



Český metrologický institut

Notifikovaná osoba č 1383, Okružní 31
638 00 Brno

EC-TYPE EXAMINATION CERTIFICATE

Number: TCM 142/08 - 4592

Addition 2

This addition replaces all previous versions of this certificate in full wording.

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.

Manufacturer: **B METERS s.r.l.**
(Applicant) **Via Friuli 3**
33050 GONARS (Udine)
Italy

In respect of: **water meter - single jet, wet dial, mechanical**
type: CPR-RP
Accuracy class: 2
Temperature class: T30, T50, T90 and T30/90

Valid until: **23 July 2018**

Document number: **0115-CS-A021-08**

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate. This certificate contains 6 pages.

Date of issue: 8 April 2010



RNDr. Pavel Klenovský

Notified Body No.1383

1. Measuring device description

The single jet wet dial with protected register (liquid filled rolls) water meters type CPR-RP 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 single jet wet dial with protected register water meters type CPR-RP consist of the brass body, the inlet strainer, the wet measuring section with rotary vane wheel, the protected mechanical indicating device, the glass window and the brass closing ring with the plastic cover. The reading rolls are installed in capsule filled by glycerin. The adjustment is internal and consists of two wings at the bottom of the brass body, thus affecting the water flow.

The difference between water meters for cold water T30 and T50 and for hot water T90 and T30/90 is in material used only.

The water meters type CPR-RP shall be installed to operate in horizontal or vertical position.

The water meters type CPR-RP shall be designate by these trademarks:



Water meters type CPR-RP are manufactured according to technical documentation of the producer, No. 1-1-CR-1, 1-1-CR-2, 1-2-CR-3 and 1-2-CR-4 from 26. 1. 2008 and 2-2-02-03-9 from 22.10.2007..

2. Basic technical data

| Model number: | CPR-RP 1.6 | | CPR-RP 2.5 | |
|--|---|-------|---------------|-------|
| Nominal diameter (DN) [mm]: | 15 / 20 | | 20 | |
| Orientation limitation: | H | V | H | V |
| Overload flowrate (Q_4) [m^3/h]: | 2.00 | 2.00 | 3.13 | 3.13 |
| Permanent flowrate (Q_3) [m^3/h]: | 1.60 | 1.60 | 2.50 | 2.50 |
| Transitional flowrate (Q_2) [m^3/h]: | 0.051 | 0.128 | 0.080 | 0.200 |
| Minimum flowrate (Q_1) [m^3/h]: | 0.032 | 0.080 | 0.050 | 0.125 |
| Ratio Q_3 / Q_1 : | 50 | 20 | 50 | 20 |
| 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): | $\pm 5 \%$ | | | |
| Maximum permissible error for the upper flowrate zone (MPE_u): | $\pm 2 \%$ for water having a temperature $\leq 30 \text{ }^\circ\text{C}$ $\pm 3 \%$ for water having a temperature $> 30 \text{ }^\circ\text{C}$ | | | |
| Temperature class: | T30, T50, T90 and T30/90 | | | |
| Water pressure classes: | MAP 16 | | | |
| Pressure-loss classes: | $\Delta P 25$ | | $\Delta P 40$ | |
| Indicating range [m^3]: | 99999 | | | |
| Resolution of the indicating device [L]: | 0.05 | | | |
| Flow profile sensitivity classes: | U0 D0 | | | |
| Length [mm]: | 110 - 130 | | | |
| Connection type – Screw thread size: | G $\frac{3}{4}$ B / G 1 B | | G 1 B | |

3. Test

Technical tests of the CPR-RP 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-P016-08 from July 16. 2008.

4. The measuring device data

There are following data on the measurement device:

- The "CE" marking and supplementary metrology marking
- Number of EC-type examination certificate
- Name or trademark of manufacturer
- Year of manufacturer (last two digit)
- Measuring device type
- The serial number (as near as possible to the indicating device)
- Unit of measurement (m^3)
- Accuracy class 2
- Numerical value Q_3 in m^3/h ($Q_3 \times \times$)
- The ratio Q_3 / Q_1 , ($R \times \times$)
- The temperature class ($T \times \times$)
- Maximum admissible pressure (MAP $\times \times$)
- The maximum pressure lost ($\Delta P \times \times$)
- Classes on sensitivity to irregularities in velocity field ($U \times D \times$)
- Orientation limitation (H or V)
- Direction of flow arrow on both sides of the meter body

5. Sealing

The connection of water meter body and closing ring has to be protected by plastic cover with safeguarding ribs. The clamp plastic cover of register has to be identified.



Figure 1: The CPR-RP water meter assembly drawings:

