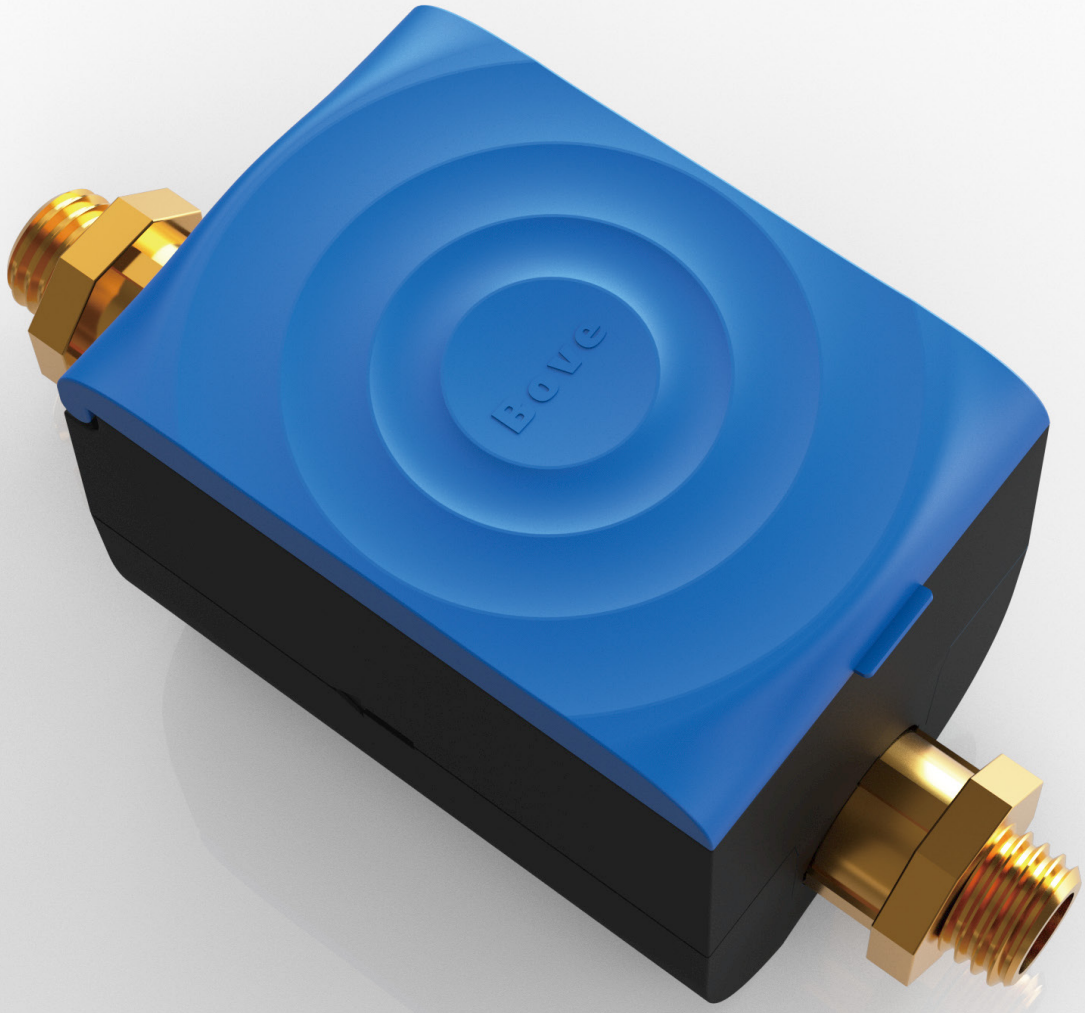
Bove® Technology

# BECO X

Remote Reading Ultrasonic Water Meter, developed for residential application
Qi: 0.005-0.032m³/h
Supporting M-Bus, RS485, Pulse, LoRaWAN, NB-IoT, Sigfox




