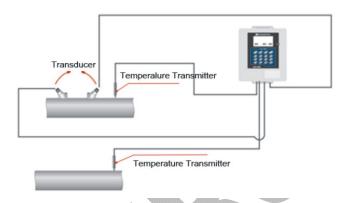
### **Series DMHF Heat Flow Meter**

The DMHF Series adopt the MultiPulse<sup>TM</sup> Technology, Digital Signal Processing Technology and Error Correction Technology, which are the state-of-the-art non-invasive flow measurement technology, with a measuring system of very high accuracy, versatility, low cost of installation and ownership. The meter can calculate automatically caloric content of water under carious temperatures, and can obtain instantaneous caloric value and totalized caloric value.



The Non-invasive clamp-on series and the Insertion series are available.

Users can select fixed types or Portable types.

The pipe range should be DN25-2500 (For Insertion series, the allowed pipe range is DN65-2500).

### Features:

- 1. Non-invasive clamp-on series transducer and Insertion Series transducer are available.
- 2. Internally configured batch controller makes batch control convenient and accurate.
- 3. No moving parts, no pressure drop, no need of maintenance.
- 4. Easy and economical installation, hot-tapped installation.
- 5. Daily, monthly and yearly totalized flow: totalized flow for the last 64 days and months as well as for the last 5 years can be reviewed.
- 6. Optional SD card Data logger output, can memory total Heat Flow, Heat flow rate, etc.

## **Applications:**

- ◆Measuring heat flow
- ◆Sewage and drainage water with small particle quantity.
- ♦Oil, including crude oil, lubricating oil, diesel oil, fuel oil, etc.
- ◆Beverage and food processors
- ♦HVAC hot and cool water, water /glycol solutions.
- ♦ Water and waste treatment
- ◆ Power plants, heat energy boiler feed water.
- ◆Energy consumption supervision and water conservation management
- ◆Metallurgy and miming applications (e.g., acid recovery)
- ◆Marine operation and maintenance
- ◆Pulp and paper industries
- ◆Pipeline leak detection, inspection, tracking and collection
- ◆Energy measurement and balancing



### Parts Identification:

### 1. Transmitters:



Fixed type



Explosion-proof type



portable type

### 2. Transducers:



Clamp-on type



Insertion type



Flanged type

## 3. Temperature Transmitter:



Pt100 (or Pt1000)





# **Specifications**

	Power Supply	Standard: 115/230VAC 50/60Hz ±15%, 5VA max.  Optional: 10 - 28 VDC, 2.5VA max.							
	Velocity	$0 \sim \pm 40$ ft/s (0 ~ $\pm 12$ m/s), bi-directional							
	Display	4 line×16 English letters LCD back lit, can display total flow, flow rate, velocity and meter running status etc.							
	Units	User Configured (English and Metric);							
	Rate	Rate and Velocity Display; (FWD, NET, REV or BATCH) gallons, ft³, barrels, lbs, liters, m³,kg							
Transmitter	Totalized								
	Output	4~20mA, Pulse, Relay, RS232C or RS485 Optional: up to 8 GB Data logger, Hart +(4~20mA), Modbus							
	A = = = =	±1.0% of reading at rates >0.5 m/s)							
	Accuracy	±2.0% of reading at rates <0.5 m/s)							
	Sensitivity	Flow Rate: 0.001ft/s (0.0003m/s)							
	Repeatability	0.2% of reading							
	Security	Keypad lockout, access code enable							
	Liquid Types	Virtually most any liquid containing less than 2% total suspended solids (TSS) or							
	Supported	aeration							
	Suited Liquid	Std. Temp. Transducer: -40°C~121°C							
	Temperature	High Temp. Transducer: -40 °C~250 °C							
	Cable Length	Std: 20 feet (6m); Opt: Maximum: 990 feet (300m)							
		L transducer: DN1000 - 4500							
Transducer		M transducer: DN40 -1000							
	Pipe Size	S transducer: DN15 - 50							
		Insertion transducer: DN65 – 2500							
		Flanged transducer: DN65 – 2500							
	Transducer Size	S: Size: $42 \times 25 \times 25$ ; weight: < 0.2kg							
		M: Size: $60 \times 43 \times 43$ ; weight: < 0.2kg							
	Size	L: Size: $80 \times 53 \times 53$ ; weight: < 0.2kg							

## DYNAMETERS ...

### Model selection for DMHF Ultrasonic Heat Meter

Model DN	MHF	-X X	X	Χ	-X	X	/* ( Tr	ansducers	)
Heat flow serie	es								
B-Fixed transmitt	ter								
P-Portable transr	mitter								
Power supply									
A—110VAC									
B-220VAC									
E—24VDC									
S—Solar supply	(including	solar bo	oard)						
<b>Output Select</b>	ion								
N—N/A									
1—4-20mA							$\sim$ 4		
2—Pulse Output	(Flow rate	te or tota	alizer out	put)					
3—Electrical Rela	ay								
4—RS232 <b>No</b>	te: RS232	2 and R	S 485 ca	nnot be	e used a	at the sar	ne time	. RS232 is	
Sta	ndard. Al	so Data	logger i	is via R	S232 pc	ort too.			
5—RS485									
6—Hart +(4-20m	ıA)			4			,		
7—ModBus									
8—Data logger									
9—GPRS Wirele			N	softwa	re.)				
Pipeline range	e			7					
XXXX—DNXXXX	K, (The rai	nge acc	ording to	the tran	nsducer	type)			
Cable length	_		<u> </u>						
XXX006—6m,			. 1000000					•	)
Temperature I directly.)	Input Ty	pe (Ple	ase conta	act with	the fact	<del>ory i</del> f use	thermal	resistance	
C1-Pt100 (-40~	150°C) Tw	o-Wire	System T	Tempera	ature tra	nsmitter i	input		
C2-Pt1000 (-40~	~150 <u>°C) T</u>	wo-Wire	System	Tempe	rature tr	ansmitte	r input		
Transducer Ty	ype								

