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CERTYFIKAT BADANIA TYPU WE

Numer: TCM 142/08-4584

Dodatek 6

Niniejszy dodatek zastępuje wszelkie poprzednie wersje niniejszego certyfikatu w pełnym brzmieniu.

Strona 1 z 10

Zgodnie z:

Dyrektywą nr 2004/22/WE Parlamentu Europejskiego i Rady, z późniejszymi zmianami, wprowadzoną w Republice Czeskiej na mocy Rozporządzenia Rządowego nr 464/2005 - Zbiór Ustaw, z późniejszymi zmianami, określającego wymogi techniczne dotyczące urządzeń pomiarowych.

Producent:

B METERS s.r.l.
Via Friuli 3
33050 GONARS (Udine), Włochy

Dotyczy:

Wodomierz – jednostrumieniowy, suchobieżny, mechaniczny
Typ: GSD8, GSD8-45, GSD5, domaqua m+ lub GSFO
Klasa dokładności: 2
Klasa temperatury: T30, T50, T90 i T30/90

Ważny do: 15 kwietnia 2018 r.

Nr dokumentu: 0115-CS-A012-08

Opis: Podstawowe specyfikacje produktu oraz zatwierdzone i szczególne warunki, jeżeli istnieją, zostały opisane w niniejszym certyfikacie,

Data wydania: 14 grudnia 2015 r.

Certyfikat zatwierdzony przez:

/okrągła pieczęć w jęz. czeskim/

RNDr. Pavel Klenovsky
/nieczytelny podpis /

Niniejszy certyfikat został wydany zgodnie z modulem B – badania typu zgodnie z aneksem B do Dyrektywy nr 2004/22/WE Parlamentu Europejskiego i Rady lub punktem 3 aneksu 2 do Rozporządzenia Rządowego nr 464/2005 - Zbiór Ustaw. V.15-001.

Nr rep. 1153/16

Stwierdzam zgodność powyższego przekładu z oryginałem dokumentu

Tytułem wynagrodzenia pobrano -

Augustów, dnia: 13.05.2016 r.

Tłumacz przysięgły języka angielskiego – mgr Piotr Szlauzyś (nr TP/4453/05)





EC-TYPE EXAMINATION CERTIFICATE

Number: TCM 142/08 - 4584

Addition 6

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

Page 1 from 10 pages

In accordance: with Directive 2004/22/EC of the European Parliament and of the Council as amended implemented in Czech Republic by Government Order No. 464/2005 Coll. as amended that lays down technical requirements on measuring instruments.

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

For: water meter - single jet, dry dial, mechanical
type: GSD8, GSD8-45, GSD5, domaquia m+ or GSFO
Accuracy class: 2
Temperature class: T30, T50, T90 and T30/90

Valid until: 15 April 2018

Document No: 0115-CS-A012-08

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

Date of issue: 14 December 2015

Certificate approved by:




RNDr. Pavel Klenovský

1. Measuring device description

The single jet, dry dial mechanical water meters type GSD8, GSD8-45, GSD5, domaqua m+ or GSFO are designed to measure 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 water meters GSD8, GSD8-45, GSD5, domaqua m+ or GSFO consist of a wet measuring section and a dry mechanical indication device. Water flows into the wet measuring section and rotates the vane wheel of transducer. The rotation is transmitted through magnetic coupling realized by two magnets to the register. Optionally between sealing plate and locking ring there is inserted steel disc. The transducer is mounted into the brass body and dial is closed in a dry chamber. The register is connected to meter body by clamp plastic cover. The adjustment can be done by rotation of the sealing plate.

All models are on the same measuring principle but with different dials:

- The model GSD8-45 has the reading rolls in 45° position and it can be equipped with a reed contact impulse emitter.
- The model GSD8 has the reading rolls in front view position and it can be equipped with a reed contact impulse emitter. Also it can be equipped by radio or M-BUS or impulse emitter module which was not part of this certification.
- The model GSD5 has the reading rolls in front view position and it can be equipped with a reed contact impulse emitter.
- The model domaqua m+ and GSFO can be equipped by radio or impulse emitter or MBUS module which was not a part of this certification

Each of the registers can be formed by numbered rollers with (a) five black drums displaying the volume in cubic meters, three red drums and one red rotary pointer displaying smaller submultiples of cubic meters or with (b) five black drums displaying volume in cubic meters and four red rotary pointers displaying smaller submultiples of cubic meters. There is a star wheel with six arms in mechanical indicating device which can be used for rapid testing.

