500	
TCS-700-60	150	438	4540	1000	
TCS-700-65	150	438	4540	1000	

Remarks:

- (1) This meter is also intended for AdBlue and LPG.