

TURBINE FLOW METER

MODEL CODE : ETFM

DESCRIPTION

Fluid entering the meter first passes through an inlet flow straightener that reduces its turbulent flow pattern. Fluid then passes through the turbine, causing the turbine to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field generated by the meter's magnetic pickup, an AC voltage pulse is generated. These pulses provide an output frequency that is proportional to volumetric flow.

SPECIAL FEATURES

- High accuracy, $\pm 0.2\%$, $\pm 0.5\%$, $\pm 1.0\%$
- Wide signal detection (3~4 kHz)
- Small, compact and lightweight, easy install and maintenance, wide range

SPECIFICATIONS

| | | |
|-----------------------|---|--|
| Output | : | Pulse/4-20mA |
| Accuracy | : | ± 1.0 of Rate/ $\pm 0.5\%$ of Rate |
| Operating Temperature | : | -20...+60°C |
| Fluid Temperature | : | -20...+150°C |
| Housing Material | : | SS304/SS316 |
| Rotor Material | : | 2Cr13/CD4MCu |
| Bearing Material | : | Tungsten Carbide |



| Diameter (mm) | Standard Range (m ³ /h) | Extended Range (m ³ /h) |
|------------------|---------------------------------------|---------------------------------------|
| 4 | 0.04 ~ 0.25 | 0.04 ~ 0.4 |
| 6 | 0.1 ~ 0.6 | 0.06 ~ 0.6 |
| 10 | 0.2 ~ 1.2 | 0.15 ~ 1.5 |
| 15 | 0.6 ~ 6 | 0.4 ~ 8 |
| 20 | 0.8 ~ 8 | 0.45 ~ 9 |
| 25 | 1 ~ 10 | 0.5 ~ 10 |
| 32 | 1.5 ~ 15 | 0.8 ~ 15 |
| 40 | 2 ~ 20 | 1 ~ 20 |
| 50 | 4 ~ 40 | 2 ~ 40 |
| 65 | 7 ~ 70 | 4 ~ 70 |
| 80 | 10 ~ 100 | 5 ~ 100 |
| 100 | 20 ~ 200 | 10 ~ 200 |
| 125 | 25 ~ 250 | 13 ~ 250 |
| 150 | 30 ~ 300 | 15 ~ 300 |
| 200 | 80 ~ 800 | 40 ~ 800 |

TURBINE FLOW METER



MODEL CODE : ELDG

HOW TO ORDER

BASIC MODEL

CODE

DIAMETER - XXXX : DN4-DN200

CONVERTER TYPE

| | | | |
|----|--|----|---|
| N1 | 24V DC; Pulse output; No display | E4 | 24V DC; 0-20mA output; EX; Digital display |
| N2 | 24V DC; Pulse output; No display; Ex | E5 | 24V DC; 3-wire 4-20mA / Pulse output; EX; Digital display |
| A | 24V DC; 4-20 mA output; No display; Ex | M | 220Vac; 4-20mA output; EX; Digital display |
| E | Battery power supply; No output; Ex; Digital Display | FE | FE: Fluidwell E series converter |
| E2 | 24V DC; 2-wire 4-20mA output; Ex; Digital Display | FF | FF: Fluidwell F series converter |
| E3 | 24V DC; Pulse output; Ex; Display | | |

Notice

- 1) Modbus RS485 is optional for E2, E3, E4, E5 and M type
- 2) Dual Power (24VDC+Battery) is optional for E2, E3, E4, E5, M

ACCURACY

| | | | | | |
|----|---------------|----|---------------|----|---------------|
| 10 | ±1.0% of Rate | 05 | ±0.5% of Rate | 02 | ±0.2% of Rate |
|----|---------------|----|---------------|----|---------------|

FLOW RANGE

| | | | |
|---|----------------|---|----------------|
| S | Standard Range | E | Extended Range |
|---|----------------|---|----------------|

BODY MATERIAL

| | | | | | |
|----|-------|----|-------|----|---------------------|
| S4 | SS304 | S6 | SS316 | PL | Plastic (DN15-DN50) |
|----|-------|----|-------|----|---------------------|

ROTOR MATERIAL

| | | | |
|----|-------|----|--------|
| Cr | 2Cr13 | CD | CD4MCu |
|----|-------|----|--------|

EXPLOSION PROOF

| | | | |
|----|------------|----|--------------------|
| BT | EXD II BT6 | NA | No Explosion Proof |
|----|------------|----|--------------------|

CONNECTION

| | | | |
|-----|--|-----|--|
| THM | Male thread; Available from DN4 ... DN50 | DXX | D16: DIN PN16 Flange; D25: DIN PN25... |
| THF | Female thread; Available from DN4 ... DN50 | AXX | A15: ANSI 150# Flange; A30: ANSI 300#... |
| WAF | Wafer connection | JXX | J10: JIS 10K Flange; J20: JIS 20K... |

TEMPERATURE

| | | | | | |
|----|--------------|----|---------------|----|---------------|
| T1 | -20...+80 °C | T2 | -20...+120 °C | T3 | -20...+150 °C |
|----|--------------|----|---------------|----|---------------|

ANSI FLANGE - A15: ANSI 150#; A30: ANSI 300#; A60: ANSI 600#

DIN FLANGE - D16 DIN PN16, D25 : DIN PN25, D40 : DIN PN40

JIS FLANGE - J10 : JIS 10K, J20 : JIS 20K, J40 : JIS 40K

Example

ETFM

XX

XX

X

XX

XX

XX

XXX

XX

Ordering Example: ETFM - XX - XX - X - XX - XX - XX - XXX - XX

FOR OTHER OPTIONAL ITEMS, PLEASE CONTACT FACTORY FOR DELIVERY AND MINIMUM QUANTITY OF ORDER.

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing.

Modifications may take place and materials specified may be replaced by others without prior notice.