

S462

Compact Ultrasonic Flow Meter for Liquids

Clamp-on



CLAMP ON
No contact to medium



TRANSIT TIME CORRELATION TECHNIQUE



PORTABLE
Connectable to S551



LOCAL DISPLAY
For easy configuration and live values



STATIONARY
Connectable to S330 / S331 series



COMPACT DESIGN
Can be installed anywhere



Benefits

- ✔ Clamp on type, very easy installation
- ✔ No moving parts
- ✔ Can be installed on stainless steel pipe, carbon steel pipe, copper pipe or plastic pipe such as (PVC, PVDF, PPR, PPH, HDPE, etc.)
- ✔ Clean fluid measurements: water, sea water, others on request
- ✔ Available pipe sizes: DN20, DN25, DN32, DN40

Time-efficient Liquid Measurement

The S462 ultrasonic clamp on flow meter for liquids uses the proven transit-time correlation technique. The unit is simply clamped onto the pipe and will never come in contact with the fluid.

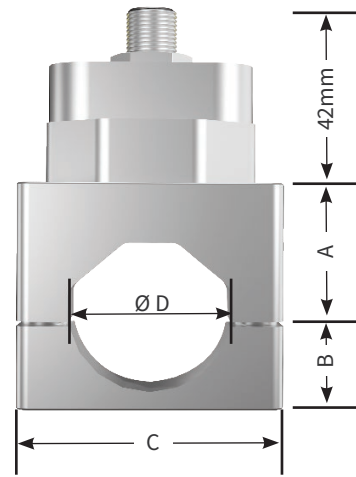
Available in pipe sizes from DN20 ... DN40 the S462 impresses with ease of installation and accurate flow readings. It comes with Modbus/RTU interface and 4 ... 20 mA output, which makes it easy connectable to any facility monitoring system.

Of course S462 clamp on ultrasonic flow meter also works with the SUTO displays and data loggers S330/331 and S551.

Dimensions (Main Unit)



Dimensions (Mounting Bracket)



Model size	A (mm)	B (mm)	C (mm)	D (mm)	
				min	max
DN10	28.5	10	58	13.5	16.5
DN15	28.5	10	58	16.5	23
DN20	26.5	15	58	25	28
DN25	30	18	58	32	35
DN32	33	22.5	68	38	45
DN40	38	27	78	48	54

Easy Installation



Technical Data

Measurement

Flow

Accuracy	1.5 % o.RDG + 0.2 % FS (0.5 ... 5.0 m/s)
Selectable units	m ³ /h, l/min, GAL
Measuring range	0.05 ... 5.0 m/s (see table below)
Repeatability	0.80 % o.RDG
Sensor	Piezo ultrasonic transducer
Sampling rate	3 samples / sec
Turn-down ratio	10:1
Response time (t90)	<2 sec

Consumption

Selectable units	m ³ , liter, GAL
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Reference conditions

Selectable conditions	20 °C 1000 mbar (ISO1217), 0 °C 1013 mbar (DIN1343) freely adjustable
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Signal / Interface & Supply

Analog output

Signal	4 ... 20 mA
Scaling	0 ... max flow / adjustable
Load	<600R
Update rate	3/sec

Fieldbus

Protocol	Modbus/RTU
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Supply

Voltage supply	20 ... 28 VDC
Current consumption	100 mA @ 24 VDC

General data

Configuration

Settings	via integrated keyboard
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Display

Integrated	OLED, 128 x 64 pixel (31 x 16 mm)
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Data Logger

Totalizer	Daily, monthly, yearly consumption
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Material

Housing	Aluminum alloy
Sensor	PEI
Display cover	PMMA
Key pad	F150

Miscellaneous

Dimensions	See dimension drawing
Electrical connection	1 x M12 (5 pole)
Protection class	IP65
Approvals	CE, RoHS, FCC
Weight	0.47 ... 0.60 kg (depends on model)

Operating conditions

Medium	Water, sea water, others on request
Medium quality	No solid particles, no air bubbles
Pipe material	Carbon steel, stainless steel, copper, PVC, PP, PU
Medium temperature	0 ... 50 °C
Ambient temperature	0 ... 50 °C
Ambient humidity	< 95 % rH
Storage temperature	-30 ... +70 °C
Transport temperature	-30 ... +70 °C
Pipe sizes	DN10, DN15, DN20, DN25, DN32, DN40

Model Depending Technical Data

Model		DN10	DN15	DN20	DN25	DN32	DN40
Pipe size (mm)	Pipe OD	13.5 ... 16.5	16.5 ... 23	25 ... 28	32 ... 35	38 ... 45	48 ... 54
	Pipe ID	10	15	20	25	32	40
	NPS	3/8"	1/2"	3/4"	1"	1¼"	1½"
Flow Range (l/min)	0.05 m/s	0.2	0.5	0.9	1.5	2.4	3.8
	0.5 m/s	2.4	5.3	9.42	14.7	24.1	37.7
	5.0 m/s	23.6	53.0	94.2	147.2	241.2	377.0

Ordering

Please use the following tables to assist in placing your order with our sales staff.

S462 Compact Ultrasonic Flow Meter for Liquids (Clamp-On)

Order No.	Description
S695 4625	S462 Clamp On Ultrasonic Flow Meter, DN10, including 2m cable and 4 Coupling pads
S695 4626	S462 Clamp On Ultrasonic Flow Meter, DN15, including 2m cable and 4 Coupling pads
S695 4621	S462 Clamp On Ultrasonic Flow Meter, DN20, including 2m cable and 4 Coupling pads
S695 4622	S462 Clamp On Ultrasonic Flow Meter, DN25, including 2m cable and 4 Coupling pads
S695 4623	S462 Clamp On Ultrasonic Flow Meter, DN32, including 2m cable and 4 Coupling pads
S695 4624	S462 Clamp On Ultrasonic Flow Meter, DN40, including 2m cable and 4 Coupling pads

S462 Accessories

Order No.	Description
A695 4620	Coupling pad, 4 pieces
A554 0129	Transport casing S462, can hold 4 units, battery pack, 2 m cable, 5 m cable, cal cert, IM, dimensions: 465 x 365 x 185 mm
A554 0108	Main unit 100 ... 240 V AC/24 V DC, 0.83 A for SUTO sensors, 1,5 m cable, M12 connector
A553 0156	Cable to connect external power bank, 1.8 m, USB-C connector for power bank, M12 connector 90 degree for S462
R200 4620	Calibration S462
A554 3310	RS-485 splitter T, with 3 x M12 connectors to connect RS-485 devices to a bus



Portable set in transport casing. Can hold up to 4 units with battery pack, cables, charger and documentation



S462 powered by external power bank with connection cable A553 0156

Note: Power bank must be sourced locally due to shipping restrictions [USB-C, 20 V, min. 80 mA]

