TCM 65K TRICOR Coriolis Mass Flow Meter

Common Uses

The TCM 065K Coriolis flow meter with a U tube design offers the best overall performance of any tube shape, including the best signal-to-noise ratio and reduced effects from external vibration. This results in improved zero stability. These features plus the robust, no moving parts design make this meter well suited to many applications, including:

- · Water measurement
- · Various fuels
- · Crude oil



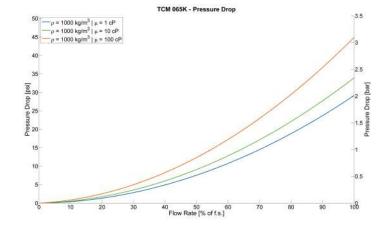
Technical Specifications

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Nominal Meter Size	1-1/2" DN540 mm
Maximum Flow Rate	65,000 kg/hr 2,388 lbs/min 65,000 l/hr 286.2 gpm 9,812 bbl/d (US)
Pressure Rating	1450 psi 100 bar
Measuring Accuracy*	±0.1% of flow rate (Liquids) ±1.0% of flow rate (Gases)
Repeatability	$\pm 0.05\%$ of flow rate (Liquids) $\pm 0.25\%$ of flow rate (Gases)
Zero Stability	±0.01% of full scale
Density Range	up to 2,500 kg/m ³ (2.5 g/cm ³)
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)
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	2" to 3" 150lb to 900lb ANSI flanges (consult factory for additional flange options)

^{*}Stated flow accuracy combines the effects of repeatability, linearity and hysteresis. The specifications refer to standard conditions (for further information see TCM CLASSIC series manual).

Materials of Construction (Wetted Parts)

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

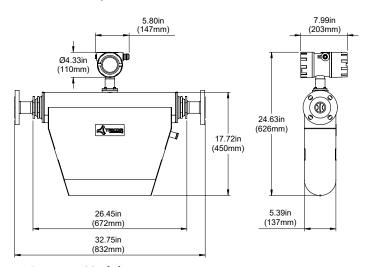




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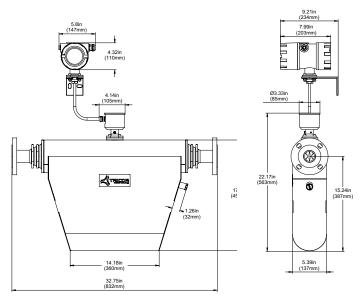
Meter Dimensions* & Weights

*Drawing of the Meter Dimensions reflects one standard connection, other connections on request (Installation length can vary depending on selected connection).



Compact Model

(with meter mount in aluminum diecast housing) Weight: 81.9 lb (35.2 kg)



Remote Model

(with junction box and remote field mount transmitter) Weight: 84.7 lb (36.5 kg)

Certifications

CSA* Compact

Cl. I, Div. 1: Groups C & D: T4 (US, Can)

Ex db ia IIC T4 Gb (Can)

Cl. I, Zone 1, AEx db ia IIC T4 Gb

Remote:

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)

*CSA certification is only available	n diecast	aluminum	housing.
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ATEX	Zone 1: Compact: II 2G Ex db ia IIC T4 Gb Remote: Sensor: II 1G Ex ia IIC T4T2 Ga Transmitter: II 2(1)G Ex db [ia Ga] IIC T4 Gb Zone 2 (All): II 3G Ex nA IIC T4 Gc
IECEX	Compact: Ex db ia IIC T4 Gb Remote: Sensor: Ex ia IIC T4T2 Ga Transmitter: Ex db [ia Ga] IIC T4 Gb
EAC (TR-CU)	Group IIC or IIB, T2T4
KGS (Korean)	Compact: Ex d (ai) IIC T4 Remote: Sensor: Ex ia IIC T4 Transmitter: Ex d (ia) IIC T4

Electronics

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

3D STEP Models are available upon request of factory. Products may be subject to change without notice. Contact factory for the most up-to-date product information.

