

Data sheet

SonoSelect 10 and SonoSafe 10 Energy Meters

Description



The Danfoss SonoSelect 10 and SonoSafe 10 are ultrasonic compact energy meters intended for measuring energy consumption in heating, cooling and combined heating and cooling applications for billing purposes. The meters are designed for remote meter read-out (AMR).

The energy meters consist of an ultrasonic flow sensor, a pair of Pt1000 temperature sensors and a calculator with integrated circuits for temperature measurement, flow calculation and energy calculation.

Feature highlights:

- Proven ultrasonic measuring principle designed for long operating life time
- No calming section or inlet/outlet restrictions
- Low pressure drop down to 0.03 bar at q_p
- Large 85 x 35 mm LCD display with 8 digits (11.5 mm high), guiding menu and info panel
- Compact design
- Extensive change and error log
- Memory: 4 years of data, yearly and monthly values stored (incl. pulse input)
- Upgradable with communication modules in bracket (dual M-Bus, connection with water meter)
- Power supply 3.6V battery (replacable) or 230V mains power
- Communication baud rate 300, 2400, 4800 and 9600 bps
- SonoApp usable for Android (Bluetooth LE via dongle)

Special features:	SonoSelect 10	SonoSafe 10
Battery	<ul style="list-style-type: none"> • 16 + 1 years battery life (from production date) 	<ul style="list-style-type: none"> • 16 + 1 years battery life (from production date)
Flexibility	<ul style="list-style-type: none"> • Heating or cooling or combined heating and cooling • Supply and return can be configured on site • Energy units can be configured on site • Slot for communication upgrade • 1.5m PUR or silicone cable between calculator and flow sensor allow for flexible installation, e.g. in flat stations 	<ul style="list-style-type: none"> • Heating • Supply and return can be configured on site • Energy units can be configured on site • Slot for communication upgrade • 0.5 m cable PVC between calculator and flow sensor
Safety	<ul style="list-style-type: none"> • EN1434 class 2 + flow and energy calculated every 0.5 second • Tamper monitor sets alarm if meter is opened by unauthorized personnel • Diagnostic function to secure confidence in meter data • IP65 calculator • Reverse flow indication 	<ul style="list-style-type: none"> • EN1434 class 2 + flow and energy calculated every 2 seconds • Tamper monitor sets alarm if meter is opened by unauthorized personnel • Diagnostic function to secure confidence in meter data • IP65 calculator • Reverse flow indication
SonoApp	<ul style="list-style-type: none"> • Installer tool (Guides and configure e.g. AMR, Pulse, units, supply/return) • Commissioning tool (Link location to serial number) • Operation tool (walk by + diagnostics) 	<ul style="list-style-type: none"> • Installer tool (Guides and configure e.g. AMR, Pulse, units, supply/return) • Commissioning tool (Link location to serial number) • Operation tool (walk by + diagnostics)

**Technical specifications,
Complete energy meter**

Application	Heating, cooling or combined heating and cooling*		
Medium	Water quality with pH 7 to 9.5 VDI 2035, VdTÜV TCh 1466		
Approvals, heating	EN1434 class 2 and 3, MID (DK-0200-MI004-034), CPA according to JJG225 -2010		
Approvals, cooling	Denmark: TS 27.02 010, Switzerland: METAS CH-T2-17763-01, Germany: PTB 17-22.001-DK, Austria: BEV-13.426_0078-E2_2017		
Measuring cycle	Flow: 0.5 sec. (SonoSelect 10), 2 sec. (SonoSafe 10) Energy: 0.5 sec. (SonoSelect 10), 2 sec. (SonoSafe 10) Temperature: 4 sec. (SonoSelect 10), 10 sec. (SonoSafe 10)		
Approved meteorological range	SonoSafe	SonoSelect	
	$\Delta\Theta$: 3- 90K Θ : 5- 95 °C	$\Delta\Theta$: 3 - 90K Θ : 5 - 95 °C	$\Delta\Theta$: 3 - 125K Θ : 5 - 130 °C
Temp. limits (energy calculation)	SonoSafe	SonoSelect	
	$\Delta\Theta$: 0.25 - 100K Θ : 0 - 105 °C	$\Delta\Theta$: 0.25 - 100K Θ : 0 - 105 °C	$\Delta\Theta$: 0.25 - 130K Θ : 0 - 140 °C
Cable strain relief	Withstand more than 5 kg		
Ambient operating temperature	Class A: 5 - 55° C indoor installation non condensing		
Ambient storage temperature	-25 - 60° C		
Temperature media	SonoSafe	SonoSelect	
	5-95 °C	5-95 °C	5-130 °C
Mechanical environment	Class M2		
Electromagnetic environment	Class E1		

* Bifunctional energy meters available only in approved meteorological range 5-95 °C

