

HME-US Series

Ultrasonic Energy Meter

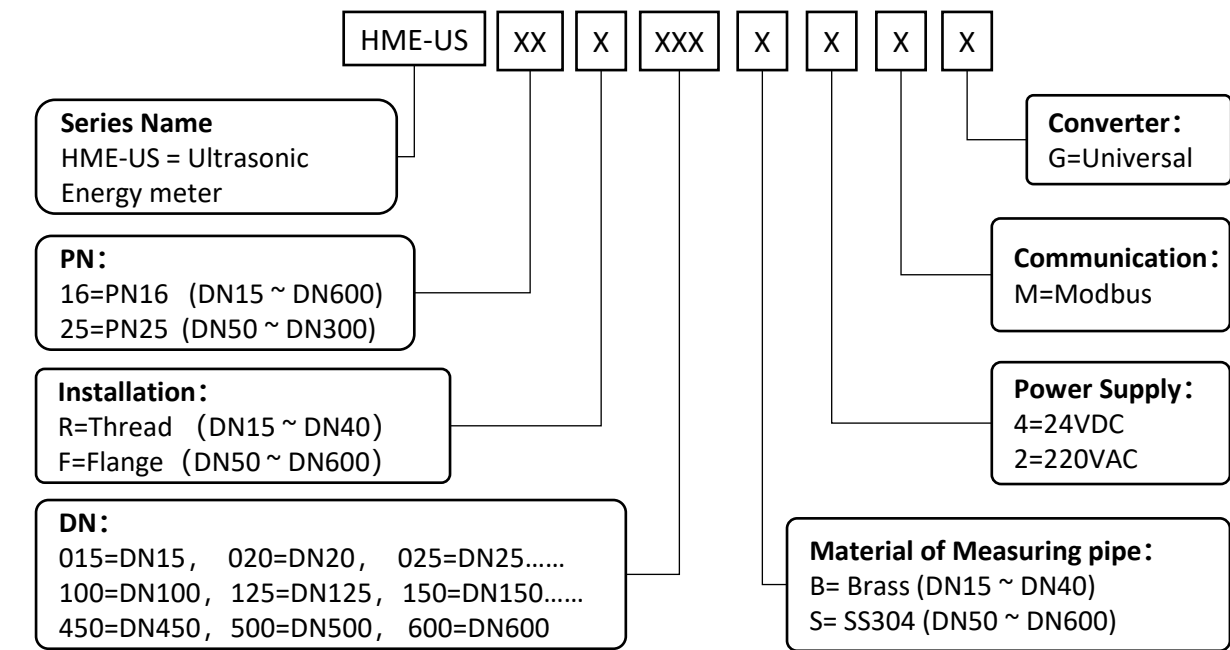
Honeywell HME-US series ultrasonic energy meter is an energy measuring instrument based on ultrasonic flowmeter, suitable for central air conditioning water system and district heating water system.

HME-US series ultrasonic energy meter can measure cold and heat.

Features

1. Universal converter design, which can be installed in integratedly or separately
2. The specially designed fluid structure can effectively improve the measurement accuracy and measurement stability, and effectively reduce the requirements for straight pipe sections during installation. There is no straight pipe section requirements for DN25 and below models.
3. Built-in large-capacity 3.6V lithium battery power supply, external optional AC220V or DC24V power supply mode to meet different application requirements.
4. Energy meter can be installed in the pipes of supply or return water horizontally or vertically.

