

## ULTRAFLOW® 44



Flow sensor family DN15-125 for cooling and combined heat/cooling inclusive the new 5HX-Series



Do you prefer waterproof and thereby durable flow sensors in harsh climatic environments, that are on demand also available with documented accuracy of  $\pm 0.5\%$  at  $q_p$ ? And what about reducing your costs of your new cooling installation while mounting one of the temperature sensors directly into the flow sensor for  $q_p$  1.5...10 m<sup>3</sup>/h instead of investing in a ball valve, T-piece or other additional equipment?

ULTRAFLOW® 44 (DN15-125,  $q_p$  1.5...100 m<sup>3</sup>/h) has been designed from the start with a clear focus on condensation protection. ULTRAFLOW® 44 has also a new variant, the 5HX-Series, which comes with documented accuracy of  $\pm 0.5\%$  at permanent flow  $q_p$ . Thus this new 5HX-Series provides you in addition to being durable also an exceptionally high accuracy. Together with our new front running temperature sensors TemperatureSensor 63 and 83 and separate calculators MULTICAL® 603 and MULTICAL® 803, ULTRAFLOW® 44 is part of our most recent and strong solution for cooling and combined heat/cooling meters. The flow sensor is approved according to EN 1434 for both MID heat (DK-0200-MI004-044) and BEK-1178 cooling (TS 27.02 014). These approvals demonstrate that ULTRAFLOW® 44 can also be utilized as a flow sensor for combined heat/cooling meters.

ULTRAFLOW® 44 is prepared for even harsh climatic environments for cooling meters like in the APAC countries. The IP class of the flow sensor is IP68 including its electronics box. Technically, this challenge has been solved by protecting the transducers with gel and grease like in our flow sensors for the cooling meters MULTICAL® 303-C and MULTICAL® 403-C.

In addition, the PCB of the separate flow sensor ULTRAFLOW® 44 is physically separated from the flow sensor housing, by moving it from the most exposed part of the cooling meter with respect to condensation into the electronics box. The separated small electronics box of ULTRAFLOW® 44 is lightweight and can even be considered as an integrated part of the cable.

Further benefits and technical details of ULTRAFLOW® 44 can be found in the available documentation.

## ULTRAFLOW® 44 is your right choice for cooling meters

- **It is durable in harsh climatic environments**  
ULTRAFLOW® 44 is waterproof (IP68) and allows to be completely insulated.
- **It reduces loss of your valuable and cost intensive cooling energy**  
ULTRAFLOW® 44 is approved according to the European metrological class 2, but the new 5HX-Series comes even with higher documented accuracy of  $\pm 0.5\%$  at  $q_p$ .
- **It reduces your installation costs**  
With the ability to mount one temperature sensor directly in the flow sensor ( $q_p$  1.5...10 m<sup>3</sup>/h), an additional ball valve, T-piece or similar is not necessary in new installations.
- **It comes with a low pressure loss (and and reduces thereby operation costs for pumps) in your installation**  
Most flow sensors have a pressure loss below 0.1 bar @  $q_p$ .
- **It ensures to bill also low quantities of cooling energy correctly**  
The approved dynamic range is for most types  $q_p:q_i = 250:1$ .



### Additional values of ULTRAFLOW® 44

- **Ensure the quality of your flow sensor by approval certificates**  
The approvals of ULTRAFLOW® 44 ensure measuring accuracy and durability upon severe standardized influences/disturbances according to EN 1434.
- **Simplify your installation with a real split meter**  
The 3-wire cable of ULTRAFLOW® 44 is mounted (and can easily be dismounted for the purpose of installation) on screw terminals in the MULTICAL® calculator. Allows easy exchange of either flow sensor or calculator and installation of the calculator behind walls with a tiny hole for cables only.
- **Get all benefits and functionalities of our most recent calculators, MULTICAL® 603 and 803**  
ULTRAFLOW® 44 is easily combined with MULTICAL® 603 and 803 by simply mounting the 3-wire cables on screw terminals in the MULTICAL® calculator. Together with our new IP68 TemperatureSensor 63 and 83 from Kamstrup, you will get a real split cooling meter.

## Think forward

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