



# CLASSIC Series | TCM 5500 Coriolis Mass Flow Meter

## FEATURES

- Robust, no moving parts for long life
- Custom flow connectors & installation lengths
- Excellent repeatability ( $\pm 0.05$  % of flow rate)
- High pressure rating: 345 bar [5,000 psi]

## BENEFITS

- ▶ Increased productivity, lower maintenance
- ▶ Lower installation cost
- ▶ Increased product quality
- ▶ Broad applications: dosing, paint, chemical injection

## FLOW RATE

|                              |  |
|------------------------------|--|
| Mass Flow Rate (max.):       | 5,500 kg/h [202 lb/min]                      |
| Volumetric Flow Rate (max.): | 5,500 l/h<br>[24.22 gpm, 830 oil bbl/d (US)] |
| Nominal Meter Size:          | DN15 [ $\frac{1}{2}$ "]                      |

**PRESSURE RATING** 345 bar [5,000 psi]

## ACCURACY (LIQUIDS)<sup>1)</sup>

|  |   |
|--|---|
| Basic Accuracy (Mass Flow) <sup>2)</sup> :   | $\pm 0.3$ % (option: up to $\pm 0.1$ % of flow rate)  |
| Repeatability (Mass Flow):                   | $\pm 0.05$ % of flow rate                             |
| Basic Accuracy (Volume Flow) <sup>2)</sup> : | $\pm 0.3$ % (option: up to $\pm 0.15$ % of flow rate) |
| Repeatability (Volume Flow):                 | $\pm 0.05$ % of flow rate                             |
| Zero Stability:                              | $\pm 0.01$ % of full scale                            |

## ACCURACY (GASES)

|  |  |
|--|--|
| Basic Accuracy (Mass Flow) <sup>2)</sup> : | $\pm 1$ % (option: up to $\pm 0.5$ % of flow rate) |
| Repeatability (Mass Flow):                 | $\pm 0.25$ % of flow rate                          |

## DENSITY

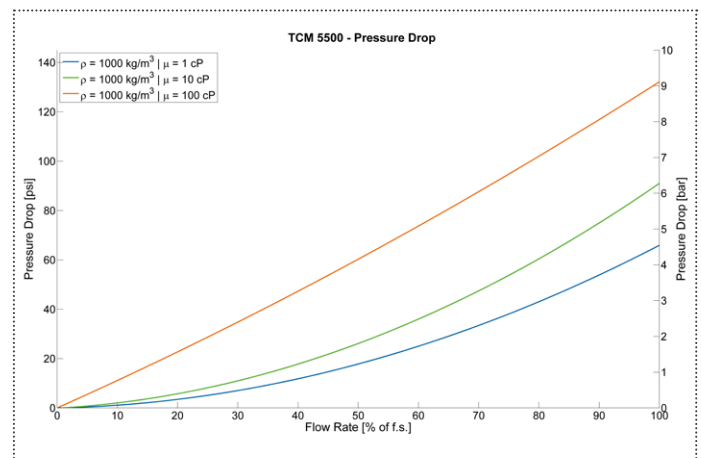
|                                  |  |
|----------------------------------|--|
| Density Range:                   | up to 2,500 kg/m <sup>3</sup> [2.5 g/cm <sup>3</sup> ]         |
| Density Accuracy <sup>2)</sup> : | $\pm 1.0$ kg/m <sup>3</sup> [ $\pm 0.001$ g/cm <sup>3</sup> ]  |
| Density Repeatability:           | $\pm 0.5$ kg/m <sup>3</sup> [ $\pm 0.0005$ g/cm <sup>3</sup> ] |

## TEMPERATURE

|                            |   |
|----------------------------|---|
| Process Temperature Range: | -40 °C ... +100 °C [-40 °F ... +212 °F]<br>Option:<br>-60 °C ... +200 °C [-76 °F ... +392 °F] |
| Temperature Accuracy:      | $\pm 1$ °C $\pm 0.5$ % of reading<br>[ $\pm 1.8$ °F $\pm 0.5$ % of reading]                   |
| Temperature Repeatability: | $\pm 0.2$ °C [ $\pm 0.36$ °F]   |

