

## Lab-Scale Ultrasonic Flowmeter/Transmitter

### Ideal for measuring high-purity solutions, slurries and corrosive chemicals

- Flow-through design with no intrusions produces almost no pressure loss
- No mechanical seals to leak or moving parts to wear out
- Segregated design for remote placement of sensor or transmitter/display

This design is ideal for use with fluids that have physical or chemical properties different from general-use water. The sensor utilizes PFA (perfluoroalkoxy) tubing, which is a high-purity, chemically inert fluoropolymer much like PTFE or FEP. The sensor housing is made of durable ABS plastic for placement in aggressive environments. A 6-ft (1.85-m) cable allows for distant installation of the sensor.

**What's included:** flow sensor including 6-ft cable, and transmitter.



Flow sensor 32986-50 with transmitter

### Specifications & Ordering Information

**Fluid type:** water, slurries, chemicals

**Operating pressure:** 70 psig max (0.49 MPa)

**Enclosure rating**  
Controller: NEMA 2/IP20  
Sensor: NEMA 4X/IP65

**Output signal(s):** 4 to 20 mA; scaled pulse, open collector, 15 VDC @ 15 mA

**Accuracy:** ±2% of reading

**Wetted materials:** PFA, high purity

**Display type:** backlit LCD, 2-line; 16 digit alphanumeric

**Pulse frequency (max):** 1,000 Hz @ 100% flow

**Repeatability:** ±0.5%

**Connections:** PFA tube-end (4" lead)

**Panel cutout:** 1.6"W x 4.0"H

**Operating temperature:** 50 to 140°F (10 to 60°C)

**Input power:** 24 VDC ±10%, 300 mA

**Dimensions**  
Controller: 1.6"W x 4.9"H x 4.25"D  
Sensor: 4.6"L x 1.2"W x 1.8"H

Flow Rate	Connections	Pulse output		Current output (4 to 20mA)	
		Catalog number	Price	Catalog number	Price
0.001 to 0.01 GPM (5 to 50 mL/min)	1/16"	<a href="#">K-32986-50</a>		<a href="#">K-32986-56</a>	
0.003 to 0.15 GPM (12 to 600 mL/min)	1/8"	<a href="#">K-32986-52</a>		<a href="#">K-32986-58</a>	
0.04 to 1.06 GPM (160 to 4,000 mL/min)	1/4"	<a href="#">K-32986-54</a>		<a href="#">K-32986-60</a>	

[K-32986-99](#) Outlet-mounted power supply, 90-264 VAC to 24 VDC

[K-26901-12](#) DIN-mount power supply

## Pilot-Scale Ultrasonic Flowmeter/Transmitter

### Ideal for measuring high-purity solutions up to 4.76 GPM (18 LPM)

- Flow through design with no intrusions produces almost no pressure loss
- No mechanical seals to leak or moving parts to wear out
- Segregated design for remote placement of sensor or transmitter/display

This design is ideal for use with fluids that have physical or chemical properties different from general-use water. The sensor utilizes PFA (perfluoroalkoxy) tubing, which is a high-purity, chemically inert fluoropolymer much like PTFE or FEP. The sensor housing is made of durable ABS plastic for placement in aggressive environments. A 16-ft (5-m) cable allows for distant installation of the sensor.



32986-80

All programming of the controller is done through the four-button panel. To improve accuracy, the controller allows the user to program and linearize measurement for up to 15 data points. The controller panel also includes indication for an alarm that can be programmed on either flow rate (high and/or low) or totalized flow. For datalogging and process integration, the controller offers a low-flow cut-off at a user-programmable 0 to 10% of full-scale.

**What's included:** flow sensor, including 16-ft cable and controller.

### Specifications & Ordering Information

**Fluid type:** water, slurries, chemicals

**Operating temperature**  
Sensor: 50 to 104°F (10 to 40°C)  
Controller: 32 to 122°F (0 to 50°C)

**Connection(s):** PFA tube-end (4" lead)  
**Input power:** 24 VDC ±10%, 150 mA (1.5 A peak)

**Display type:** backlit LCD, 2-line 16-digit alphanumeric

**Accuracy:** ±2% of reading (water)

**Operating pressure:** 75 psig max (0.52 MPa)

**Enclosure rating:** IP20, controller

**Special indicators:** 2 LED, alarm

**Linearity:** user determinable, 15-point

**Wetted materials:** PFA

**Cable length:** 16 1/4 ft (5 m)

**Output signal(s):** 4 to 20 mA or 0 to 10 V scaled pulse, open collector, 30 VDC at 20 mA

**Repeatability:** ±0.5%

**Pulse frequency (max):** 5 Hz, 10 Hz or 1000 Hz

**Relay type:** 2-point alarm, open collector, 30 VDC at 20 mA

**Panel cutout:** 3.7"W x 1.7"H

Flow range	Connections	Voltage output (0 to 10 V)		Current output (4 to 20 mA)	
		Catalog number	Price	Catalog number	Price
0.03 to 2.38 GPM (110 to 9,000 mL/min)	3/8"	<a href="#">K-32986-80</a>		<a href="#">K-32986-86</a>	
0.61 to 4.76 GPM (230 to 18,000 mL/min)	1/2"	<a href="#">K-32986-82</a>		<a href="#">K-32986-88</a>	

[K-32986-99](#) Outlet-mounted power supply, 90-264 VAC to 24 VDC

[K-26901-12](#) DIN-mount power supply

**Dimensions**

Controller: 3.8"W x 1.9"H x 7.0"D  
Sensor: 4.8"L x 1.0"W x 2.0"H