The water meters type GSD8, GSD8-45, GSD5, domaqua m+ or GSFO shall be installed in horizontal and vertical position.

Water meters type GSD8, GSD8-45, GSD5, domaqua m+ or GSFO are manufactured according to technical documentation of the producer, No. 2.0.G8.5 from 25.5.2011, No. 2.0.G8.6 from 25.5.2011, No. 2.0.8M.1 from 30.1.2012, No. 2.0.8M.2 from 25.5.2011, No. 2.0.EU.1 from 25.5.2011, No. 2.1.G45.5 from 25.5.2011, No. 2.1.G45.6 from 25.5.2011, No. 2.0.G5.2 from 25.5.2011, No. 2.0.G5.3 from 25.5.2011, No. 2.0.G8.7 from 5.2.2013, No.2.0G8.9 from 25 November 2015 and No. 2.0.G8.8 from 25 November 2015.

2. Basic technical data

Nominal diameter DN [mm]:	15				20	
Minimum flowrate Q_1 [m³/h]:	≥0.010	≥0.0320	≥0.0156	≥0.050	≥0.025	≥0.080
Transitional flowrate Q_2 [m³/h]:	≥0.016	≥0.0512	≥0.0250	≥0.080	≥0.040	≥0.128
Permanent flowrate Q_3 [m³/h]:	≤ 1.6		≤ 2.5		≤ 4.0	
Overload flowrate Q_4 [m³/h]:	≤ 2.0		≤ 3.1		≤ 5.0	
Ratio Q_2 / Q_1 :	1.6					
Ratio Q_3 / Q_1 : ¹	≤160	≤50	≤160	≤50	≤160	≤50
Orientation limitation:	H	V	H	V	H	V
Accuracy class:	2					
Maximum permissible error (MPE) lower flow range:	± 5 %					
Maximum permissible error (MPE) upper flow range:	± 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					
Maximum admissible pressure [MPa]:	1.6					
Pressure-loss class:	ΔP 63					
Indicating range [m³]:	99 999					
Resolution of the indicating device [dm³]:	0.05					

Resolution of the device for rapid testing [pulse/L]:	249.36	207.72	151.518
Flow profile sensitivity classes:	U0 D0		
Length [mm]:	80 to 130		130
Connection type:	G ¾ B or G 1 B		G 1 B
Reed Impulse emitter power supply ($U_{\max} / I_{\max}$):	24 V / 0.5 A		
Reed Impulse emitter reading [impulse / L]:	GSD8, GSD8-45=1 GSD5=1,10,100,1000		

¹ The ratio Q_3 / Q_1 shall be chosen from the R10 line from ISO 3:1973 and this value shall be higher than 10.

3. Test

Technical tests of the GSD8, GSD8-45, GSD5, domaqua m+ or GSFO water meters were performed in compliance with the International Recommendation OIML R 49 Edition 2006 (E) with conformity to EN 14154:2005, Test Reports No. 6015-PT-P007-08 from 1 April 2008, 6015-PT-P0042-10 from 16 July 2010, 6015-PT-P0032-11 from 23 May 2011, 6015-PT-P0008-12 from 8 February 2012, 6015-PT-P0009-13 from 28 February 2013 and 6015-PT-P0047-15 from 11 December 2015.

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
- Manufacturer’s mark or name
- Year of manufacture
- 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 ($\text{MAP} \times \times$)
- The maximum pressure lost ($\Delta P \times \times$)
- Orientation limitation (H and V)
- Classes on sensitivity to irregularities in velocity field ($U_x D_x$)
- Direction of flow arrow on both sides of the meter body

There are additional data required if the water meter is equipped with radio or M-BUS system:

- Output signals for ancillary devices (type / levels)
- External power supply requirements (voltage – frequency)
- Effective life of battery (years)

There is additional data required if the water meter is equipped with Reed Contact Impulse emitter:

- Output signals for ancillary devices (type / levels)
- External power supply requirements (voltage – frequency)

5. Sealing

The clamp plastic cover of register has to be identified. The location of the seals is described in Figure 6, Figure 7 and Figure 8.



