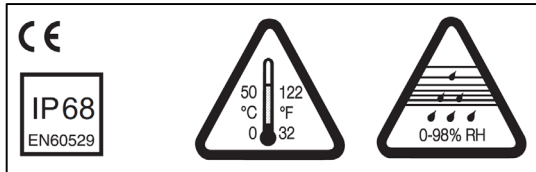
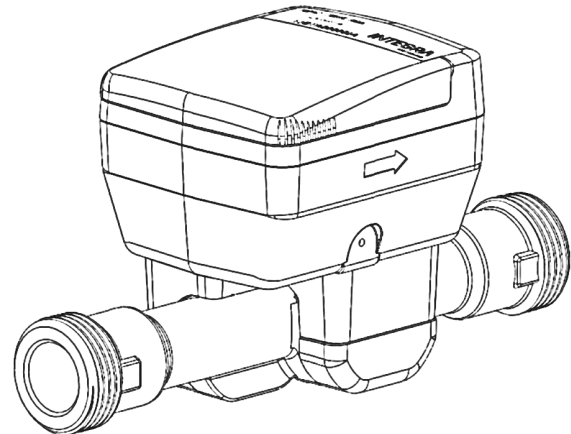


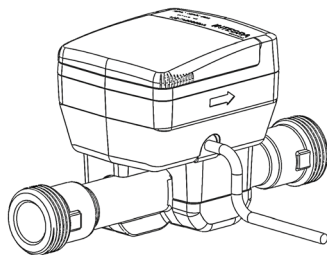
TOPAS® SONIC

Residential ultrasonic water meter
 Ultraschall-Wasserzähler für den Wohnbereich
 Compteur d'eau à ultrasons résidentiel
 Contatore d'acqua ad ultrasuoni residenziale

Installation guide
 Montageanleitung
 Instructions de montage
 Istruzioni di montaggio

