# IN-LINE ULTRASONIC FLOWMETER

FDT100 Series Starts at

£1370



- **Economical Ultrasonic** Flowmeter for Water Service
- Battery Powered (Batteries Included)
- Displays Flow Rate and Total
- Extended Low Flow Range
- **Virtually No Pressure Loss**
- ✓ No Moving Parts for Long Life
- **3-Point Calibration** Included

The FDT100 Series comprises advanced-technology water flowmeters. This series uses transit-time ultrasonic technology in which the signal is transmitted and received alternately between 2 flow sensors and the "time of flight" determines the flow rate. The battery-powered transmitter comes in the user's choice of an integrally mounted display or a remote-mount version. Applications include both commercial and consumable water measurement. Long-term stability and a wide measurement range make it possible not only to measure water consumption, but also to monitor systems for water leakage. Because the FDT100 Series has no moving parts, system pressure loss is minimal and filtration is not required. Display flow rate or total at the push of a button. Installation is aided by ANSI or DIN flanges in sizes from 50 to 200 mm.

### **SPECIFICATIONS**

Accuracy: ±2% of reading; ±5% below minimum transition rate Fluid Temperature: 0 to 50°C Maximum Pressure: 15.8 bar **Enclosure:** 

IP67 (integral mount version)

**Electronic Housing:** 

Aluminium alloy with plastic cover



Display:

7-segment, 8-digit, single-line LCD Current Output: 4 to 20 mA/DC current (requires 8 to 24 Vdc supply) **Open Collector Output:** 

5 to 30 Vdc, 1 mA max

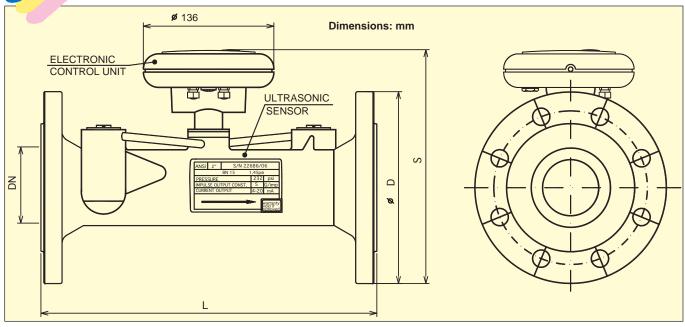
Flange: ANSI 150 or DIN Meter Body: Cast iron **Power Supply:** 

Internal 3.6V battery (included), 1 to 2 year life

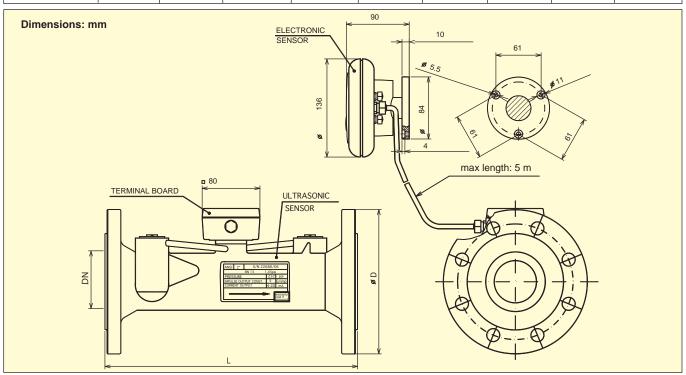
GPM Rates								
ANSI Flange Size	2	2½	3	4	5	6	8	
Overload Flow Rate q <sub>s</sub> [GPM]	130	220	350	530	880	1320	1585	
Nominal Flow Rate q <sub>p</sub> [GPM]	65	110	175	265	440	660	1100	
Transitional Flow Rate q <sub>t</sub> [GPM]	13	22	35	53	88	132	220	
Minimum Flow Rate q <sub>min</sub> [GPM]	2	3.3	5.3	8	13.2	20	33	
Pulse Output Constant k <sub>i</sub> [gal/pulse]	5	10	10	15	30	30	30	

m³/n Rates									
DIN Flange Size	32	40	50	65	80	100	125	150	200
Overload Flow Rate q <sub>s</sub> [m³/h]	12	20	30	50	80	120	200	300	360
Nominal Flow Rate q <sub>p</sub> [m³/h]	6	10	15	25	40	60	100	150	250
Transitional Flow Rate q <sub>t</sub> [m³/h]	0.48	0.8	3	5	8	12	20	30	50
Minimum Flow Rate q <sub>min</sub> [m³/h]	0.12	0.2	0.45	0.75	1.2	1.8	3	4.5	7.5
Pulse Output Constant k <sub>i</sub> [l/pulse]	10	25	25	50	50	100	100	100	100