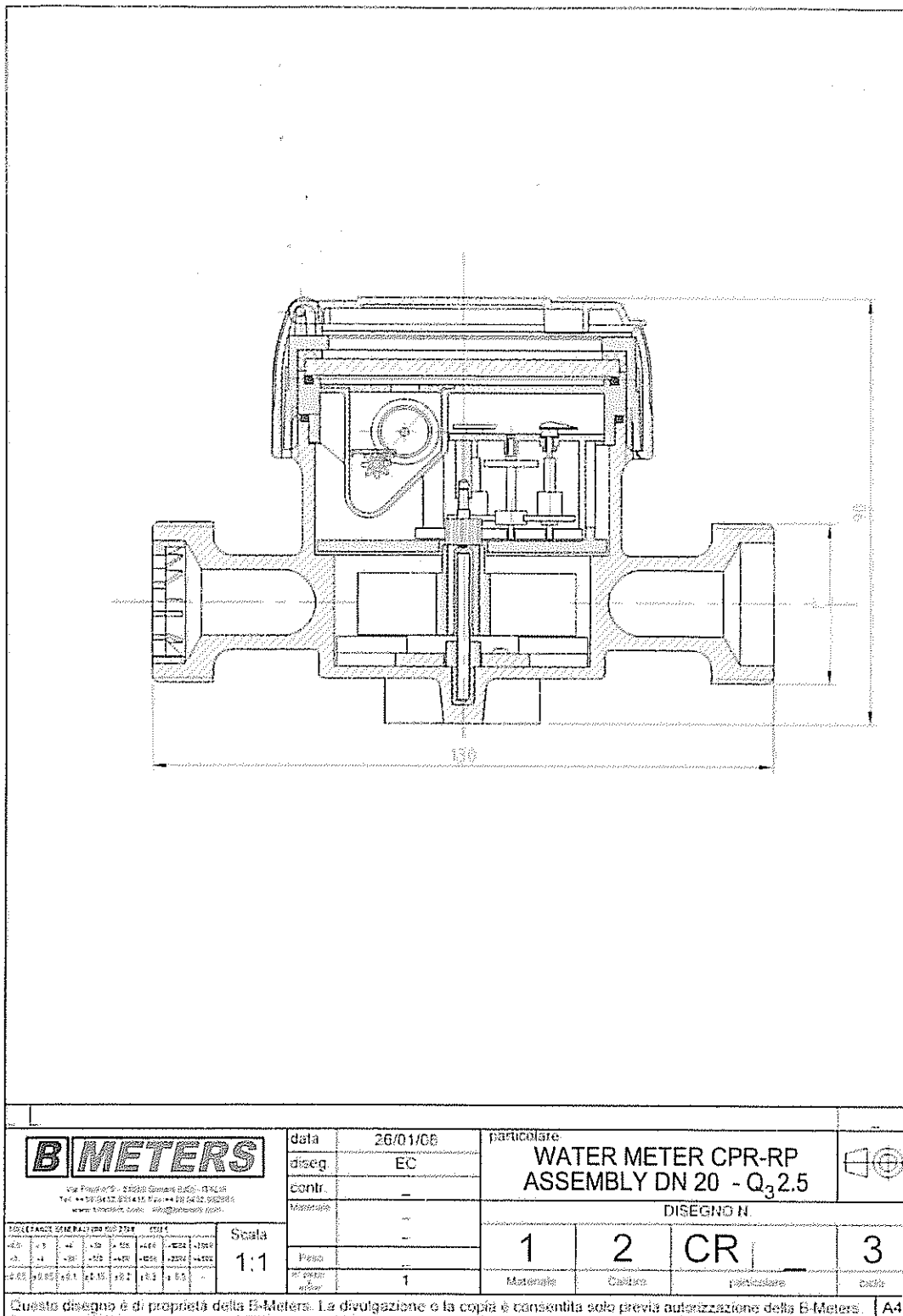
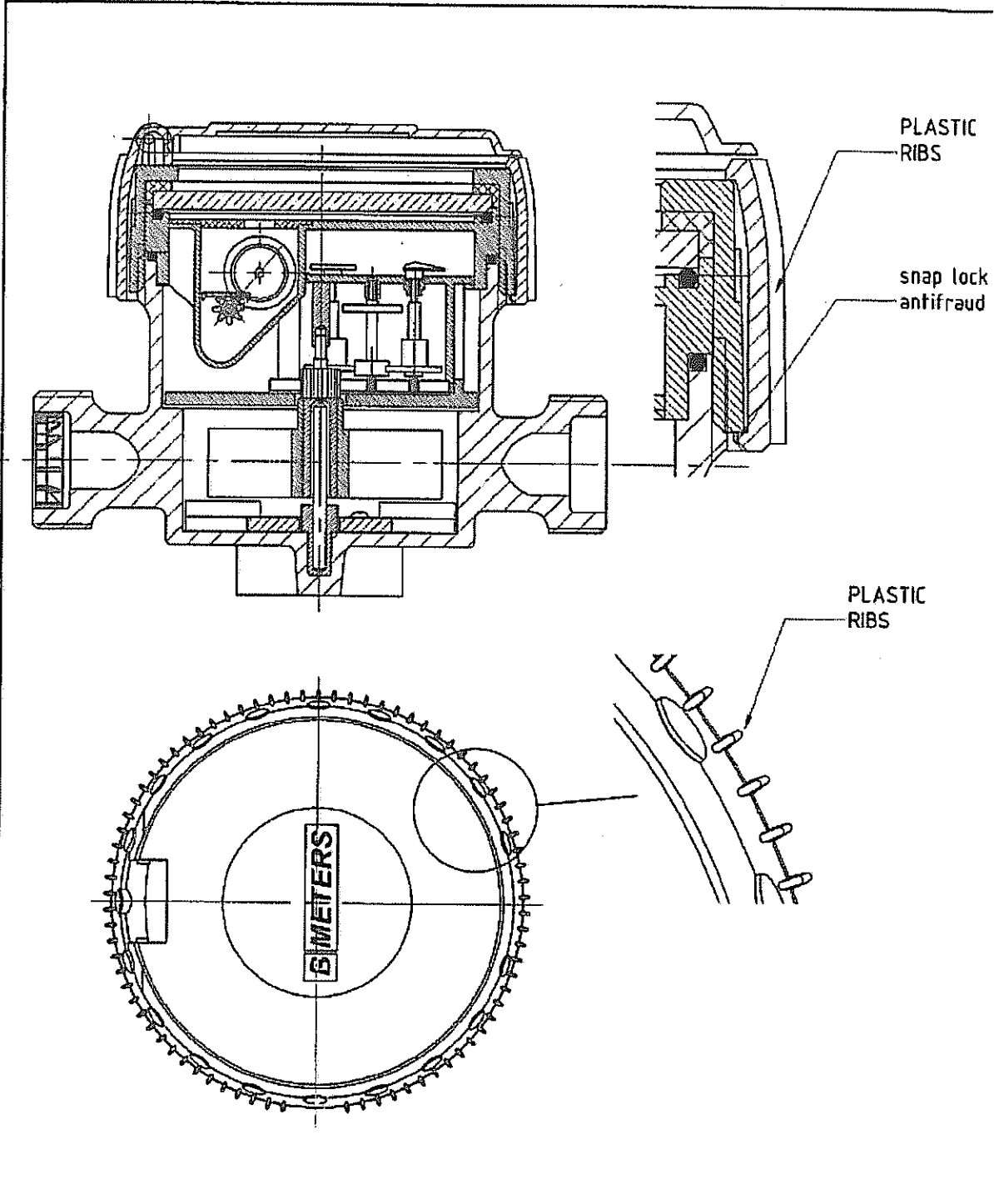