**Technical specifications,
Calculator**

Power supply	3.6 V DC lithium battery (2 AA SonoSelect, 1 AA SonoSafe), Mains supply 230V AC	
Battery life time*	16+1 years	
Mains Supply	Voltage of Alternating Current	230V AC
	Upper and lower voltage tolerance	+10%/-15%
	Alternating current voltage frequency	50/60 Hz
	Power consumption	< 2.5VA
	Output	3.6V DC
	Backup supply	Integral SuperCap eliminates interruptions of Energy meter due to power failures for up to 60 Min.
	Cable gland	M12
Mains supply cable	2 wire with PHR3-2 connector for Mains supply	
Display	85 x 35 mm LCD display with 8 digits (11.5 mm high main characters) Menu guide and info panel 16 years of operation at q_p , 45 °C without display overflow	
Units	MWh - kWh - GJ - Gcal - °C - K - m ³ - m ³ /h - l/h	
IP	65	
Memory	4 years of data, yearly and monthly values stored (incl. pulse input) available as of FW01.06.00	
Optical interface	Optical acc. to EN62056-21. Data protocol acc. to EN13757-3, supports 2400 or 4800 baud.	
Communication	Wired M-Bus to EN13757-3, supports 300, 2400, 4800, 9600 baud. Delivered with 1 m cable (SonoSelect: PUR, SonoSafe: PVC) Serial number: sssssvvNNyyWW (addressing) ss : Primary address, yWWsssss : Secondary address	
Additional communication	1 slot for communication module (delivered from factory or later upgrade)	

* Battery life time measured under following preconditions: enclosure temp. 45° C, communication every 15 min. at 2400 baud or faster, 80 meters on bus. Please contact Danfoss for further information.

**Technical specifications,
Flow sensor**

DN	15	15	20	20	25	25	25	32
Nominal flow q_p (m ³ /h)	0.6	1.5	1.5	2.5	3.5	3.5	6.0	6.0
Max flow q_s (m ³ /h)	1.2	3	3	5	7	7	12	12
Minimum flow (1:100) q_l^* (m ³ /h)	0.006	0.015	0.015	0.025	0.035	0.035	0.06	0.06
Cut off flow q_c (m ³ /h)	0.0012	0.003	0.003	0.005	0.007	0.007	0.012	0.012
Overflow q_{ss} (m ³ /h)	1.32	3.3	3.3	5.5	7.7	7.7	12.3	12.3
Pressure drop (at q_p , 50 °C) (mBar)	30	150	150	160	130	130	220	220
K_{vs} values ($\Delta p=Q^2/K_{vs}^2$)	3.46	3.87		6.25	9.71	9.71	12.79	
Connection	G $\frac{3}{4}$ A" 110mm		G1A" 130mm	G1 $\frac{1}{4}$ A" 160mm	G1 $\frac{1}{4}$ A" 260mm	G1 $\frac{1}{4}$ A" 260mm	G1 $\frac{1}{2}$ A" 260mm	
Pressure PN (bar)	25 (SonoSelect), 16 (SonoSafe)							
IP [EN60529]	68 (SonoSelect), 65 (SonoSafe)							
Temperature limits (°C)	0 to 105 and 0 to 130 (SonoSelect), 0 to 105 (SonoSafe)							
Cable length	1.5m (SonoSelect 10: PUR or silicone), 0.5m (SonoSafe 10: PVC)							
Mounting	Any position, no inlet or outlet restrictions							

* Technically prepared for 1:250 q_l

**Technical specifications,
Temperature sensor**

Type	Pt1000 direct short, 2 wire		
Size	Diameter: Ø5.2 mm, length: 26 mm		
Nipple	M10 x 1 mm brass, with pin lock		
Cable length	1.5 m		
Accuracy	Class B (EN60751)		
Temperature range	SonoSafe	SonoSelect	
	5 to 95 °C	0 to 105 °C	0 to 150 °C
IP	65		
Approved temp. range to EN60751	SonoSafe	SonoSelect	
	Ø: 0 - 105 °C	Ø: 0 - 105 °C	Ø: 0 - 150 °C
Difference temp. EN60751	SonoSafe	SonoSelect	
	ΔØ:3 - 105 K	ΔØ:3 - 105 K	ΔØ:3 - 150 K
Pressure	25 bar		

**Communication
modules**
Modules in general

To adapt the meter for various applications SonoSelect 10 and SonoSafe 10 features a slot for mounting communication modules. Each module features its own μ -controller and is powered by its own battery. Modules have their own parameter set which is saved in the module μ -controller flash memory. A local copy of the energy meter parameters used for communication is stored in the module. Data from module is updated in meter every 10 minutes.

Power: Lithium Thionyl Chloride battery (half of AA size) or Mains power supply (230 V).

2 pulse in/outputs have common ground.

Modules are galvanically isolated from main Energy Meter circuitry.

Wired M-Bus module with 2 pulse inputs

Once installed the meter will display the icon for wired communication and pulse inputs in loop 2 of the display. Wired M-Bus is galvanically isolated from μ -controller and pulse inputs. The two pulse inputs can be programmed independently of each other (see specification for pulse input module).

M-Bus (primary)	Lithium Thionyl Chloride battery (half of AA size)
M-Bus (secondary)	M-Bus supply
Baud rate supported	300, 2400, 4800, 9600
Communication protocol	According to EN1434-3 & EN13757-3
Battery life time	16+1 year
Addressing	Serial number: sssss vNny WW ss : Primary address, yWWsssss : Secondary address

Wireless OMS communication module, 868.95MHz with 2 pulse inputs

Once installed the meter will display the icon for wireless communication and pulse inputs in loop 2 of the display. The two pulse inputs can be programmed independently of each other (see specification for pulse input module).