Figure 1: The water meter GSD8 - view:



Figure 2: The water meter GSD8 water meter with M-BUS and RADIO module - view:



Figure 3: The water meter GSD8 with coloured capsule - view:

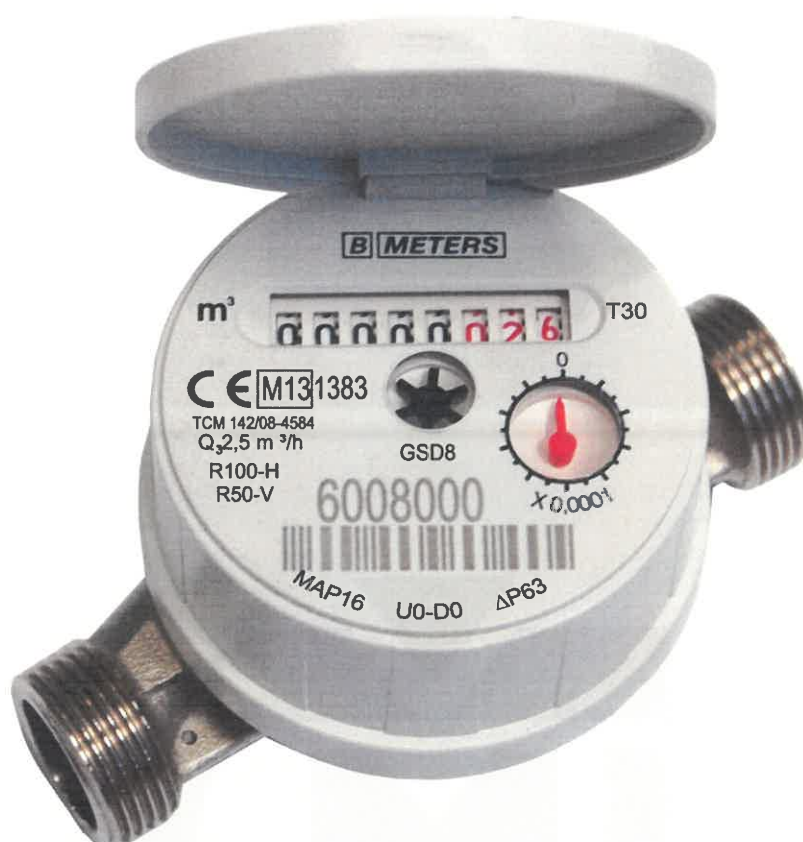


Figure 4: The water meter GSD8-45 - view:



Figure 5: The water meter GSD5 - view:

