### NOMINAL FLOW RATE

| @ 850 kg/m³: | 180 kg/h @ 1 cSt |
| (Pressure Drop max. 2 bar) | [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] |

### 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:**
  - 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 - PROCESS

- **Process Temperature Range:** -40 °C ... +100 °C [-40 °F ... +212 °F]
- **Medium:** Liquid
- **Pressure Effect on Sensitivity:** 0.0002 % / bar [0.00014 % / 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:** G1/2”

### CONNECTIVITY

- **Flow Meter:** 3/4” Autoclave (MP)
- **Signal Cable Connection:** Push-Pull connector
- **For triple Ex approval (Ex3)**

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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 M33 (TCE) and with connector Lemo (TCM), x m cable length (TCC-06-xx).
**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]

**EX-CERTIFICATIONS**

**ATEX**
Zone 1:
Group IIC, T2...T4

Zone 2:
II 3G Ex nA IIC T2...T4 Gc

**IECEx**
Zone 1:
Group IIC, T2...T4

**cCSAus**
Class 1, Division 1:
Group A, B, C, D, T2…T4

**ATEX + IECEx + cCSAus triple approval**
Zone 1:
Group IIC, T2...T4
Class 1, Division 1:
Group A, B, C, D, T2...T4

**ELECTRONICS**

Power Supply: 24 V DC ±20 %
or 90 ... 264 V AC

Housing Material: Aluminum
1.4404 [AISI 316L]

Display:
LCD Display

**REMOTE MOUNT**

**OUTPUT SIGNALS**

Analog: 2 x 4 ... 20 mA passive two-wire, galvanically free accuracy ±0.05 % of f.s.
temperature drift 0.05 % per 10 K
load <620 Ω (with 24 V supply)
output value programmable

Frequency/Pulse:
5 - 10,000 Hz active, push pull for flowrate
push pull programmable

**INPUT SIGNALS**

Control Input: 0/24 V DC
Analog (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

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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].