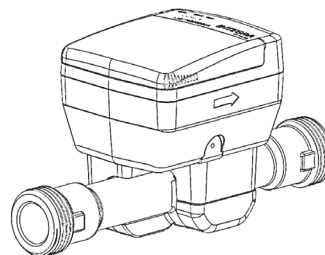


i



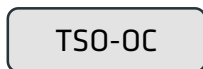
TSO-MB

Wired M-Bus



TSO-W4

Wireless M-Bus 434MHz



TSO-OC

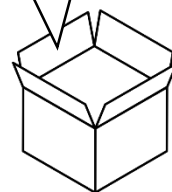
Open Collector



TSO-W8

Wireless M-Bus 868MHz

1 YEAR
storage max.



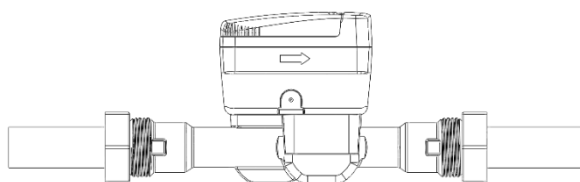
max.
+70°C
+158°F



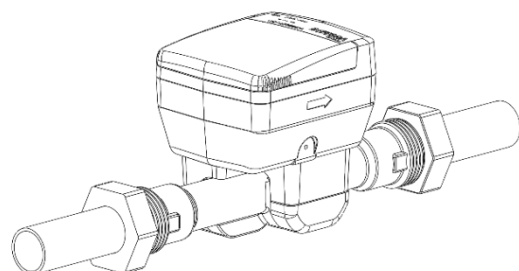
min.
-20°C
-4°C



2 weeks of storage
max. at T>35°C or T>95°C



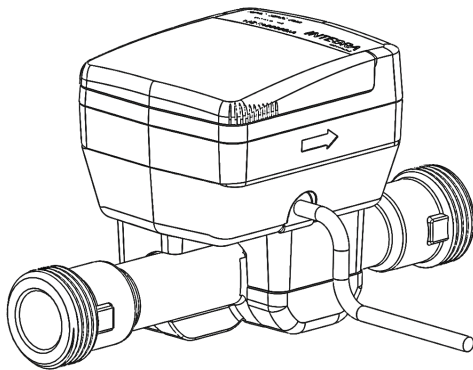
Torque: min. 30 N.m, max. 50 N.m





TSO-MB

TSO-OC



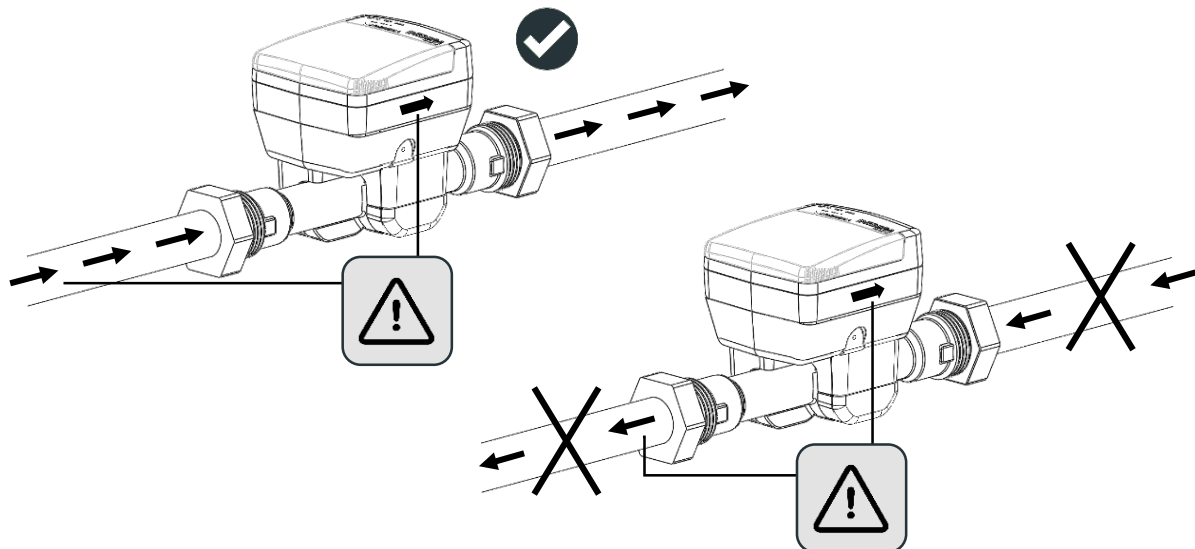
Color	Open Collector	M-Bus
Yellow	Temper	-
Green	Flow direction	-
White	Pulse	M-Bus
Brown	Ground	M-Bus

TSO-MB

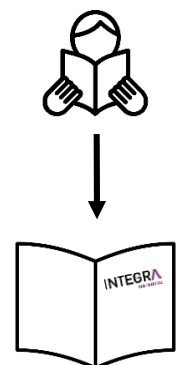
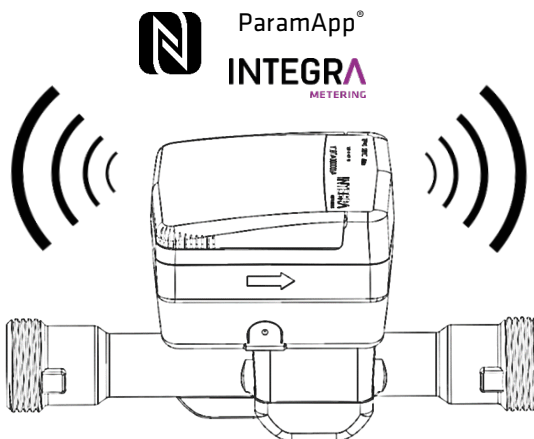
TSO-OC

