

## 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

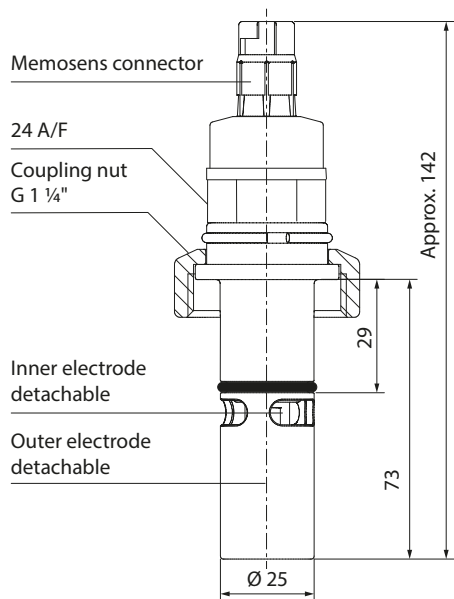
### Specifications

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 $\Omega$
Temperature:	Medium: -20 ... 135 °C Environment: -25 ... 80 °C
Pressure, Ingot:	Max. 25 bar (-20 ... 70 °C); max. 10 bar (135 °C)
Pressure, Clamp:	Max. 16 bar (-10 ... 110 °C); max. 10 bar (135 °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

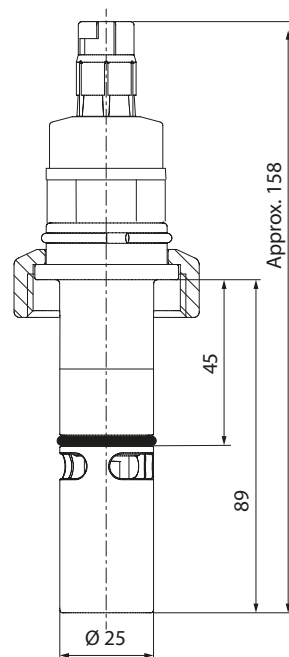
# SE 605 H Memosens Conductivity Sensor

## Dimension Drawing

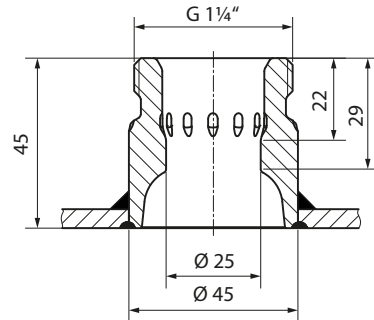
**Ingold socket process connection, groove position 29 mm (Type H0)**



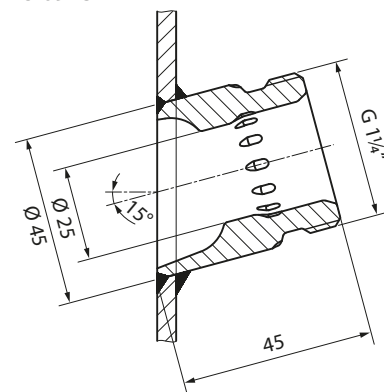
**Ingold socket process connection, groove position 45 mm (Type HZ)**



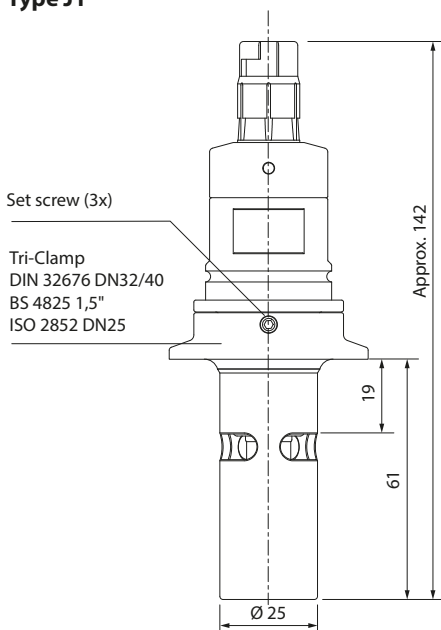
**Weld-in socket, straight**  
With HSD (handling safety design) safety function  
**ZU 0922**



