



NOMINAL FLOW RATE

@ 850 kg/m ³ : (Pressure Drop max. 2 bar)	180 kg/h @ 1 cSt [6.6 lb/min @ 1 cSt] 150 kg/h @ 10 cSt [5.5 lb/min @ 10 cSt] 65 kg/h @ 30 cSt [2.4 lb/min @ 30 cSt]
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PRESSURE RATING

TCMH 0450-HC-SPOS:	1,050 bar [15,200 psi]
TCMH 0450-HC-SROS:	690 bar [10,000 psi]
TCMH 0450-HC-SSOS:	414 bar [6,000 psi]

ACCURACY

Flow:	±0.2 % of flow rate
Mass Repeatability:	±0.1 % of flow rate
Zero Stability ¹⁾ :	0.34 kg/h [0.16 kg/h] 0.012 lb/min [0.005 lb/min]
Temperature:	±1 °C ±0.5 % of flow rate [±1,8 °F ±0.5 % of flow rate]

OPERATING CONDITIONS - PROCESS²⁾

Process Temperature Range:	-40 °C ... +100 °C [-40 °F ... +212 °F]
Medium:	Liquid
Pressure Effect on Sensitivity:	0.0002 % / bar [0.000014 % / psi]

OPERATION CONDITIONS - ENVIRONMENT

Ambient Temperature:	-40 °C ... +70 °C [-40 °F ... +158 °F]
Relative Humidity:	max. 95 %

MATERIALS (WETTED PARTS)

NACE MR0175/MR0103

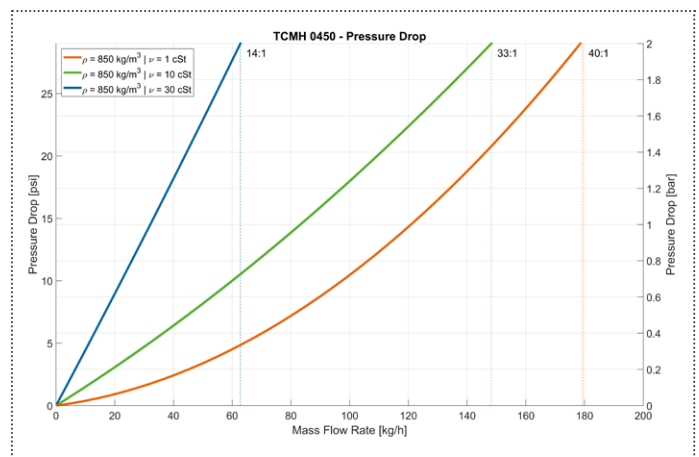
Tubes:	1.4404 [AISI 316L]
Case:	1.4404 [AISI 316L]
Flow Splitter:	1.4404 [AISI 316L]

BURST PROTECTION

Rupture Disc:	G½"
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CONNECTIVITY

Flow Meter:	¾" Autoclave (MP)
Signal Cable Connection:	Push-Pull connector
For triple Ex approval (Ex3) ³⁾	