Standard	Open Metering System (OMS) issue 4.0.2
Frequency	868.95 MHz
Antenna	Internal
Transmission power	10mW (Max. 25mW; 13,9 dBm)
Mode	T1 mode
Encryption	AES 128 bit encryption (mode 5), Parameterized Static key
Sending interval	Fixed network: 15 min. Walk-by: 2 min. (both changeable)
Telegram	Standard telegram*
Battery life time	16+1 year (with pulse inputs off), depending on period (e.g. 10+1 year for 2 min period)
Addressing	Serial number: sssss vNny WW yWWsssss : Secondary address

* See section with data telegram.

2 pulse input module

Once installed the meter will display the icon for pulse inputs in loop 2 of the display. Accumulated volume is only readable by communication. The two pulse inputs can be programmed independently of each other.

Pulse value	0.001 m ³ to 1 m ³ per pulse
Voltage supply	≤ 6.0 V
Source current	≤ 0.1 mA
High level input threshold	≥ 2 V
Low level input threshold	≤ 0.5 V
Pull-up resistor	100 kΩ
Pulse length	≥ 100 ms
Maximum frequency	≤ 5 Hz
Pulse inputs	According to EN1434-2, section 7.1.5 (Classification of pulse input devices Class IB)*
Battery life time	16+1 year

* Suitable for both electronic switch and Reed contact.

Communication modules *(continuous)*

2 pulse output module

Once installed the meter will display the icon for wired communication in loop 2 of the display.

Pulse 1 (energy*)	+ terminal 16, - terminal 17
Pulse 2 (volume*)	+ terminal 18, - terminal 19
Pulse value*	Unit follow the display. Scaling follow least significant digit of the display (default setting can be changed via SonoApp)
Pulse timing	Updates every 15 seconds
Polarity reversal:	Not possible, but can withstand -30V, max 27 mA without damage
Pulse length	≥100 ms
Pulse Pause:	≥100 ms
Voltage supply	3-30 V
Source current	≤ 27 mA
“ON” condition	$U < 2,0 @ 27 \text{ mA}$
“OFF” condition	$R \geq 6 \text{ M}\Omega$
Maximum frequency	≤ 5 Hz
Pulse outputs	According to EN1434-2, section 8.2.3 (Classification of pulse output devices Class OB)
Battery life time	16+1 year
Cable length	Max 25 m
Alarms	E32 is activated in meter if: 1) Module battery is empty 2) When no. of delayed pulses exceeds 5000 (incorrect scaling)

*Default setting. Can be changed via SonoApp

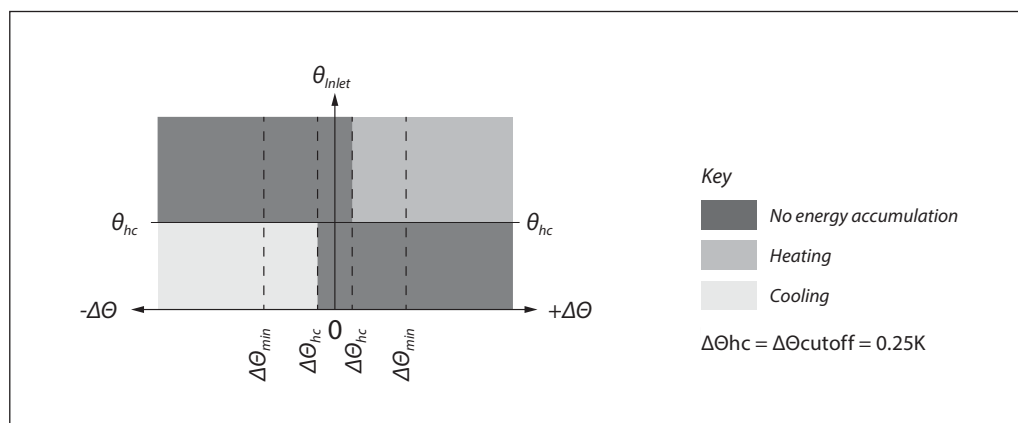
Data telegram

<p>Wired M-bus Standard telegram (16 seconds if main powered):</p> <ul style="list-style-type: none"> • Accumulated Energy (heat and cooling for bifunctional) • Accumulated Volume (heat and cooling for bifunctional) • Current flow • Current power • Supply temperature • Return temperature • Difference temperature • Enclosure temperature • Current time • Hour counter factory • Hour counter OK 	<p>Wireless M-bus (OMS) Standard telegram fixed network (15 minutes sending interval, 16 seconds if mains powered):</p> <ul style="list-style-type: none"> • Accumulated Energy (heat and cooling for bifunctional) • Accumulated Volume (heat and cooling for bifunctional) • Current flow • Current power • Supply Temperature • Return Temperature • Current Time 	<p>Wireless M-Bus (Walk -by) Standard telegram Walk by (2 minutes sending interval, 16 seconds if mains powered):</p> <ul style="list-style-type: none"> • Accumulated Energy (heat and cooling for bifunctional) • Accumulated Volume (heat and cooling for bifunctional) • Current Time • Hour counter factory • Month log 1 (last month log)
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Note! Default setting can be changed via SonoApp