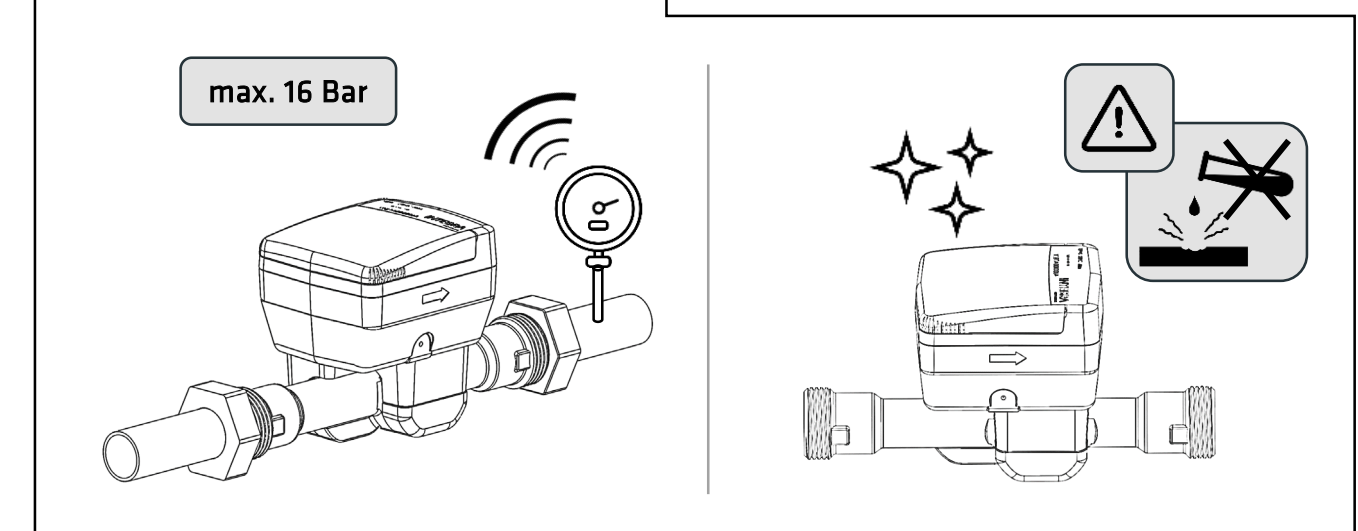
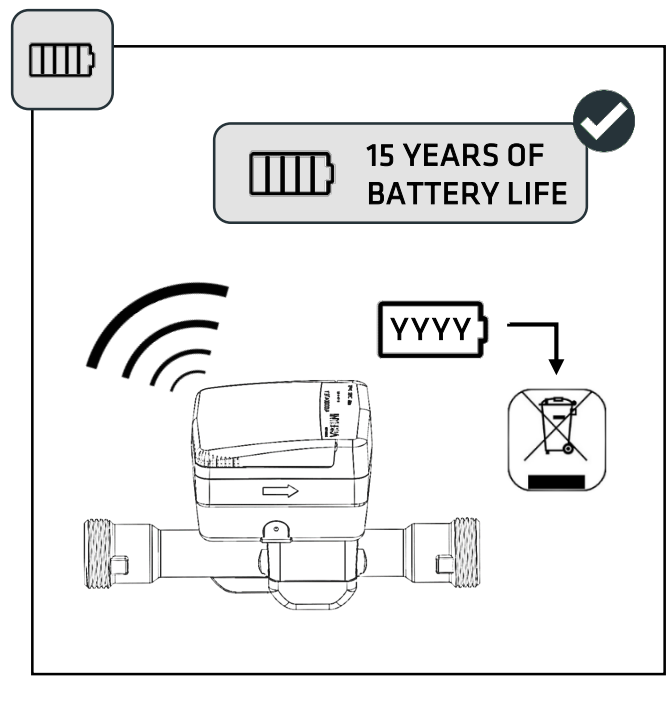
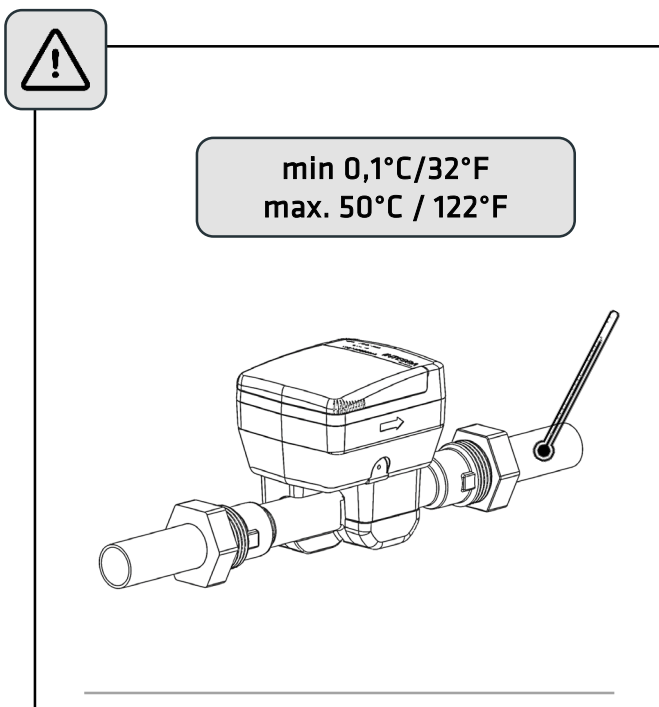
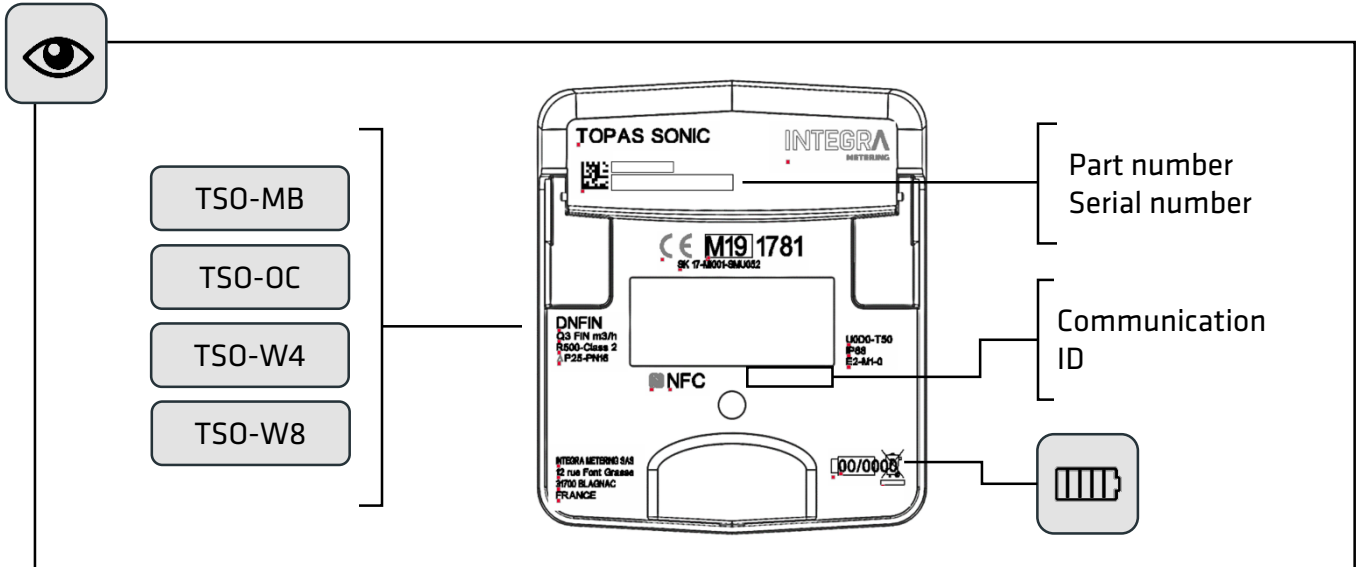
TSO-W4

