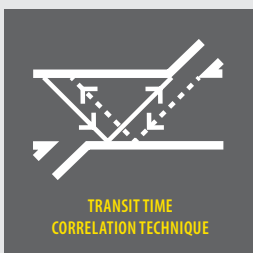


ULTRASONIC FLOW METER

S 460



Measure liquid flow and consumption



S 460 FEATURES



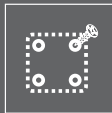
**TRANSIENT TIME
CORRELATION
TECHNIQUE**



SENSOR
PT100, 3wire



PORTABLE
Connectable
to S 551



STATIONARY
Connectable to
S 330 / S 331 series

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

S 460 OPERATION PRINCIPLE

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.



S 460-W, wall mountable controller

S 460 TECHNICAL DATA

General Specifications	
Velocity range	0.03 ... 20 m/s
Repeatability	0.2% of reading
Accuracy	±1% of reading
Temperature sensor	PT100 3-wire
Output	4 ... 20 mA
Communication	Modbus/RTU, Modbus ASCII
Pipe sizes	32 ... 6000 mm (depending on transducer type, inner diameter)
Temperature range controller transducer	-30°C ... +80°C -30°C ... +90°C (standard) -30°C ... +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

To calculate the flow range please use this formula:

$$Q = Di^2 * 0.01979$$

Q [m³/h]

Di [mm]



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



Ultrasonic transducer pair, screw terminals

S 460 ORDERING

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



Visit our website or e-mail us:
www.suto-itec.com
sales@suto-itec.com

	Ultrasonic flow meter controller, wall mountable	
	D554 0074	S 460-W, ultrasonic flow meter controller, wall mountable, including 5 m connection cable to transducers, metal stretcher and coupling agent
	Ultrasonic transducer pair	
	S694 4606	Ultrasonic transducer pair, DN32 ... DN100, screw terminals, for stationary, TS-2
	S694 4607	Ultrasonic transducer pair, DN100 ... DN700, screw terminals, for stationary, TM-1
	Portable ultrasonic controller for liquid flow sensor	
	P554 0070	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
	Ultrasonic transducer pair	
Optional	S694 4603	Ultrasonic transducer pair, DN32 ... DN100, socket terminals, for portable, TS-2
	S694 4604	Ultrasonic transducer pair, DN100 ... DN700, socket terminals, for portable, TM-1
	S694 4605	Ultrasonic transducer pair, DN300 ... DN6000, socket terminals, for portable, TL-1
	Transducer cable pair	
	A553 0124	Transducer cable pair, red and blue connector, 5 m (included in P554 0070)
	Transducer cable pair	
	A553 0127	Transducer cable pair, open wire, 2 poles, outer diameter 7 mm, shielding (2 x 5 m included in D554 0074)
	Sensor cable, 6 poles	
	A553 0121	Sensor cable, 6 poles, AWG22, 7.5 mm outer diameter, w/ shielding, black [per meter] (for connection to S 330/331 displays)
	Coupling agent	
	A554 0075	Coupling agent, ultrasonic transducers, 100 g, temporary installations (included in P554 0070)
	Metal stretcher	
	A554 0077	Metal stretcher for installations of transducers (2 pieces) (2 pieces included in D554 0074 + P554 0070)
	Coupling agent	
	A554 0078	Coupling agent, ultrasonic transducers, 100 g, permanent installations (included in D554 0074)
	Temperature sensor, Pt100	
	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)