



Electronic Ultrasonic Flowmeters

- Accuracy: $\pm 1\%$ of reading
- Flow material: water-like liquids

Flowmeters feature an easy, non-invasive installation and low maintenance. Units are suitable for measuring clean liquids in energy monitoring, HVAC, power generation, and water treatment applications.



generation, and water treatment applications.			49DE96	49DE81
For Pipe Size	Flow Range	Display Units	Mfr. Model	Item No.
Housing Material: Unspecified, Fluid Temp. Range: -40° to 250°F, Power Req.: 10-30V DC				
Strap-on Assembly Connection				
½ in to 98 in	0.09792 to 940,420 gpm	Acre Feet, Cubic Feet, Cubic Meters, Feet, Kilograms, Liquid Barrels, Liters, Mega US Gallons, Meters, Oil Barrels, Pounds, gal	DXNP-ABS-NN	49DE96
½ in to 98 in	0.09792 to 940,420 gpm		DXNP-AES-NN	49DE99
½ in to 120 in	0.00612 to 1,410,000 gpm		DXNP-ATS-NN	49DE97
1 in to 60 in	0.00612 to 1,410,000 gpm		DXNP-AFS-NN	49DF01
1 in to 60 in	0.09792 to 940,420 gpm		DXNP-AHS-NN	49DE98
Housing Material: Aluminum, PVC, Fluid Temp. Range: -40° to 140°F, Power Req.: 95-264V AC				
Dual Connection				
½ in	2 to 38 gpm	Acre-Feet, Barrels (Liquid and Oil), British Thermal Unit, Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Kilojoules, Kilowatts, Liters, Megawatts, Meters, Million British Thermal Unit, Million Gallons, Million Liters, mmBtu, Pounds, Tons	DTFXE-AP-AKNN-NN	49DE81
½ in	2 to 38 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXB-GP-AKNN-NN	49DE75
¾ in	2.75 to 66 gpm	Acre-Feet, Barrels (Liquid and Oil), Btu, Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, kJ, kW, Liters, mBtu, Meters, Million Gallons, Million Liters, mmBtu, MW, Pounds, Tons	DTFXE-BP-AKNN-NN	49DE82
¾ in	2.75 to 66 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXE-HP-AKNN-NN	49DE88
¾ in	2.75 to 66 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXB-BP-AKNN-NN	49DE70
1 in	3.5 to 108 gpm	Acre-Feet, Barrels (Liquid and Oil), Btu, Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, kJ, kW, Liters, mBtu, Meters, Million Gallons, Million Liters, mmBtu, MW, Pounds, Tons	DTFXE-CP-AKNN-NN	49DE83
1 in	3.5 to 108 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXE-IP-AKNN-NN	49DE89
1 in	3.5 to 108 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXB-CP-AKNN-NN	49DE71
1 in	3.5 to 108 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXB-IP-AKNN-NN	49DE77
2 in	8 to 420 gpm	Acre-Feet, Barrels (Liquid and Oil), Btu, Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, kJ, kW, Liters, mBtu, Meters, Million Gallons, Million Liters, mmBtu, MW, Pounds, Tons	DTFXE-FP-AKNN-NN	49DE86
2 in	8 to 420 gpm	Acre-Feet, Barrels (Liquid and Oil), Cubic Feet, Cubic Meters, Feet, Gallons, Kilograms, Liters, Meters, Million Gallons, Million Liters, Pounds	DTFXB-FP-AKNN-NN	49DE74



Doppler Ultrasonic Flowmeters

- Accuracy: $\pm 2\%$ full scale
- Flow velocity range: 0.15 to 30 ft./sec.

Non-invasive meters measure full-pipe flows of liquids containing suspended particles or aerated liquids such as sewage, mud slurries, and plastics.

DFX Flowmeter Systems—Systems include transmitter and transducer.

- Ambient temp. range: -40° to 185°F

DFX Flowmeter Transmitters—Each transmitter allows up to 4 meters to be interconnected.

- Ambient temp. range: -40° to 185°F

5XPN0



5XPN2



Flowmeter Transducers—Suitable for most plastic and metal pipes.

