



Innovative Mass Gas Flowmeters

Model MFT-B Series



**Digital Mass Flowmeter
Digital comes of age.**

Features

- **A new generation of thermal dispersion flowmeters**

Full digital control. It has eliminated the need for the bridge circuit.

- **Sophisticated and user friendly.**

Simplified communication with USB interface, HART communication feature, Profibus DP communication feature, RS-485 (Modbus) communication feature, Error logging feature (keeps a maximum of 200 error events in 16 different alarm types), Min./max. logging feature (records maximum and minimum readings in flowrate, fluid temperature, transmitter temperature), Trend memory feature (stores a maximum of 56 hours of flowrate / temperature trends).

- **Long life and high reliability. Plus increased maintainability.**


- **Maintains interchangeability with previously offered models.**

- **Retractor unit (option)**

Attachment / removal of insertion massflow meter is possible while the gas is flowing. Optimum for the line where the attachment of taint to sensor is concern and the line that cannot be stopped after starting operation.



Our product line up

Installation in existing piping assembly; for relatively large sized	▶ Retractable insertion type Model 454FTB	
Application for small sized (100mm and less); when accuracy is the prime requirement	▶ In-line type (standard) Model 504FTB	
Application for relatively small sized; where long straight pipe is not practical	▶ In-line type (flow straightener built-in) Model 543FTB	

General Specifications

Item	Description		
	Retractable insertion type (454FTB)	In-line type (504FTB)	
General and Probe Specifications	Acceptable fluids	Air, nitrogen, oxygen, argon, carbon dioxide, chlorine gas, ethane, ethylene, methane, Digestion gas, ammonia, helium, hydrogen, etc.	
	Installation	Screw type, Flange type	
	Applicable nom. size	65 to 500mm (500mm or larger also acceptable)	
	Sensor support size	3/4"(Standard), 1/2", 1"	
	Operating temperature range	Standard : -40 to +260°C High temperature : -40 to +500°C	
	Max. operating pressure	Less than 1MPa	
	Material	Sensor: Alloy C276 Other parts in contact with gas: SUS316L	
	Accuracy	±2% of FS (Calibration with actual flow acceptable only with air and nitrogen. ±2% of RD if calibrated with actual flow, with integrally mounted or separately mounted type.)	
	Transmitter Specifications	Installation	Integrally mounted or separately mounted type
		Power	24VDC or 85 to 265VAC 50/60Hz
Display		Backlight 2-line, 16-digit LCD Shows instant flowrate (or velocity), total flow, and temperature.	
Output		2 analog outputs (flowrate, temperature), pulse output, and alarm output	
Protection rating		IP66	
Explosionproof rating		Basic explosionproof (Exn): CSA, ATEX, IECEx Flameproof (Exd): TIIS, CSA, ATEX, IECEx	

Maximum Rated Flowrate (retractable insertion type)

(Nm³/h)

Nominal size (mm)	Air, N ₂ , O ₂ , Ar, CO ₂	Methane Digestion gas	Ethylene	Ethane	Helium	Hydrogen
65	1090	1020	912	808	612	364
80	1540	1450	1280	1140	865	515
100	2630	2470	2190	1940	1470	877
125	4060	3820	3380	2990	2270	1350
150	5720	5380	4760	4220	3200	1900
200	9950	9350	8290	7340	5560	3310
250	15300	14400	12700	11300	8580	5110
300	22000	20700	18300	16200	12300	7350
400	36200	34000	30100	26700	20200	12000
500	57500	54100	47900	42400	32100	19100

NOTE: The maximum flowrates shown above are with SGP pipe. The flow range varies with operating conditions, such as fluid kind, pressure, and temperature.

For more complete information about the products, see our Products GS Sheet, GS. No. GBF 109-E. (Also available on our website.)
The specification as of June, 2017 is stated in this catalog. Specifications and design are subject to change without notice.



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