

TECHNOLOGY

HOLYKELL®

UF2000-F
FLOWMETER
• DATASHEET •

1. Pressure Measurement 2. Level Measurement 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments

UF2000-F In-line Ultrasonic Flow Meter



■ Product Introduction

UF-2000F series in-line ultrasonic flow meter/heat meter is a new product launched in accordance with the JJG1030-2007 ultrasonic flow meter verification regulations in order to improve the reliability of product protection. The product uses the principle of ultrasonic time difference, suitable for DN15~DN6000 pipeline flow measurement.

This series feature high measurement accuracy, strong anti-interference ability, high stability and reliability, and rich interfaces. Each component of the flow meter is designed in accordance with the IP68 protection level standard, which is suitable for harsh working environments.

Product Features



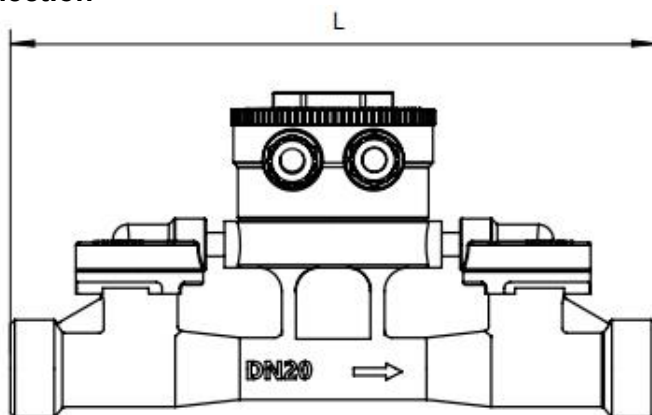
Model Types

1. Reflection type in-line ultrasonic flow meter (DN15-32)

Suitable for DN15~DN32mm. The connections include threaded connection and flange connection, and the protection level is IP68.

Measuring fluid temperature: -30~160°C, pressure: 0~4.0Mpa, accuracy can reach ±0.5%.

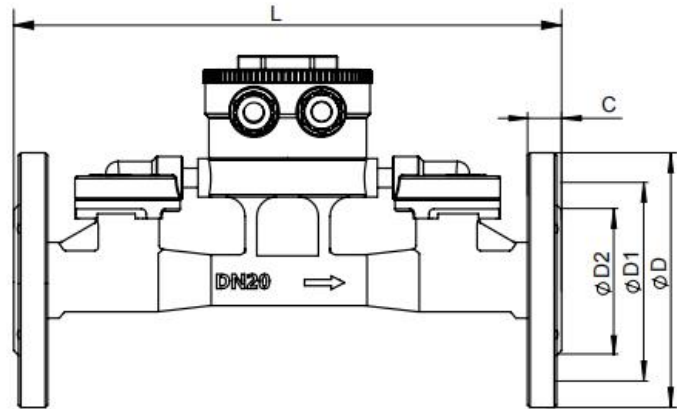
• **Threaded connection**



Unit, mm

DN	Pressure level (P)	Length (L)	Valid length of thread	Connecting thread
DN15	2.5	220	15	G3/4B
DN20	2.5	220	15	G1B
DN25	2.5	260	16	G1 1/4B
DN32	2.5	260	22	G1 1/2B

• Flange connection



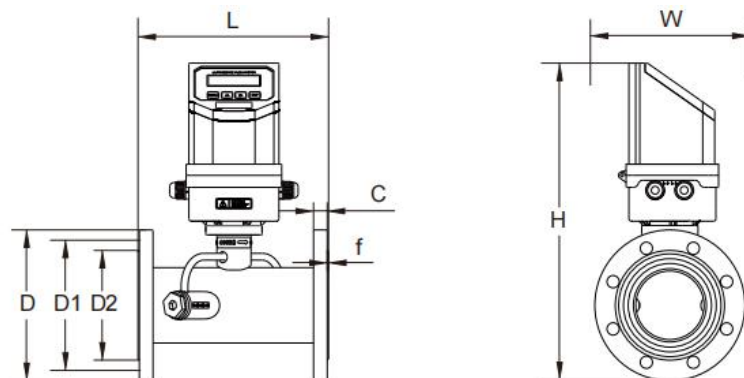
Unit, mm

DN	Pressure level (P)	Length (L)	Flange dimension						
			external diameter D	Center circle diameter of bolt hole D1	Bolt hole diameter×qty $\phi \times n$	Sealing surface diameter D2	Flange thickness		Bolt Spec
							C	f	
DN15	2.5	226	95	65	14×4	46	14	2	M12×50
DN20	2.5	226	105	75	14×4	56	16	2	M12×50
DN25	2.5	266	115	85	14×4	65	16	2	M12×60
DN32	2.5	266	140	100	18×4	76	18	2	M16×60