Figure 2: The sealing of the CPR-RP water meter

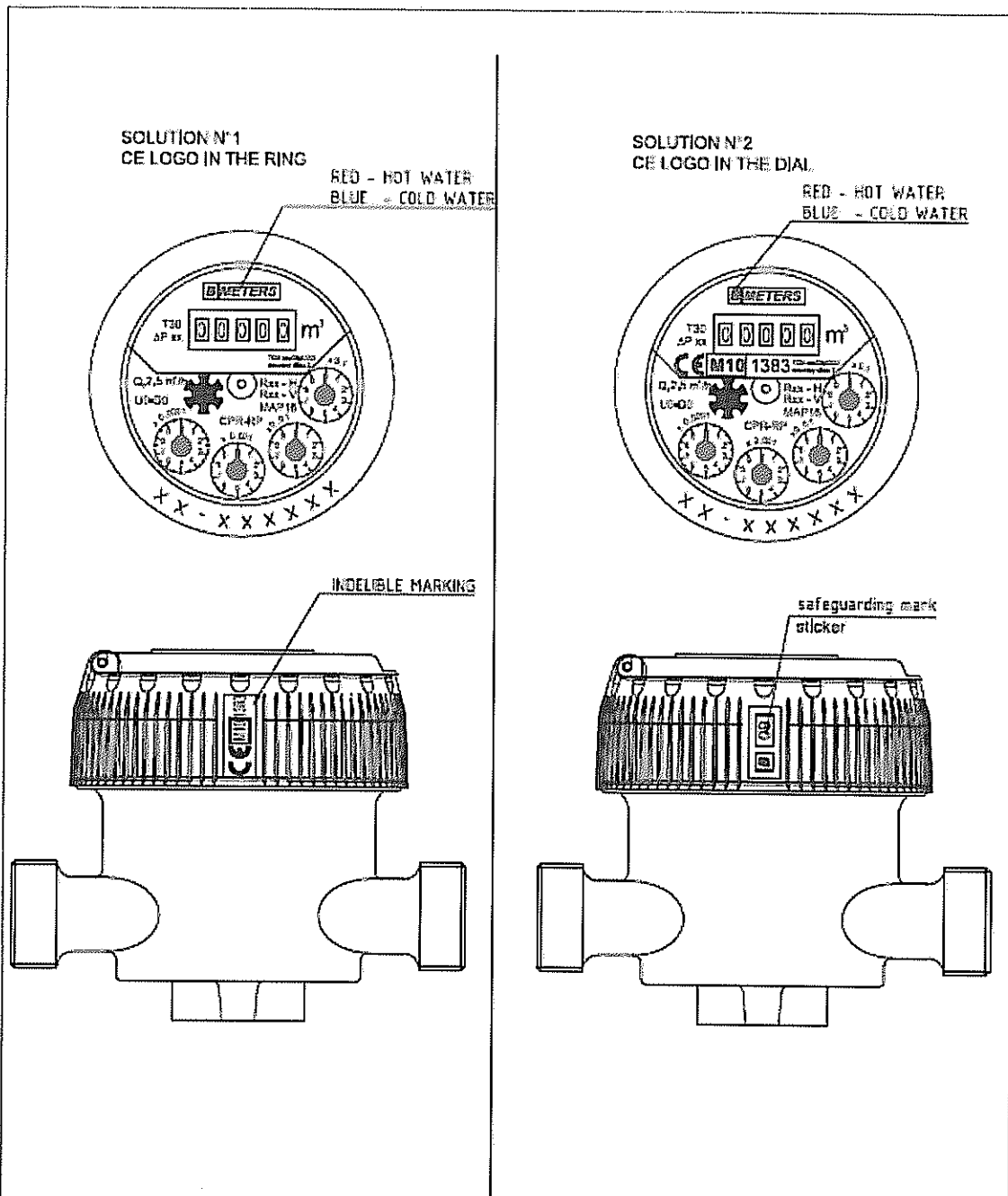




| 1 PLASTIC RIBS | | | | 18-7-08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------|----------------------------------|----------|--|---|-------------|-------|-----|--|-------|-------|--|--|--|--|--|--|--|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|--------|---|------------|--|
|  Via F.lli n°7 - 33050 Gorizia (UD) - ITALIA Tel. ++39 0432 831416 Fax ++39 0432 872101 www.bimeters.com info@bimeters.com | | date | 26/01/08 | particolare |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | diseg. | EC | WATER METER CPR-RP ANTIFRAUD PROTECTION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="8">TOLLERANZE GENERALI UNO ISO 2768</th> <th rowspan="2">Scala</th> </tr> <tr> <th colspan="8">mH</th> </tr> </thead> <tbody> <tr> <td>+0.3</td> <td>+0.4</td> <td>+0.5</td> <td>+0.6</td> <td>+0.8</td> <td>+1.0</td> <td>+1.5</td> <td>+2.0</td> <td rowspan="2">1:1</td> </tr> <tr> <td>-0.3</td> <td>-0.4</td> <td>-0.5</td> <td>-0.6</td> <td>-0.8</td> <td>-1.0</td> <td>-1.5</td> <td>-2.0</td> </tr> </tbody> </table> | | TOLLERANZE GENERALI UNO ISO 2768 | | | | | | | | Scala | mH | | | | | | | | +0.3 | +0.4 | +0.5 | +0.6 | +0.8 | +1.0 | +1.5 | +2.0 | 1:1 | -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -1.0 | -1.5 | -2.0 | contr. | - | DISEGNO N. | |
| | | TOLLERANZE GENERALI UNO ISO 2768 | | | | | | | | | Scala | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| mH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| +0.3 | +0.4 | +0.5 | +0.6 | +0.8 | +1.0 | +1.5 | +2.0 | 1:1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -1.0 | -1.5 | -2.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Materiale | - | 1 | 1 | CR | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Peso | - | Materiale | Calibro | particolare | ciclo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | n° pezzi | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Figure 3: The dial of the CPR-RP water meter



| 2 | | 2 DIFFERENT SOLUTIONS | | | data | | 26/01/05 | particolare | | 06/03/10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|--------------------------------|-------|------|-------------------------------|----------|-------------|---|----|----------|----|----|----|------|----|------|---|-----|----|----|----|------|----|------|---|-------|-------|------|-------|------|------|------|---|-----------|---|--|------------|--|--|--|--|
|  <p>VIA F. L. GIARDINO - 23020 CORONA (LC) - ITALIA Tel. ++39 0345 321415 Fax ++39 0345 321424 www.bmeters.com - info@bmeters.com</p> | | disegn. | EC | | WATER METER CPR-RP MARKING | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | contr. | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="8">TOLLERANZE DIMENSIONALI ED ITM</th> </tr> <tr> <th>+35</th> <th>+5</th> <th>+4</th> <th>+2</th> <th>+1.5</th> <th>+1</th> <th>+0.5</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>-35</td> <td>-5</td> <td>-4</td> <td>-2</td> <td>-1.5</td> <td>-1</td> <td>-0.5</td> <td>-</td> </tr> <tr> <td>±0.05</td> <td>±0.15</td> <td>±0.1</td> <td>±0.05</td> <td>±0.1</td> <td>±0.3</td> <td>±0.5</td> <td>-</td> </tr> </tbody> </table> | | TOLLERANZE DIMENSIONALI ED ITM | | | | | | | | +35 | +5 | +4 | +2 | +1.5 | +1 | +0.5 | - | -35 | -5 | -4 | -2 | -1.5 | -1 | -0.5 | - | ±0.05 | ±0.15 | ±0.1 | ±0.05 | ±0.1 | ±0.3 | ±0.5 | - | Materiali | - | | DISEGNO N. | | | | |
| | | TOLLERANZE DIMENSIONALI ED ITM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| +35 | +5 | +4 | +2 | +1.5 | +1 | +0.5 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -35 | -5 | -4 | -2 | -1.5 | -1 | -0.5 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ±0.05 | ±0.15 | ±0.1 | ±0.05 | ±0.1 | ±0.3 | ±0.5 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Scala | 1:1 | | 2 | 1 | CR | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Fuso | - | | Materiali | Callibro | particolare | ciclo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | N° pezzi | 1 | | | | | | A4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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EC-TYPE EXAMINATION CERTIFICATE

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Addition 1

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In respect of: **water meter - single jet, wet dial, mechanical**
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Accuracy class: 2
Temperature class: T30, T50, T90 and T30/90

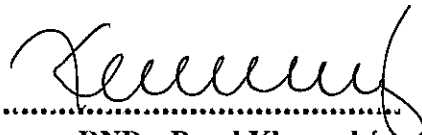
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Date of issue: 12 January 2009




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RNDr. Pavel Klenovský

Notified Body No.1383

1. Measuring device description

The single jet wet dial with protected register (liquid filled rolls) water meters type CPR-RP 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.

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The difference between water meters for cold water T30 and T50 and for hot water T90 and T30/90 is in material used only.

The water meters type CPR-RP shall be installed to operate in horizontal or vertical position.

The water meters type CPR-RP shall be designate by these trademarks:



Water meters type CPR-RP are manufactured according to technical documentation of the producer, No. 1-1-CR-1, 1-1-CR-2, 1-2-CR-3 and 1-2-CR-4 from 26. 1. 2008 and 2-2-02-03-9 from 22.10.2007..

2. Basic technical data

| Model number: | CPR-RP 1.6 | | CPR-RP 2.5 | |
|--|--|-------|------------|-------|
| | 15 | | 20 | |
| Nominal diameter (DN) [mm]: | | | | |
| Orientation limitation: | H | V | H | V |
| Overload flowrate (Q_4) [m ³ /h]: | 2.00 | 2.00 | 3.13 | 3.13 |
| Permanent flowrate (Q_3) [m ³ /h]: | 1.60 | 1.60 | 2.50 | 2.50 |
| Transitional flowrate (Q_2) [m ³ /h]: | 0.051 | 0.128 | 0.080 | 0.200 |
| Minimum flowrate (Q_1) [m ³ /h]: | 0.032 | 0.080 | 0.050 | 0.125 |
| Ratio Q_3 / Q_1 : | 50 | 20 | 50 | 20 |
| 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, T50, T90 and T30/90 | | | |
| Water pressure classes: | MAP 16 | | | |
| Pressure-loss classes: | ΔP 25 | | ΔP 40 | |
| Indicating range [m ³]: | 99999 | | | |
| Resolution of the indicating device [L]: | 0.05 | | | |
| Flow profile sensitivity classes: | U0 D0 | | | |
| Length [mm]: | 110 | | 130 | |
| Connection type – Screw thread size: | G ¾ B | | G 1 B | |

3. Test

Technical tests of the CPR-RP 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-P016-08 from July 16. 2008.