Definition



Basic Technical Information

Flow Measurement Principle	Ultrasonic	
Flow Measurement Accuracy	±1% FS	
Energy Measurement Accuracy	±2% FS	
Turndown Ratio	100:1	
DN & PN	PN16: DN15~DN600 PN25: DN50~DN300	
Applicable Medium and Medium Temperature	Hot and cold water DN15 ~ DN40: 1 ~ 95℃ DN50 ~ DN600: 1 ~ 130℃	
Medium Temperature difference range	DN15-DN40: 2 ~ 90 K DN50-DN600: 2 ~ 110 K	
Communication Protocol	Modbus RTU, RS485	
Temperature Sensor Type	PT1000	
Energy calculation starting temperature difference	≥0.25K	
Temp sensor Cable length	DN15 ~ DN40 1.5 meters, DN50 ~ DN600 3 meters	
Power Supply	Built-in 3.6V lithium battery External power supply: 7 ~ 24VDC or 220±10% VAC	
IP Ratio	Sensor IP68, Converter IP67	
Cable length between sensor and converter	DN15 ~ DN40: 0.5 meter, DN50 ~ DN600: 3 meters	
Connection	DN15 ~ DN40: Rp thread DN50 ~ DN600: Flange	
Operation Environment	-25 ~ 55 °C	
Stock Environment	-25 ~ 55 °C	
Number of ultrasonic channels	DN15 ~ DN40: Single Channel DN50 ~ DN300: Double Channels DN350 ~ DN600: Four Channels	
Material	Measuring Pipe	DN15 ~ DN40: Brass DN50 ~ DN600: SS304
	Flange	SS304
	Converter housing	Plastic

Basic Technical Information

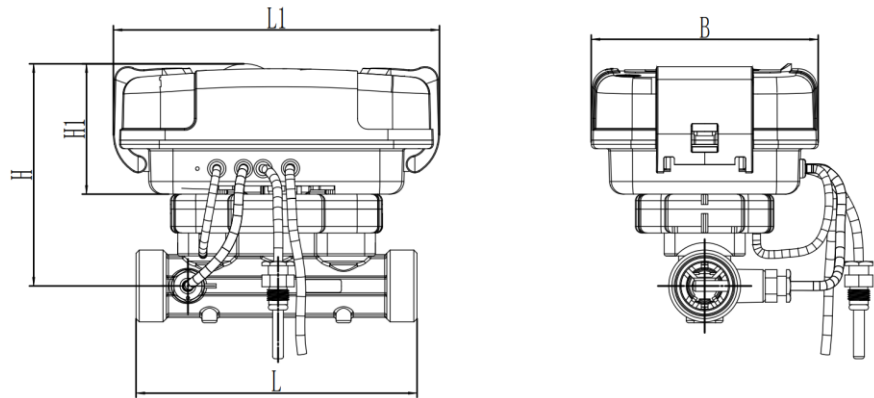
SKU	PN	DN	Installation	Max flow m³/h	Common Flowrate m³/h	Min Flow m³/h	Pressure Drop (kPa)
HME-US16R015BXMG	PN16	DN15	Thread	3	1.5	0.015	18
HME-US16R020BXMG	PN16	DN20	Thread	5	2.5	0.025	17
HME-US16R025BXMG	PN16	DN25	Thread	7	3.5	0.035	15
HME-US16R032BXMG	PN16	DN32	Thread	12	6	0.06	13
HME-US16R040BXMG	PN16	DN40	Thread	20	10	0.1	11

Illustrate: The pressure drop of energy meter is the pressure drop under the common flow rate.

SKU	PN	DN	Installation	Max flow m³/h	Common Flowrate m³/h	Min Flow m³/h
HME-US16F050SXMG	PN16	DN50	Flange	30	15	0.15
HME-US16F065SXMG	PN16	DN65	Flange	50	25	0.25
HME-US16F080SXMG	PN16	DN80	Flange	80	40	0.4
HME-US16F100SXMG	PN16	DN100	Flange	120	60	0.6
HME-US16F125SXMG	PN16	DN125	Flange	200	100	1
HME-US16F150SXMG	PN16	DN150	Flange	300	150	1.5
HME-US16F200SXMG	PN16	DN200	Flange	500	250	2.5
HME-US16F250SXMG	PN16	DN250	Flange	800	400	4
HME-US16F300SXMG	PN16	DN300	Flange	1200	600	6
HME-US16F350SXMG	PN16	DN350	Flange	1600	800	8
HME-US16F400SXMG	PN16	DN400	Flange	2000	1000	10
HME-US16F450SXMG	PN16	DN450	Flange	2600	1300	13
HME-US16F500SXMG	PN16	DN500	Flange	3200	1600	16
HME-US16F600SXMG	PN16	DN600	Flange	4600	2300	23
HME-US25F050SXMG	PN25	DN50	Flange	30	15	0.15
HME-US25F065SXMG	PN25	DN65	Flange	50	25	0.25
HME-US25F080SXMG	PN25	DN80	Flange	80	40	0.4
HME-US25F100SXMG	PN25	DN100	Flange	120	60	0.6
HME-US25F125SXMG	PN25	DN125	Flange	200	100	1
HME-US25F150SXMG	PN25	DN150	Flange	300	150	1.5
HME-US25F200SXMG	PN25	DN200	Flange	500	250	2.5
HME-US25F250SXMG	PN25	DN250	Flange	800	400	4
HME-US25F300SXMG	PN25	DN300	Flange	1200	600	6

