RSA-TVW Paddlewheel Flow Transmitter



Applications & Features

- For monitoring liquid flow rates in pipes from 1-1/2 to 40", integral 4- 20 mA output
- Bearings and shaft offer excellent wear protection even in applications with particulate for long life
- One unit adjustable over a large pipe size range
- Sensor technology uses inductive sensing to sense the blades of the impeller therefore does not use magnets allowing low flow rate monitoring with no concerns regarding magnetic material in the flow

Specifications

Service: Water-based fluids Range: 1.2 to 25 ft/s (0.37 to 7.62 m/s)

Wetted Materials: Body and fitting: Brass; O-ring: FKM; impeller: 316 SS; shaft: Tungsten carbide; bearing:

RSA-TVWE Linearity: ±1.0%FS Repeatability: ±0.5%FS Temperature Limits: -40 to 212°F (-40 to 100°C)

Pressure Limits: 400 psig (27.6 bar) @ 100°F (37.8°C), 325

psig (22.4 bar) @212°F (100°C)

Process Connection: 1-1/2" NPT male, optional weldolet

accessories Output: 4-20 mA

Power Requirement: 10 to 35 VDC, 40 mA (max.) Electrical Connection: 22 AWG shielded UL type PTLC

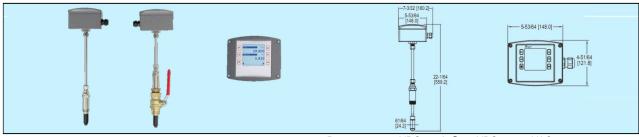
rated 105°C, 20' (6.1 m) long with cable gland

Enclosure Rating: IP67 Weight: 3 lb (1.36 kg) Approvals: CE

Models

Model	Description
RSA-TVW	Paddlewheel Flow Transmitter , 4-20mA output

RSA-TFIE Insertion Electromagnetic Flow Transmitter



Applications and Features

- For various liquids flow measurement in 4" to 36"pipe
- Setup LCD display can field configure various applications with one model through multiple configurations i.e. pipe size/material, liquid type, analog/pulse/frequency/alarm/ communication outputs, damping, and calibration factor
- High accuracy in changing temperature, density or viscosity
- Simple setup wizard and installation tool for quick and precise installation
- No moving parts, durable, maintenance free and no fouling
- Optional isolation valve for hot-tap application

Specifications

Service: Compatible non coating, conductive liquids

Range: 0~20 ft/s (0~6 m/s)

Accuracy: High accuracy: ±0.5% of reading at calibrated velocity; ±1% of reading from 2-20 ft/s (0.6~6 m/s); ±0.02 ft/s (±0.006m/s) at <2ft/s (0.6m/s). Standard accuracy:±1% FS Applicable Pipe Size: High accuracy: 4 to 10" (101 to 254 mm); Standard accuracy: 4 to

High accuracy: 4 to 10" (101 to 254 mm); Standard accuracy: 4 to 36" (101 to 914 mm)

Diameter Length Requirements: >10 upstream, >5 downstream Wetted Materials: Body shaft/fitting:316SS; Electrodes: 316SS; Electrode cap: Polymer/Polystyrene; O-ring: Silicon. Temperature Limits: Ambient: -20~60°F (-29~71°C); Process: 15~250°F (121°C); Storage: -40~185°F (-40~85°C)

Process Connection: 1" NPT, optional weldolet accessories Pressure Limits: 400 psi (27.6 bar) @ 100° F (37.8°C) Pressure Drop: < 0.1 psi at 12 ft/s in >=4" (101.6 mm) pipe Outputs: (1) Analog: 4-20mA, 0-5V, 0-10V or 2-10V (display selectable); (2) Pulse/Frequency: 0-15V peak pulse, 0-500Hz or scalable pulse output (display selectable); (3) Alarm: (I) Empty pipe detection or minimum/maximum velocity, (display selectable); (II) Reverse flow output indication output indication

Power: 12~42.4VDC, 25 A @ 24 VDC; 12~36VAC Electrical Connection: Removable terminal blocks, PG 16 Display (-LCD option): large graphic LCD with backlight.

Conductivity: >20 microsiemens

Enclosure Material: Powder coated die cast aluminum Enclosure Ratings: NEMA 6P (IP68) (Non display models); NEMA 4X (IP66) (-LCD

Approvals: BTL, CE, NSF/ANSI 61 and 372 pending COMMUNICATIONS (-COM OPTION): BACnet MS/TP or

Modbus RTU protocol (default disabled, display selectable). Supported Baud Rates: 9600, 19200, 38400, 57600, 76800, or 115200 bps (display selectable). Device Load: 1/8 unit load.

Models

Model	RSA-TFIE					Insertion Electromagnetic Flow Transmitter
Accuracy		Н				High accuracy; 1% of reading
		S				Standard accuracy; 1% FS
Process			N			1" NPT
Connection			IN			I NPI
Electrical				Р		DC 16 aland
Connector				ւ		PG 16 gland
Ontions					LCD	Integral LCD
Options					СОМ	BACnet or Modbus communication

ACCESSORIES

Model	Description
RSA-TIEF-KIT	Setup kit (includes setup display, thickness gage and measuring tape)
RSA-TIEF-DS	Setup display
RSA-IEF-IVB	1-1/4" full port isolation valve brass