4. The measuring device data

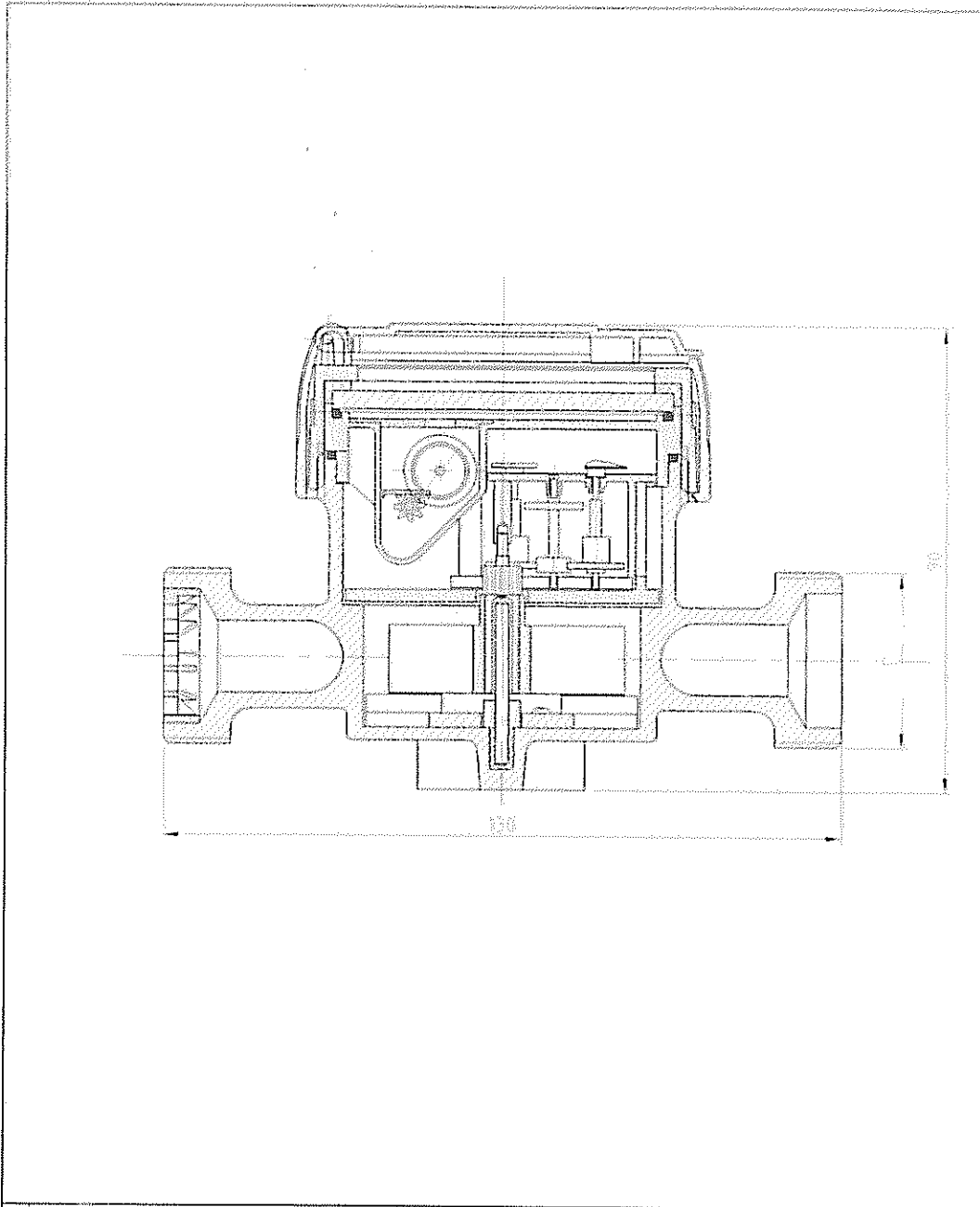
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- Direction of flow arrow on both sides of the meter body

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The connection of water meter body and closing ring has to be protected by plastic cover with ribs. The clamp plastic cover of register has to be identified.

Figure 1: The CPR-RP water meter assembly drawings:





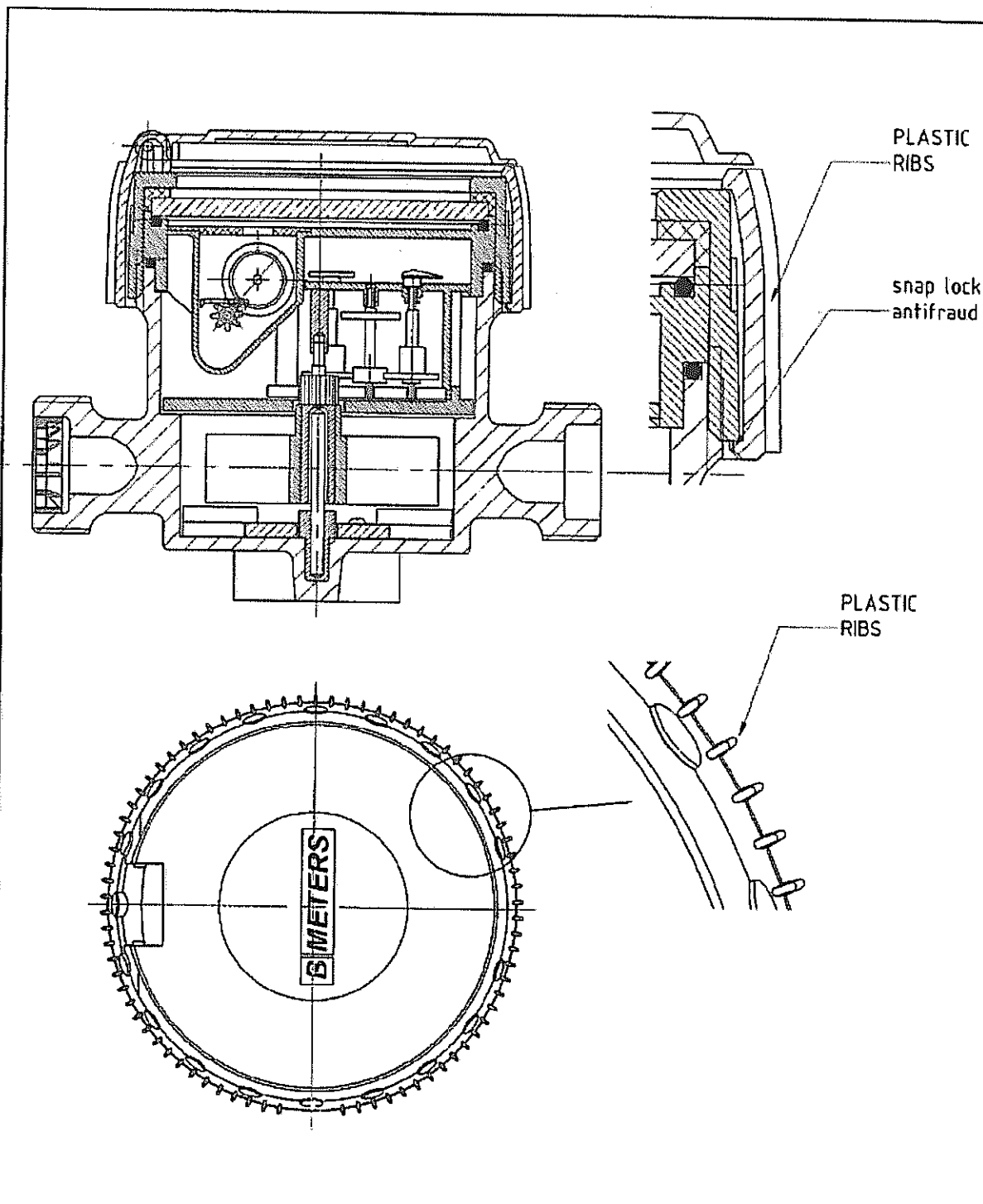
|  <p>Via Repubblica 28020 Sesto San Giovanni (MI) Tel. +39 02 42 93 41 55 Fax +39 02 42 93 22 81 www.b-meters.com 91022504900-0200</p> | | data | 26/01/05 | | particolare | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|------------------------|----------|-----|---|-----|---|---|------|---|----|----|-----|----|-----|-----|----|-----|------|------|---|--------|---|--|------------|--|--|---|---|----|---|-----------|-------|-------------|-------|
| | | disegn | EC | | WATER METER CPR-RP ASSEMBLY DN 20 - Q ₃ 2.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="2">MULTIPLICAZIONE DECIMA</th> <th colspan="2">MIL</th> </tr> </thead> <tbody> <tr> <td>0,1</td> <td>1</td> <td>1</td> <td>1000</td> </tr> <tr> <td>1</td> <td>10</td> <td>10</td> <td>100</td> </tr> <tr> <td>10</td> <td>100</td> <td>100</td> <td>10</td> </tr> <tr> <td>100</td> <td>1000</td> <td>1000</td> <td>1</td> </tr> </tbody> </table> | | MULTIPLICAZIONE DECIMA | | MIL | | 0,1 | 1 | 1 | 1000 | 1 | 10 | 10 | 100 | 10 | 100 | 100 | 10 | 100 | 1000 | 1000 | 1 | contr. | - | | DISEGNO N. | | <table border="1"> <tr> <td>1</td> <td>2</td> <td>CR</td> <td>3</td> </tr> <tr> <td>Materiale</td> <td>Costo</td> <td>particolare</td> <td>Scala</td> </tr> </table> | 1 | 2 | CR | 3 | Materiale | Costo | particolare | Scala |
| | | MULTIPLICAZIONE DECIMA | | MIL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0,1 | 1 | 1 | 1000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 10 | 10 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 100 | 100 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 1000 | 1000 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | CR | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Materiale | Costo | particolare | Scala | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scala 1:1 | | Materiali | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Prezzo | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Numero di copie | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | A4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure 2: The sealing of the CPR-RP water meter




