

CAT

COMPRESSED AIR TECHNOLOGY



S 460-W, wall mountable controller

The S 460 ultrasonic flow meter uses the proven clamp-on transit-time correlation technique. The ultrasonic transducers are simply clamped onto the outside of the pipe and never come in contact with the fluid.

The transducers are connected to a controller which is available as hat rail, or portable version. The stationary models can be connected to the S 330/331 series of displays and data loggers where the portable model is connectable to the S 551.

Features

Measurement of liquid flows and consumption such as:

- Chemical addition
- Cooling and heating water
- Drinking water
- Broad range of refined hydrocarbons
- Potable water
- De-ionized and demineralized water
- Sanitary flow rate measurements
- Purified water

To calculate the flow range please use this formula:

$$Q = Di^2 * 0.01979$$

Q [m3/h]

Di [mm]

S460 ULTRASONIC FLOW METER



Complete wall mountable set: S 460-W + transducer pair (metal stretcher and coupling agent are included in S 460-W)

Technical data S 460

Velocity range	0.03 ... 20 m/s
Repeatability	0.2%
Accuracy	±1%
Temperature sensor	PT100 3 wire
Output	4 ... 20 mA
Communication	Modbus RTU, Modbus ASCII
Pipe sizes	32 ... 6000 mm (depend on transducer type, inner diameter)
Temperature range	
controller	-30° ... +80°C
transducer	-30° ... +90°C (standard) -30° ... +160°C (High temperature)
Physical units	Selectable
Supply	24 VDC / 1.5 W (S 460-P) 230 VAC or 24 VDC (S 460-W)
Dimensions:	Wall version: 190 x 155 x 85 mm Portable version: 177 x 177 x 60 mm



Clamp on temperature sensors are used for energy calculation in heating and cooling systems



Ultrasonic transducer pair, screw terminals

S460 ULTRASONIC FLOW METER

Order form



D554 0074 Wall mountable

S 460-W, ultrasonic flow meter controller, wall mountable, including 5 m connection cable to transducers, metal stretcher and coupling agent



S694 4606 / S694 4607 / S694 4608

S694 4606 - Ultra sound sensor pair, DN32 ... DN100, screw terminals, for stationary, TS-2
S694 4607 - Ultra sound sensor pair, DN100 ... DN700, screw terminals, for stationary, TM-1
S694 4608 - Ultra sound sensor pair, DN 300 ... DN6000, screw terminals, for stationary, TL-1



P554 0070 Portable

S 460-P, ultrasonic controller for liquid flow sensor, connectable to S 551, including 5 m connection cable to S 551 and to transducers, metal stretcher and coupling agent



S694 4603 / S694 4604 / S694 4605

S694 4603 - Ultra sound sensor pair, DN32 ... DN100, socket terminals, for portable, TS-2
S694 4604 - Ultra sound sensor pair, DN100 ... DN700, socket terminals, for portable, TM-1
S694 4605 - Ultra sound sensor pair, DN300 ... DN6000, socket terminals, for portable, TL-1

Optional



A553 0124

Transducer cable pair, red and blue connector, 5 m (included in P554 0070)



A553 0127

Transducer cable pair, open wire, 2 pole, outer diameter 7mm, shielding (2 x 5 m included in D554 0074)



A553 0121

Sensor cable, 6 pole, AWG22, 7.5 mm outer diameter, w/ shielding, black [per meter] (for connection to S 330/331 displays)



A554 0075

Coupling agent, ultrasonic transducers, 100 g, temporary installations (included in P554 0070)



A554 0077

Metal stretcher for installations of transducers (2 pieces) (2 pieces included in D554 0074 + P554 0070)



A554 0078

Coupling agent, ultrasonic transducers, 100 g, permanent installations (included in D554 0074)



S604 0107

Temperature sensor, Pt100, 3-wire, with 2 m cable, clamp on sensor for pipes, including stretcher (2 sensors required for energy calculation / only for stationary applications)