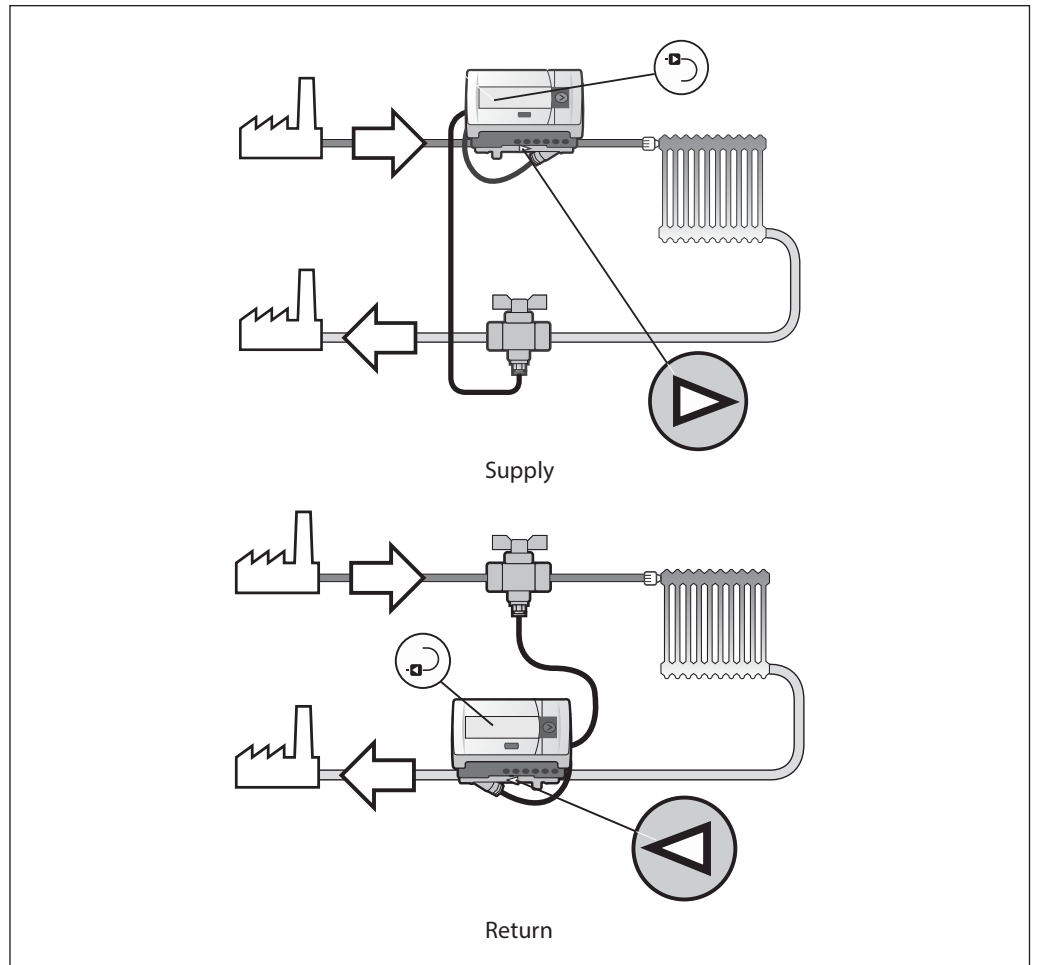
Bifunctional meters

Bifunctional meters are for combined heating and cooling applications. θ_{hc} default value is 30 °C it can be configured with SonoApp. Bifunctional energy meters available only in approved meteorological range 5-95 °C.