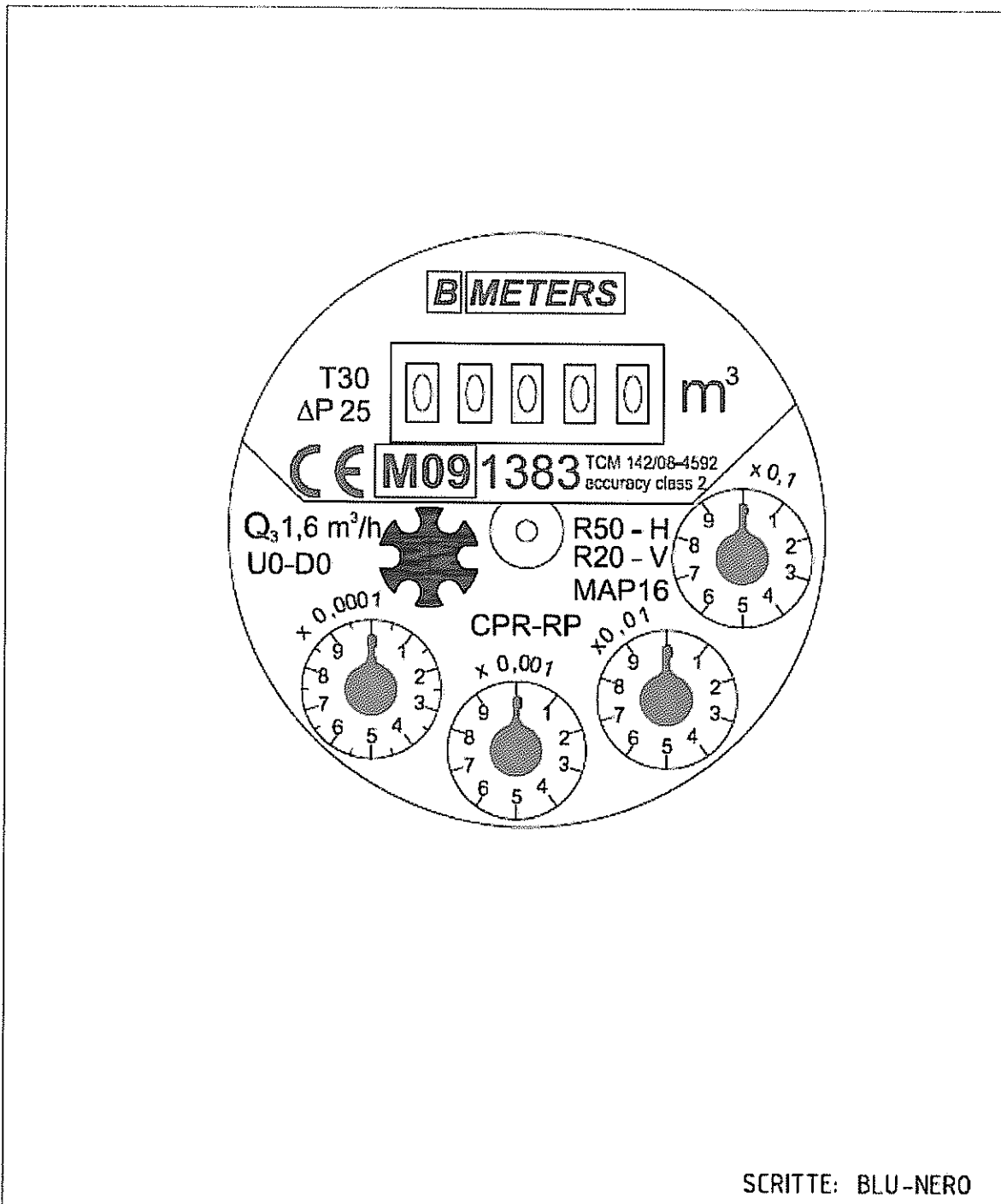


| | | | | | |
|--|--|------------------------|----------|--|---------|
| 1 PLASTIC RIBS | | | | | 18-7-08 |
|  Via F.lli n°3 - 35055 Concesio (VI) - ITALIA Tel. ++39 0432.831415 Fax ++39 0432.82101 www.b-meters.com info@b-meters.com | | date | 26/01/08 | particolare | |
| | | diseg. | EC | WATER METER CPR-RP ANTIFRAUD PROTECTION | |
| | | contr. | - | DISEGNO N. | |
| | | Materiale | - | | |
| | | Pezzo | - | 1 | 1 |
| | | n° pezzi x copia | 1 | CR | 10 |
| | | | | Materiale | Castro |
| | | | | particolare | ciclo |
| Questo disegno è di proprietà della B-Meters. La divulgazione o la copia è consentita solo previa autorizzazione della B-Meters. A4 | | | | | |