Creating an Eco Society |

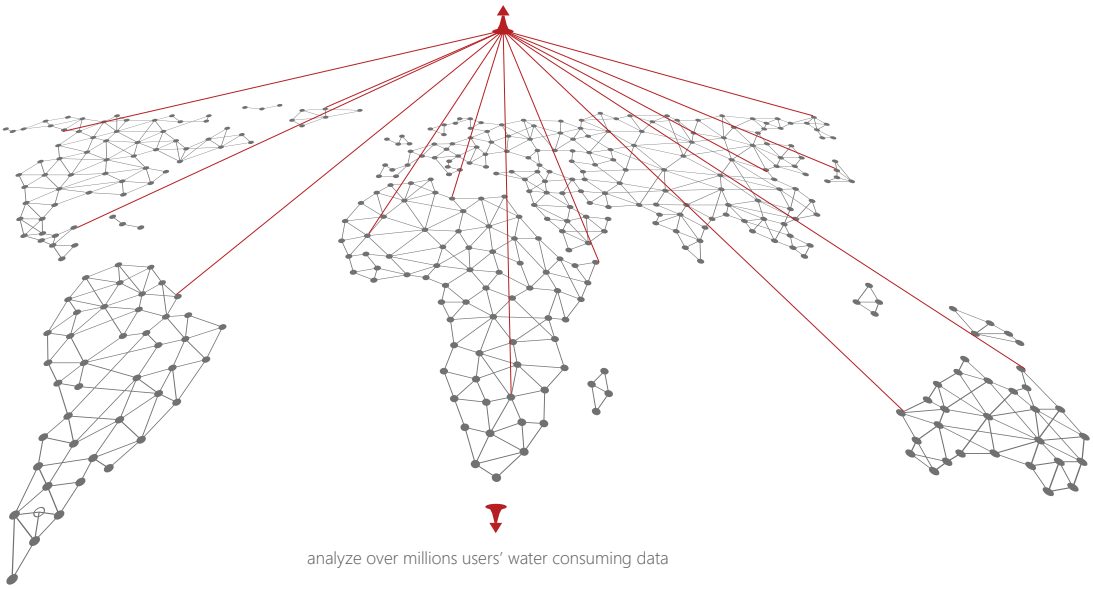
Instrumentteam PLUSS as

This time, a next-generation ultrasonic water meter,
BECO X is released after Bove engineers' two years dedication.

A fresh new firmware enabling an overall power consumption lowering by 18 percent.
With same battery plan, BECO X offers our customer a longer period measurement on various communications.

Metering firmware upgrade

power consumption
lowering by 18 %



analyze over millions users' water consuming data

Working together with AMI System,
BECO X is able to collect and analyze over millions users' water consuming data.
Bove's engineers are able to optimize the meter metrology and communication by utilizing these big data.
Utilities also upgrade their water supply network with the help of these water consumption data.

## Big but hale, or Performance Monster?
## BECO X satisfy you all.

I am rigorous on meter protection.
High temperature, high humidity, UV, all under my presiding intelligence.

High temperature

High humidity

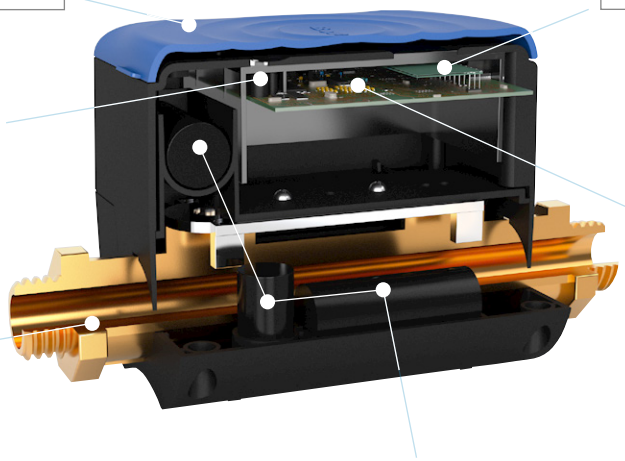
UV

**'No trouble, no fear'.**
We build highly coordinated metering solution for our esteemed customers.
At years after re-calibration, BECO X and BOVE's B28 VTB series calibration and testing bench working consistently to make BECO X renew like original.

Streamline top cover coloring in ocean blue, Let every opening be a new experience.

Simple but comprehensive LCD design, making exploration of BECO X to be full of fun.

Once again upgraded photosensitive technology, make new surprise on next touch.



High precision measuring technology, when water flow across, every single drop of water is 'carved in my heart'.

Simply install on the proper position, leave the remaining work to BECO X.

Small body, big energy. Flexible lithium battery setting avoiding failure of the entire meter upon only one set of battery problem.

## 1. Flexible Battery Life Span

**6-16 years**

BECO X has no moving parts, presents as IP68, and its body is fabricated from durable brass material. This robust design makes the BECO X maintenance-free and highly precise throughout its flexible 6/ 10/ 16 years battery life depends upon customer needs.

## 2. Battery Replaceable

Battery is able to get replaced in case of failure of battery sets. This action can be treated by professional engineers without any injection on electronic parts.

## 3. Proof of Humidity, Water and UV.

BECO X is specially designed for extreme complex environment which has high humidity, high UV.

## 4. IoT Ready

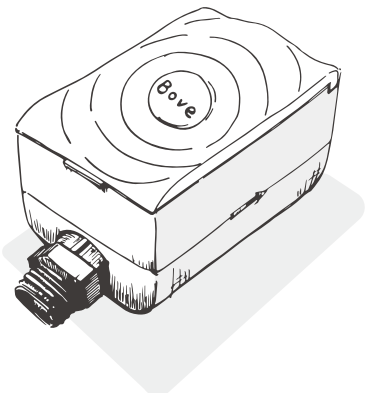
BECO X supports multiple communication interfaces for both wired and wireless which suitable for any type of installation environment, e.g. M-Bus(EN1434), RS485 (Modbus), Pulse, LoRaWAN, Sigfox, NB-IoT. Leak detection function inside meter help troubleshooting, end- service and saving the most important source of life, water.

