

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 sensor with hygienic design made of stainless steel in coaxial arrangement. Large measuring range from ultrapure water to 1000 $\mu\text{S}/\text{cm}$. 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 and Features

- Perfect galvanic isolation thanks to Memosens technology
- Digital data transfer
- Integrated sensor diagnostics

- Large measuring range from ultrapure water to 1000 $\mu\text{S}/\text{cm}$
- Hygienic design
- Electropolished – Roughness $R_a \leq 0.4$ or $\leq 0.8 \mu\text{m}$
- 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
- Replaceable gaskets

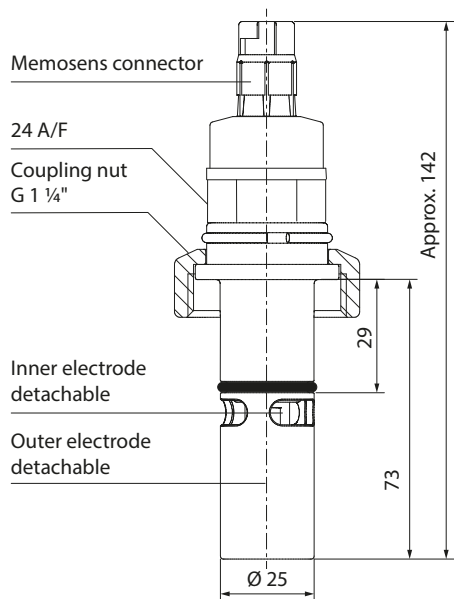
Specifications

Cell constant:	0.021/cm
Measuring range:	0 ... 1000 $\mu\text{S}/\text{cm}$
Measurement error:	0 ... 600 $\mu\text{S}/\text{cm} \pm 2 \%$ 600 ... 1000 $\mu\text{S}/\text{cm} \pm 4 \%$
Wetted materials:	1.4435 stainless steel; insulator: PEEK; gaskets: See product range
Temperature detector:	NTC 30 k Ω
Temperature:	Medium: $-20 \dots 135 \text{ }^\circ\text{C}$ Environment: $-25 \dots 80 \text{ }^\circ\text{C}$
Pressure, Ingot:	Max. 25 bar ($-20 \dots 70 \text{ }^\circ\text{C}$); max. 10 bar ($135 \text{ }^\circ\text{C}$)
Pressure, Clamp:	Max. 16 bar ($-10 \dots 110 \text{ }^\circ\text{C}$); max. 10 bar ($135 \text{ }^\circ\text{C}$)
Process connection:	See product range
Sensor connector:	Memosens
ATEX marking:	II 1 G Ex ia IIC T3/T4/T6 Ga
FM marking:	IS for Class I, Division 1, Groups A, B, C, D; Class I, Zone 0, AEx/Ex ia IIC T6 ... T4 NIFW for Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, IIC T6 ... T4

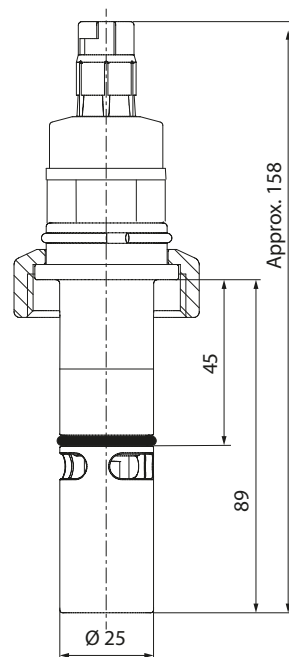
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Dimension Drawing

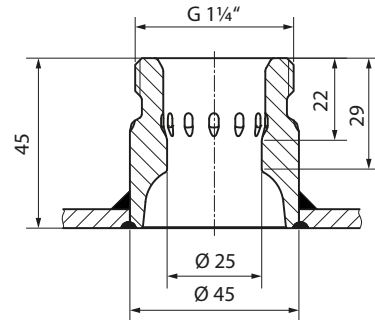
Ingold socket process connection, groove position 29 mm (Type H0)



