Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

Member State of OIML
Germany

OIML Certificate No.
**R49/2006-DE1-15.03**

# OIML CERTIFICATE OF CONFORMITY

**Issuing Authority**

| | |
|---|---|
| Name: | Physikalisch-Technische Bundesanstalt |
| Address: | Bundesallee 100, 38116 Braunschweig |
| Person responsible: | Dr. M. Rinker |

**Applicant**

| | |
|---|---|
| Name: | Sensus GmbH Ludwigshafen |
| Address: | Industriestr. 16, 67063 Ludwigshafen am Rhein |

Manufacturer of the certified type is the applicant.

**Identification of the certified type**

Water Meter
Electromagnetic flow meter for cold and hot water
Type: iPERL

Further characteristics see page 3

This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 49-1 (Edition 2006) Metrological and technical requirements
R 49-2 (Edition 2006) Test methods
R 49-3 (Edition 2006) Test report format

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation identified above.

This Certificate does not bestow any form of legal international approval.

R3-0033

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

OIML Certificate No.
**R49/2006-DE1-15.03**

The conformity was established by the results of tests and examinations provided in the associated Test Reports

| | |
|---|---|
| No. PTB-1.5-4076673(1) | that includes 53 pages |
| No. PTB-1.5-4076673(2) | that includes 66 pages |
| No. PTB-1.5-4076673(3) | that includes 75 pages |

**The Issuing Authority**

Dr. M. Rinker
Member of Certification Body

09.09.2015

**The CIML Member**

Dr. R. Schwartz
Vice President

09.09.2015

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

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

OIML Certificate No.
**R49/2006-DE1-15.03**

Identification of the certified type – page 1 continued

Type details

| Permanent flowrate | **2,5** m³/h | **4** m³/h | **6,3** m³/h | **10** m³/h | **16** m³/h |
|---|---|---|---|---|---|
| Operating conditions $Q_1$ | 0,003 m³/h | 0,005 m³/h | 0,008 m³/h | 0,013 m³/h | 0,020 m³/h |
| $Q_2$ | 0.005 m³/h | 0,008 m³/h | 0,013 m³/h | 0,020 m³/h | 0,032 m³/h |
| $Q_3$ | 2,5 m³/h | 4 m³/h | 6,3 m³/h | 10 m³/h | 16 m³/h |
| $Q_4$ | 3,125 m³/h | 5 m³/h | 7,875 m³/h | 12,5 m³/h | 20 m³/h |
| $Q_2 / Q_1$ | 1,6 | | | | |
| $Q_3 / Q_1$ | 800[1)] | | | | |
| Max. permissible error: | ± 2 % ($Q_2 \leq Q \leq Q_4$) for water temperature ≤ 30°C | | | | |
| | ± 3 % ($Q_2 \leq Q \leq Q_4$) for water temperature > 30°C | | | | |
| | ± 5 % ($Q_1 \leq Q < Q_2$) | | | | |
| Water temperature range: | 0,1 °C to 70 °C | | | | |
| Working pressure range | 0,3 bar (0,03 MPa) to 16 bar (1,6 MPa) | | | | |
| Pressure loss class ΔP: | 0,40 bar (0,04 MPa) | | | | |
| Orientation limitations: | All orientation | | | | |
| Environmental class: | I | | | | |
| Mechanical Environmental: | M2 | | | | |
| Climatic Environmental: | -15°C bis 70°C | | | | |
| Electromagnetic Ennvironmental: | E2 | | | | |
| Connection size | DN15 | DN20 | DN25 | DN32 | DN40 |
| Threaded end connection: | ≥ G¾B | ≥ G1B | ≥ G1¼B | ≥ G1½B | ≥ G2B[2)] |
| Meter length: | ≥ 110mm | ≥ 105 mm | ≥ 198 mm | ≥ 260 mm | ≥ 300 mm |

[1)] The meter is also allowed to be manufactured for the flow rates $Q_3 / Q_1 = R$ = 630, 500, 400, 315, 250, 200, 160, 125, 100, 80, 63,5, 50, 40.

[2)] The meter can be performed alternatively with flanges according to DIN EN1092-1 and DIN 2501-1