

FLOWave SAW Flowmeter

8098

- Without any parts in the measuring tube
- Conforms to hygienic requirements CIP/SIP capable
- Ideal for liquids with low or no conductivity
- Compact, lightweight and low energy consumption
- Digital communication, parameter setting via communicator and display
- Optional density and mass flow measurement
- Combine with ME43 or ME63 for batch control



Blind 8098 "S" OEM version

CLICK ME



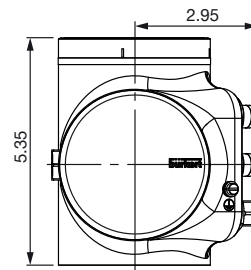
FOR DATA SHEET

The Type 8098L (with display) and 8098S (blind) flowmeter opens up new possibilities for hygienic and process applications. With its unique SAW technology (Surface Acoustic Waves), the device has no sensor elements in the measuring tube and makes it easy to fulfil very high hygienic requirements. This is achieved by using: - suitable stainless steel materials - a measuring tube free of any wetted parts except for the actual tube - the ideal outer hygienic design. FLOWave offers a range of integrated functions, including the advantages of flexibility, ease of cleaning, compact dimensions, lightweight, easy installation and handling, and is compliant with numerous standards. Optimal measurement results can be achieved with homogeneous, air and solid free liquids. Integrated viscosity compensation can be used for higher viscous liquids. Gas and steam cannot be measured; however, their flow does not have any negative effect on the device or its operation. Other liquids flowing through again afterwards are measured correctly as before. Special functions derived from further process values (mass flow, density, differentiation factor, acoustic transmission factor) offer additional information about the particular liquid in use (see data sheet).

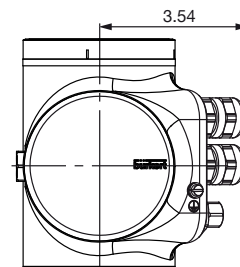
Technical Data

Fluids	Non dangerous liquids complying with article 4 §1 of 2014/68/EU directive
Ambient temperature	-4 °F to 140 °F
Process connection/pipe size acc. to	DIN 32676 series C (ASME BPE) 3/8", 1/2", 3/4", 1", 1 1/2", 2", 2 1/2", 3"
Electrical connections	2 x M20 x 1.5 cable glands and 1 x 5 pin M12 male fixed connector (A-coded) or 2 x 4 pin M12 female fixed connectors (D-coded) and 1 x 5 pin M12 male fixed connector (A-coded)
Sensor housing	Stainless steel 304/1.4301
Blind cover	Stainless steel 304/1.4301
Seal	VMQ silicone
Degree of protection	IP65, IP67 (according to IEC/EN 60529), NEMA 4X (according to NEMA250), if the product is wired and if the cable glands are tightened and the covers are screwed tight
Surface finish	
Measurement tube (inner surface)	Ra < 0.8 µm (32 µin.) available upon request or Ra < 0.4 µm (15 µin.) (electro-polished)
Meas. tube (outer surface), housing	Ra < 1.6 µm (excluding welding seams)
Display module	2.4", monochrome graphic (240 x 160 pixels) German, English, French languages
Measurement deviation	From 10% of full scale up to full scale: ±0.4% of the measured value; From 1% of full scale up to 10% of full scale: ±0.08% of full scale
Temperature measurement	
Measurement range	-4 to 284 °F (-20 to +140 °C)
Measurement deviation for T° ≤ 100 °C	±1 °C
100 °C < T° < 140 °C	±1.5 °C
Refresh time	1 s

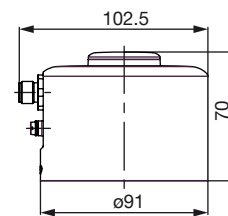
Transmitter SE98 Dimensions [inch]



Ethernet version with 2 x 4 pin M12 female connectors and 1 x 5 pin M12 male connector



with 2 x M20 x 1.5 cable glands in nickel plated brass and 1 x 5 pin M12 male connector