TSO-W8



PROG







EU DECLARATION OF CONFORMITY

Model: **TOPAS Sonic water meter**Type designation: **TSO**

We,

INTEGRA METERING12 rue FontGrasse
31700 Blagnac, France

declare under our sole responsibility the product listed above consistent with the type described in the certificate **No. SK17-MI001-SMU052-rev 3** (issued November 8th, 2019 valid until September 28th, 2027 approved by the Notified body 1781 Slovak Institute of Metrology in accordance with **Directive 2014/32/EU Annex II, Module B**).

The quality system for production, final product inspection and testing of the **water meters (MI-001)** was approved by the Notified body 1781 Slovak Institute of Metrology in accordance with **Directive 2014/32/EU Annex II, Module D**, under Certificate No. **SK 19-QD-SMU020** (issued August 20th, 2019 and valid until August 20th, 2022).

The object of the declaration described above is in conformity with the essential requirements of:

- **Directive 2014/32/EU** on Measuring instrument
- **Directive 2014/30/EU** on Electromagnetic compatibility
- **Directive 2014/53/EU** on Radio equipment
- **Directive 2014/35/EU** on Low voltage electrical equipment.
- **Directive (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU** on restriction of use of certain hazardous substances in electrical and electronic equipment (RoHS III)
- **Directive 1907/2006** on Registration, Evaluation, Authorization and Restriction of Chemical (REACH)

and harmonized standards and normative documents

- ISO4064-1:2014 : Water meters for cold potable and hot water – Part 1: Metrological and technical requirements.
- ISO4064-2:2014 : Water meters for cold potable and hot water – Part 2: Tests method
- OIML R49-1:2013: Water meters intended for the metering of cold potable water and hot water. Part1: Metrological and technical requirements
- OIML R49-2:2013: Water meters intended for the metering of cold potable water and hot water. Part 2: Test methods.

Place and date of issue:
Blagnac, November 12th, 2019

Signed by Thomas Mitchell,
Head of Global Quality

Integra Metering SAS | Blagnac 31700, France | Tel: 05.61.11.23.56 | www.integra-metering.com