



Flowmeters

Flow Indicators

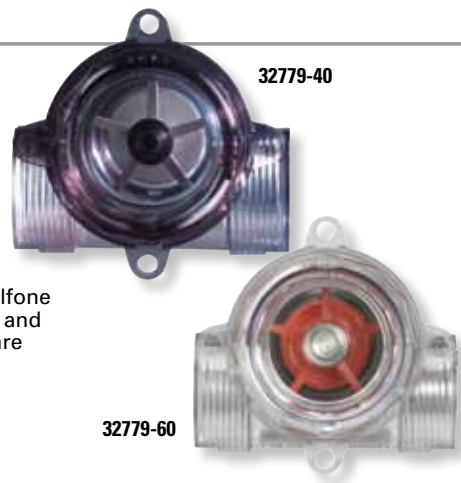
Sight Flow Indicators and Transmitters

Easily view flow indicator through clear plastic housing

- Models with 1 to 10 VDC output offer local and remote indication
- No magnets in the rotor to attract ferrous materials
- Output sensors can be added and replaced in the field without removing body from the process line

Sight flow indicators are a low-cost, durable rotor-style flow indicator. Choose from models that provide basic visual flow indication or models with output for remote flow monitoring. Units are constructed of clear plastic, enabling 360° viewing of the spinning rotor for easy flow indication. Models constructed of polysulfone (PSF) have excellent chemical compatibility, high pressure and temperature ratings, and all wetted materials are FDA/NSF rated for potable water applications. Models that are polycarbonate (PC) are constructed of UV-stabilized material making them ideal for outdoor applications (these models do not meet FDA/NSF rating).

Easily replace or switch outputs—install onto an existing indicator body in the field without any tools. Any sensor can be used with any flow indicator.



Specifications

Pulsed output

Accuracy: ±5% full-scale
 Temperature range: -20 to 212°F (-29 to 100°C)
 Power: 8 to 28 VDC
 Output: 5 VDC and 8 to 28 VDC pulse

1 to 10 VDC output

Accuracy: ±5% full-scale
 Temperature range: -20 to 212°F (-29 to 100°C)
 Power: 15 to 28 VDC
 Output: 1 to 10 VDC

Two switch outputs

Temperature range: -20 to 212°F (-29 to 100°C)
 Power: 8 to 28 VDC
 Output: 100 mA and 28 VDC max NO/NC switches

Wetted materials						Operating temperature	Maximum pressure	Port size NPT(F)	Flow range GPM (LPM)	Indicators only		Indicators with 1 to 10 VDC output	
Body	Window	Rotor	Rotor pin	Thrust washers	O-ring					Catalog number	Price	Catalog number	Price
PSF	PSF	White PSF	316 SS	300 SS	NSF-grade fluoroelastomer	-20 to 212°F (-29 to 100°C)	150 psi	1/2"	0.5 to 6.5 (1.9 to 24.6)	TW-32779-40		TW-32779-54	
								1/2"	2 to 20 (7.6 to 75.5)	TW-32779-42		TW-32779-56	
								3/4"	3 to 35 (11.4 to 132.5)	TW-32779-44		TW-32779-58	
PC	PC	Red PTB	316 SS	300 SS	Buna N	-20 to 130°F (-29 to 55°C)	125 psi	1/2"	0.5 to 6.5 (1.9 to 24.6)	TW-32779-46		TW-32779-60	
								1/2"	2 to 20 (7.6 to 75.5)	TW-32779-48		TW-32779-62	
								3/4"	3 to 35 (11.4 to 132.5)	TW-32779-52		TW-32779-64	

[TW-32779-66](#) Replacement output sensor, with pulsed output

[TW-32779-68](#) Replacement output sensor, with 1 to 10 VDC output

[TW-32779-70](#) Replacement output sensor, with two switch output

Flow Indicators for Liquids

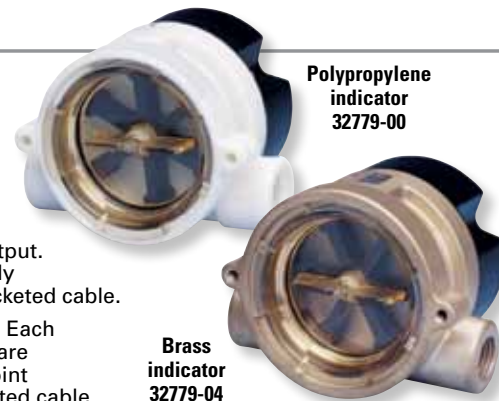
Models with sensor or switch offer dual functionality

All flow indicators feature a paddle-wheel that spins at a rate proportional to the flow. Lens can be removed with a 1/4 turn for easy cleaning. Use with fluids that have a viscosity less than 34 centipoise (150 µm filter is recommended for protection). Select from indicator, indicator/sensor, or indicator/switch.