- Ambient temp. range: -40° to 194°F

Power Source	Includes	Mfr. Model	Item No.
DFX Flowmeter Systems (Transmitter and Transducer)			
115 V AC	Transducer For Pipe Size 1 in and Above - 5XPN2	—	7HU43
	Transducer For Pipe Size ¼ in to 1 in - 5XPN3	—	7HU44
12-28 V DC	Transducer For Pipe Size 1 in and Above - 5XPN2	—	7HU45
	Transducer For Pipe Size ¼ in to 1 in - 5XPN3	—	7HU46
DFX Flowmeter Transmitters			
115 V AC	—	DDFXD2-ANNA-NN	5XPN0
12-28 V DC	—	DDFXD2-ENNA-NN	5XPN1
Description	For Use With	Mfr. Model	Item No.
Flowmeter Transducers			
Pipe Size (In.): 1 and above	5XPN0, 5XPN1	DT94-020-N000-N	5XPN2
Pipe Size (In.): 0.25 to 1.00		DT95-020-N000-N	5XPN3
Modules			
4-20 mA Output Module	5XPN0, 5XPN1	D020-1045-100	5XPN4
Rate Pulse Output Module, 0-2,500Hz		D020-1045-207	5XPN5
Control Relay Module-Two Form C		D020-1045-102	5XPN6



Transmitters and Flowmeters

For use in water/wastewater treatment, irrigation, industrial, and HVAC/building automation applications.

Flow Transmitters—Can receive sensor data and convert it to the desired output that represents the flow rate.

BTU/Flowmeters—Measure flow and temperature differential to compute energy in hot service applications. Output is scaled pulse and RS-485 (Modbus and BACnet).

- Fluid temp. range: 20° to 260°F
- Accuracy: $\pm 2\%$



Brass Flowmeters—Each sensor comes with 20-ft., 2-conductor 20 AWG shielded UL type PTLT 221°F (105°C) cable.

- Fluid temp. range: 0° to 221°F
- Accuracy: ± 1

Stainless Steel Insertion Flowmeters—Suitable for use in flow control and batch type applications.

- Fluid temp. range: 14° to 150°F
- Accuracy: $\pm 1\%$

Description	Mfr. Model	Item No.
Flow Transmitters		
Analog Signal, 9-35VDC	310-00	49DF35
BACnet and Modbus Signal, 12-24VAC	340BN/MB-00	49DF34
Lon Works Signal, 12-24VAC/DC	340LW-00	49DF38
N2 Output Signal, 12-24VAC	340N2-00	49DF33
Pulse Signal, 12-28VAC	320-00	49DF36
Relay Signal, 12-28VAC	330-00	49DF37

For Pipe Size	Flow Range	Wetted Materials†	Mfr. Model	Item No.
BTU/Flowmeters, FNPT, All-In-One				
¾ in	1.65 to 24.69 gpm	Brass, PEEK	380207000-1202	49DF12
1 in	2.70 to 40.48 gpm		380210000-1202	49DF13
1 ¼ in	4.66 to 69.93 gpm		380212000-1202	49DF14
1 ½ in	6.35 to 95.18 gpm		380215000-1202	49DF15
2 in	10.49 to 157.34 gpm		380220000-1202	49DF16
Brass Insertion Flowmeter				
3 in	—	Brass, EPDM, Nylon, Tungsten, UHMWPE	220BR0005-1211	49DF24
Brass T Flowmeters, FNPT				
½ in	0.18 to 9.18 gpm	Brass, EPDM, Nylon, Tungsten, UHMWPE	250BR0505-1211	49DF19
¾ in	0.41 to 20.6 gpm		250BR0705-1211	49DF20
1 in	0.73 to 36.7 gpm		250BR1005-1211	49DF21
1 ¼ in	1.14 to 57.3 gpm		250BR1205-1211	49DF22
1 ½ in	1.65 to 82.6 gpm		250BR1505-1211	49DF23
2 in	5.00 to 300 gpm		228BR2005-1211	49DF17
2 ½ in	7.65 to 459 gpm		228BR2505-1211	49DF18
Stainless Steel Insertion Flowmeters (NEMA 4X Enclosure)				
1 ½ in to 10 in	5.50 to 4896 gpm	316 Stainless Steel, Brass, PEEK, PPS Tip	SD1D1N00-0200	49DF25
1 ½ in to 10 in	5.50 to 4896 gpm		SD1D1N00-0200	49DF29
12 in to 36 in	352 to 63,452 gpm		SD1D2N00-0200	49DF26
12 in to 36 in	352 to 63,452 gpm		SD1D2N11-0200	49DF27 *
12 in to 36 in	352 to 63,452 gpm		SD1D2N10-0200	49DF28
12 in to 36 in	352 to 63,452 gpm		SD1D2N00-0200	49DF30
12 in to 36 in	352 to 63,452 gpm		SD1D2N11-0200	49DF31 *
12 in to 36 in	352 to 63,452 gpm		SD1D2N10-0200	49DF32

* LCD display. † EPDM = ethylene propylene diene monomer rubber, PEEK = polyetheretherketone, PPS = polyphenylene sulfide, UHMWPE = ultra-high-molecular-weight polyethylene.