## 5. Multiple Dynamic Range Options ($Q_3/Q_1$)

Application for multiple requirements. R160/ R200/ R250/ R400/ R500. Able to count every drop of water.

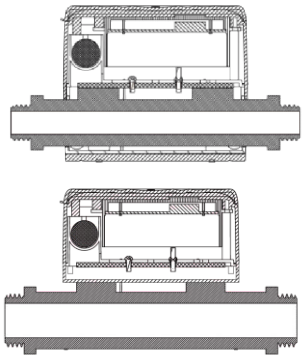
## 6. Exceptional Industry Design

Golden ratio of Length-Width-Height, splendid color assortment with Ocean Blue & Night Sky Black. Anti-dirty enclosure ensures long duration of tidy outlook same as original meter.

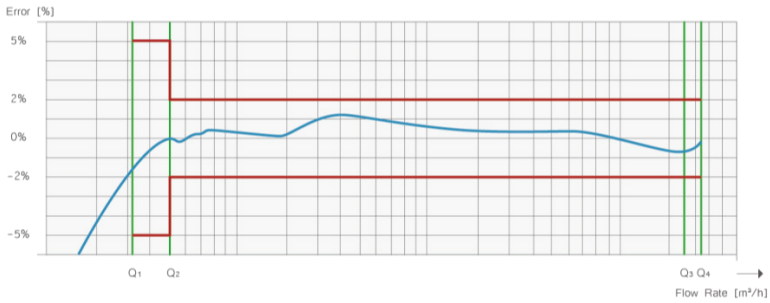


## DIMENSIONS

| Model | BECO X - 15 | BECO X - 20 | BECO X - 25 | BECO X - 32 | BECO X - 40 |
|---|---|---|---|---|---|
| Pipe Diameter | DN15 | DN20 | DN25 | DN32 | DN40 |
| $Q_1$ ($m^3/h$)@R500 | 0.005 | 0.008 | 0.0126 | 0.02 | 0.032 |
| $Q_2$ ($m^3/h$) | 0.008 | 0.0128 | 0.02016 | 0.032 | 0.0512 |
| $Q_3$ ($m^3/h$) | 2.5 | 4.0 | 6.3 | 10 | 16 |
| Connection | G¾" | G1" | G1¼" | G1½" | G2" |
| Length (mm) | 165 | 195 | 225 | 180 | 200 |
| Width (mm) | 81 | 81 | 81 | 81 | 81 |
| Height (mm) | 100 | 100 | 118 | 128 | 135 |
| Temperature | ● Medium Range: 0.1℃.....30/ 50/ 70℃ (T30 /T50 /T70)<br>● Ambient temperature: 5~55 ℃<br>● Storage temperature: -20~60 ℃ | | | | |
| Materials | Brass 59-1 | | | | |
| Metrological Class | Class 2<br>R160/ R200/ R250/ R400/ R500 | | | | |
| Maximum Operation Pressure | 1.6 MPa | | | | |
| Pressure Loss | ΔP≤40kPa | | | | |
| Pressure Stage | PN16 | | | | |
| Protection Class | IP68 | | | | |
| Stream Field Sensitivity | U5/ D3 | | | | |
| Battery (Optional) | 6/ 10/ 16 years service life | | | | |
| Data Storage (Optional) | 24/ 120 logs, daily/ weekly/ monthly. | | | | |
| Environmental Requirement | E1, M1, B | | | | |
| Interface & Communication (Optional) | ● M-Bus ● Pulse output ● RS485<br>● LPWAN ( LoRaWAN, NB-IOT, Sigfox ) | | | | |
| Installation | 360 degree | | | | |
| Display and Indication | ● Unit: L/ m³/ Gal (Optional)<br>● LCD: 8-digit | | | | |
| Standard Compliance | ● EN14154 ● ISO4064 ● OIML R49 | | | | |



BECOX Ultrasonic Water Meter Accuracy Curve




## WHY CHOOSE Bove Technology.....

When it comes to water flow measurement, Bove is the one of the most excellence. And we want to explain why you should trust us when we say that choosing a Bove products equals choosing reliability.

In our manufacturing plant, you will find a dedicated research and development team that gives us the ability to face your local needs and challenges head-on–regardless of size or requirements. And thanks to our in-house laboratories and highly-skilled engineers, we can develop innovative and user-friendly products faster than ever. A manufacturing capacity reaching millions of units in our plant ensuring on-time delivery, and meanwhile Bove ensures the highest level of quality and reliability through standards such as ISO 9001 and ISO 14001.....