

# TCM3100 Coriolis Flow Meter

**EXTREME ACCURACY MASS FLOW MEASUREMENT**



## Specifications

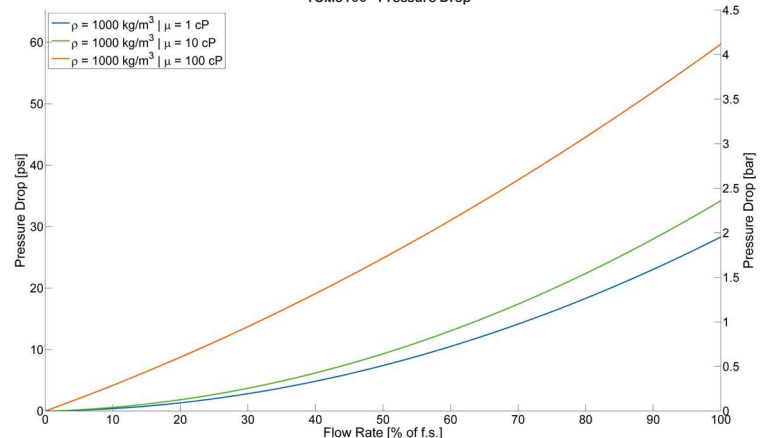
### Performance

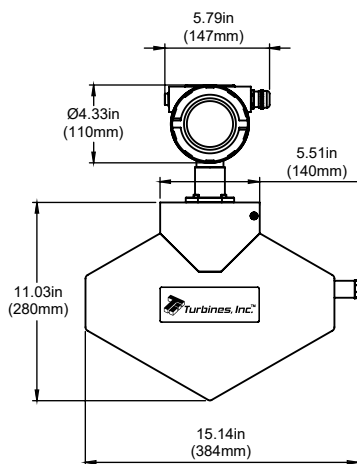
Linearity	±0.1 % of flow rate (Liquids)   ±0.5% of flow rate (Gases)
Repeatability	±0.05% of flow rate (Liquids)   ±0.25% of flow rate (Gases)
Process Temperature Range	Standard: -40° F to 212° F (-40°C to 100°C)   Optional: -76° F to 392° F (-60°C to 200°C)
Pressure Rating	2,900 psi   200 bar
Temperature Accuracy	±1.8° F ±0.5% of reading   ±1.0°C ±0.5% of reading
Temperature Repeatability	±0.36°F   ±0.2°C
Calibration	5-point logarithmic calibration
Standard Process Connection	Female thread 0.5" NPT
Zero Stability	±0.01 % of full scale
Density Range	up to 2,500 kg/m <sup>3</sup> (2.5 g/cm <sup>3</sup> )
Max Flow Rate	3100 kg/hr   114 lbs/min   3100 l/hr   13.65 gpm   468 bbl/d (US)
Nominal Meter Size	1/4"   DN6 mm

### Materials

Tubes	316L Stainless steel (DIN 1.4404)
Case	316L Stainless steel (DIN 1.4404)
Flow Splitter	CF3M (DIN 1.4409)
Brazing Alloy	BNi-2

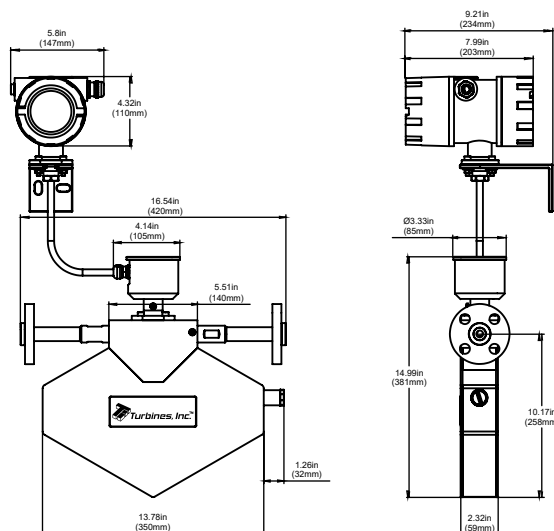
TCM3100 - Pressure Drop





## Compact Model

(with meter mount in aluminum diecast housing) Weight: 15.4 lb (7 kg)



## Remote Model

(with junction box and remote field mount transmitter) Weight: 18.3 lb (8.3 kg)

## Certifications

**CSA\***  
**Sensor:**  
 Cl. I, Div. 1, Groups C & D: T4 ... T2 (US, Can) Ex ia IIC T4 ... T2 Ga (Can)  
 Cl. I, Zone 0, AEx ia IIC T4 ... T2 Ga (US)  
**Transmitter:**  
 Cl. I, Div. 1, Groups C & D: T4 (US, Can) Ex db [ia Ga] IIC T4 Gb (Can)  
 Cl. I, Zone 1, AEx db[ia Ga] IIC T4 Gb (US)

ATEX	<b>Zone 1:</b> <b>Sensor:</b> II 1 G Ex ia IIC T4 ... T2 Ga <b>Transmitter:</b> II 2(1) G Ex db [ia Ga] IIC T4 Gb <b>Zone 2:</b> 113G Ex nA IIC T4 Ge
IECEX	<b>Compact:</b> Ex ia IIC T4...T2 Ga <b>Transmitter:</b> Ex db [ia Ga] IIC T4 Gb
EAC (TR-CU)	Group IIC or IIB, T2...T4
KGS (Korean)	<b>Compact:</b> Ex ia IIC T4 <b>Transmitter:</b> Ex d (ia) IIC T4

## Electronics

Power Supply 24 V DC  $\pm 20\%$  or 90 ... 264 V AC  
 Outputs Analog, Frequency, Pulse, Status  
 Interfaces RS485 RTU (Modbus), HART®  
 Cable Gland M20 | 1/2" NPT

\*CSA certification is only available in diecast aluminum housing.

## Service

Our dedicated staff offers complete support and recertification for flow meters — whether our own or a competitor's brand. Our calibration services are performed by our trained technicians using the latest testing equipment.

Turbines, Inc. maintains extensive inventories in multiple locations to facilitate rapid, industry leading deliveries.

## Worldwide Support

We serve customers globally with offices in Altus, OK; Seneca, SC; Odessa, TX; Cranston, RI; and Edmonton, Alberta, Canada.



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