





DATA SHEET

DUO U SERIES / NDU-40 ULTRASONIC FLOW / WATER METER

Product Description

This is a battery-powered, Transit Time Flow meter utilising advanced digital processing technology. The meter contains no moving parts and does not require external power. It also has advantages such as ultra-low power consumption, high accuracy and reliability. The meter is designed for easy installation. It has the same conduit length as industrial mechanical water meter, but can be used just as conveniently as a mechanical water meter.

Application

- · Water and waste water management
- Process industries
- · Dredging industries
- · Mining industries

Product Description

- \square Flow tube sizes 50 mm to 600 mm
- ☐ Optional: GSM or GPRS AMR functionality
- ☐ Battery life-5years (10 years optional)
- ☐ Unique housing design rated to IP68
- $\hfill \Box$ On-board self-diagnostic function and fault indicator
- ☐ Optional feature to integrate Pressure Transmitter
- ☐ Long-term stability and accuracy over a wide range of conditions
- ☐ High reliability and minimum maintenance requirement
- ☐ The communication port permits the transfer of data from remote stations to the central system via, GPRS Modem, LoRaWAN
- ☐ Self-adjusting sensor receiving circuit continually adapts to changing pipe diameters due to scaling or corrosion

For further information

NETIX. Global B.V. Beechavenue 115, 1119RB Schiphol-Rijk, Tel: +31 68 543 6139

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Technical Specification

Parameters	Specifications			
Technical characteristics	Low power consumption, digital process technology with stable piezoelectric sensor			
Accuracy	±1% of reading (Optional ±0.5%)			
Repeatability	0.2% of Span			
Display	Total flow, flow rate, velocity, working time & date, signal intensity, quality & battery status			
Output	RS 485, 4 – 20 mA, Pulse for total flow (All outputs need external power supply 24 V DC)			
Communication interface	GSM, RS 485 (Modbus RTU), UART			
Operation	Inside keypad available			
Sampling period	0.5 sec			
Environment temp.	Up to 65°C			
Water temp.	5 to 70°C			
Power supply	Li-ion battery, solar powered			
Enclosure class	IP 68			
Pipe size	DN 40 - 600			
Flange standard	ANSI, IS, DIN PN, BS			
Pressure transmitter	Range 0-16 kg/cm ² , IP 68, 1/2" male threaded, accuracy 0.25%			

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Flow Table

DN in mm	m3/hr		Ips	
	Min.	Max.	Min.	Max.
40	0.90	54.28	0.25	15.08
50	1.41	84.82	0.39	23.56
65	2.39	143.28	0.66	39.80
80	3.62	217.08	1.01	60.30
100	5.65	339.24	1.57	94.23
125	8.84	530.16	2.46	147.27
150	12.72	763.32	3.53	212.03
200	22.60	1,356.00	6.28	376.67
250	35.20	2,112.00	9.78	586.67
300	50.89	3,053.16	14.14	848.10
350	69.26	4,155.72	19.24	1,154.37
400	90.46	5,427.84	25.13	1,507.73
450	114.49	6,869.64	31.80	1,908.23
500	141.35	8,481.00	39.26	2,355.84
600	203.54	12,212.52	56.54	3,392.37

Precautions:

- Installation location should be such that the Flowmeter will always remain full of liquid.
- Minimum 5D upstream and 3D downstream straight lengths should be maintained at installation location where "D" is the pipe diameter.
- $\bullet \ \ \text{The Flowmeter installation location should be free of bends, elbows, tees, valves, etc.}$

For further information

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