



TM04A/TM04D, 1/2"

Anodized Aluminum / Stainless Steel

- Only two moving parts
- No metal to metal contact in chamber or bearings
- Electronic = Gland-less meter
- Patented 'Wave Form' oval gear design
- Low differential pressure for maximum flow

Specifications

- **Nominal Capacity on 1 cSt viscosity with 10:1 turndown:**
 10 GPM = 38 lpm
 600 GPH = 2250 lph
- **Pressure Rating at 100°F (38°C), with 3:1 Safety Factor:**
 TM04A : 1500 PSI = 103 BAR
 TM04D : 1500 PSI = 103 BAR
- **Temperature Rating:**
Design : -40°F/+300°F = -40°C to +150°C
*Temperature ratings under UL & ATEX listings may differ.
 See register specifications for temperature range rating for electronics.*
- **Connections:**
 1/2" ports in meter case, FNPT standard, FBSP optional.
- **Materials:**
TM04A Case : Hardcoat anodized aluminum
 Seal : Viton™ standard, Teflon™ optional
TM04D Case : 316 Stainless Steel
 Seal : Teflon™ standard.
 Posts : 316SS Hard Chrome coated
 Gears Std. : PPS (polyphenylene sulfide resin)
- **Pulsers:** Hall Effect or
 Reed Switch (for battery powered registers)
- **Nominal Pulse Resolution:**

| | On 1 cSt viscosity | On 100 cSt viscosity |
|--------------|--------------------|----------------------|
| Hall Effect: | ±805 PPG (212 ppl) | ±777 PPG (205 ppl) |
| Reed Switch: | ±201 PPG (53 ppl) | ±194 PPG (51 ppl) |



Flow Sensor
without display



With CC56 register in NEMA 4X
(= water & dust proof) enclosure



With CC56 register in NEMA 7/4X
(= explosion & water proof) enclosure

Meter Performance

Linearity* Over 10:1 turn-down from nominal capacity: ±0.5%
 with electronic enhancements: ±0.25%

* This flow meter will operate with up to 30:1 turn-down.
 However, extended operating range, will result in
 greater flow meter error at the low end.

Repeatability 0.25% under constant conditions

Approvals

- **Flow Meter** CE mark
- **Pulsers** UL, cUL & ATEX listed;
 Intrinsically Safe when powered through a UL or
 ATEX listed barrier with appropriate rating.

Optional Registration, Signals & Accessories

- **Registers, Totalizers & Batch Controllers**
CC56 Battery powered register, NEMA 4X or NEMA 7/4X
ELNC AC or DC, NEMA 4X
PC58 DC, Totalizer/Rate Meter
PDB180 AC or DC batch controller, opt. 4-20 mA signal
EMR³ DC, register/preset, serial port for PC interface,
 optional with temperature compensation
- **Signal Conditioners:**
EL6630 PIA-300, Pulse Isolator, Amplifier & Splitter,
 with sinking & sourcing output signal.
EL0410-7 SCL, Scaler, Calibrator and/or Linearizer for EMR³
 please consult for selection & pricing.

Tuthill Transfer Systems Phone: 800-634-2695
 8825 Aviation Drive, Fax: 800-866-4861
 Fort Wayne, IN 46809 USA E-mail: fillrite@tuthill.com



ISO 9001:2000 Certified

International offices:
 Europe, Middle East & Africa - UK Office
 Mexico (North)
 Mexico (South)/Caribbean/Centr. America
 South America
 Australia/Pacific Rim
 China

| Phone | Fax |
|--------------------|--------------------|
| +44 (115) 932-5226 | +44 (115) 932-2526 |
| +52 (81) 8303-0025 | +52 (81) 8303-6334 |
| +52 (55) 5370-2626 | +52 (55) 5370-0602 |
| +54 (11) 4116-2830 | +54 (11) 4116-2835 |
| +61 (3) 9726-2900 | +61 (3) 9725-2663 |
| +86 (21) 6917-1999 | +86 (21) 6917-2162 |