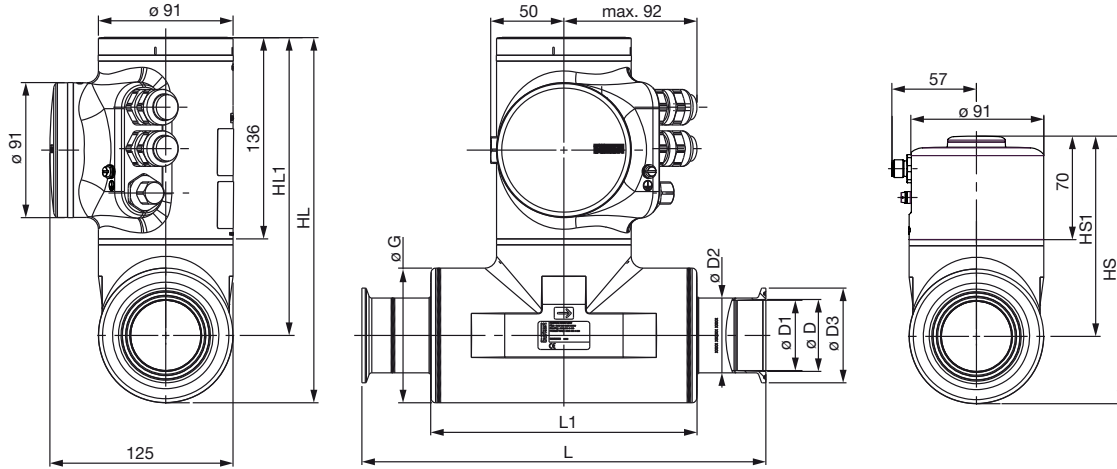
with 1 x 8 pin male connector



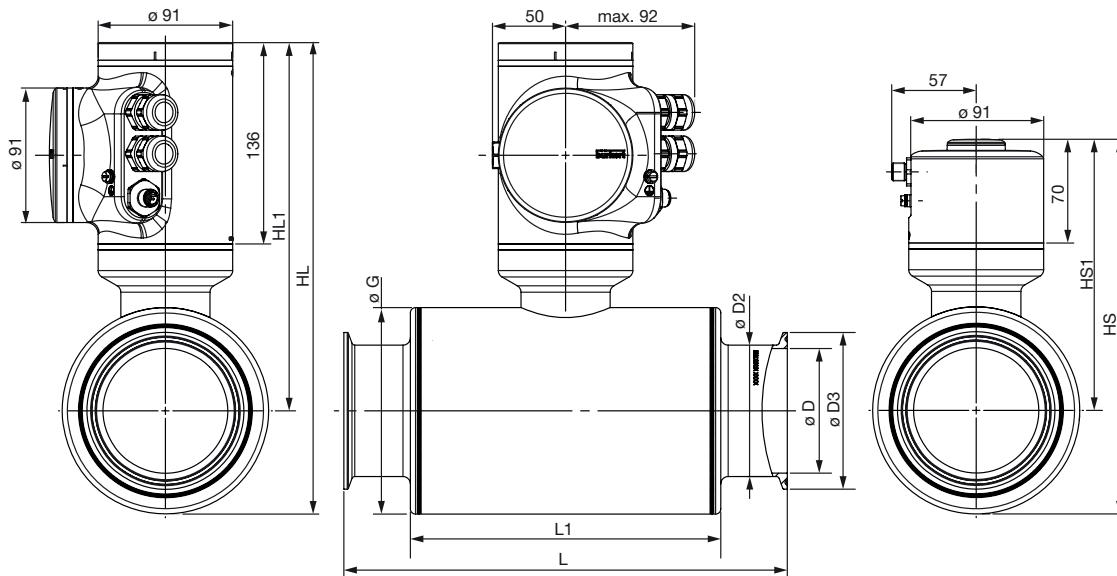
Dimensions [mm] (see datasheet for details)

Flowmeter 8098 with clamp according to DIN 32676 series (ASME BPE)

Sensor with process connection \leq DN 50/2"



Sensor with process connection $>$ DN 50/2"