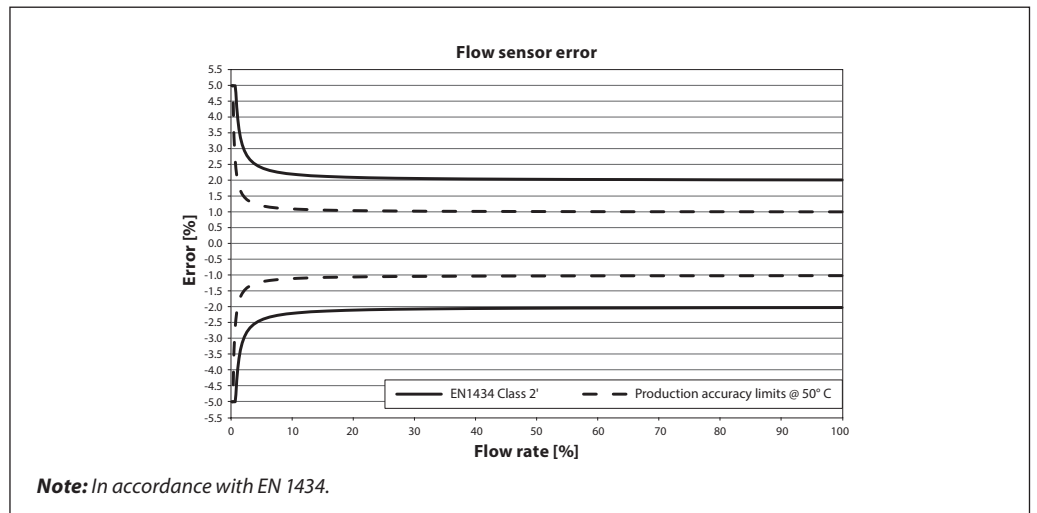


Application drawings

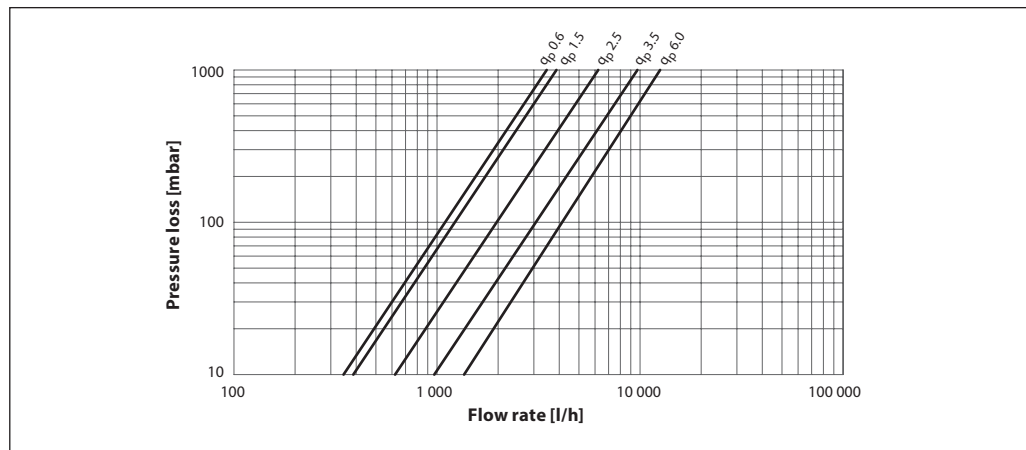
Heat meters have red temp sensor in supply pipe and all cooling meters have blue temp sensor in supply pipe