Refer to DB (Clamp-on), DC (Insertion), DF (Flanged) transducer type selections

### **Parts Number Construction example:**

DMHF-BB1NN-0400-015-C1/ DB-MNN-0400-030

**Description:** DMHF Ultrasonic Heat meter, Clamp-on type transducer, 220VAC power supply, 4-20mA output, Non-multiple output selections, temperature input in pipeline DN400; its cable length 15m; Temperature Input Type Pt100; Standard M type transducer, standard temperature, no mounting frame, common mounting type, used in pipeline DN400, transducer cable length 30m.

## **Data Logger and Software Utility**

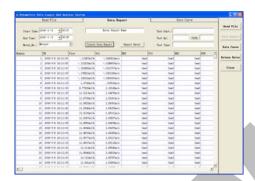
#### Features:

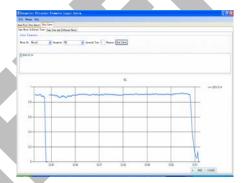
- 1. Provides data logging, based on SD card data memory, the memory capacity can be 512M,1GB, 2GB, 4GB, 8GB. Normally, 1GB can store 5 year data with 5 minutes logging interval.
- 2. Very easy to read data from SD card (just plug it out from Dynameters Data Logger, and run Dynameters Data Logging and Analyze software, browse the SD card file).



▲ Data logger

3. Data report and Data Curve functions.





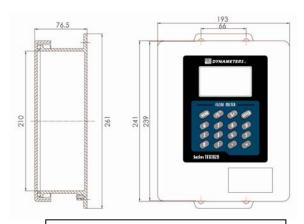
- 4. User can edit and Excel report and print it on PC.
- 5. Logging Parameters: Flow Rate, Velocity, Positive total flow, Negative total flow, Net total flow, Total Heat flow, Temperature in, Temperature out, Temperature difference and Heat flow rate. If user is interested in other parameters, please consult us. Users can delete the unnecessary parameters from Excel Table and then print the data table.

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tred Fr	le Para Saper	Beis Dave									
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below instructed at ten			Contraction State S	aper   Sport 2	-7	Set Br					
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	200-02-14-3	25.46	3.0	74	ja .		(75.46	88	36.96	20.4	-⊆ 40
	BH-0741	23.99	8.0	74	ja .		(77.46)	86	36.96	JR 98	-SE 41
	BH-07-14-1	38.6	8.0	34	/a	,	990.75	.00	36.9	JR 98	-SE \$1
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6. Users can download the software from our website: <a href="https://www.dynameters.com">www.dynameters.com</a>

# DYNAMETERS ...

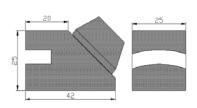
## **Parts & Dimensions**

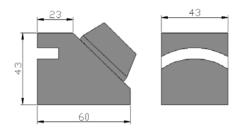


**Standard Transmitter** 



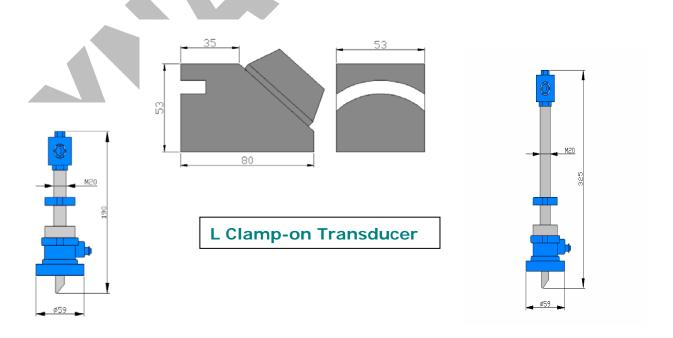
**Explosion-proof Transmitter** 





**S Clamp-on Transducer** 

Std. M Clamp-on Transducer

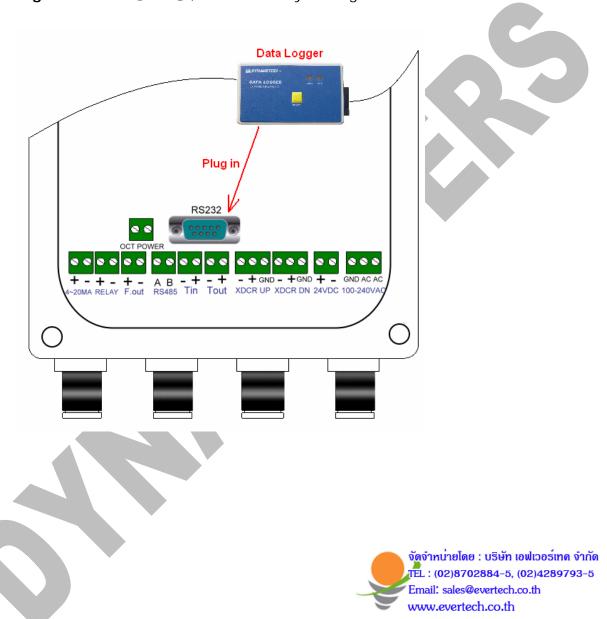


**Std. Insertion Transducer** 

**Extended Insertion Transducer** 

## **Wiring Terminals**

**Conduit holes:** NPT1/2 and NPT3/4 can been selected. **Housing:** NEMA 4 \* [IP65] ,aluminum alley casting.





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