

Sensors for Conductivity Measurement

Pharm

Food

MEMOSENS



SE 605 (H) Memosens Conductivity Sensor

Robust 2-electrode sensor, for precise and reliable measurement of low and very low conductivities, particularly in ultrapure water, digital, with Memosens technology

Robust, coaxially arranged electrodes made of stainless steel. Large measuring range from ultrapure water to 600 $\mu\text{S}/\text{cm}$. Integrated temperature detector for temperature compensation. Easy to clean thanks to replaceable outer and inner electrode.

Applications

Ultrapure water, WFI (water for injection), pharmaceutical and food industry, biotechnology

Facts

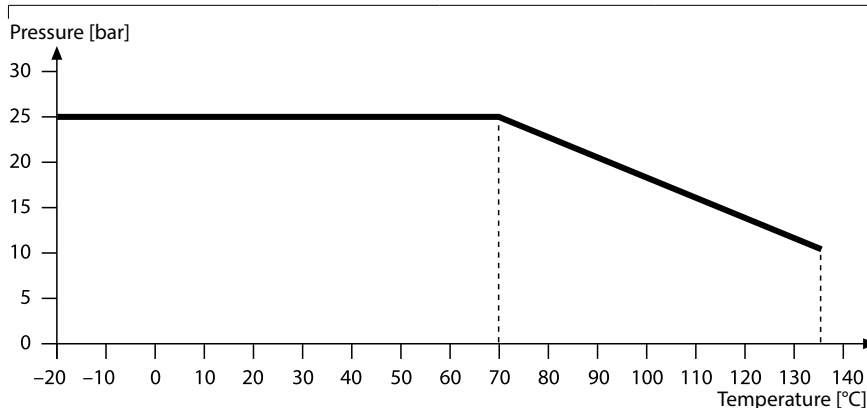
- Perfect galvanic isolation thanks to Memosens technology
- Digital data transfer
- Integrated sensor diagnostics
- Large measuring range from ultrapure water to 600 $\mu\text{S}/\text{cm}$

- Hygienic design
- Electropolished – roughness <0.4 or <0.8 μm , resp.
- FDA-certified materials
- Coaxially arranged electrodes
- Independent of installation conditions
- Integrated temperature detector
- High level of process safety due to durable materials and robust design
- Easy to clean thanks to replaceable outer and inner electrode
- Particularly suitable for monitoring ultrapure water in power plants
- Calibration Certificate
- Replaceable gaskets

Technical Data

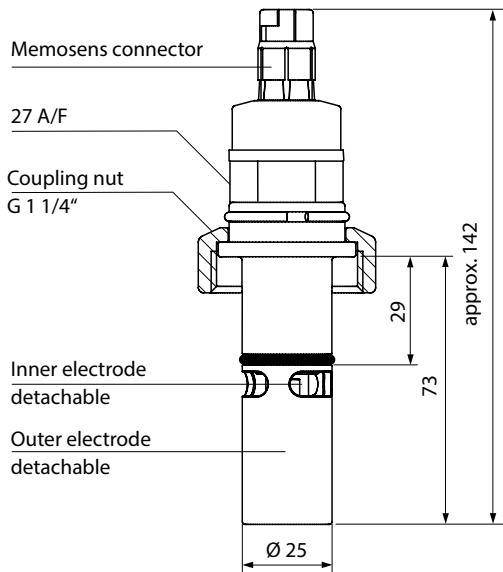
Cell constant:	0.021/cm
Measuring range:	0,001 ... 600 $\mu\text{S}/\text{cm}$
Accuracy:	2 % meas. value up to 500 $\mu\text{S}/\text{cm}$
Process-wetted materials:	1.4435 stainless steel; insulator: PEEK; gaskets: EPDM
Temperature detector:	NTC 30 k Ω (reduced accuracy above 100 °C)
Temperature:	Medium: -20 ... +135 °C Environment: -25 ... +80 °C
Pressure (relative):	-1 ... 25 bar (-20 ... +70 °C) -1 ... 10 bar (135 °C)
Process adaptation:	See product range
Sensor connector:	Memosens
Explosion protection:	II 1 G Ex ia IIC T3/T4/T6
Hazardous area:	II 3 G Ex ic IIC T3/T4/T6 Gc

