.SUTO

# CLAMP ON
# ULTRASONIC FLOW METER FOR LIQUIDS
# S462



SQ 99     14:15:00
0.140 m3/h
Net     0.073 m3

TRANSIT TIME CORRELATION
TECHNIQUE

# Clamp On
# Ultrasonic Flow Meter —
# measures water and other liquids throughout the facility

## S462 FEATURES

**CLAMP ON**
No contact to medium

**LOCAL DISPLAY**
For easy configuration and live values

**TRANSIT TIME CORRELATION TECHNIQUE**
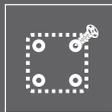
**STATIONARY**
Connectable to S330 / S331 series

**PORTABLE**
Connectable to S551
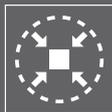
**COMPACT DESIGN**
Can be installed anywhere

## S462 BENEFITS

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.

## S462 FEATURES AT A GLANCE

- 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

## S462 DIMENSIONS
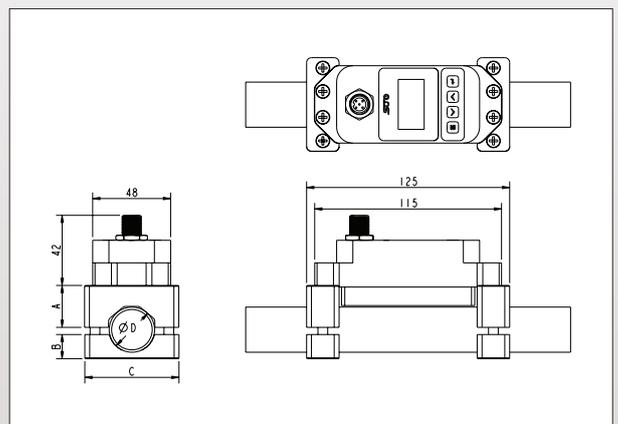
| Model size | A (mm) | B (mm) | C (mm) | D (mm) | |
|---|---|---|---|---|---|
| | | | | min | max |
| DN20 | 26.5 | 15 | 58 | 25 | 28 |
| DN25 | 30 | 18 | 58 | 32 | 35 |
| DN32 | 33 | 22.5 | 68 | 38 | 45 |
| DN40 | 38 | 27 | 78 | 48 | 54 |

# S462  TECHNICAL DATA

| Measurement | |
|---|---|
| **Flow** | |
| Accuracy | 1.5 % o.RDG + 0.2 % FS (0.5... 5.0 m/s) |
| Measuring range | 0.05 ... 5.0 m/s |
| Selectable units | m³/h, l/min, GAL |
| Measuring range | see table next page |
| Repeatability | 0.80 % o.RDG |
| Sensor | Piezzo ultrasonic transducer |
| Sampling rate | 3/sec |
| Turndown ratio | 10:1 |
| Response time (t90) | <2 sec |
| **Consumption** | |
| Selectable units | m³, liter, GAL |
| **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) |



S462 Main unit



Placing the couplant pads before installation on the transducer surface
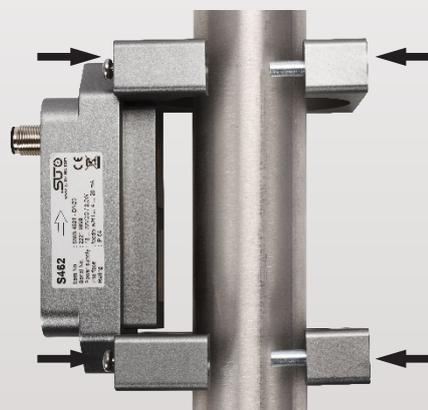


Easy clamp-on installation through mounting brackets

| 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 |

# S462 ORDERING

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

| S462 CLAMP ON ULTRASONIC FLOW METER FOR LIQUIDS | |
|---|---|
| **Order No.** | **Description** |
| **S695 4621** | S462 Clamp On Ultrasonic Flow meter, DN20 , including 2m cable and 4 couplant pads |
| **S695 4622** | S462 Clamp On Ultrasonic Flow meter, DN25 , including 2m cable and 4 couplant pads |
| **S695 4623** | S462 Clamp On Ultrasonic Flow meter, DN32 , including 2m cable and 4 couplant pads |
| **S695 4624** | S462 Clamp On Ultrasonic Flow meter, DN40 , including 2m cable and 4 couplant pads |
| **Accessores** | |
| **A695 4620** | Couplant pad, 4 pieces, 0 ... +80 °C |
| **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 0130** | Battery pack (lasts for 25 h operation), 1.8 m cable with M12 connector, including charger. Recommended for portable unit |
| **R200 4620** | Calibration S462 |
| **A4615** | Sensor cable length extension (please inquire) |



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



Vertical installation on a water pipe

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