

Member State of OIML
United Kingdom of Great Britain
and Northern Ireland

OIML Certificate No
R117/2007-GB1-17.01

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**
Person responsible: **Mannie Panesar – Head of Technical Services**
Applicant: **OVAL Corporation**
1-9-5, Fukuura
Kanazawa-ku, Yokohama
Kanagawa, 236-8645
Japan
Manufacturer: **The applicant**

Identification of the certified pattern: **ALTI mass Type U Coriolis Flow Meters**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

OIML R117-1 - Edition 2007 (E) for accuracy class:
0.3 and 0.5 (volumetric & mass flow)

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

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 or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: **21 December 2017**

A handwritten signature in black ink, appearing to read 'Grégory Glas'.

Grégory Glas
Lead Technical Manager
For and on behalf of the Head of Technical Services



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The conformity was established by testing and examinations described in the associated Evaluation Report P01871-1A, which includes 75 pages and Evaluation report P01871-1B, which includes 63 pages.

Characteristics of the instrument:

Technical data:

Type	CA015	CA025	CA040 CA050	CA080	CA100 CA150	CA15H CA200	CA20H CA250
Diameter in- / outlet [mm]	15	25	50	80	100	150	200
Q _{min} [kg/min] (accuracy class 0.3)	3	9	32.5	100	285	583	1167
Q _{min} [kg/min] (accuracy class 0.5)	1.5	4.5	16.25	50	142.5	292	583
Q _{max} [kg/min] (accuracy class 0.3 & 0.5)	120	360	1300	4000	11400	23333	46667
Density [kg/m ³]	300-2000						
Viscosity [mPa.s]	≤ 10000						
MMQ [m ³]	5	10	50	100	500	1000	1000
Temperature range liquid [°C]	-200°C - +200°C						
Temperature range ambient [°C]	-40°C - +55°C						
Maximum pressure [kPa]	Flange rating dependent						

Interfaces:

The instrument may have the following interfaces:

- ModBus
- ProfiBus
- Foundation FieldBus
- Hart

Sealing:

The parameter write protect switch is positioned on the CPU board which is accessed by removing the transmitter front lid and LCD board. The front lid is secured with a wire and seal to prevent unauthorised access to metrological parameters.

Software:

The software identification can be displayed via the display menus.

Designation	Version number	Checksum
Main CPU: ALTI _{mass}	03.17	580c
I/O CPU: ALTI _{mass}	01.13	d741
DSP1: ALTI _{mass}	01.01.00.03	b584
DSP2: ALTI _{mass}	03.01.00.04	3eac
LCD CPU: ALTI _{mass}	03.10	eed7

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R117/2007-GB1-17.01	21 December 2017	Certificate first issued.
-	-	No revisions have been issued.