Pressure/Temperature Diagram

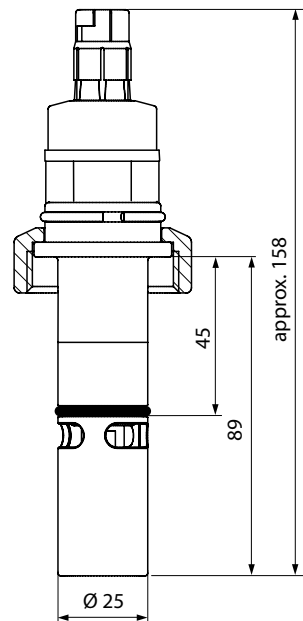


Dimension Drawings

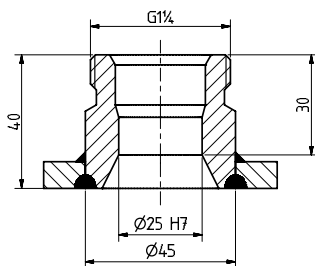
**Ingold socket process adaptation,
eg, 40 mm (H0)**



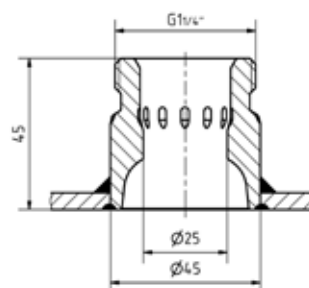
**Ingold socket process adaptation,
eg, 50 mm (HZ)**



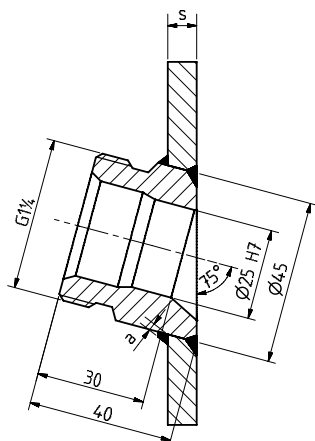
**Weld-in socket, straight
ZU 0717**



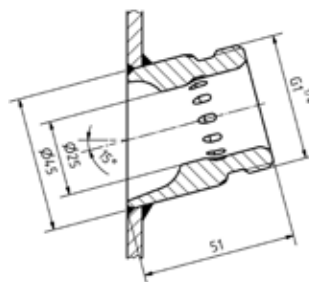
**Weld-in socket, straight
ZU 0922**



**Weld-in socket, beveled 15°
ZU 0718**



**Weld-in socket, beveled 15°
ZU 0923**



Note: These weld-in sockets are only suitable for sensors with design version HO. Further weld-in sockets are available on request.

SE 605 (H) Memosens Conductivity Sensor

Accessories

		Order No.
Memosens cable	3 m	CA/MS-003NAA
	5 m	CA/MS-005NAA
	10 m	CA/MS-010NAA
	20 m*	CA/MS-020NAA
Memosens cable, Ex	3 m	CA/MS-003XAA
	5 m	CA/MS-005XAA
	10 m	CA/MS-010XAA
	20 m*	CA/MS-020XAA
Conductivity standard	KCl 300 ml 15 µS/cm ± 1 %	ZU 0350
	KCl 500 ml 147 µS/cm ± 1 %	ZU 0702
Weld-in socket, straight, 40 mm	For tank wall	ZU 0717
	For pipe, DN 50	ZU 0717/DN50
	For pipe, DN 65	ZU 0717/DN65
	For pipe, DN 80	ZU 0717/DN80
	For pipe, DN 100	ZU 0717/DN100
Weld-in socket, beveled, 15 °, 40 mm	For tank wall	ZU 0718
	For pipe, DN 50	ZU 0718/DN50
	For pipe, DN 65	ZU 0718/DN65
	For pipe, DN 80	ZU 0718/DN80
	For pipe, DN 100	ZU 0718/DN100
Weld-in socket with HSD safety function (Handling Safety Design), straight, 40 mm	For tank wall	ZU 0922
	For pipe, DN 50	ZU 0922/DN50
	For pipe, DN 65	ZU 0922/DN65
	For pipe, DN 80	ZU 0922/DN80
	For pipe, DN 100	ZU 0922/DN100
Weld-in socket with HSD safety function (Handling Safety Design), beveled, 15°, 40 mm	For tank wall	ZU 0923
	For pipe, DN 50	ZU 0923/DN50
	For pipe, DN 65	ZU 0923/DN65
	For pipe, DN 80	ZU 0923/DN80
	For pipe, DN 100	ZU 0923/DN100
MemoSuite		Order No.
	Management software for Memosens sensors	SW-MS1400-B SW-MS1400-A

* Greater lengths on request