Figure 3: The dial of the CPR-RP water meter



SCRITTE: BLU-NERO

| | | | | | |
|--|---------------------|--------------------------|----------|--|---|
| 2 | Δp63 -> Δp25 M09 | | | 28-10-08 | |
| 1 | Δp16 -> Δp63 MAP 16 | | | 3-6-08 | |
|  <p>Via F.lli R. 25 - 20022 Soriano (CR) - ITALIA Tel. ++39 0352 233416 Fax ++39 0352 233417 www.bmeters.com info@bmeters.com</p> | | data | 16/04/08 | particolare |  |
| | | diseg. | EC | GRAFIA QUADRANTE CPR-RP MID DN 15 - Q ₃ 1.6 AF | |
| | | cont. | - | DISEGNO N. | |
| | | Materiale | - | 2 | 1 |
| | | Scala | 2:1 | 05 | 83 |
| | | peso | - | 9 | |
| | | n° pezzi a testat. | 1 | Materiale | Calibro |
| | | | | particolare | dido |
| Questo disegno è di proprietà della B-Meters. La divulgazione o la copia è consentita solo previa autorizzazione della B-Meters. A4 | | | | | |



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638 00 Brno

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Applicant: **B METERS s.r.l.**
Via Friuli 3
33050 GONARS (Udine)
Italy

In respect of: **water meter - single jet, wet dial, mechanical**
type: CPR-RP
manufacturer: B METERS s.r.l.
Accuracy class: 2
Temperature class: T30, T50, T90 and T30/90

Valid until: **23 July 2018**

Document number: **0115-CS-A021-08**

Description: Essential characteristics, approved conditions and special conditions, if any, are described in this certificate. This certificate contains 6 pages.

Date of issue: 24 July 2008



RNDr. Pavel Klenovský

Notified Body No.1383

1. Measuring device description

The single jet wet dial with protected register (liquid filled rolls) water meters type CPR-RP 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 single jet wet dial with protected register water meters type CPR-RP consist of the brass body, the inlet strainer, the wet measuring section with rotary vane wheel, the protected mechanical indicating device, the glass window and the brass closing ring with the plastic cover. The reading rolls are installed in capsule filled by glycerin. The adjustment is internal and consists of two wings at the bottom of the brass body, thus affecting the water flow.

The difference between water meters for cold water T30 and T50 and for hot water T90 and T30/90 is in material used only.

The water meters type CPR-RP shall be installed to operate in horizontal or vertical position.

The water meters type CPR-RP shall be designate by these trademarks:



Water meters type CPR-RP are manufactured according to technical documentation of the producer, No. 1-1-CR-1, 1-1-CR-2, 1-2-CR-3 and 1-2-CR-4 from 26. 1. 2008.

2. Basic technical data

| Model number: | CPR-RP 1.6 | | CPR-RP 2.5 | |
|--|---|-------|------------|-------|
| Nominal diameter (DN) [mm]: | 15 | | 20 | |
| Orientation limitation: | H | V | H | V |
| Overload flowrate (Q_4) [m^3/h]: | 2.00 | 2.00 | 3.13 | 3.13 |
| Permanent flowrate (Q_3) [m^3/h]: | 1.60 | 1.60 | 2.50 | 2.50 |
| Transitional flowrate (Q_2) [m^3/h]: | 0.051 | 0.128 | 0.080 | 0.200 |
| Minimum flowrate (Q_1) [m^3/h]: | 0.032 | 0.080 | 0.050 | 0.125 |
| Ratio Q_3 / Q_1 : | 50 | 20 | 50 | 20 |
| 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): | $\pm 5 \%$ | | | |
| Maximum permissible error for the upper flowrate zone (MPE_u): | $\pm 2 \%$ for water having a temperature $\leq 30 \text{ }^\circ\text{C}$ $\pm 3 \%$ for water having a temperature $> 30 \text{ }^\circ\text{C}$ | | | |
| Temperature class: | T30, T50, T90 and T30/90 | | | |
| Water pressure classes: | MAP 16 | | | |
| Pressure-loss classes: | ΔP 63 | | | |
| Indicating range [m^3]: | 99999 | | | |
| Resolution of the indicating device [L]: | 0.05 | | | |
| Flow profile sensitivity classes: | U0 D0 | | | |
| Length [mm]: | 110 | | 130 | |
| Connection type – Screw thread size: | G $\frac{3}{4}$ B | | G 1 B | |

3. Test

Technical tests of the CPR-RP 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-P016-08 from July 16. 2008.



4. The measuring device data

There are following data on the measurement device:

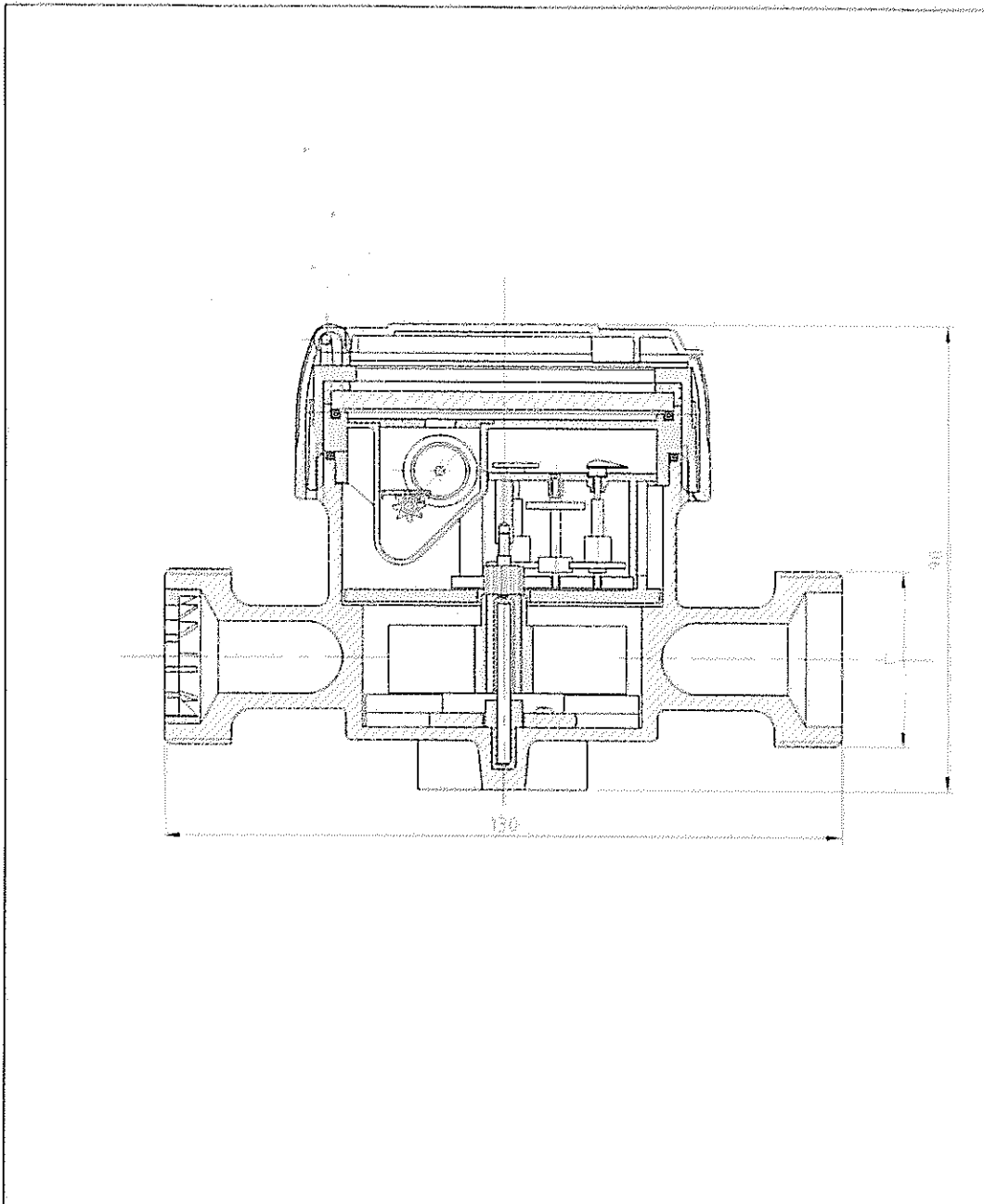
- The "CE" marking and supplementary metrology marking
- Number of EC-type examination certificate
- Name or trademark of manufacturer
- Year of manufacturer (last two digit)
- Measuring device type
- The serial number (as near as possible to the indicating device)
- Unit of measurement (m^3)
- Accuracy class 2
- Numerical value Q_3 in m^3/h ($Q_3 \times .\times$)
- The ratio Q_3 / Q_1 , ($R \times \times$)
- The temperature class ($T \times \times$)
- Maximum admissible pressure (MAP $\times \times$)
- The maximum pressure lost ($\Delta P \times \times$)
- Classes on sensitivity to irregularities in velocity field ($U \times D \times$)
- Orientation limitation (H or V)
- Direction of flow arrow on both sides of the meter body