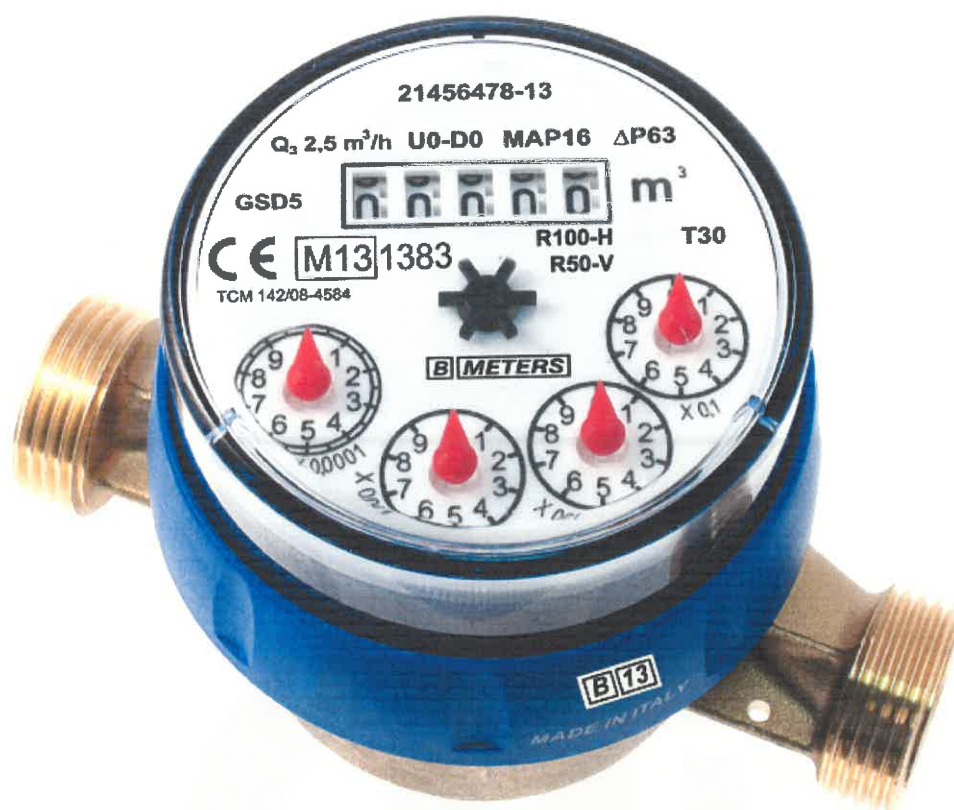
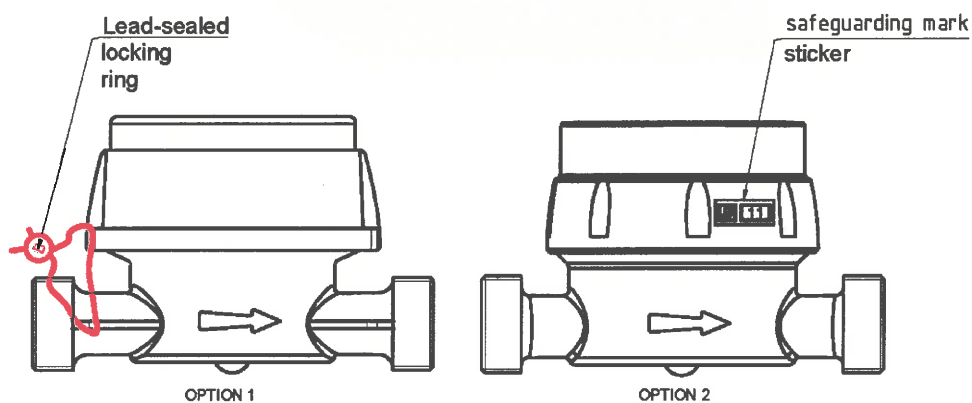
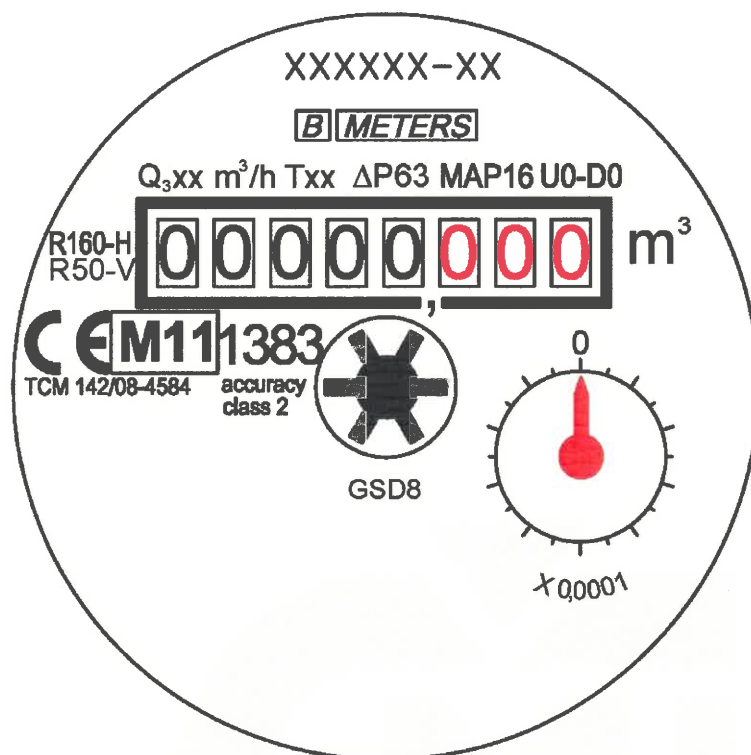


Figure 6: The dial, the marking and sealing of GSD8 water meter:


