

# **S 460 ULTRASONIC FLOW METER**



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



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



Ultrasonic transducer pair, screw terminals



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 transducer	-30° +80°C -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

To calculate the flow range please use this formula:

Q=Di<sup>2</sup> \* 0.01979

Q [m3/h]

Di [mm]

# S 460 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 - 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



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









Optional

#### 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



#### 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 \$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)