Dimension and Weight

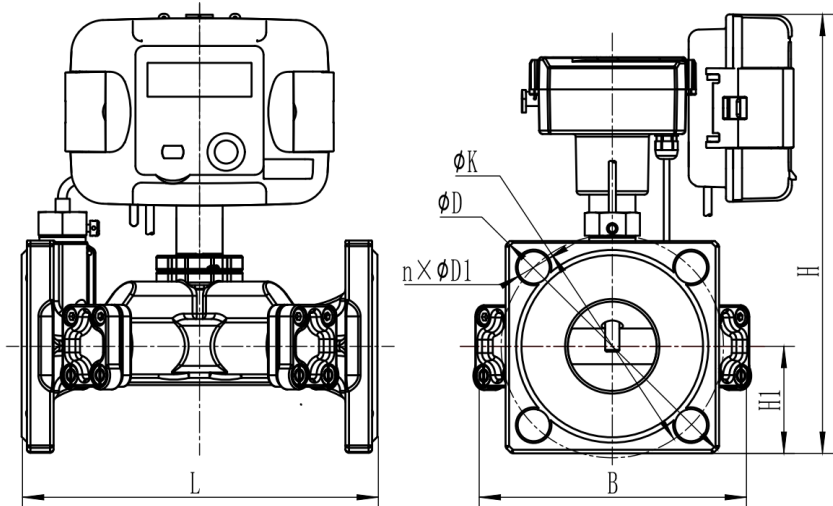
SKU	PN	DN	L	L1	L2	H	H1	B	Meter thread	Connection thread	Weight
HME-US16R015BXMGM	PN16	DN15	110	150	204	105	60	105	G ¾ B	R ½	0.7
HME-US16R020BXMGM	PN16	DN20	130	150	234	108	60	105	G 1 B	R ¾	0.8
HME-US16R025BXMGM	PN16	DN25	160	150	280	111	60	105	G ¼ B	R 1	1
HME-US16R032BXMGM	PN16	DN32	180	150	300	114	60	105	G1 ½ B	R1 ¼ B	1.2
HME-US16R040BXMGM	PN16	DN40	200	150	328	118	60	105	G 2 B	R1 ½	1.5



Dimension: mm
Weight: kg

Note: The size of the Connection thread in the table is the reference size for purchasing the connection.

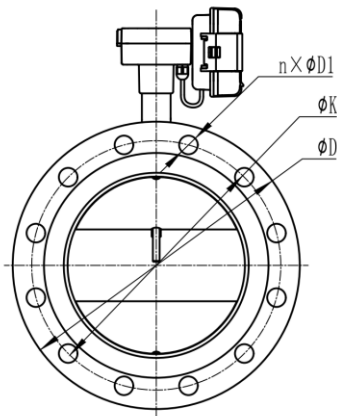
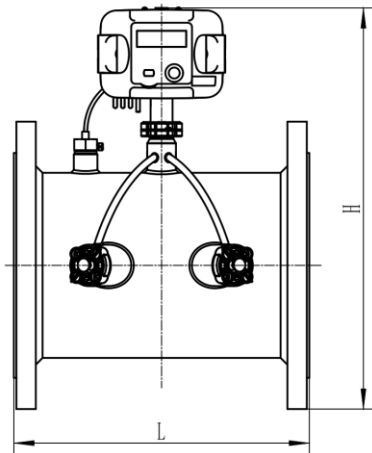
SKU	PN	DN	L	D	H	K	n * ϕL	Weight
HME-US16F050SXMGM	PN16	DN50	200	165	245	125	4 x ϕ18	9
HME-US16F065SXMGM	PN16	DN65	200	185	255	145	4 x ϕ18	10
HME-US16F080SXMGM	PN16	DN80	225	200	280	160	8 x ϕ18	13
HME-US16F100SXMGM	PN16	DN100	250	220	295	180	8 x ϕ18	16
HME-US25F050SXMGM	PN25	DN50	270	165	250	125	4×ϕ18	10
HME-US25F065SXMGM	PN25	DN65	300	185	255	145	4×ϕ18	11.5
HME-US25F080SXMGM	PN25	DN80	300	200	280	160	8×ϕ18	15
HME-US25F100SXMGM	PN25	DN100	360	235	310	190	8×ϕ22	20.5