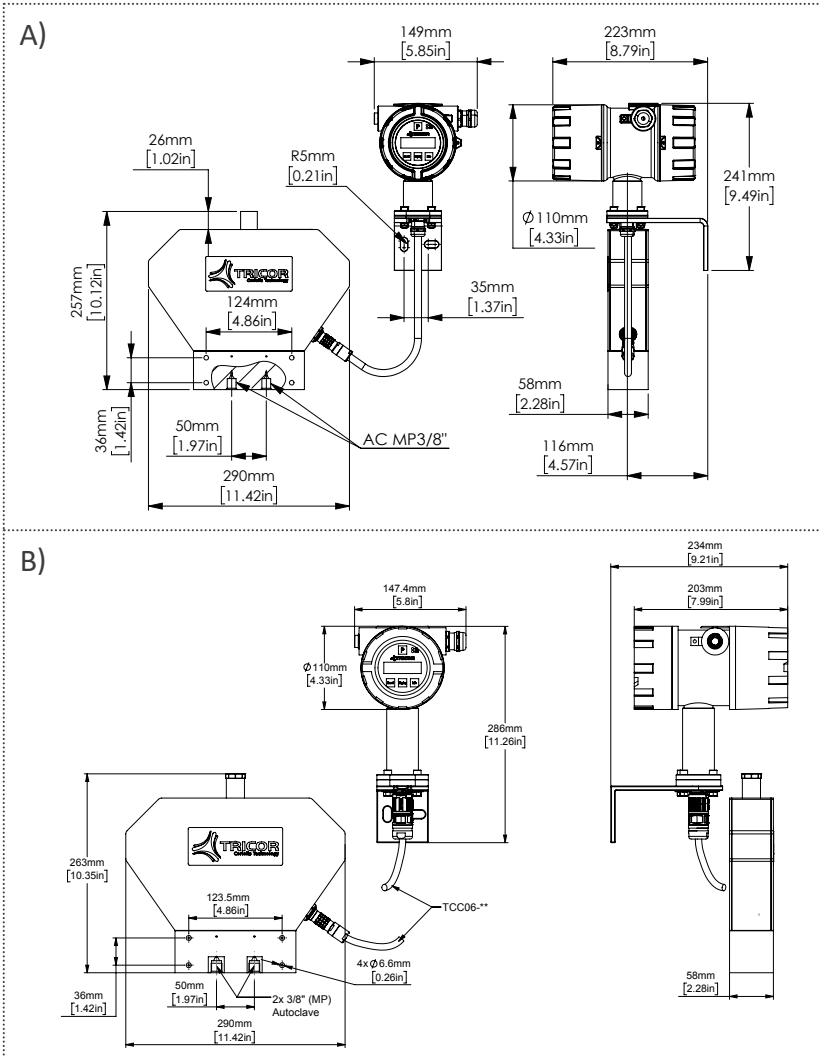
¹⁾ Customer information required for density and viscosity at operation temperature for Reynolds number compensation.

²⁾ Customer specific pressure compensation curves on request.

³⁾ With connector M23 (TCE) and with connector Lemo (TCM), x m cable length (TCC-06-xx).



HIGH PRESSURE | TCMH 0450 Coriolis Mass Flow Meter – Liquids



METER DIMENSIONS AND WEIGHTS

A) Ex/Ex1

Weight: 7.5 kg [16.5 lb]

B) Ex3

Weight: 7.5 kg [16.5 lb]

APPROVALS & CERTIFICATIONS

ATEX Zone 1	Sensor: II 1G Ex ia IIC T4...T2 Ga
IECEX	Transm.: II 2(1)G Ex db [ia Ga] IIC T4 Gb
Atex Zone 2	II 3G Ex nA IIC T4
cCSAus	Sensor: Cl. 1, Div. 1, Group A-D: T4...T2 (US, Can) Ex ia IIC T4...T2 Ga (Can) Transm.: Cl. 1, Div. 1, Group A-D: T4 (US, Can) Ex db [ia Ga] IIC T4 Gb (Can)
EAC (TR-CU)	Sensor: 0Ex ia IIC T4...T2 Ga X Transm.: 1Ex d [ia Ga] IIC T4 Gb X
KGS (Korea)	Sensor: Ex ia IIC T4 Transm.: Ex d [ia] IIC T4

ELECTRONICS

Power Supply:	24 V DC or 100 ... 240 V AC (version dependent)
Housing Material:	Aluminum 1.4404 [AISI 316L]
Display:	LCD Display

OUTPUT SIGNALS

Analogue:	2 x 4 ... 20 mA passive two-wire, galvanically free accuracy $\pm 0.05\%$ of f.s. temperature drift 0.05 % per 10 K load $< 620 \Omega$ (with 24 V supply) output value programmable
Frequency/Pulse:	5 - 10,000 Hz active, push pull for flowrate
Status:	push pull programmable

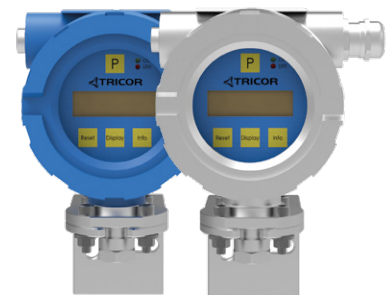
INPUT SIGNALS

Control Input:	0/24 V DC
Analogue (optional):	4 ... 20 mA active for passive 2-wire-pressure sensor supply > 20 V (sensor current 20 mA)
Interfaces:	RS485 RTU (Modbus), optional HART®

PROTECTION CLASS

IP65 (NEMA 4)
IP66 (NEMA 4X) optional

REMOTE MOUNT⁵⁾



⁴⁾ For cCSAus the electronic is only available in aluminum housing.
⁵⁾ 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].

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