

OIML Certificate

OIML Member State

The Netherlands

Number R117-1/2007-B-NL1-18.03 Project number 1902493

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Issuing authority Person responsible:

NMi Certin B.V. C. Oosterman

Applicant and Manufacturer

Endress + Hauser Flowtec AG

Kägenstrasse 7 CH-4153 Reinach Switzerland

Identification of the

A measurement transducer

certified type

Type: Promass Q 300 DNxxx^[1]; Promass Q 500 DNxxx^[1]

Characteristics See page 2 and further

This OIML Certificate is issued under scheme B

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 / 1.5

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.

With xxx denoting the size of the Promass Q measurement sensor.

Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL

10 September 2018

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.

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

- NMi-15200323-01 dated 25 October 2016 that includes 94 pages;
- NMi-16200475-01 dated 22 December 2016 that includes 247 pages;
- NMi-16200475-02 dated 22 December 2016 that includes 16 pages;
- NMi-1901185-01 dated 1 November 2017 that includes 269 pages.
- NMi-1901704-01 dated 31 August 2018 that includes 17 pages.

Characteristics of the flow transmitter

In Table 1, the general characteristics of the measuring instrument are presented. The construction of the measurement transducer is recorded in documentation folders TC7149-7 fo the measurement sensor and TC10822-2 for the electronics.

Table 1 General characteristics of the Promass Q measurement sensor

Sensor size	DN25	DN50	DN80	DN100
Maximum flow rate [t/h] + + + + +	20 + + +	80 + +	200+++	400 + + +
Minimum flow rate [t/h] [2]	0.45	2	6	14
Minimum flow rate [t/h] [3]	0.225	1 + + +	3, , , ,	7, , , ,
+ Minimum Measured Quantity [kg] + +	+10+ + + +	-20+ + +	100+++	200+++
Maximum pressure	100 bar	+ + + + -	+ + + + + -	
Density range	4001400 kg/m³.			
Maximum Viscosity + + + + + +	1000 mPa·s + + + + + + + + + + + + + + + + + + +			
Accuracy class + + + + + + +	0.3; 0.5; 1.0 and 1.5			
Environmental classes	M3 / E2 / H3			
Ambient temperature range	-40 – +55 °C	+ + + + -		
Product temperature range	-10 – +90 °C for mass, density and volume measurement			
	-200 – +90 °C for mass measurement			
Intended for the measurement of	Oil and oil products, chemicals, potable liquids and liquefied gases under pressure.			

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^[2] For Accuracy Class 0.3 and 0.5

^[3] For Accuracy Class 1.0 and 1.5



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Table 2 General characteristics of the Promass 300 electronics

*Environmental classes * * * * * * *	M3 / E2 / H3 + + + + + + + + + + + + + + + + + +
Ambient temperature range	-40+55 °C; condensing humidity
Power supply voltage	24 VDC; 100240 VAC; 5060 Hz 24 VDC/100240 V AC;-/5060 Hz
	Version number: 01.00.02; CRC: 0xE87F (Modbus); 0x321F (Hart).
	Version number: 01.01.01; CRC: 0xA476 (Modbus); 0x977D (Hart).
Software identification	Version number: 01.01.02; CRC: 0x2AAB (Modbus); 0xED44 (Hart).
	Version number: 01.01.03; CRC: 0x6A37 (Modbus); 0x86FC (Hart).
	Version number: 01.01.04; * * * * * * * * * * * * * * * * * * *

Table 3 General characteristics of the Promass 500 electronics

Environmental classes	M3 / E2 / H3
+Ambient temperature range + + + + +	-40+55 °C; condensing humidity + + + + +
Power supply voltage + + + + + + + + + + + + + + + + + + +	24 VDC; 100240 VAC; 5060 Hz 24 VDC/100240 V AC;-/5060 Hz
	Version number: 01.01.01;
+ + + + + + + + + + + + + + + + + + +	Version number: 01.01.02; CRC: 0x2AAB (Modbus); 0xED44 (Hart).
Software identification	Version number: 01.01.03; CRC: 0x6A37 (Modbus); 0x86FC (Hart).
	Version number: 01.01.04; CRC: 0x6D79 (Modbus).

The Promass 300 and Promass 500 flow transmitter is solely to be used in combination of dynamic mass meters (Coriolis meters) of brand Endress + Hauser.