

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

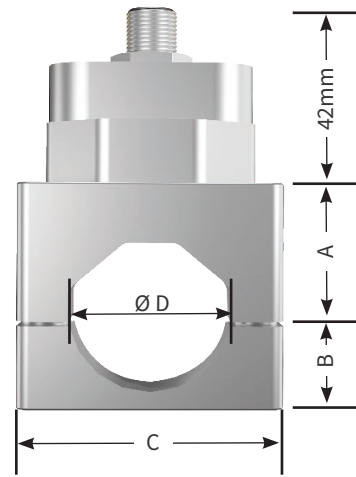
Time-efficient Liquid Measurement

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 (Mounting Bracket)



Dimensions (Main Unit)



| 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



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 |
|------------------|-----------------------------|

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 | Main unit 100....240 VAC/24 VDC, 0.5 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]

