

Measuring / Adjustment instrument

TA-SCOPE is a tough, effective balancing instrument for measuring and documenting of differential pressure, flow, temperature and power in hydronic systems. Robust, accurate and easy-to-use, TA-SCOPE delivers quicker, more cost-efficient balancing and enables rapid troubleshooting. TA-SCOPE links effortlessly to the HySelect PC software gaining the maximum benefit from recorded data and enabling professional report writing and automatic software upgrades.

Features

- **User-friendly design**
Ergonomic and custom designed user-interface ensures easy and more comfortable balancing.
- **Interactive software**
Step by step software wizards for measuring, balancing and trouble shooting ensure a fast commissioning process.
- **Wireless communication**
For reliable balancing, a fully charged TA-SCOPE provides three days of power-efficient wireless performance.
- **DpS-Visio**
The Dp Sensor has an OLED display for showing Dp measurement, temperature and status. It also has an automatic flushing and calibration function.



Construction

TA-SCOPE consists of two main components:

Handheld unit – Computer-based unit programmed with the TA valve characteristics. Straightforward functions with easy-to-follow instructions on the colour display.

Differential Pressure Sensor unit – The DpS-Visio communicates wirelessly with the Handheld and has an OLED display for showing its status, measured data and other information.



Technical information

Functions:

TA-SCOPE is a balancing instrument for measuring and documenting of differential pressure (Δp), flow, temperature and power in hydronic systems.

Measurement range:

Total pressure:
 TA-SCOPE max. 1.600 kPa
 TA-SCOPE HP max. 2.500 kPa
 Differential pressure:
 TA-SCOPE 0 - 500 kPa
 TA-SCOPE HP 0 ~ 1.000 kPa
 Recommended pressure range during flow measurements:
 TA-SCOPE 1 ~ 500 kPa
 TA-SCOPE HP 3 ~ 1.000 kPa

Temperature liquid medium measurement:

-20°C ~ +120°C

Measurement deviation:

Differential pressure:
 TA-SCOPE 0.1 kPa or 1% of reading, whichever is the highest
 TA-SCOPE HP 0.2 kPa or 1% of reading, whichever is the highest
 Flow: as for differential pressure + valve deviation
 Temperature: <0.2°C

Battery capacity, operating and charge times:

Handheld unit:

- Capacity: 4.400 mAh
- Operating time (with backlight on): >25 h
- Charge time to full capacity: 6-7 h

DpS-Visio (Dp sensor unit):

- Capacity: 1.400 mAh
- Operating time (continuous measurements): >25 h
- Charge time to full capacity: 2,5 h
- Logging time (in sleep mode): >100 days

Ingress protection:

Handheld unit (in wireless mode): IP64
 Dp sensor unit (in wireless mode): IP64
 Safety pressure and temperature probe: IP65
 Digital temperature sensor: IP65

Ambient temperature for the instrument:

During operation and charging: 0 ~ +40°C
 During storage*: -20 ~ +60°C
 *) Do not leave water in the sensor when there is a risk of freezing.

Humidity:

Ambient humidity: max. 90%RH

Charger:

Input voltage: 100 ~ 240 VAC
 Input frequency: 50 ~ 60 Hz
 Class II: Insulation
 Certification: IEC (868 MHz) and/or UL, CSA (915 MHz)
 Corresponds to the LPS (Low Power Source) directive

Case dimensions:

TA-SCOPE Premium case:
 LxBxH = 430x285x170 mm