Indicators feature a bright orange rotor that spins to provide visual verification.

Indicators/Sensors feature a Hall-effect sensor that produces a 4.5 to 24 VDC pulse output. Maximum current source output is 70 mA and frequency output range is approximately 25 Hz at low flow to 225 Hz at high flow. Indicator/sensor includes 24" (61.0 cm) PVC jacketed cable.

Indicators/Switches offer extra level of reliability and protection with a built-in switch. Each SPDT switch is rated for 1 amp, 24 VDC resistive (0.3 amp 110 VAC indicator/switches are available online). Repeatability is ±2%; accuracy is ±5%. An LED lights when the set point is reached for easy field calibration. Indicator/switches include 24" (61.0 cm) PVC jacketed cable.



Specifications

Wetted materials: polypropylene (PP) or brass, ceramic, PPS, nylon, polysulfone, Buna N (PP models) or Viton® (brass models), and glass-reinforced PP

Max pressure
 PP models: 100 psi (6.9 bar) at 70°F (21°C)
 Brass models: 200 psi (13.8 bar) at 70°F (21°C)

Max operating temp
 Indicator/switches: 180°F (82°C)
 All other models: 212°F (100°C)

Body material	Port size	Flow range (GPM)		Indicators		Indicator/sensors			Indicator/switches		
		Low†	Standard	Cat. no.	Price	Cat. no.	Power	Price	Cat. no.	Power	Price
Polypropylene	1/4" NPT(F)	0.1 to 1.0	0.5 to 5.0	TW-32779-00		TW-32779-10	4.5 to 24 VDC		TW-32880-20	24 VDC	
	1/2" NPT(F)	1.5 to 12.0	4.0 to 20.0	TW-32779-02		TW-32779-12	4.5 to 24 VDC		TW-32880-32	24 VDC	
Brass	1/4" NPT(F)	0.1 to 1.0	0.5 to 5.0	TW-32779-04		TW-32779-13	4.5 to 24 VDC		TW-32880-50	24 VDC	
	1/2" NPT(F)	1.5 to 12.0	4.0 to 20.0	TW-32779-06		TW-32779-14	4.5 to 24 VDC		—	—	
	3/4" NPT(F)	—	3.0 to 30.0	TW-32779-08		—	—		—	—	
	1" NPT(F)	—	5.0 to 60.0	TW-32779-09		—	—		—	TW-32880-62	

†Using included low-flow adapter

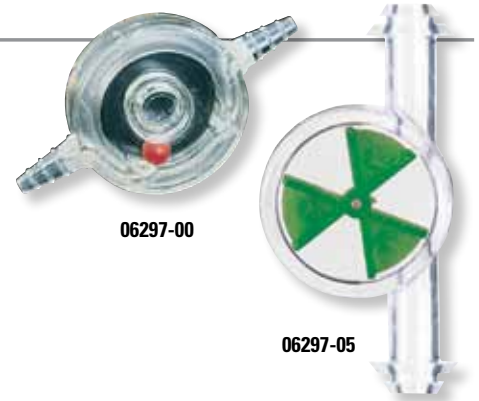
Flow Indicators for Liquids and Gases

An inexpensive way to visually monitor flow of liquids and gases

Indicators give visual confirmation of flow through a clear polystyrene housing. All models can be used with noncorrosive liquids and gases. Connect tubing to indicators via hose barb connections; model 06297-05 has straight ends. All models are pressure rated to 10 psig.



