

QCT Series

In line Liquid Ultrasonic Flow Meter

Description

The QCT Series in line ultrasonic flow meter has been specifically designed for applications that require excellent accuracy & reliability at an economical price point. The compact QCT Series has no moving parts and there is nothing in the flow stream that will cause an increase in pressure drop; this results in a very rugged, reliable and accurate flow meter. High accuracy & repeatability is achieved through the unique measurement section within the flow meter where the flow is conditioned and delta T is measured along the axis of the flow meter. The small footprint, lightweight device is ideal for low viscosity liquid applications including water based products, oils, and its all plastic construction makes it the meter of choice for many corrosive fluids.

The QCT Series flow meter bases its operation on measuring the time difference of an ultrasonic wave traveling with and against the flowing medium. The time difference is directly proportional to the fluid's flow rate. Temperature is measured via an RTD embedded into the flow meter body.

Features

- High accuracy
- No moving parts
- Compact & lightweight design
- Low pressure drop
- All plastic construction
- IP66 / NEMA 4X



Specifications

Accuracy	±0.5% of reading plus zero stability*
Zero stability	±0.05% of full scale
Repeatability	±0.2%*
Turndown	100:1
Nominal Line Sizes	1/8", 1/4", 1/2", 1"
Materials of Construction	
Meter Body	Carbon filled Nylon
Sensor	PEEK
Sensor Seal	Viton
Temperature	Class A RTD
Temperature Range	-10°C to 80°C (14°F to 176°F)
Max Pressure	275 psi (19 bar)
End connection	NPT
Rating	IP 66 / NEMA 4X
Power	9 -32 VDC
Outputs	
Analog	4-20mA
Scaled frequency	10 to 5000 Hz
Communications	Modbus RTU over EIA485
Baud Rate	115200, 57600, 38400, 19200, 9600 bps



*Over 10:1 calibration range

Ordering Information

Line Size	Fitting Size	Minimum Flow	Maximum Flow	Model Number	Dim A (in)	Dim B (in)	Dim C (in)	Weight (g)
1/8"	1/4"	0.035 gpm	3.5 gpm	QCT013-AAA	8.0	1.60	2.00	145
1/4"	1/4"	0.07 gpm	7.0 gpm	QCT025-AAA	8.0	1.60	2.00	150
1/2"	1/2"	0.20 gpm	20 gpm	QCT050-AAA	9.0	1.55	2.18	175
1"	1"	0.70 gpm	70 gpm	QCT100-AAA	10.0	1.80	2.60	250

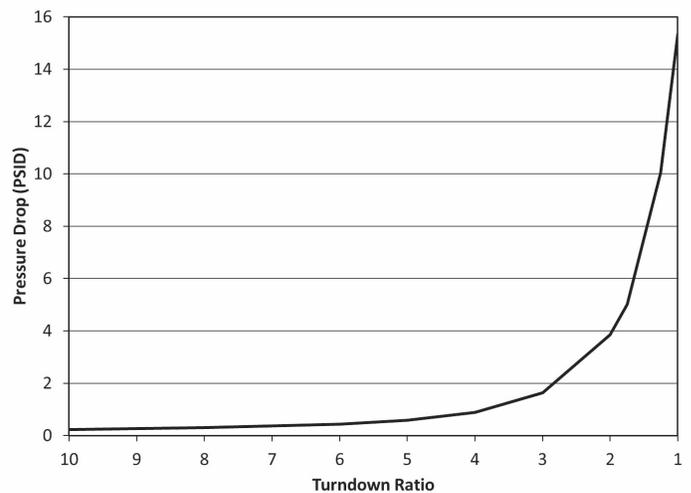
Wiring

Pin #	Function	Wire Color
1	Current Loop (+)	Yellow
2	Power (9-32VDC)	Red
3	Chassis	Green
4	EIA-485 A	Blue
5	EIA-485 B	White
6	Frequency Output	Orange
7	Current Loop (-)	Brown
8	Power Return	Black

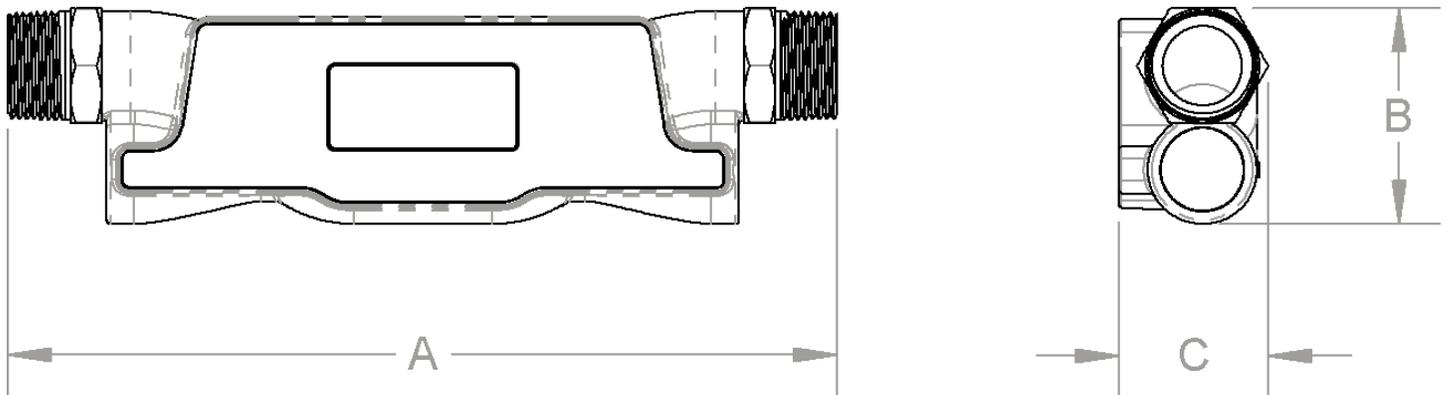
Cable

19-102374-101 Connector to flying leads cable, 5 meters

Pressure Drop



Dimensions



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