5. Sealing

The connection of water meter body and closing ring has to be protected by plastic cover with ribs. The clamp plastic cover of register has to be identified.



Figure 1: The CPR-RP water meter assembly drawings:





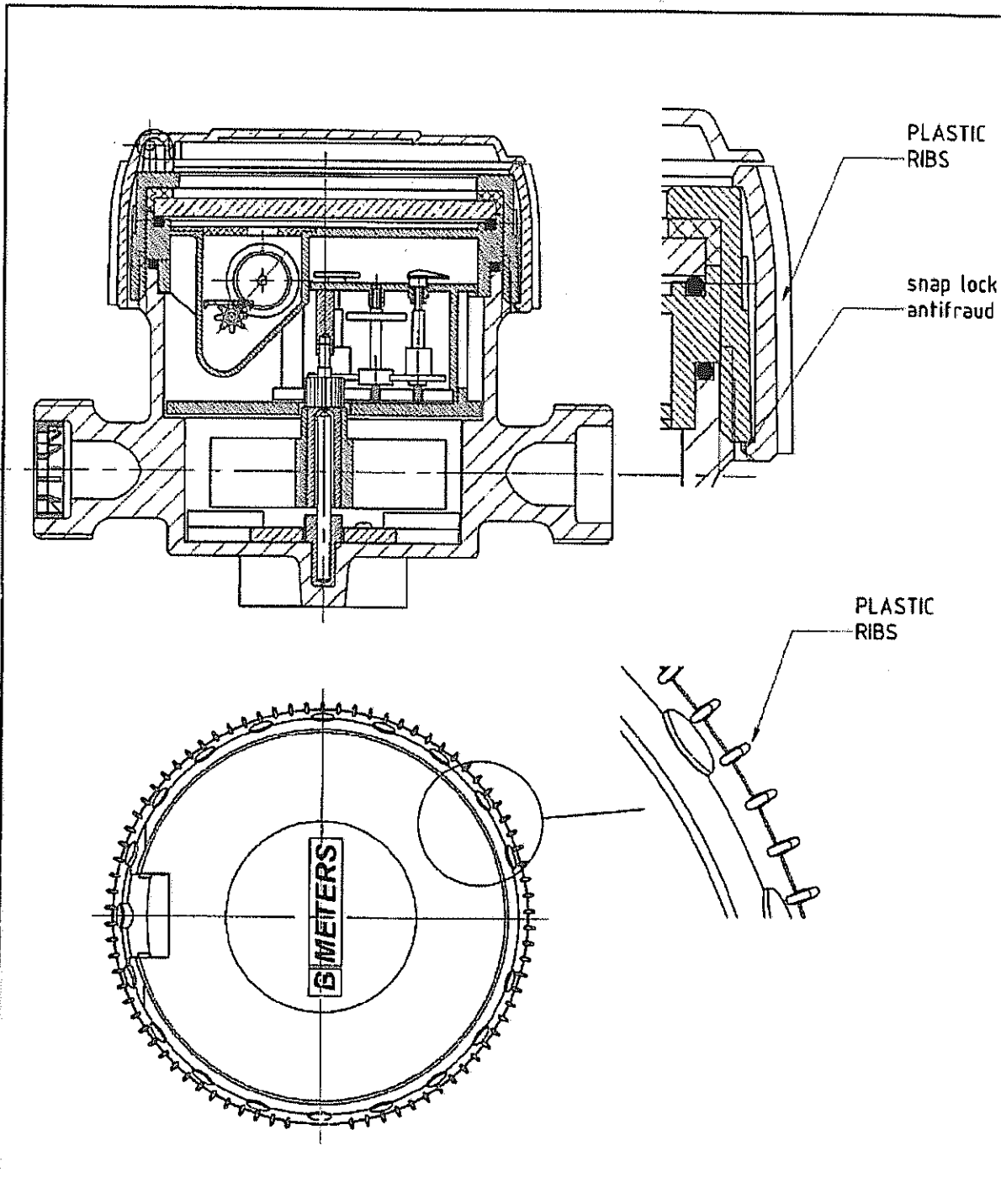


|  <p>Via Pissardi 12 - 20066 Gemonio (LO) - 02 4654 Tel. ++39 0432 831415 Fax ++39 0432 368091 www.bimeters.com - info@bimeters.com</p> | | data | 26/01/05 | | particolare |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|-------------------|----------|-------------------|---|---|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|--------|---|--|------------|--|
| | | diseg. | EC | | WATER METER CPR-RP ASSEMBLY DN 20 - Q ₃ 2.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="2">SISTEMI DI MISURA</th> <th colspan="2">SISTEMI DI MISURA</th> <th colspan="2">SISTEMI DI MISURA</th> </tr> <tr> <th>mm</th> <th>mm</th> <th>mm</th> <th>mm</th> <th>mm</th> <th>mm</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> <td>15</td> </tr> <tr> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>25</td> <td>25</td> <td>25</td> <td>25</td> <td>25</td> <td>25</td> </tr> <tr> <td>32</td> <td>32</td> <td>32</td> <td>32</td> <td>32</td> <td>32</td> </tr> <tr> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> </tr> <tr> <td>50</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> </tr> <tr> <td>65</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> </tr> <tr> <td>80</td> <td>80</td> <td>80</td> <td>80</td> <td>80</td> <td>80</td> </tr> <tr> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> <td>100</td> </tr> </tbody> </table> | | SISTEMI DI MISURA | | SISTEMI DI MISURA | | SISTEMI DI MISURA | | mm | mm | mm | mm | mm | mm | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 20 | 20 | 20 | 20 | 20 | 25 | 25 | 25 | 25 | 25 | 25 | 32 | 32 | 32 | 32 | 32 | 32 | 40 | 40 | 40 | 40 | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 | 65 | 65 | 65 | 65 | 65 | 65 | 80 | 80 | 80 | 80 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | contr. | - | | DISEGNO N. | |
| | | SISTEMI DI MISURA | | SISTEMI DI MISURA | | SISTEMI DI MISURA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| mm | mm | mm | mm | mm | mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 15 | 15 | 15 | 15 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 25 | 25 | 25 | 25 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | 32 | 32 | 32 | 32 | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 40 | 40 | 40 | 40 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 50 | 50 | 50 | 50 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 65 | 65 | 65 | 65 | 65 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80 | 80 | 80 | 80 | 80 | 80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 100 | 100 | 100 | 100 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scala 1:1 | | Materiale | - | | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Disegn. | - | | CR | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Questo disegno è di proprietà della B-Meters. La divulgazione o la copia è consentita solo previa autorizzazione della B-Meters. | | in pezzi | 1 | | Materiale | Calibro | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | in disegno | - | | particolare | scala | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | A4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Figure 2: The sealing of the CPR-RP water meter

