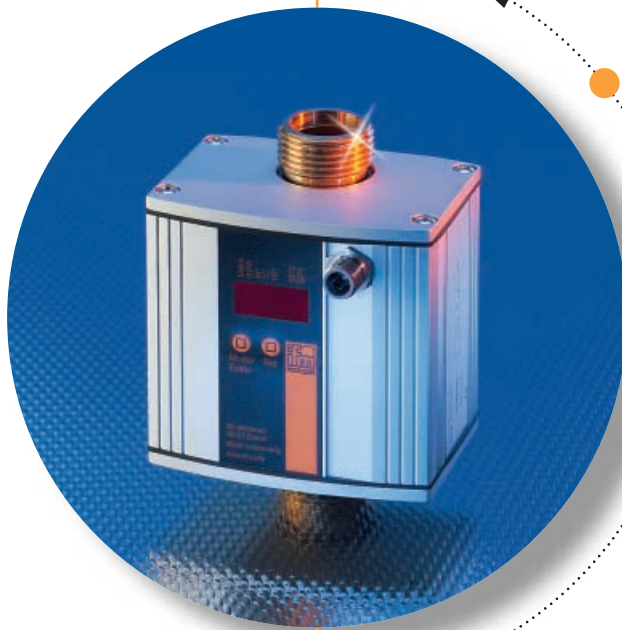


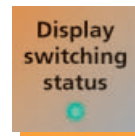
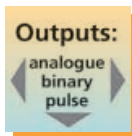
Ultrasonic flow sensor in robust inline design.

Provides flow rate, totalising and medium temperature indication.



- 4-digit alphanumeric display, LEDs for unit and switch point indication.
- Binary, analogue and pulse outputs for signal processing.
- Suited for water up to a flow rate of 100 litres per minute.
- R 1/2 and R 3/4 process connection via adapter fitting.
- High measurement dynamics and resolution due to the transit-time difference method.

Fluid sensors and diagnostic systems



Measuring method

The ultrasonic sensor is based on the transit-time difference method. Sonic pulses are propagated against and in flow direction on a defined measuring path and they are detected by sonic sensors.

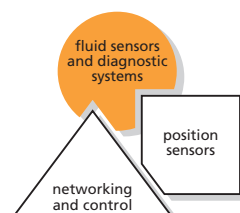
The flow rate can be concluded from the difference of the transit times (in the nanosecond range).

Device functions

Analogue, binary and pulse outputs offer various possibilities to process sensor data. Flexible programming possibilities allow the sensor to adapt to different conditions. The unit is operated via a robust keypad. A display for flow rate, totalising and medium temperature is also integrated.

Installation

Installation is effected via R 1/2 and R 3/4 adapters with the inline sensor. The robust aluminium housing is suited for industrial applications with a high protection rating.



Flow sensors

Ultrasonic flow sensor
For R 1/2 and R 3/4 inline mounting
Robust aluminium housing

With totalising display (totalizer)
4-digit alphanumeric display for the units
of measurement l/min, m³/h and °C

Fluid sensors and diagnostic systems

Application	Water	
Electrical design	DC PNP/NPN	
Connection	4-wire	
Output	Output 1 / programmable or pulse (1 pulse = 0.001 m ³ ...1 pulse = 100 x 10 m ³) Output 2 / programmable or analogue 4...20 mA / 0...10 V	
Measuring range water [l/min]	0...50	0...100
Setting range		
SP* [l/min / m ³ /h]	0.1...50 / 0.005...3	0.2...100 / 0.01...6
ASP** [l/min / m ³ /h]	0.0...40 / 0.0...2.40	0.0...80 / 0.0...4.80
AEP*** [l/min / m ³ /h]	10.0...50.0 / 0.60...3.00	120...100 / 1.20...6.00
Process fitting	G 3/4	G 1
Order no.	SU7000 (SU7200¹⁾)	SU8000 (SU8200¹⁾)
Operating voltage [V]	20...28 DC	
Current rating [mA]	2 x 250	
Short-circuit protection, pulsed	•	
Rev. polarity / overl. protection	•	
Analogue output	4...20 (max. 500 Ω) / 0...10 V (min. 10 KΩ)	
Pressure rating [bar]	16	
Medium temperature [°C]	5...80	
Power-on delay time [s]	10	
Response time [s]	< 2 (flow rate) / 15 (temperature)	
Measuring error	± [3 % measured value + 0.2 % final value of the measuring range] (flow rate) / ± 2 °C (temperature)	
Resolution temperature [°C]	0.2	
Function display		
Switching status	2 x yellow	
Display	4-digit alphanumeric display	
Operating temperature [°C]	5...60	
Protection	IP 65 III	
Housing material	housing: AlMgSi 0.5, anodised; seal: Viton; connector housing: brass	
Sensor material	red brass (2.1096.01), PPR, Viton, PES	
Connection	M12 connector	

*SP = switch point, **ASP = analogue starting point, ***AEP = analogue end point ¹⁾Version with reduced functionality on request

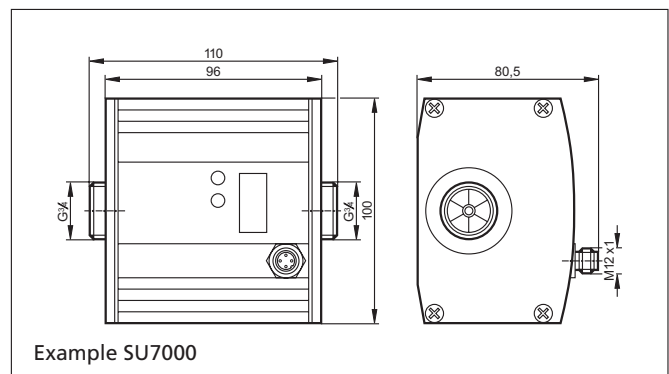
Sockets

Socket type	Design	Order no.
ifm	2 m (PUR), M12 angled, without LED	E10900
ifm	5 m (PUR), M12 angled, without LED	E10901

Accessories

Description	Order no.
Adapter G 3/4 I – R 1/2 (SU7000)	E40151
Adapter G 1 I – R 1/2 (SU8000)	E40152
Adapter G 1 I – R 3/4 (SU8000)	E40153

Dimensions



Visit our website: www.ifm-electronic.com