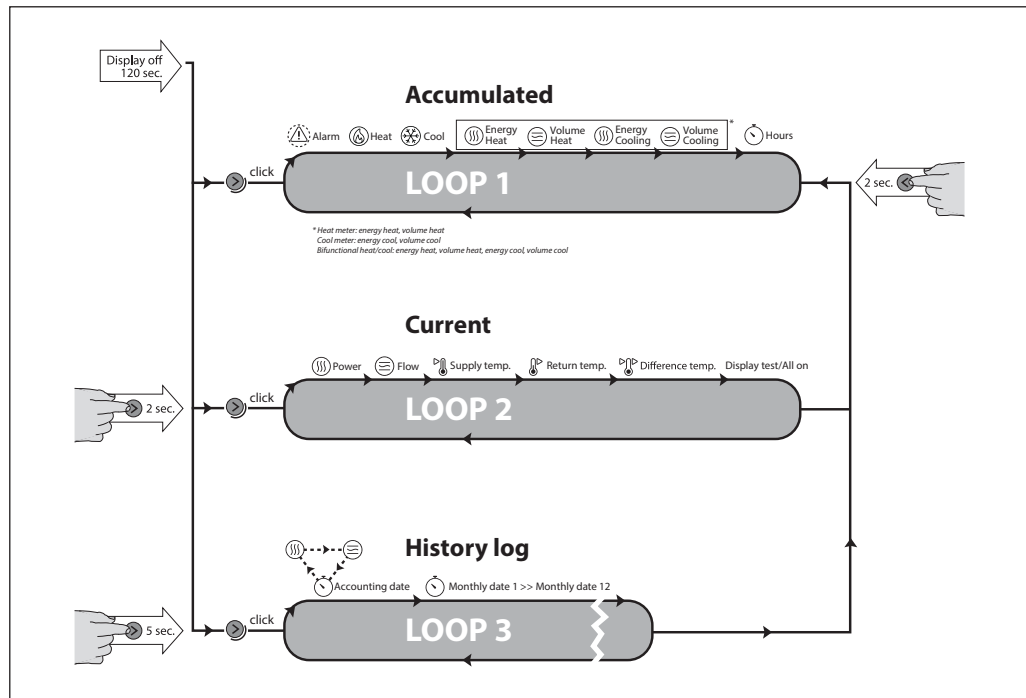
Accuracy



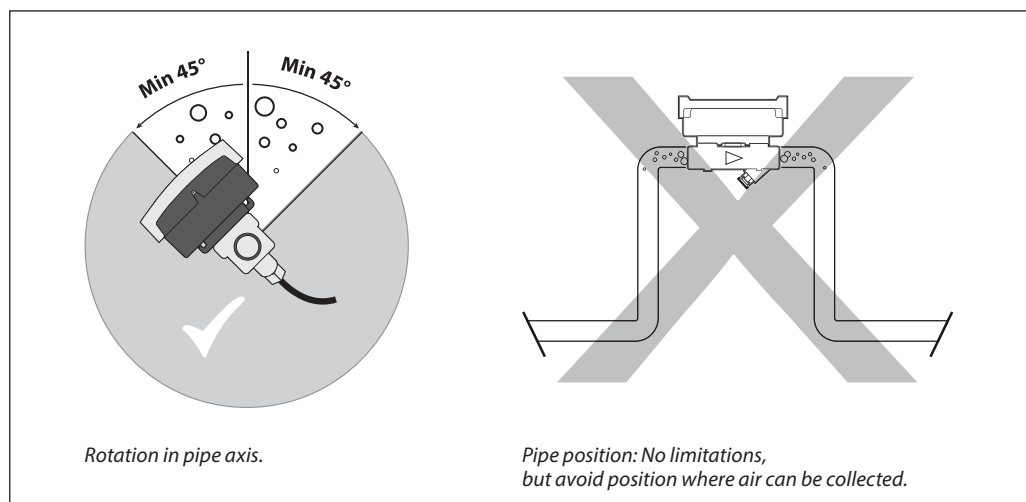
Pressure loss



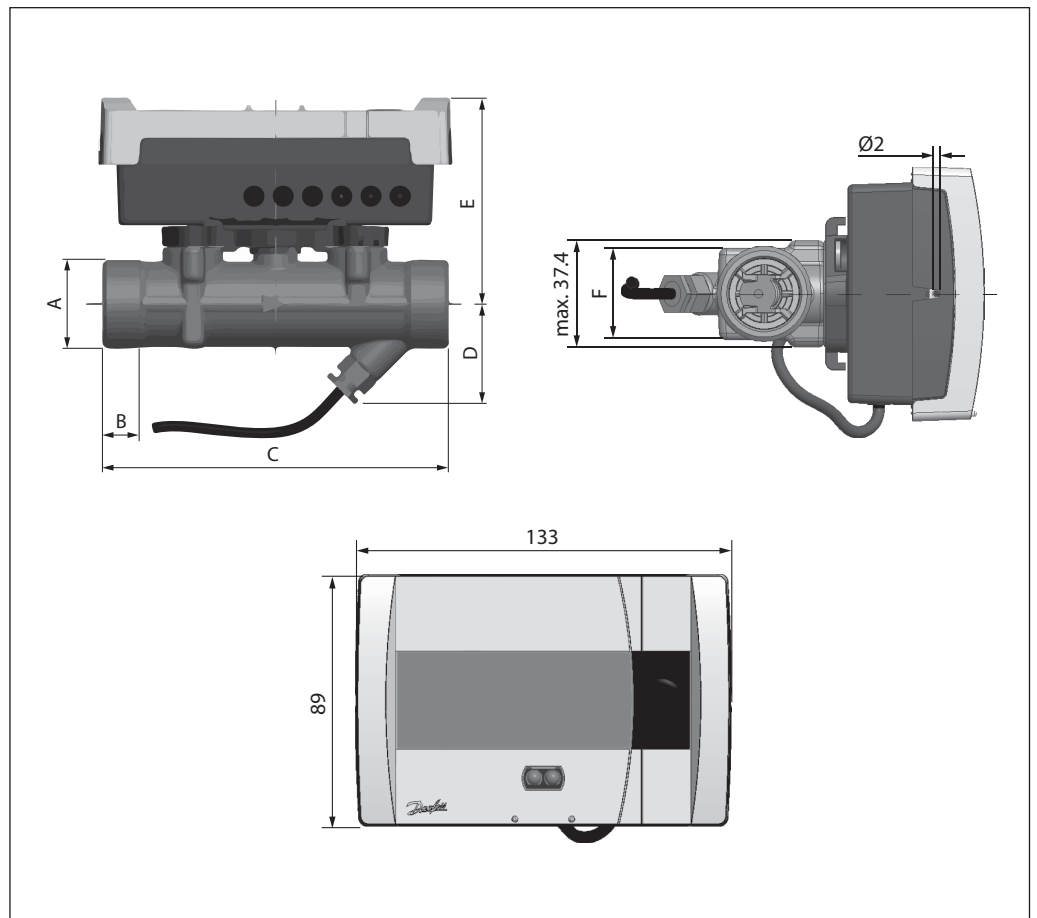
Menu structure



Mounting



Dimensions



Dimension	DN15	DN20	DN20 + extension pipe 014U1957	DN25	DN25	DN32
A	G $\frac{3}{4}$ A	G1A	G1A	G1 $\frac{1}{4}$ A	G1 $\frac{1}{4}$ A	G1 $\frac{1}{2}$ A
B	12 mm	14 mm	14 mm	16 mm	16 mm	18 mm
C	110 mm	130 mm	190 mm	160 mm	260 mm	260 mm
D	33.5 mm	38 mm	38 mm	40.5 mm	40.5 mm	40.5 mm
E	74.5 mm	77.5 mm	77.5 mm	80.5 mm	80.5 mm	80.5 mm
F	32 mm	32 mm	32 mm	41 mm	41 mm	41 mm
Weight	700 g	800 g	1100 g	1100 g	1500 g	1600 g