Clamp/pipe size											
Clamp according to DIN 32676 series C and process pipe according to DIN 11866 series C (ASME BPE)											
[inch]	HL	HL1	HS	HS1	D1	D	D2	D3	G	L1	L
3/8	250	220	184	154	7.75	7.75	14	25	60.3	105	158
1/2	250	220	184	154	9.4	9.4	14	25	60.3	105	158
3/4	250	220	184	154	15.75	15.75	19.05	25	60.3	105	143
1	250	220	184	154	22.1	22.1	25.4	50.5	60.3	105	143
1 1/2	250	200	184	134	34.8	34.8	38.1	50.5	91	180	273
2	250	200	184	134	47.5	47.5	50.8	64	91	180	273
2 1/2	321	251	255	185	60.2	60.2	63.5	77.5	139.7	210	300
3	321	251	255	185	72.9	72.9	76.2	91	139.7	210	300

Ordering Chart

8098L (with display)						
Clamp and pipe size	Measurement tube (inner surface)	Operating voltage	Maximal flow rate	Electrical connection	Display	Item no.
3/8"	0.4 µm	12-35 V DC	1.7 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	573116
				2 × 4 pin M12 female connectors + 1 × 5 pin M12 male connector (Ethernet version)	Yes	573118
1/2"	0.4 µm	12-35 V DC	2.5 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	573123
				2 × 4 pin M12 female connectors + 1 × 5 pin M12 male connector (Ethernet version)	Yes	573125
3/4"	0.4 µm	12-35 V DC	7 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	569675
				2 × 4 pin M12 female connectors + 1 × 5 pin M12 male connector (Ethernet version)	Yes	569679
1"	0.4 µm	12-35 V DC	14 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	569676
				2 × 4 pin M12 female connectors and 1 × 5 pin M12 male connector (Ethernet version)	Yes	569680
1 1/2"	0.4 µm	12-35 V DC	35 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	569677
				2 × 4 pin M12 female connectors and 1 × 5 pin M1 male connector (Ethernet version)	Yes	569681
2"	0.4 µm	12-35 V DC	64 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	569678
				2 × 4 pin M12 female connectors and 1 × 5 pin M12 male connector (Ethernet version)	Yes	569682
2 1/2"	0.4 µm	12-35 V DC	100 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	574710
				2 × 4 pin M12 female connectors + 1 × 5 pin M12 male connector (Ethernet version)	Yes	574720
3"	0.4 µm	12-35 V DC	150 m³/h	2 cable glands* M20 × 1.5 + 1 × 5 pin M12 male connector	Yes	574711
				2 × 4 pin M12 female connectors + 1 × 5 pin M12 male connector (Ethernet version)	Yes	574721

*Cable gland in nickel plated brass

8098L NOTES:

Clamp acc. to DIN 32676 series C (ASME BPE) process connection for pipe acc. to DIN 11866 series C (ASME BPE).

All versions are UL,3A and EHEDG certified and equipped with the special functions ATF (acoustic transmission factor) and DF (differentiation factor).

8098S (blind)						
Clamp and pipe size	Measurement tube (inner surface)	Operating voltage	Maximal flow rate	Electrical connection	UL	Item no.
3/8"	0.4 µm	12-35 V DC	1.7 m³/h	1 X 8 pin M12 Male Connector	Yes	571794
1/2"			2.5 m³/h		Yes	571797
3/4"			7 m³/h		Yes	571800
1"			14 m³/h		Yes	571803
1 1/2"			35 m³/h		Yes	571806
2"			64 m³/h		Yes	571809
2 1/2"			100 m³/h		Yes	574718
3"			150 m³/h		Yes	574719

8098S NOTES:

Clamp acc. to DIN 32676 series C (ASME BPE) process connection for pipe acc. to DIN 11866 series C (ASME BPE).

To set up these devices, please order the USB buS interface kit ,Type 8920, ID 772426 and the 8-pin female to 5-pin male cable, ID 773286.

All above mentioned 8098S versions are UL, 3A and EHEDG certified and equipped with the special functions ATF (acoustic transmission factor) and DF (differentiation factor).

All units have 2x configurable AO or DO's.