.SUTO

Be smart. **Measure it.**

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
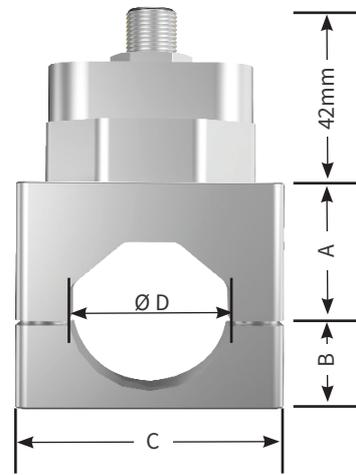- ✅ Available pipe sizes: DN20, DN25, DN32, DN40

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)

48mm

115mm

125mm

Dimensions (Mounting Bracket)

42mm

A

B

Ø D

C

Model size	A (mm)	B (mm)	C (mm)	D (mm)	
				min	max
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

Placing the Coupling pads before installation to the downside part of the main unit

Easy clamp-on installation through mounting brackets

Vertical installation on a water pipe

Technical Data

Measurement

Flow

Accuracy	1.5 % o.RDG + 0.2 % FS (0.5 ... 5.0 m/s)
Selectable units	m³/h, l/min, GAL
Measuring range	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	m³, liter, GAL

Reference conditions

Selectable conditions	20 °C 1000 mbar (ISO1217), 0 °C 1013 mbar (DIN1343) freely adjustable

Signal / Interface & Supply

Analog output

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

Fieldbus

Protocol	Modbus/RTU

Supply

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

General data

Configuration

Settings	via integrated keyboard

Display

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

Data Logger

Totalizer	Daily, monthly, yearly consumption

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	DN20, DN25, DN32, DN40

Model Depending Technical Data

	Model	DN20	DN25	DN32	DN40
Pipe size	Pipe OD (mm)	25 ... 28	32 ... 35	38 ... 45	48 ... 54
	Pipe ID (mm)	20	25	32	40
	NPS	3/4"	1"	1¼"	1½"
Flow Range	Min flow (l/min)	0.94	1.47	2.41	3.77
	Max flow (l/min)	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 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 0107	Plug-in power supply, 100 ... 240 VAC / 24 VDC, 0.5 A, 2 m cable M12 connector. Recommended for portable unit
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]

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