



Ultrasonic Flowtransmitter DU-S

Ultrasonic transonic-time difference method



- No moving parts
- No reduced cross-section – no pressure loss
- Very big measuring dynamic
- No problem to measure high velocity
- Compact design
- Very good long-time stability
- Excellent price/performance relation
- Totalisator included

D-EN-IDUS-20180418



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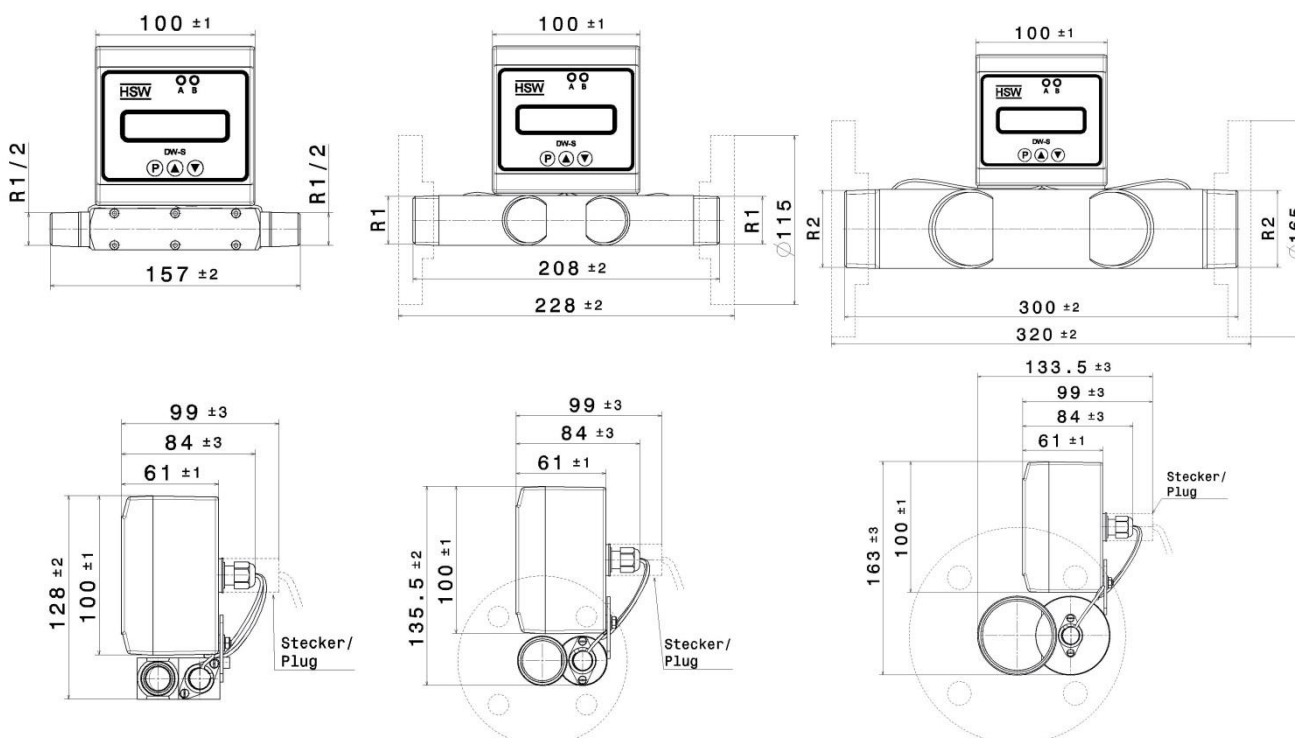
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Flow control using ultrasonic sensors

The functional principle of the DU-S Flowtransmitter is based on two ultrasonic sensors, which are placed in opposing positions. The delay time of the sound depends on the velocity of the flow. Both sensors work alternately as transmitter and receiver. The difference of the delay time is proportional to the flow velocity. The DU-S system works unlike other ultrasonic measuring systems parallel to the liquid stream. This system offers high accuracy, an excellent measuring dynamic and the possibility to measure very high flow speed without reduced cross-section in a very compact design.

Type	DU-S-15-A	DU-S-15-B	DU-S-25-A	DU-S-FL-25-B	DU-S-50-B	DU-S-FL-50-B
Measuring range	0,5-80 l/min	0,5-80 l/min	1-180 l/min	1-180 l/min	8-1000 l/min	8-1000 l/min
Connection	½" external thread	½" external thread	1" external thread	Flange DN25 PN 16	2" external thread	Flange DN50 PN 16
Material	Brass 2.0401	Stainless steel 1.4571	Stainless steel 1.4571	Stainless steel 1.4571	Stainless steel 1.4571	Stainless steel 1.4571

Dimensions



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Technical data

Sensors	Stainless steel 1.4571	Medium	Acustical conductive fluids, gas solids contents ≤ 10 volume %
Housing	Aluminium die cast	Operation	3 buttons at the front side
Measurement functions	Flow speed, flow quantity and totaliser	Flow direction	Optional (housing is rotatable)
Display	2 x 16 digits, illuminated	Accuracy	$\pm 2\%$ v. M.E. at norm conditions
Power supply	24VDC $\pm 15\%$	Operation temperature	-10 – 60°C
Power consumption	200 mA max.	Operation temperature (medium)	-20 – 100°C (higher on request)
Relays	30VDC/1A (2x) SPDT	Pressure loss	No cross section reduction
Signal output	4-20mA, 0-10V, frequency (adjustable max. 32 kHz)	Max. pressure	25 bar
Interface	RS232, RS-485 (with optional interface cable only)	Protection class	IP 67
Measuring principal	Ultrasonic transic-time difference method	Unities	Selectable

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Important instructions!

Technical changes and errors reserved.

Pictures can be similar.

The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.