

TS30C, 3"

Stainless Steel, Electronic

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

Specifications

- **Nominal Capacity with standard LV rotors**


To 1500 SSU visc. : 200 GPM	} NTEP 5:1 turn-down OIML 10:1 turn-down Industrial to 30:1 turn-down
To 300 cP viscosity : 760 lpm	
To 300 cP viscosity : 45 m³/h	
- **Pressure Rating** : 275 PSI at 100°F = 19 BAR at 40°C
- **Temperature Rating** [See note under Signal Conditioners](#)
 - Design W Assy.** : -40°F to +257°F = -40°C to +125°C
 - ATEX listing** : -4°F to +140°F = -20°C to +60°C
 - Design F Assy** : Same, *subject to register temperature limits!*
- **Viscosity**
 - With LV rotors : 100% capacity to 1,500 SSU (300 cP).
 - With HV rotors : 100% capacity to 5,000 SSU (1000 cP),
reduced capacity to 1,500,000 SSU (350,000 cP).
- **3" Connections** 150# RF ANSI flanges, integral to flow meter
- **Materials** **100% Non-Ferrous**
 - Case : .CF8M (cast equivalent to 316SS).
 - Gears : PPS with carbon bearings, Teflon™ bearings opt.
 - Posts : HC316SS
 - Seals : Teflon™ standard.
 - Flanges : CF8M (cast equivalent to 316SS).
- **Pulser** : **Hall Effect Quadrature**,
5V reg or 6-12V non-reg; pls consult for 24V DC.
- **K Factor** : Nominal 275 PPG (72.6 ppl) on 1 cP viscosity,
Opt. with SCL : EL0300-3-13F = 100 PPG (26.5 ppl)
EL0300-3-18F = 10 PPL (37.85 PPG)

TS30CW04CBTU for remote electronic register

Depending upon register or controller model, the pulser compartment in flow sensor front cover holds the sensor (pulser), and either:

- TBB = Terminal Block Board
- SCL = Scaler/Calibrator/Linearizer

Meter Performance

- **Linearity**
 - Over 5:1 turn-down from max. capacity: ±0.175%
 - Over 10:1 turn-down from max. capacity: ±0.25%
 - Over 30:1 turn-down from max. capacity: ±0.5%
- **Repeatability** 0.05% or better under constant conditions
- **Approvals** Custody Transfer approvals are liquid specific.
W&M approval in the US, Canada* & EU*.
EU MID W & M approved if fitted with sensor and TBB
* Canada & EU: W&M approval of pulser is pending.
- **Flow Meter** CE mark.
- **Pulser & SCL** **Intrinsically Safe**, UL & cUL listed,
SCL also EEx ia ATEX
when powered through [approved barrier](#).
- **Pulser encl.**  II 2G Ex d IIA T4, -20°C <Ta<+60°C,
ATEX, IEC Ex & IP65

Registration, Signals & Accessories

- **Electronic registers:**
Tuthill electronic flow meters will support most common electronic registers & controllers. Available through Tuthill:
 - **ELNC** W&M register for stationary service
 - **EMR³** W&M register for stationary or truck service
 - **PC58** Totalizer/Rate meter (non-W&M)
 - **Signal Conditioners:**
 - **EL0300** SCL Scaler, Calibrator and/or Linearizer.
 - **EL6630** PIA-300 amplifier for remote register (to 2,500' = 750 m)
 - **PC58** with optional 4-20 mA signal or multi-point calibration.
- NOTE:** *If EL0300 is used in place of EL0304, max liquid temperature = 185°F (85°C). For higher liquid temperatures, these components must be mounted remote from the flow meter in a separate enclosure.*
- **Accessories**
Inlet strainer for flow meter protection
Air eliminator mounted on strainer

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



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International offices:

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

Phone
+32 (10) 22 83 34
+44 (115) 932-5226
+52 (81) 8303-0025
+52 (55) 5370-2626
+54 (11) 4116-2830
+61 (3) 9726-2900
+86 (21) 6917-1999

Fax
+32 (10) 22 83 38
+44 (115) 932-2526
+52 (81) 8303-6334
+52 (55) 5370-0602
+54 (11) 4116-2835
+61 (3) 9725-2663
+86 (21) 6917-2162



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