## MATERIALS (WETTED PARTS)

|                |                    |
|----------------|--------------------|
| Tubes:         | 1.4404 [AISI 316L] |
| Case:          | 1.4404 [AISI 316L] |
| Flow Splitter: | 1.4404 [AISI 316L] |
| Brazing Alloy: | BNi-2              |

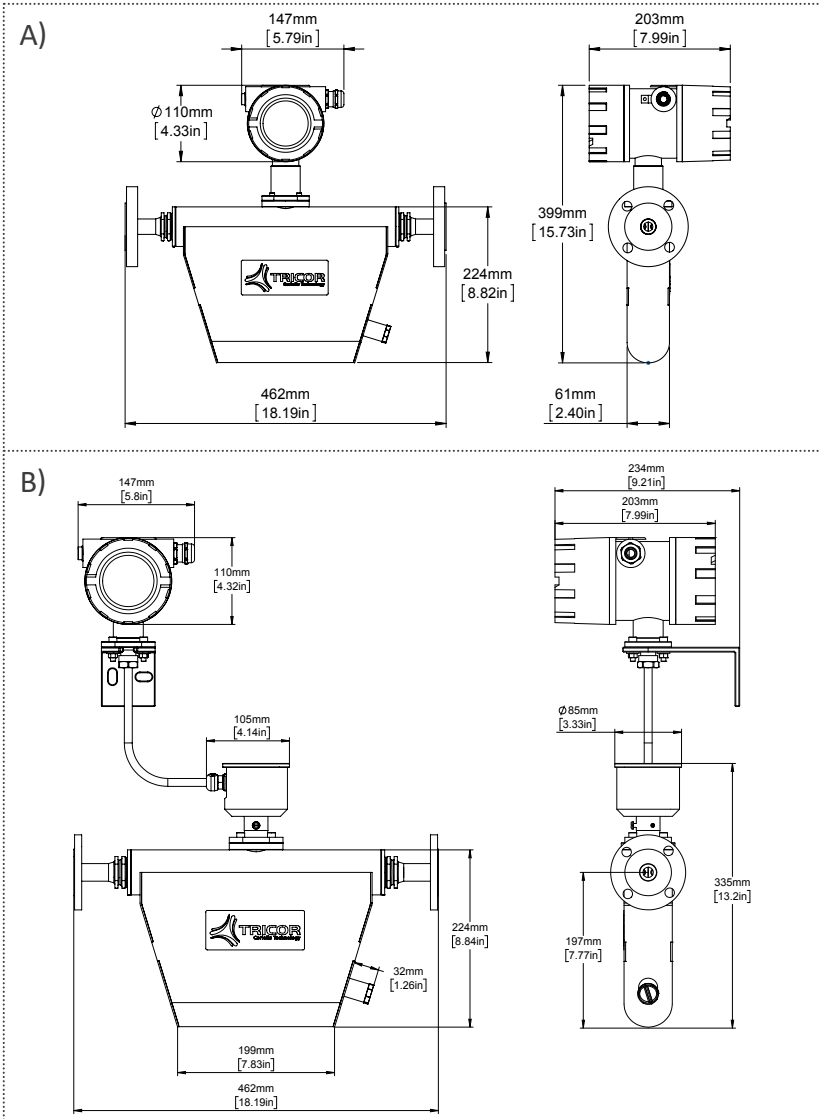


<sup>1)</sup> Stated flow accuracy combines the effects of repeatability, linearity and hysteresis.

<sup>2)</sup> The specifications refer to standard conditions (for further information see TCM CLASSIC series manual).