Ordering
SonoSelect 10 - Heating

Meter size	PN	Installation	Temperature Range [°C]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN15 qp0.6m ³ /h G $\frac{3}{4}$ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0068
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0070
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0071
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0165
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0183
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0324
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0449
		Supply	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0450
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0419
Supply	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0434		
DN15 qp1.5m ³ /h G $\frac{3}{4}$ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0081
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0083
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0084
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0167
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0185
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0186
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0253
		Return	5-95°C	PUR 1.5m	Mains power 230V	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0340
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U0350
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0451
		Return	5-95°C	PUR 5.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U0495
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0421
DN15 qp1.5m ³ /h G $\frac{3}{4}$ 110mm	PN25	Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0544
DN20 qp1.5m ³ /h G1 130mm	PN25	Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0096
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0097
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0169
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0423
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0437
		Supply	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0438
		Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0546
		Supply	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0547
DN20 qp2.5m ³ /h G1 130mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0107
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0109
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0110
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0171
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0189
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0325
		Return	5-95°C	PUR 1.5m	Mains power 230V	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0344
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0455
		Return	5-95°C	PUR 5.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U0496
DN20 qp2.5m ³ /h G1 130mm	PN25	Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0425
		Supply	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0440
		Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0548

Ordering

SonoSelect 10 - Heating (continuous)

Meter size	PN	Installation	Temperature Range [°]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN25 qp3.5m ³ /h G1¼ 160mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0120
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0122
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0123
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0173
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0191
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0335
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0457
DN25 qp3.5m ³ /h G1¼ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0133
		Supply	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0135
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	GJ	014U0136
		Return	5-95°C	PUR 1.5m	Mains power 230V	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0346
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0447
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0459
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0427
		Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0550
DN25 qp6.0m ³ /h G1¼ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0268
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0270
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0272
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0336
		Return	5-95°C	PUR 1.5m	Mains power 230V	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0348
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0461
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0429
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0443
		Supply	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0444
		Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0552
DN32 qp6.0m ³ /h G1½ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0280
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0282
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0463
		Return	5-130°C	silicone 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U0431
		Return	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0554
		Supply	5-130°C	silicone 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0555

Ordering
SonoSafe 10 - Heating

Meter size	PN	Installation	Temperature Range [°C]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN15 qp0.6m ³ /h G ³ / ₄ 110mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	No module	kWh	014U0001
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	No module	kWh	014U0002
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0235
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0236
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0250
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0003
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0004
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0028
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0029
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0203
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0204
DN15 qp1.5m ³ /h G ³ / ₄ 110mm	PN16	Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0361
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	No module	kWh	014U0005
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0237
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0251
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0007
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0008
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0035
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0036
DN20 qp1.5m ³ /h G1 130mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0205
		Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0363
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	No module	kWh	014U0009
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0011
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0012
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0042
DN20 qp2.5m ³ /h G1 130mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0043
		Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0365
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	No module	kWh	014U0013
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0241
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0252
DN20 qp2.5m ³ /h G1 130mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0015
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0016
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0049
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0050
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0209
		Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0367
DN25 qp3.5m ³ /h G1 ¹ / ₄ 160mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0243
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0332
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0019
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0020
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0056
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0057
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U0211
DN25 qp3.5m ³ /h G1 ¹ / ₄ 260mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U0245
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0023
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0024
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0063
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	GJ	014U0064
		Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0369

Ordering

SonoSafe 10 - Heating (continuous)

Meter size	PN	Installation	Temperature Range [°]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN25 qp6.0m ³ /h G1¼ 260mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0333
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0266
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0267
		Return	5-95°C	PVC 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U0371
DN32 qp6.0m ³ /h G1½ 260mm	PN16	Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U0334
		Return	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0276
		Supply	5-95°C	PVC 1.5m	Battery 3.6V DC (1 AA-cell)	Wired M-Bus	No module	kWh	014U0277

Ordering

SonoSelect 10 - Cooling

Meter size	PN	Installation	Temperature Range [°]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN15 qp0.6m ³ /h G¾ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1400
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1456
DN15 qp1.5m ³ /h G¾ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1401
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1411
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1415
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1435
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1449
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1455
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1457
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1470
DN20 qp1.5m ³ /h G1 130mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1402
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1412
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1450
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1458
DN20 qp2.5m ³ /h G1 130mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1403
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1413
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1436
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1451
		Return	5-95°C	PUR 5.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1473
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1459
DN25 qp3.5m ³ /h G1¼ 160mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1404
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1414
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1452
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1453
		Return	5-95°C	PUR 5.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1474
DN25 qp3.5m ³ /h G1¼ 160mm	PN25	Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1460
DN25 qp3.5m ³ /h G1¼ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1424
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1426

Ordering

SonoSelect 10 - Cooling (continuous)

Meter size	PN	Installation	Temperature Range [°]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN25 qp6.0m ³ /h G1½ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1429
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS 868,95 with 2 pulse inputs	kWh	014U1431
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1437
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1461
DN32 qp6.0m ³ /h G1½ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1432
		Return	5-95°C	PUR 3.0m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1454
		Return	5-95°C	PUR 5.0m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	Wired M-Bus with 2 pulse inputs	kWh	014U1475
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1462