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



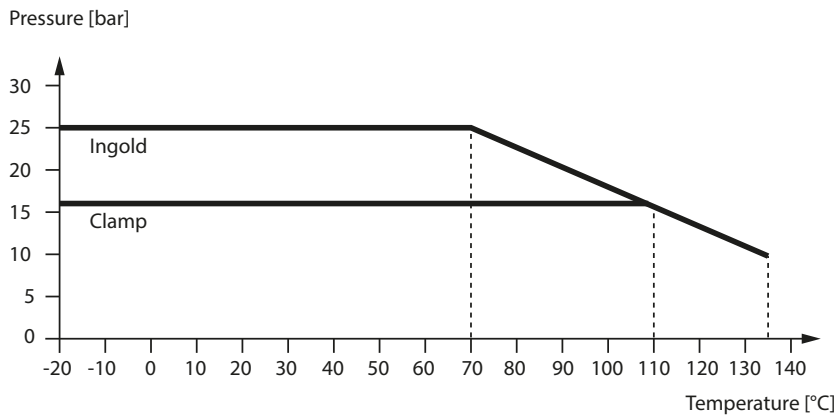
**Process connection clamp Type J1**



**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			MS						
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

# SE 605 H Memosens Conductivity Sensor

## Accessories

		Order No.
Memosens cable	3 m	<b>CA/MS-003NAA</b>
	5 m	<b>CA/MS-005NAA</b>
	10 m	<b>CA/MS-010NAA</b>
	20 m*	<b>CA/MS-020NAA</b>
Memosens cable, Ex	3 m	<b>CA/MS-003XAA</b>
	5 m	<b>CA/MS-005XAA</b>
	10 m	<b>CA/MS-010XAA</b>
	20 m*	<b>CA/MS-020XAA</b>
Conductivity standard	KCl 300 ml 1.3 µS/cm	<b>ZU 0701</b>
	KCl 500 ml 15 µS/cm	<b>CS-C15K/500</b>
	KCl 500 ml 147 µS/cm	<b>CS-C147K/500</b>
Weld-in socket, straight, 40 mm	For tank wall	<b>ZU 0717</b>
	For pipe, DN 50	<b>ZU 0717/DN50</b>
	For pipe, DN 65	<b>ZU 0717/DN65</b>
	For pipe, DN 80	<b>ZU 0717/DN80</b>
	For pipe, DN 100	<b>ZU 0717/DN100</b>
Weld-in socket, beveled, 15 °, 40 mm	For tank wall	<b>ZU 0718</b>
	For pipe, DN 50	<b>ZU 0718/DN50</b>
	For pipe, DN 65	<b>ZU 0718/DN65</b>
	For pipe, DN 80	<b>ZU 0718/DN80</b>
	For pipe, DN 100	<b>ZU 0718/DN100</b>
Weld-in socket with HSD (handling safety design) safety function, straight	For tank wall	<b>ZU 0922</b>
	For pipe, DN 50	<b>ZU 0922/DN50</b>
	For pipe, DN 65	<b>ZU 0922/DN65</b>
	For pipe, DN 80	<b>ZU 0922/DN80</b>
	For pipe, DN 100	<b>ZU 0922/DN100</b>
Weld-in socket with HSD (handling safety design) safety function, beveled, 15°	For tank wall	<b>ZU 0923</b>
	For pipe, DN 50	<b>ZU 0923/DN50</b>
	For pipe, DN 65	<b>ZU 0923/DN65</b>
	For pipe, DN 80	<b>ZU 0923/DN80</b>
	For pipe, DN 100	<b>ZU 0923/DN100</b>
<b>MemoSuite</b>		<b>Order No.</b>
Management software for Memosens Sensors	Basic version (calibration)	<b>SW-MS1400-B</b>
	Advanced version (calibration, diagnostics, documentation)	<b>SW-MS1400-A</b>

\* Greater lengths on request