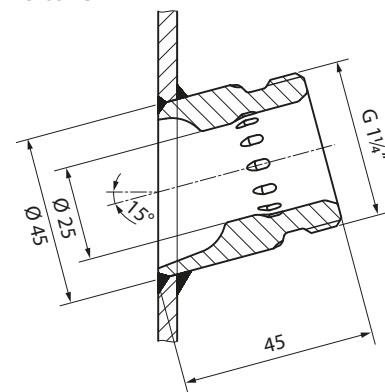
Ingold socket process connection, groove position 45 mm (Type HZ)



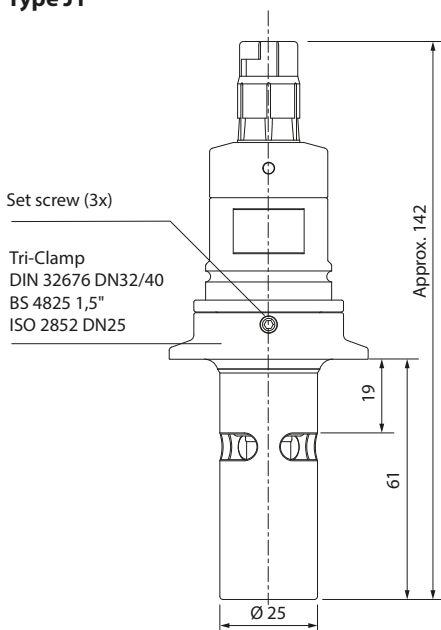
Weld-in socket, straight
With HSD (handling safety design) safety function
ZU 0922



Weld-in socket inclined, 15°
With HSD (handling safety design) safety function
ZU 0923



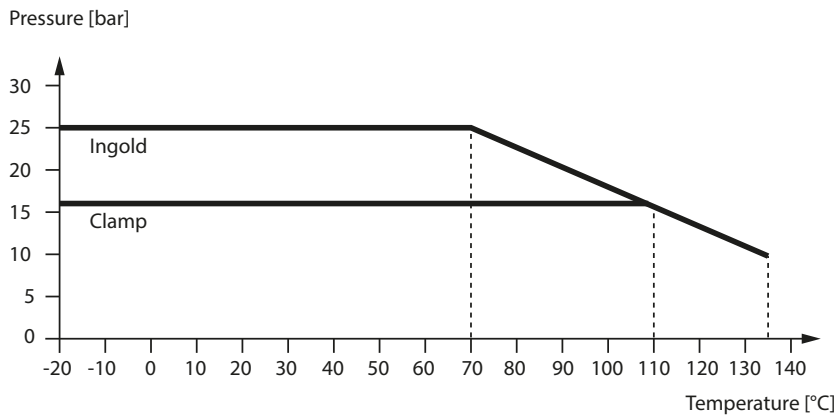
Process connection clamp Type J1



Note: The weld-in sockets listed above are only suitable for sensors with design version H0. For additional weld-in sockets, see accessories.

All dimensions in mm.

Pressure/Temperature Diagram



Product Range

		Order No.								
		SE 605H -								
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	/	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explosion protection	Without ATEX	N								
Sensor connector	Memosens									
Process connection	Ingold socket, 25 mm (G 1 ¼"), 29-mm groove					H	0			
	Ingold socket, 25 mm (G 1 ¼"), 45-mm groove					H	Z			
	Clamp 1 ½"					J	1			
Gasket material	FKM FDA							F		
	EPDM FDA							E		
	FFKM FDA							H		
	FKM FDA USP VI							V		
	EPDM FDA USP VI							U		
	FFKM FDA USP VI							W		
Certificates	Without									0
	Inspection Certificate 3.1 according to EN 10204									3
	FDA - USP VI									U
	FDA									F
	Surface Ra ≤ 0.4 µm									4
	Surface Ra ≤ 0.8 µm									8

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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 1.3 µS/cm	ZU 0701
	KCl 500 ml 15 µS/cm	CS-C15K/500
	KCl 500 ml 147 µS/cm	CS-C147K/500
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 (handling safety design) safety function, straight	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 (handling safety design) safety function, beveled, 15°	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	Basic version (calibration)	SW-MS1400-B
	Advanced version (calibration, diagnostics, documentation)	SW-MS1400-A

* Greater lengths on request