# Handheld Ultrasonic Flow Meter Floko FM-200H

#### **7 GENERAL**

*FM-200H* series is a protable transit-time ultrasonic flowmeter with clamp-on transducers for non-invasive liquid measurement. Our microprocessor based, user friendly, field programmable flow measurement technique allows no interruption of the process flow and has low installation costs.

#### **7 FEATURES**

- □ 4 line LCD display with flowrete, totalizer & signal condition.
- □ The flowmeter is designed for high accuracy +/-1.0%.
- □ Small sized (210 \* 90 \* 30mm) and light weight (500 g)
- □ Wide range, Velocities (0.01 ~ +/- 32 m/s).
- □ Ni-MH Battery life for up to 12 hours continuous opeartion.
- Transducers for pipe sizes of 15 to 6000 mm.
- □ High accuracy of +/-0.5% of reading (or +/-0.2% of reading)
- Transducers include magnet devise, which can install on Metal pipe without mounting belt.
- Data logger which records flowrate, date, total flow, signal condition..Etc.
- Response time less than 1 second

#### **7 SPECIFICATION**

Measuring Principle	: Transit time Ultrasonics
<b>o</b> .	: TS: 15 mm ~ 100 mm (1/2" ~ 4")
	: TM: 50 mm ~ 700 mm (2" ~ 28")
	: TL: 300 mm ~ 6000 mm (12" ~ 240")
	: HTS: 15 mm ~ 100 mm (1/2" ~ 4")
	: HTM: 50 mm ~ 1000 mm (2" ~ 40")
Pipe Material	: Cast Iron, Stainless Steel, Ductle Iron
	Coppor, PVC, Aluminum, Asbestos
	Fiberglass etc.
Liner Material	: Tar Epoxy, Rubber, Mortar, Polypropylene,
	Polystryal, Ploystryene, Polyester, Ebonite,
	Polyethylene, Teflon etc.
Display	: 4 Line LCD with illumination.
Flowrate	: 5 digit with decimal point
Totalizer	: 8 digit, Forward, Reverse & Net values.
Engineer Unit	: M3, Liter, US Gallon, Imperial Gallon,
	Million Gallon, Cubic Feet, US Barrels,
	Imperial Barrels, Oil Barrel.
Time Unit	: Second, Minute, Hour, Day.
Other	: Velocity, Date, Time, Signal condition.
<ul> <li>Accuracy</li> </ul>	: +/- 1% ~ +/- 2% of reading(0.5 ~ 30 m/s)
	: +/- 0.5% of reading (online calibration)
Repeatability	: +/-0.2% of reading



Keypad	: 18 Key with tactile action
Response Time	: Less than 1 second
Flow velocity	: 0.01 ~ +/- 32 m/s
Resolution	: 0.0001 m/s
Ambient Temperature	: -20 ~ +50 °C
Ambient Humidity	: 90% RH or Less
Built-in battery	: Ni-MH Battery
Operation Time	: > 12 Hours
Charger	: 90 ~ 260Vac 50/60 Hz, 8-12 Hr charging
Data Storage	: Operation parameters and totalization
	data are stored by EEPROM for more
	than 10 years
Operation Time	: > 10 Hours
Charger	: 90 ~ 260Vac 50/60 Hz, 8-12 Hour charging
Data Logger	: 64 data include flowrate, totalizer,
	time, date.
Alarm	: High/Low with buzzer
Power consumption	: Less than 2W
<ul> <li>Dimension</li> </ul>	:210 * 90 * 30 mm
<ul> <li>Weight</li> </ul>	: 0.50 Kg
Enclosure	
Converter	· · ID65

Converter : IP65

Sensor : IP68 (Submersible)

# **7 TRANSDUCER SPECIFICATION**

#### • Standard-Transducers

Fluid Temperature : -30 ~ +90 °C

Model	TS-2 (Small Size)	TM-1 (Medium Size)	TL-1 (Large Size)
Pipe Size	DN15-100mm	DN50-700mm	DN300-6000mm
A*B*C	45mm*23mm*25mm	64mm*32mm*35mm	98mm*45mm*49mm



#### • High Temperature Transducers

Fluid Temperature : -30 ~ +160 °C

Model	HTS-1 (Small Size)	HTM-1 (Medium Size)		
Pipe Size	DN15-100mm	DN50-1000mm		



# **ACCESSORY** (standard package)









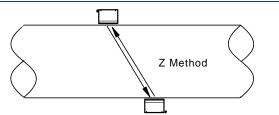
Aluminum Case

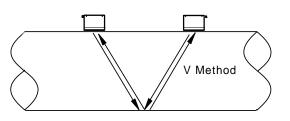
Silicone grease

Mounting Belt

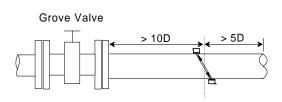
Measuring Tape

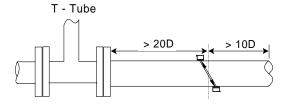
# **7** INSTALLATION

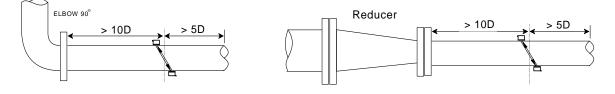




# **7 STRAIGHT RUN PIPING REQUIREMENT**







### **7 COMBINATION FOR ULTRASONIC FLOWMETER**



**7 OTHER ACCESSORY** 



Thickness gauge