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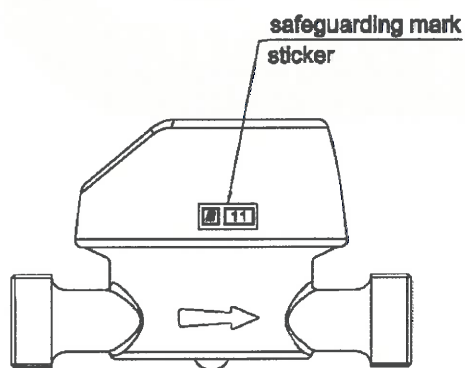
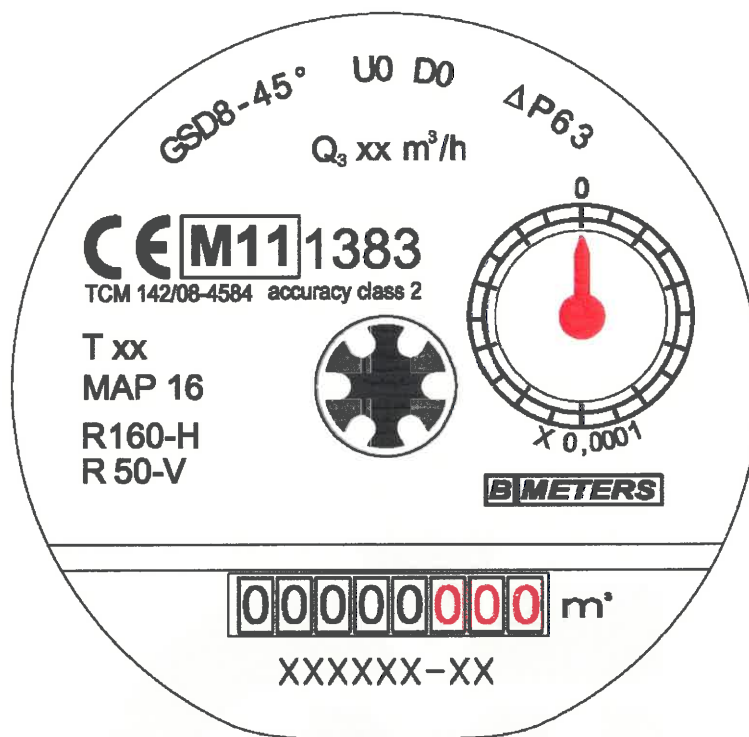
data	25-05-11
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contr.	-

Titolo

GSD8 DIAL
2.0.G8.6



Figure 7: The dial, the marking and sealing of GSD8-45 water meter:


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data	25-05-11
diseg.	EC
contr.	-

Titolo

GSD8-45 DIAL
2.1.G45.6

Questo disegno è di proprietà della B-Meters. La divulgazione o la copia è consentita solo previa autorizzazione della B-Meters. A4



Figure 8: The dial, the marking and sealing of GSD5 water meter:

