



Badger Meter Europa

Advantages of Badger Meter Ultrasonic Flow Meters

Saving Energy, Saving Money



DXN

- Only true hybrid device on the market allowing both transit-time and Doppler measurement in one device. Automatically selects the most suitable measuring principle.
- Real-time display of measured values and also benefiting from an on board datalogger.
- Graphical diagnostic function of waveforms as an analytical tool to check the optimum measurement signal and the quality of the measurement.
- Suitable for energy/BTU measurements using optional PT1000 RTDs or existing site installed RTDs
- Ethernet port for ModBus[®] TCP
- Data storage can be downloaded directly to a USB memory stick
- Windows[®] based software
- Colour touch screen
- Coloured graphs
- Wall thickness gauge

TFX Ultra

- Suitable for applications within building automation using BACnet interface. Allows compatibility between devices from different manufacturers.
- The only device on the market offering such a wide range of interfaces, like ModBus[®] RTU MSTP via RS485, Ethernet connection with BACnet[®]/ protocols IP[™], Ethernet/ protocols IP[™], ModBus[®] TCP/IP.
- Quick to install and easy commissioning using straightforward menus.
- Version for energy/BTU measurement available using PT1000 RTDs or existing site installed RTDs.



Technical Data

Type	DXN
Liquid types	Any single phase fluid which can be penetrated by ultrasonic signals
Accuracy	± 1 % of reading under ideal conditions
Power supply	Internal 11,1 V lithium-Ion battery, 6–9 hrs of continuous operation with battery and indefinitely on external power
Ambient conditions	-20 °C up to +45 °C (battery powered) / -30 °C up to +60 °C (externally powered)
Sensor type	Clamp-on
Velocity range	Bi directional 0.03...12 m/s
Display	Touch screen
Units	Engineering units: m ³ , liter, million-liter, kg, feet, gallons, ft ³ Flow units: second, minute, hour, day
Enclosure	Water-/dust resistant (IP 64)
Dimensions	240 mm W x 197,6 mm H x 95,7 mm D

Type	TFX Ultra®
Liquid types	Most clean liquids or liquids with small amounts of suspended solids
Pipe sizes	DN 15 up to DN 3000
Accuracy	± 1 % of reading or ± 0.003 m/s, whichever is greater
Power supply	AC: 95 – 264 VAC 47 – 63 Hz @ 17 VA max. resp. 20 – 28 VAC 47 – 63 Hz @ 0,35 A max. DC: 10 – 28 VDC @ 5 W max.
Ambient conditions	-40 °C up to +85 °C
Velocity range	Bi directional 0,03 up to 12 m/s
Display	Two line LCD, LED backlit

Type	Sensors DXN		Sensors TFX Ultra®	
Pipe size	DN 15 – DN 3000		DN 15 – DN 3000	
Enclosure	DTTSU DTTL / DTTR / DT94 Doppler	Ultem® Ultem®	DTTR DTTC/DTTL / DTTN (IS) / DTTN/DTTL DTTH DTTS	Ultem® CVPC, Ultem® PTFE PVC, Ultem®
Pipe surface temperature	DTTSU / DTTL DTTH DTTL DTTR	-40 °C up to +90 °C -40 °C up to +175 °C -40 °C up to +90 °C -40 °C up to +121 °C	DTTR DTTC / DTTL DTTN DTTN / DTTL DTTH DTTS	-40 °C up to +121 °C -40 °C up to +90 °C -40 °C up to +90 °C -40 °C up to +90 °C -40 °C up to +175 °C -40 °C up to +60 °C
Sensor frequency	DTTSU DTTR DTTL	2 MHz 1 MHz 500 kHz	DTTS / DTTC DTTR / DTTN / DTTH DTTL	2 MHz 1 MHz 500 KHz