# CLASSIC Series | TCM 5500 Coriolis Mass Flow Meter



## METER DIMENSIONS<sup>3)</sup> AND WEIGHTS

### A) Compact Version

Weight: 8.5 kg [18.7 lb]  
With meter mount in aluminum diecast housing

### B) Remote Version

Weight: 9.8 kg [21.6 lb]  
With junction box and remote field mount

### Standard Process Connection

DN15 PN40 [½" ANSI CL 300] (others on request)

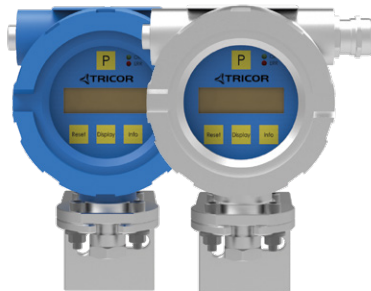
## APPROVALS & CERTIFICATIONS

|                                     |  |
|-------------------------------------|--|
| ATEX Zone 1<br>IECEX                | <b>Compact version:</b><br>II 2G Ex db ia IIC T4 Gb<br><b>Remote version<sup>6)</sup>:</b><br>Sensor: II 1G Ex ia IIC T4...T2 Ga<br>Transm.: II 2(1)G Ex db [ia Ga] IIC T4 Gb  |
| Atex Zone 2<br>cCSAus <sup>5)</sup> | <b>All versions:</b> II 3G Ex nA IIC T4<br><b>Compact version:</b><br>Cl. 1, Div. 1, Group A-D: T4 (US, Can)<br>Ex db ia IIC T4 Gb (Can)<br><b>Remote version<sup>6)</sup>:</b><br>Sensor: Cl. 1, Div. 1, Group A-D:<br>T4...T2 (US, Can)<br>Ex ia IIC T4...T2 Ga (Can)<br>Transm.: Cl. 1, Div. 1, Group A-D:<br>T4 (US, Can)<br>Ex db [ia Ga] IIC T4 Gb (Can) |
| EAC (TR-CU)                         | <b>Compact version:</b> 1Ex d ia IIC T4 Gb X<br><b>Remote version<sup>6)</sup>:</b><br>Sensor: 0Ex ia IIC T4...T2 Ga X<br>Transm.: 1Ex d [ia Ga] IIC T4 Gb X   |
| KGS (Korean)                        | <b>Compact version:</b> Ex d [ia] IIC T4<br><b>Remote version<sup>6)</sup>:</b><br>Sensor: Ex ia IIC T4<br>Transm.: Ex d [ia] IIC T4   |

## PANEL MOUNT<sup>6)</sup>



## REMOTE MOUNT<sup>7)</sup>



## ELECTRONICS

Power Supply: 24 V DC or 100 ... 240 V AC (version dependent)  
Outputs: Analog, Frequency, Pulse, Status  
Interfaces: RS485 RTU (Modbus), HART®  
Cable Gland: M20 | ½" NPT

<sup>3)</sup> Drawing of the Meter Dimensions reflects one standard connection, other connections on request (Installation length can vary depending on selected connection).

<sup>4)</sup> For cCSAus the electronic is only available in aluminum housing.

<sup>5)</sup> Only wall mounting, not panel mounting.

<sup>6)</sup> Weight: 0.4 kg [0.88 lb].

<sup>7)</sup> Weight with aluminum diecast housing: 3.8 kg [8.4 lb] with 3 m cable, Weight with 1.4404 [AISI 316L] housing: 6.15 kg [13.56 lb].

www.tricorflow.com



**NORTH & SOUTH AMERICA**  
AW-Lake Company  
2440 W. Corporate Preserve Dr. #600  
Oak Creek WI 53154 | USA  
+1 414 574 4300

**ASIA PACIFIC & MIDDLE EAST**  
KEM Küppers Elektromechanik GmbH  
Liebigstraße 5  
85757 Karlsfeld | Germany  
+49 8131 59391-0

**CHINA**  
KEM flow technology (Beijing) Co., Ltd.  
Rm. 906, Block C, Ruiipu Office Bldg, No. 15  
HongJunYingNan Road  
Chaoyang District, Beijing 100012 | China  
+86 10 84929567

**EUROPE (ROW)**  
KEM Küppers Elektromechanik GmbH  
Liebigstraße 5  
85757 Karlsfeld | Germany  
+49 8131 59391-100