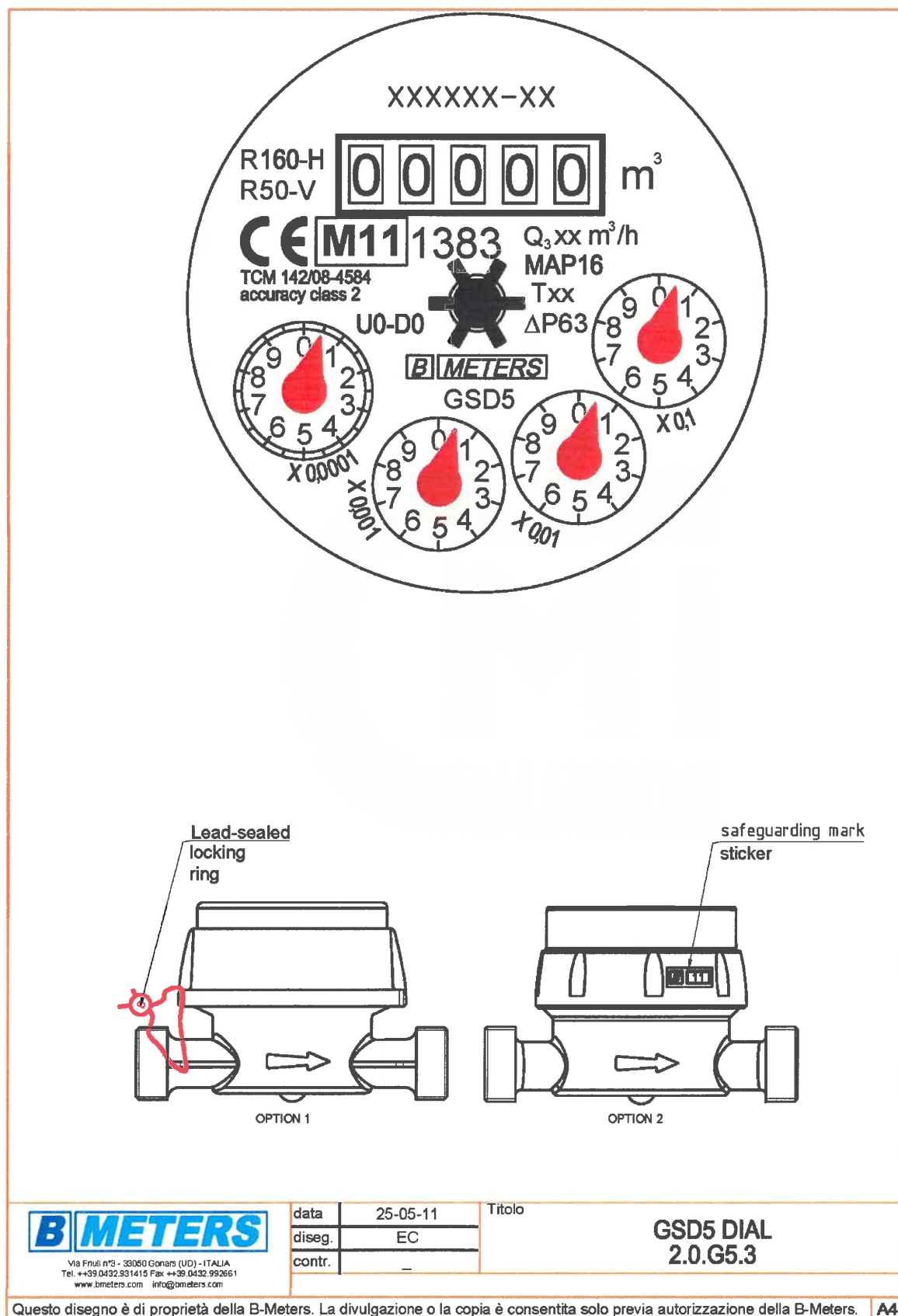
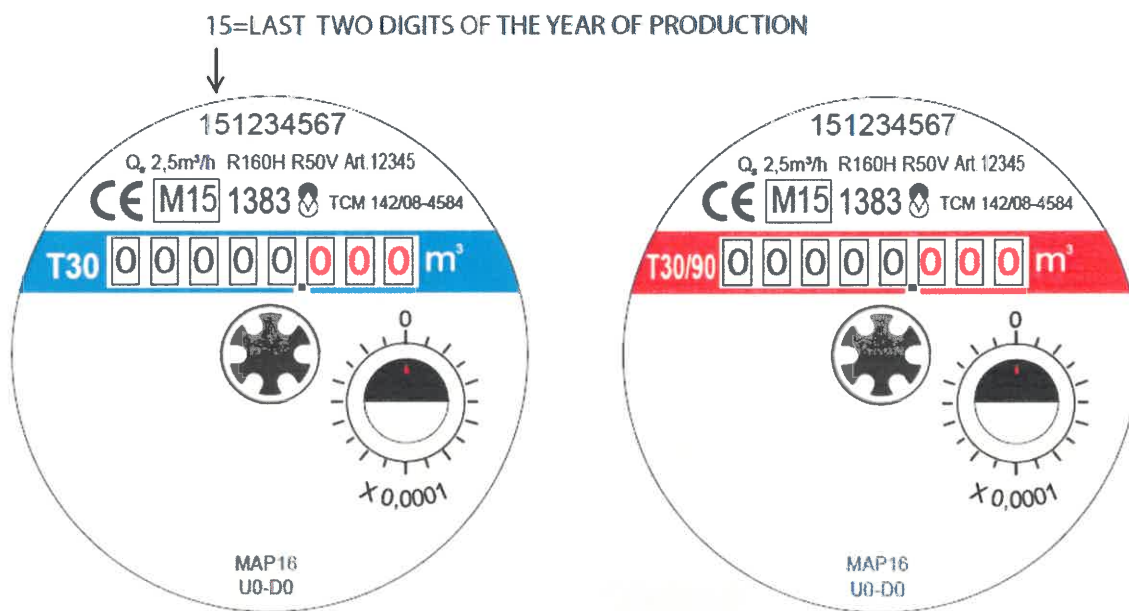


Figure 9: The dial plate and marking of domaqua m+ or GSFO water meter:



 = BMETERS LOGO

151234567 = SERIAL NUMBER

 = SPACE FOR PUT THE CUSTOMER LOGO

 = MODEL NAME *domaqua® m+* or GSFO

Art. 12345 = ARTICLE NUMBER VARIABLE TYPE