Ordering

SonoSelect 10 - Combined Heating and Cooling

Meter size	PN	Installation	Temperature Range [°]	Cable length temperature sensor	Power supply	Integrated communication	Modules	Energy unit	Code No.
DN15 qp0.6m ³ /h G¾ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1300
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1307
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1334
DN15 qp1.5m ³ /h G¾ 110mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1301
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1308
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U1315
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1335
DN20 qp1.5m ³ /h G1 130mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1302
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1309
DN20 qp2.5m ³ /h G1 130mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1303
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1310
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	2 pulse inputs	kWh	014U1317
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1337
DN25 qp3.5m ³ /h G1¼ 160mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1304
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1311
DN25 qp6.0m ³ /h G1¼ 260mm	PN25	Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1338
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1305
DN25 qp6.0m ³ /h G1¼ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1312
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1339
DN32 qp6.0m ³ /h G1½ 260mm	PN25	Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	Wired M-Bus	No module	kWh	014U1306
		Return	5-95°C	PUR 1.5m	Battery 3.6V DC (2 AA-cell)	None	Radio OMS WB 868,95 with 2 pulse inputs	kWh	014U1313
		Return	5-95°C	PUR 1.5m	Mains power 230V	Wired M-Bus	No module	kWh	014U1340

Accessories

Product	Designation	Quantity	Code No.
Tailpiece connection set	DN15 G3/4"-R1/2" PN25 130 °C	1 set	087G6071
Tailpiece connection set	DN20 G1"-R3/4" PN25 130 °C	1 set	087G6072
Tailpiece connection set	DN25 G1 1/4"-R1" PN25 130 °C	1 set	087G6073
Tailpiece connection set	DN15 G3/4"-R1/2" PN16 95 °C	1 set	014U1936
Tailpiece connection set	DN20 G1"-R3/4" PN16 95 °C	1 set	014U1937
Tailpiece connection set	DN25 G1 1/4"-R1" PN16 95 °C	1 set	014U1938
Tailpiece connection set	DN32: G1 1/2"-R5/4" PN25 130 °C	1 set	014U1939
Adapter for temperature sensor	Adapter R1/2" to M10x1 (32pcs.) - conical thread for sealing with hemp. PN25 130 °C	32 pcs	014U1935
Adapter for temperature sensor	Adapter R1/2" to M10x1 (1pc) - conical thread for sealing with hemp. PN25 130 °C	1 pc	014U1941
Adapter for temperature sensor	Adapter R1/2" to M10x1 (32pcs.) - incl. copper gasket for flat sealing. PN25 130 °C	32 pcs	087G6076
Adapter for temperature sensor	Adapter R1/2" to M10x1 (1pc) - incl. copper gasket for flat sealing. PN25 130 °C	1 pc	087G6075
Tee fitting	T-fitting DN15: G1/2", G1/2", G1/2" PN25 130 °C	1 pc	014U1959
Tee fitting	T-fitting DN20: G3/4", G1/2", G3/4" PN25 130 °C	1 pc	014U1960
Tee fitting	T-fitting DN25: G1", G1/2", G1" PN25 130 °C	1 pc	014U1961
Tee fitting	T-Fitting DN32: G11/4", G1/2", G11/4" PN25 130 °C	1 pc	014U1943
Ball valve	G1/2" internal thread, Pt sensor connection M10, PN25 130 °C	1 pc.	187F0593
Ball valve	G1/2" internal thread, Pt sensor connection M10, PN25 130 °C	12 pcs.	087H0118
Ball valve	G3/4" internal thread, Pt sensor connection M10, PN25 130 °C	1 pc.	187F0592
Ball valve	G3/4" internal thread, Pt sensor connection M10, PN25 130 °C	12 pcs.	087H0119
Ball valve	G1" internal thread, Pt sensor connection M10, PN25 130 °C	1 pc.	187F0591
Ball valve	G1" internal thread, Pt sensor connection M10, PN25 130 °C	12 pcs.	087H0120
Wall mounting kit	Calculator wall mounting	1 set	014U1945
Extension pipe, L = 60 mm	DN20 x G1	1 pc.	014U1957
Extension pipe, L = 100 mm	DN25 x G1¼	1 pc.	014U1958
Gasket	DN15	1 set	014U1964
Gasket	DN20	1 set	014U1965
Gasket	DN25	1 set	014U1966
Gasket	DN32	1 set	014U1942
O-ring mounting kit	O-ring Ø4.3 x 2.4 + assembly tool	1 set	014U1967
Battery	Battery pack 1 AA cell	1 pc.	014U1968
Battery	Battery pack 2 AA cell	1 pc.	014U1969
Communication module	M-Bus module with 2 pulse inputs	1 pc.	014U1998
Communication module	Wireless OMS 868.95MHz with 2 pulse inputs	1 pc.	014U1999
Communication module	2 pulse inputs	1 pc.	014U1995
Communication module	2 pulse outputs	1 pc.	014U1993
Bluetooth dongle	IR2BLE	1 pc.	014U1963
Sealing kit	4 x wire with + 4 x snap lock seal	1 set	014U1962

* On request new codes with unique specification combination can be created. If needed please contact you local product manager.



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