TURBINE FLOWMETERS FOR FUEL

With Local Digital Display



FTB380 Series



- Indicates Both Rate and Total
- ✓ Up to 1.5% Reading Accuracy
- 6-Digit Display
- ✓ Signal Output Capabilities
- ✓ Reads GPM or LPM (Field Selectable)
- Battery Operated (Included)



FTB383

FTB380 Series turbine meters with microprocessor-based electronics offers a durable, compact, high-precision fuel measurement device, with total and rate indication. Information is clearly displayed on a large 6-digit liquid crystal display with only 2-point floating decimal for totals from 0.01 to 999,999. All operations are easily performed with only 2 buttons.

The basic unit and display are powered by 2 lithium batteries, providing up to 4000 hours of use. Automatic "on" and "off" extend battery life. Manual "on" allows view of the display on demand. Cumulative total, batch total, and rate of flow are standard. A single-point field calibration curve can be stored in memory.

The turbine meter can also be ordered without display electronics. A special pulse output model (FLSC790-P-ND) must be ordered to obtain an open collector current sinking output operated on 9 to 35 Vdc. The output is a square wave pulse with a 3-wire connection.

Accessories for Turbine Meters with the Display

The FTB790-RK-FM is an FM approved remote kit. It allows the display electronics to be mounted in a hazardous area up to 30 m (100') from the turbine meter and for fluid temperatures of -40 to 121°C (-40 to 250°F).

The FLSC790-BATT is the replacement battery for the display electronics. Batteries provide 4000 hours of use.

The FLSC790-90D is a 90° mounting adaptor designed to allow displays to be mounted 90° from the standard position.

SPECIFICATIONS

Accuracy:

FTB381: ±5% rdg

FTB383, FTB385: ±1.5% rdg

Repeatability: FTB381: ±1%

FTB383, FTB385: ±0.2%

Pressure Rating: 300 psig (21 bar) With Remote Electronics Kit: -40 to 121°C (-40 to 250°F)

Temperature Range (Without Remote Electronics): -10 to 60°C (14 to 140°F) Viscosity: Rated accuracy for fuels or fluids with viscosity of (1 cSt); meters with display can be used for fluids up to 100 cSt with field calibration

Wetted Components:

Housing: Aluminum
Journal Bearings: Ceramic

(96% alumina)

Shaft: Tungsten carbide Rotor and Supports: Nylon Retaining Rings: 316 SS

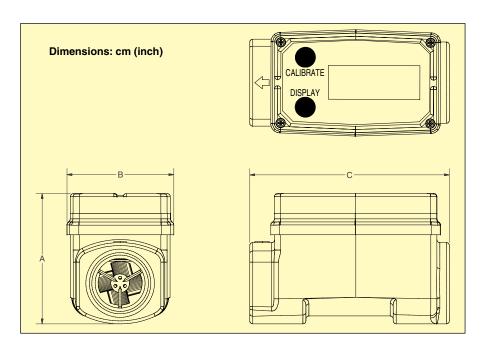
Display: 6-digit LCD indicates flow rate,

batch and cumulative total **Battery Life:** 4000 hours

FM Approvals: Turbine meters with display and no accessories or with the FLSC790-RK-FM are FM approved for Class 1, Div. 1 hazardous environments

Note: Other outputs and accessories are not designed for hazardous environments.





Dimensions

Models	FTB381, FTB383	FTB385
Size	1"	2"
A = Height*	6.3 cm (2.5")	11.4 cm (4.25")
B = Width	5.1 cm (2.0")	7.6 cm (3.0")
C = Length	10.1 cm (4.0")	15.2 cm (6.0")

^{*} Height includes 1.8 cm (0.7") for the computer electronics.

To Order						
Model No.	Description	Range GPM (LPM)	FNPT Size	Typical K-Factor Pul/Gal	Recommended Strainer Size	Shipping Weight kg (lb)
FTB381	Aluminum turbine low flow with display	0.3 to 3 (1 to 11)	1*	2200	55 mesh	0.61 (1.35)
FTB383	Aluminum turbine mid-range with display	3 to 50 (11 to 190)	1*	730	28 mesh	0.61 (1.35)
FTB385	Aluminum turbine high flow with display	30 to 300 (114 to 1135)	2	72	28 mesh	1.36 (3.0)
FTB381-ND	Aluminum turbine low flow, no display	0.3 to 3 (1 to 11)	1*	2200	55 mesh	0.61 (1.35)
FTB383-ND	Aluminum turbine mid-range, no display	3 to 50 (11 to 190)	1*	730	28 mesh	0.61 (1.35)
FTB385-ND	Aluminum turbine high flow, no display	30 to 300 (114 to 1135)	2	72	28 mesh	1.36 (3.0)

^{*} For units with BSPP threads add "-BSPP" to model number, no additional cost.

Field Installable Options and Accessories

Model No.	Description
FLSC790-P-ND	Pulse output for models without displays ("-ND" suffix); open collector output
FTB790-RK-FM	FM approved remote display kit module
FLSC790-BATT	Two 3V replacement batteries
FLSC790-90D	90° display mounting adaptor

Comes complete with two 3V lithium batteries installed, and operator's manual.

Ordering Examples: FTB381, 1 FNPT aluminum turbine for 0.3 to 3 GPM.
FTB383-ND, 1 FNPT aluminum turbine for 3 to 50 GPM and FTB790-RK-FM, FM approved remote display kit.