Dimension: mm
Weight: kg

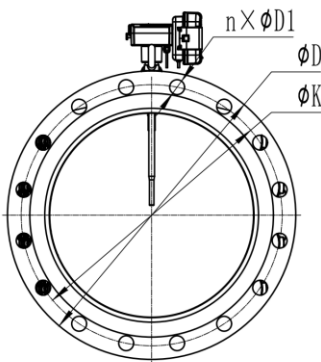
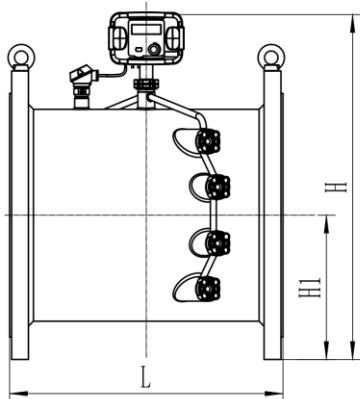
Dimension and Weight

SKU	PN	DN	L	D	H	K	n * ϕ L	Weight
HME-US16F125SXM	PN16	DN125	350	250	385	210	8 x ϕ 18	23
HME-US16F150SXM	PN16	DN150	350	285	415	240	8 x ϕ 22	29
HME-US16F200SXM	PN16	DN200	350	340	475	295	12 x ϕ 22	35
HME-US16F250SXM	PN16	DN250	400	405	535	355	12 x ϕ 26	51
HME-US16F300SXM	PN16	DN300	450	460	590	410	12 x ϕ 26	69
HME-US25F125SXM	PN25	DN125	350	270	395	220	8 x ϕ 26	29
HME-US25F150SXM	PN25	DN150	350	300	425	250	8 x ϕ 26	37
HME-US25F200SXM	PN25	DN200	350	360	485	310	12 x ϕ 26	48
HME-US25F250SXM	PN25	DN250	400	425	545	370	12 x ϕ 30	65
HME-US25F300SXM	PN25	DN300	450	485	600	430	16 x ϕ 30	91



Dimension: mm
Weight: kg

SKU	PN	DN	L	D	H	K	n * ϕ L	Weight
HME-US16F350SXM	PN16	DN350	500	520	645	470	16 x ϕ 26	95
HME-US16F400SXM	PN16	DN400	550	580	700	525	16 x ϕ 30	115
HME-US16F450SXM	PN16	DN450	600	640	755	585	20 x ϕ 30	145
HME-US16F500SXM	PN16	DN500	650	715	820	650	20 x ϕ 33	205
HME-US16F600SXM	PN16	DN600	800	840	930	770	20 x ϕ 36	315



Dimension: mm
Weight: kg

Wiring

- 1.Note: The extension cables are drawn separately according to the function, which is divided into power supply cable and communication cable.
- The three types of cables contain several thin cables, which need to be connected strictly according to the cable color and corresponding functions.
2. The energy meter is powered by external power supply and built-in lithium battery. When the external power supply is off, it can be automatically switched to battery power supply and the RS485 module stops working.
3. The RS485 communication cable must use a shielded twisted pair cable, which size is no less than 4 x 0.75 mm²