2. Standard in-line ultrasonic flow meter (DN40-6000)

Standard in-line ultrasonic flow meter is suitable for DN40~DN6000mm, IP68,
Measuring fluid temperature: -30~160°C, pressure: 0~2.50Mpa, accuracy ±0.5%.

• Dimensions



Unit, mm

DN	Pressure level (P)	Length (L)	Width (W)	Height (H)	Flange dimension						
					External diameter D	Center circle diameter of bolt hole D1	Bolt hole diameter r×qty φ ×n	Sealing surface diameter D2	Flange thickness		Bolt Spec
									C	f	
40	1.6	300	150	336	150	110	18×4	84	18	2	M16×60
50	1.6	300	165	349	165	125	18×4	99	20	2	M16×70
65	1.6	300	185	366	185	145	18×4	118	22	2	M16×70
80	1.6	225	200	381	200	160	18×8	132	20	2	M16×80
100	1.6	250	220	401	220	180	18×8	156	22	2	M16×80
125	1.6	275	250	428	250	210	18×8	184	22	2	M20×80
150	1.6	300	285	459	285	240	22×12	211	24	2	M20×90
200	1.6	350	340	511	340	295	26×12	266	26	2	M22×90
250	1.6	450	405	569	405	355	26×12	319	28	2	M22×90
300	1.6	500	460	621	460	410	23×16	370	32	2	M22×90
350	1.0	550	500	666	500	460	25×16	428	28	4	M20×80
400	1.0	600	565	697	565	515	25×20	482	30	4	M22×90
450	1.0	700	615	774	615	565	25×20	532	30	4	M22×90
500	1.0	800	670	826	670	620	30×20	585	32	4	M22×90
600	1.0	1000	780	931	780	725	25×24	685	36	5	M27×110
700	0.6	1100	860	1021	860	810	30×24	775	32	5	M22×90
800	0.6	1200	975	1129	975	920	30×24	880	32	5	M27×100
900	0.6	1300	1075	1229	1075	1020	30×24	980	34	5	M27×100
1000	0.6	1400	1175	1329	1175	1120	30×28	1080	36	5	M27×100

3. In-line Ultrasonic flow meter/heatmeter

It's equipped with a three-wire temperature sensor to achieve heat measurement with accuracy of ±1.0%.



■ Specification

Spec	UF2000-F	
Host	Accuracy	Flow meter:±0.5%; heatmeter, ±1.0%
	Signal output	1 channel 4~20mA currency output, impedance 0~1K, accuracy 0.1%
		1 channel OCT pulse output (pulse width 6~1000ms, 200ms by default)
		1 channel relay output
	Signal input	3 channel 4~20mA currency input, accuracy 0.1%; temperature, pressure and liquid level signals can be collected.
		3 wire PT100 can be connected to measure heat
Data port	RS485, MODBUS etc.	
Special cable	Generally less than 50m; for 485 communication, transmission distance can be more than 1000 meter.	
Pipe	Pipe material	Steel, S/S, iron steel, copper, PVC, aluminum, etc, liner allowed
	Pipe inner diameter	15-6000mm
Medium	Type	Water, sea water, industrial sewage, acid and alkali solutions, alcohol, beer, various oils and other single uniform liquids that can conduct ultrasonic waves
	Temperature	-30~160℃
	Turbidity	10000ppm and the bubble content is small
	Flow rate	0~±10m/s
Power consumption	1.5W	
Power supply	DC8-36V or AC85-264V (Optional)	
Working temperature	Host: -20~60℃; Flow sensor: -30~160℃	
Working humidity	Host & sensor can be immersed in water, water depth ≤ 2m (note:after wiring and potting)	