Compact Version—Basic Dimensions									
DN	32	40	50	65	80	100	125	150	200
L: mm	260	300	300	300	350	350	350	350	350
S: mm	190	198	208	225	237	253	280	307	352
D: mm	140	150	165	185	200	220	250	285	340
Weight: kg	4.5	7	10	11	15	17.5	22.5	26	36.5



Remote Version—Basic Dimensions									
DN	32	40	50	65	80	100	125	150	200
L: mm	260	300	300	300	350	350	350	350	350
D: mm	140	150	165	185	200	220	250	285	340
Weight: kg	5	7.5	10.5	11.5	15.5	18	23	26.5	37





To Order (Sp	ecify Mo	del Number)	
		150# ANSI	
Model No.	Price	Flange Size in	Description
FDT103	£1420	2	Battery-powered ultrasonic flowmeter
FDT104	1470	2½	Battery-powered ultrasonic flowmeter
FDT105	1530	3	Battery-powered ultrasonic flowmeter
FDT106	1575	4	Battery-powered ultrasonic flowmeter
FDT107	1615	5	Battery-powered ultrasonic flowmeter
FDT108	1740	6	Battery-powered ultrasonic flowmeter
FDT109	2065	8	Battery-powered ultrasonic flowmeter
FDT103-R	1575	2	Battery-powered ultrasonic flowmeter with remote electronics
FDT104-R	1675	2½	Battery-powered ultrasonic flowmeter with remote electronics
FDT105-R	1730	3	Battery-powered ultrasonic flowmeter with remote electronics
FDT106-R	1780	4	Battery-powered ultrasonic flowmeter with remote electronics
FDT107-R	1820	5	Battery-powered ultrasonic flowmeter with remote electronics
FDT108-R	1945	6	Battery-powered ultrasonic flowmeter with remote electronics
FDT109-R	2265	8	Battery-powered ultrasonic flowmeter with remote electronics
Model No.	Price	DIN Size	Description
FDT101-DIN	£1370	32	Battery-powered ultrasonic flowmeter
FDT102-DIN	1400	40	Battery-powered ultrasonic flowmeter
FDT103-DIN	1430	50	Battery-powered ultrasonic flowmeter
FDT104-DIN	1470	65	Battery-powered ultrasonic flowmeter
FDT105-DIN	1530	80	Battery-powered ultrasonic flowmeter
FDT106-DIN	1575	100	Battery-powered ultrasonic flowmeter
FDT107-DIN	1625	125	Battery-powered ultrasonic flowmeter
FDT108-DIN	1730	150	Battery-powered ultrasonic flowmeter
FDT109-DIN	2065	200	Battery-powered ultrasonic flowmeter
FDT101-R-DIN	1575	32	Battery-powered ultrasonic flowmeter with remote electronics
FDT102-R-DIN	1605	40	Battery-powered ultrasonic flowmeter with remote electronics
FDT103-R-DIN	1635	50	Battery-powered ultrasonic flowmeter with remote electronics
FDT104-R-DIN	1675	65	Battery-powered ultrasonic flowmeter with remote electronics
FDT105-R-DIN	1730	80	Battery-powered ultrasonic flowmeter with remote electronics
FDT106-R-DIN	1780	100	Battery-powered ultrasonic flowmeter with remote electronics
FDT107-R-DIN	1830	125	Battery-powered ultrasonic flowmeter with remote electronics
FDT108-R-DIN	1945	150	Battery-powered ultrasonic flowmeter with remote electronics
FDT109-R-DIN	2265	200	Battery-powered ultrasonic flowmeter with remote electronics

#### Accessory

Model No.	Price	Description	
FW-202	£168	Reference Book: Consumer's Guide to Magnetic Flowmeters	

Comes with complete operator's manual, internal 3.6 V battery and NIST 3-point calibration. For a 4-point NIST calibration, add "-NIST4" to the model number and add £175 to the price. For an 8-point NIST calibration, add "-NIST8" to the model number and add £308 to the price.

Ordering Example: FDT104-R, 150 lb ANSI flanged magnetic flowmeter, £1675.

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