Technical Datasheet

SYCOUS®

ZENNER

Zenner C5-IUF

Part Code	Name	Size	Qp	Output
ZE101C5	Zenner C5 IUF Heat	DN15	0.6m3/h	MBus & Pulse
ZE102C5	Zenner C5 IUF Heat	DN15	1.5m3/h	MBus & Pulse
ZE112C5	Zenner C5 IUF Heat	DN15	0.6m3/h	Wireless MBus & Pulse
ZE107C5	Zenner C5 IUF Heat	DN15	1.5m3/h	Wireless MBus & Pulse
ZE015C5	Zenner C5 IUF Heat	DN15	1.5m3/h	MBus
ZE016C5	Zenner C5 IUF Heat	DN15	1.5m3/h	MBus
ZE103C5	Zenner C5 IUF Heat	DN20	2.5m3/h	MBus & Pulse
ZE104C5	Zenner C5 IUF Heat	DN20	2.5m3/h	Wireless MBus & Pulse
ZE020C5	Zenner C5 IUF Heat	DN20	2.5m3/h	MBus
ZE025C5	Zenner C5 IUF Heat	DN25	3.5m3/h	MBus & Pulse
ZE026C5	Zenner C5 IUF Heat	DN25	6m3/h	MBus & Pulse
ZE027C5	Zenner C5 IUF Heat & Cooling	DN25	3.5m3/h	MBus & Pulse
ZE028C5	Zenner C5 IUF Heat	DN25	3.5m3/h	Wireless MBus & Pulse
ZE029C5	Zenner C5 IUF Heat	DN25	6m3/h	Wireless MBus & Pulse
ZE033C5	Zenner C5 IUF Heat	DN32	6m3/h	MBus & Pulse
ZE034C5	Zenner C5 IUF Heat	DN32	6m3/h	Wireless MBus & Pulse
ZE040C5	Zenner C5 IUF Heat	DN40	10	MBus & Pulse
ZE041C5	Zenner C5 IUF Heat	DN40	10	Wireless MBus & Pulse

- Electronic compact meter for heating or cooling energy with ultrasonic flow sensor (IUF)
- Optional interfaces: M-Bus, wireless M-Bus and 3 inputs/outputs
- Nominal sizes: qp 0.6 to 10 m³/h

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Connection sizes			
Nominal flow qp (m³/h)	**L (mm)**	**Threaded connection**	**Flange**
0.6	110	G¾B	
0.6	130	G1B	
0.6	190	G1B	DN20
1.5	110	G¾B	
1.5	130	G1B	
1.5	190	G1B	DN20
2.5	130	G1B	
2.5	190	G1B	DN20
3.5	150	G1¼B	
3.5	260	G1¼B	DN25
6	150	G1¼B	
6	260	G1¼B	DN25
		G1½B	DN32
10	200	G2B	
10	300	G2B	DN40

Technical data flow sensor type IUF							
Nominal flow qp	m³/h	0.6	1.5	2.5	3.5	6	10
Maximum flow qs	m³/h	1.2	3	5	7	12	20
Minimum flow qi	l/h	6	15	25	35	60	100
		12	30	50	70	120	200
Pressure loss at qp	bar	≤ 0.25					
Temperature range (*)	°C	0 ≤ Θ q ≤ 105 / 0 ≤ Θ q ≤ 130					
Minimum pressure (to avoid cavitation)	bar	1 bar at qp and 80 °C medium temperature					
Measurement accuracy class (*)		2 (optional 3)					
Nominal pressure (*) Body with thread connection	PS/PN	16/16					
Body with flange	PS/PN	25/25					
IP protection class		68					
Installation position		in any position					
Installation point		return pipe, optionally supply pipe					
Cable length up to calculator	m	1.2					
Installation adapter for temperature sensors		M10 x 1					
Heat carrier (Medium)		Water					

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Technical data calculator		
Temperature range	°C	0 ... 105 / 0 ... 150
Temperature difference range	K	3 ... 80 / 3 ... 130
Display		LCD 8-digit + additional characters
Ambient temperature during operation	°C	5 ... 55
Storage temperature	°C	-20 ... + 65
Resolution temperature	°C	0.01
Measurement frequency	s	flow rate = 4 temperatures = 4 / 32 (*)
Unit to read the heat consumption		Standard MWh; opt. kWh, GJ
Data backup		1 x daily
Due date values		Storage of all monthly values during the entire operation time
Maximum value storage		Extensive storage of flow rate, thermal output and other parameters
Interface	Standard	Optical interface (ZVEI, IrDA)
	Optional	3 inputs/outputs M-Bus, radio
Supply		Powered over MBus
Backup Supply		3.6 V lithium battery (different capacities)
Battery lifetime	Years	> 6, opt. ≥ 11
Protection class		IP54
Environmental class		A
Ambient conditions/ climatic influencing (valid for complete compact meter)	- Climatic	Highest permissible ambient temperature 55 °C, Lowest permissible ambient temperature 5 °C, Humidity class IP54
	- Mechanical class	M1
	- electro-magnetic class	E1