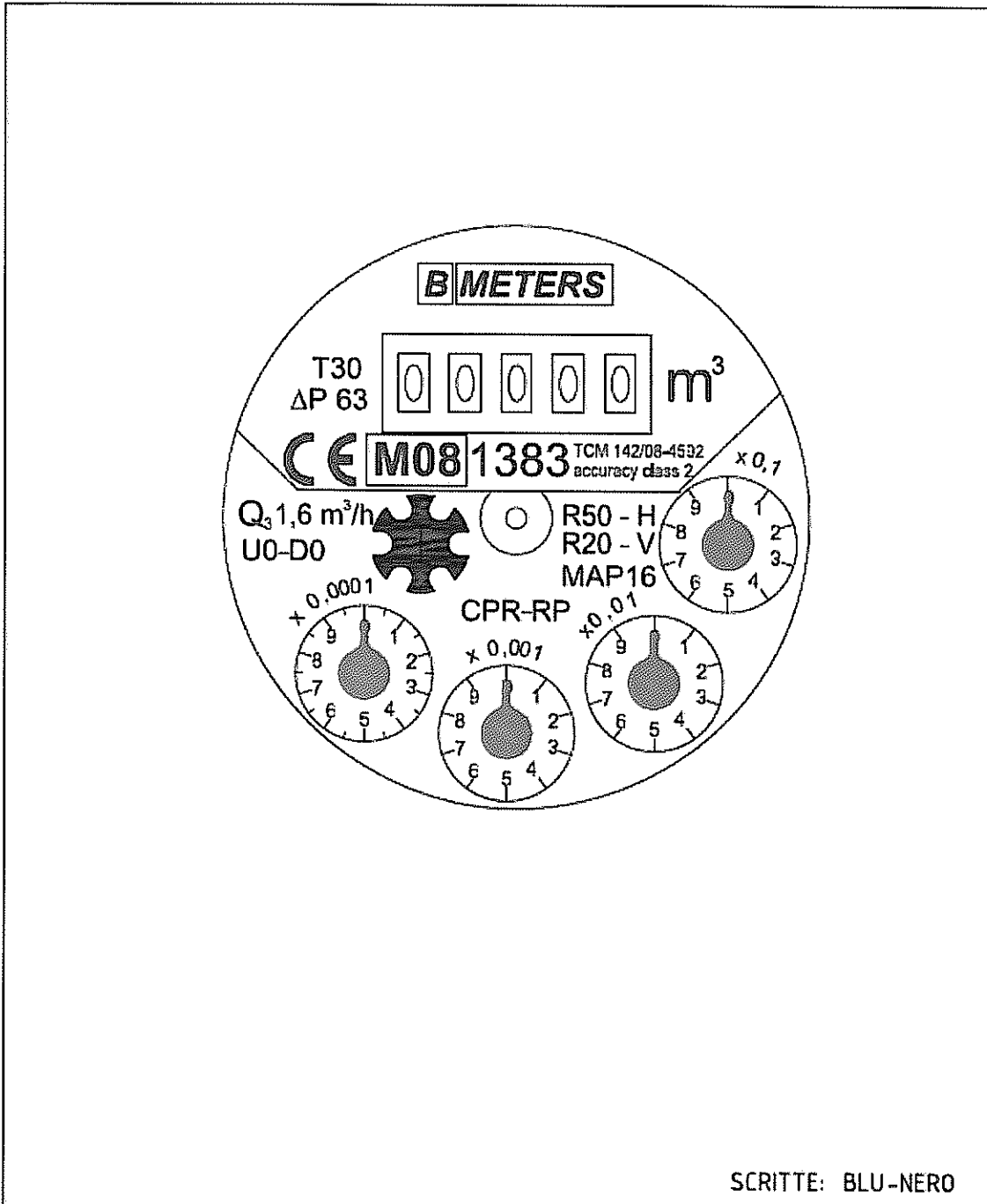


| | | | | | |
|--|--------------------|----------|--|---------|---|
| 1 PLASTIC RIBS | | | | | 18-7-08 |
|  Via F.lli A. 4° - 21022 Gorzone (LO) - ITALIA Tel. ++39 0432 834415 Fax ++39 0432 852101 www.b-meters.com info@b-meters.com | data | 26/01/08 | particolare | |  |
| | diseg. | EC | WATER METER CPR-RP ANTIFRAUD PROTECTION | | |
| | contr. | - | DISEGNO N. | | |
| | Miscele/Sp | - | 1 | 1 | CR |
| | Scale | 1:1 | 1 | 1 | 10 |
| | Pr/Bc | - | Materiale | Calibro | particolare |
| | n° pezzi e opz. | 1 | | | ciclo |


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Figure 3: The dial of the CPR-RP water meter



SCRITTE: BLU-NERO

| | | | | | | | | | | | | | | | | | | | | | | |
|--|------|---------------------|----------|------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----|--|---------------------|--|
| 1 | | Ap16 => Δp63 MAP 16 | | | 3-6-08 | | | | | | | | | | | | | | | | | |
|  <p>Via F.lli R. - 32030 Cortina (TS) - ITALIA Tel. ++39 0431 429444 Fax ++39 0431 429444 www.bmeters.com info@bmeters.com</p> | | data | 16/04/08 | | particolare | | | | | | | | | | | | | | | | | |
| | | diseg. | EC | | GRAFIA QUADRANTE CPR-RP | | | | | | | | | | | | | | | | | |
| | | cont. | - | | MID DN 13 - Q ₃ 1.5 AF | | | | | | | | | | | | | | | | | |
| | | Materiale | - | | DISEGNO N. | | | | | | | | | | | | | | | | | |
| <p>TOLLERANZE GENERALI ISO 718</p> <table border="1"> <tr> <td>+0.1</td> <td>+0.2</td> <td>+0.3</td> <td>+0.4</td> <td>+0.5</td> <td>+0.6</td> <td>+0.8</td> <td>+1.0</td> </tr> <tr> <td>-0.1</td> <td>-0.2</td> <td>-0.3</td> <td>-0.4</td> <td>-0.5</td> <td>-0.6</td> <td>-0.8</td> <td>-1.0</td> </tr> </table> | | +0.1 | +0.2 | +0.3 | +0.4 | +0.5 | +0.6 | +0.8 | +1.0 | -0.1 | -0.2 | -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -1.0 | Scala | 2:1 | | 2 1 05 83 9 | |
| +0.1 | +0.2 | +0.3 | +0.4 | +0.5 | +0.6 | +0.8 | +1.0 | | | | | | | | | | | | | | | |
| -0.1 | -0.2 | -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -1.0 | | | | | | | | | | | | | | | |
| | | Numero | - | | Materiale | | | | | | | | | | | | | | | | | |
| | | N° pezzi | 1 | | Calibro | | | | | | | | | | | | | | | | | |
| | | Alleg. | - | | particolare | | | | | | | | | | | | | | | | | |
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