Catalog number	Flow range (L/min)	Tubing ID	Indicator type (PP)	Max fluid temperature	Price
TW-06297-00	0.2 to 6.5	1/4" to 3/8"	Ball	125°F (50°C)	
TW-06297-05	0.5 to 10.0	1/4"	Paddle	150°F (65°C)	
TW-06297-06	0.5 to 10.0	3/16" to 1/4"	Paddle	150°F (65°C)	
TW-06297-07	0.5 to 10.0	1/4" to 7/16"	Paddle	150°F (65°C)	



Sight Flow Transmitters

Output signal for local and remote indication

These sight flow sensors are designed for low-cost applications where visual indication and sensing output signals are required—available with 4 to 20 mA, pulse, relay, or 0 to 5 VDC output. Durable polypropylene body is compatible with a variety of fluids. Sensors offer a flow measuring accuracy of ±2% full-scale, and are capable of handling pressures up to 150 psig and temperatures up to 150°F (66°C).

Specifications

Wetted materials: glass-filled polypropylene casing, clear polycarbonate cover, Buna N seal, acetal copolymer turbine, PEEK bearing, stainless steel shaft

Measuring accuracy: ±2% full-scale

Repeatability: ±0.5% full-scale

Process connection: 1/2" NPT(F)

Electrical connection: 3-wire pigtail, 12 ft (3.6 m)

Turndown ratio: 10:1

Max pressure: 150 psig (10.3 bar)

Operating temp: 20 to 150°F (-7 to 66°C)

Standard calibration media: tap water at 70°F (21°C)

Dimensions (W x H x D): 3 3/4" x 3 1/2" x 2 1/2"
(9.5 x 9 x 6.3 cm)



Catalog number	Output type	Flow range	Power	Price
TW-32825-00	4 to 20 mA	0.5 to 5 GPM	12 to 35 VDC	
TW-32825-02		1 to 10 GPM		
TW-32825-04		1.5 to 15 GPM		
TW-32825-06	Pulse	0.5 to 5 GPM	5 to 24 VDC	
TW-32825-08		1 to 10 GPM		
TW-32825-10		1.5 to 15 GPM		
TW-32825-12	Relay	0.5 to 5 GPM	12 to 35 VDC	
TW-32825-14		1 to 10 GPM		
TW-32825-16		1.5 to 15 GPM		
TW-32825-18	0 to 5 VDC	0.5 to 5 GPM	12 to 35 VDC	
TW-32825-20		1 to 10 GPM		
TW-32825-22		1.5 to 15 GPM		
TW-32825-22		1.5 to 15 GPM		

Industrial Flow Indicators

Integral cleaning mechanism ensures clear, unobstructed viewing

- Transparent glass cylinder
- Universal mountability

With a simple twist of the sight glass, integral wipers clean the viewing area to allow unobstructed observation of the rotor. The offending contaminants are then simply washed away by the medium flow. This process may be repeated as often as desired—no fuss—no downtime.

The body is made of a hard glass (Duran) and the rotor and wipers are synthetic. The device is kept tight and rotatable through the use of low friction O-rings.

Specifications

Max operating temp: 210°F (98.9°C)

Max pressure: 230 psig (15.6 bar)

Indicator with brass fittings						Indicator with SS fittings					
Catalog number	Connection NPT(F)	Length in. (cm)	Max flow (GPM)	Pressure drop ¹ (psi)	Price	Catalog number	Connection NPT(F)	Length in. (cm)	Max flow (GPM)	Pressure drop ¹ (psi)	Price
TW-32481-62	1/4"	2.76 (7.0)	2.11	0.29		TW-32481-68	1/4"	2.76 (7.0)	2.11	0.29	
TW-32481-63	3/8"	2.76 (7.0)	3.17	0.29		TW-32481-69	3/8"	2.76 (7.0)	3.17	0.29	
TW-32481-61	1/2"	3.35 (8.5)	6.34	0.44		TW-32481-70	1/2"	3.35 (8.5)	6.34	0.44	
TW-32481-64	3/4"	3.74 (9.5)	12.15	2.32		TW-32481-71	3/4"	3.74 (9.5)	12.15	2.32	
TW-32481-65	1"	4.13 (10.5)	17.44	4.06		TW-32481-72	1"	4.13 (10.5)	17.44	4.06	
TW-32481-66	1 1/4"	4.72 (12.0)	29.06	3.63		TW-32481-73	1 1/4"	4.72 (12.0)	29.06	3.63	
TW-32481-67	1 1/2"	5.12 (13.0)	42.27	4.21		TW-32481-74	1 1/2"	5.12 (13.0)	42.27	4.21	

¹Pressure drop with 6.5 ft/sec

[TW-17080-12](#) NIST-traceable calibration with data



32481-62