Data Collection

Wired Networks

Wireless Networks

IoT Technologies

MBus & Pulse for any network

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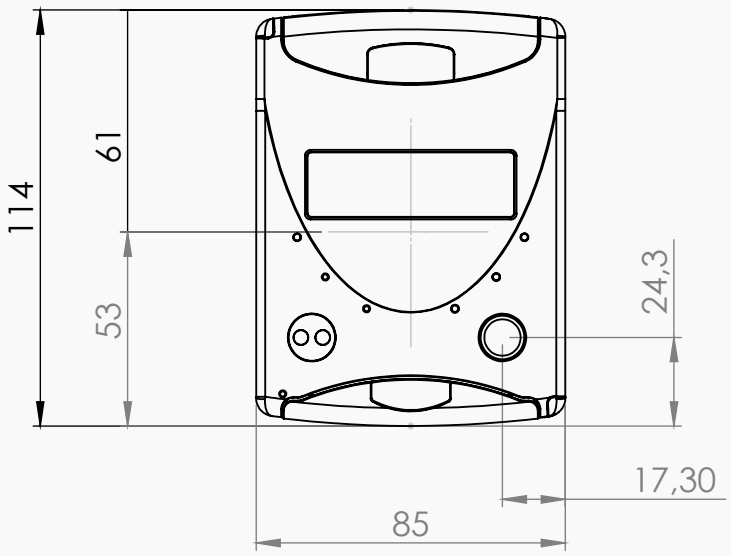
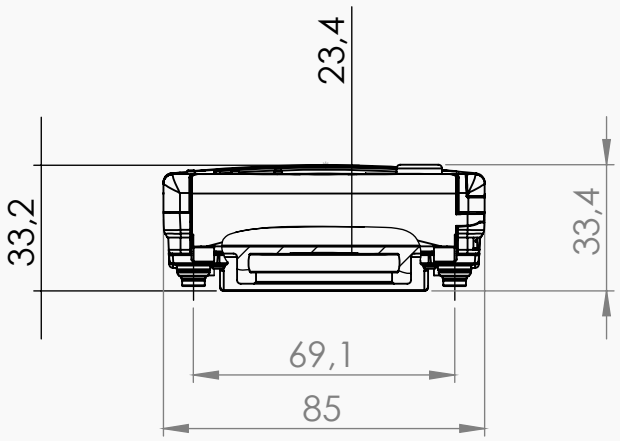
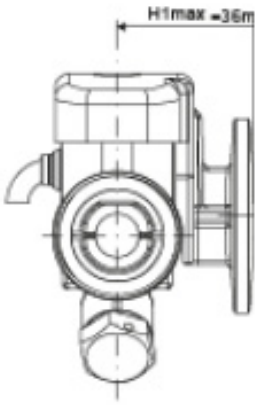
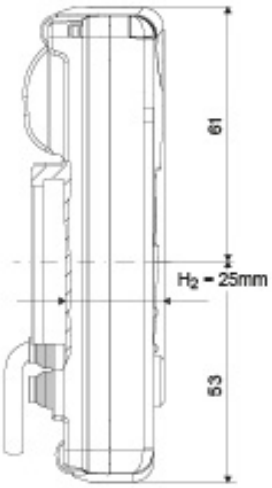
Technical data temperature sensors		
Platinum precision resistor		Pt 1000
Sensor type (*)	mm	45 x 5.0 mm / 45 x 5.2 mm DS 27.5 / DS 38 Universal 6 - 150
Temperature range	˚C	0 ... 105 / 0 ... 150 (*)
Cable length	m	qp 0.6 to 2.5: approx. 1.5 (optional: approx. 5) qp 3.5 to 10: approx. 5
Installation	supply pipe	by direct immersion or by immersion sleeves (in case of existing measuring points) return pipe Integrated in the flow sensor
	return pipe	Integrated in the flow sensor, optionally external

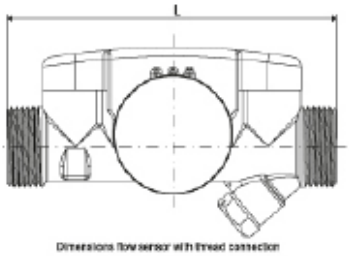




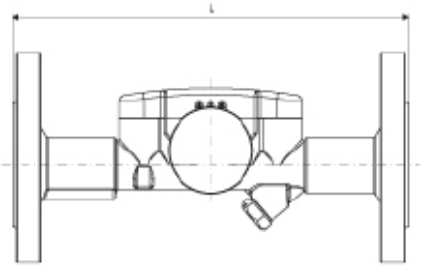
Technical data temperature sensors



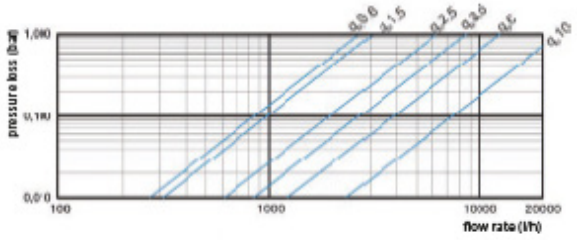




Dimensions flow sensor with thread connection



Dimensions flow sensor with flange



Pressure loss curve