

Conductivity Measuring Cells

sensors for screw-in armatures and immersion



The conductivity measuring cells comprise sensors for screw-in armatures as well as for immersion which can be immersed into the fluid easily. A wide-ranged modular configuration system including various types of sensor designs and available materials allow an individual adjustment to the specific task and conditions. Thus, in all fields of industrial process technology, monitoring and laboratory applications universal and precise conductivity measurements are available.

Features

- 3-ring, 2-pin or coaxial sensor designs available
- sensor materials stainless steel (1.4571) or graphite
- various metering ranges and cell constants selectable
- automatic temperature compensation by PT100, PT1000 or NTC possible
- high accuracy and long-term stability
- low maintenance required in combination with long service life
- robust, shock-protected design
- installation length variable
- several housing materials available
- universally applicable at temperatures up to +115 °C (depending on housing material)
- screw-in sensors appropriate for installation in armatures

Application fields

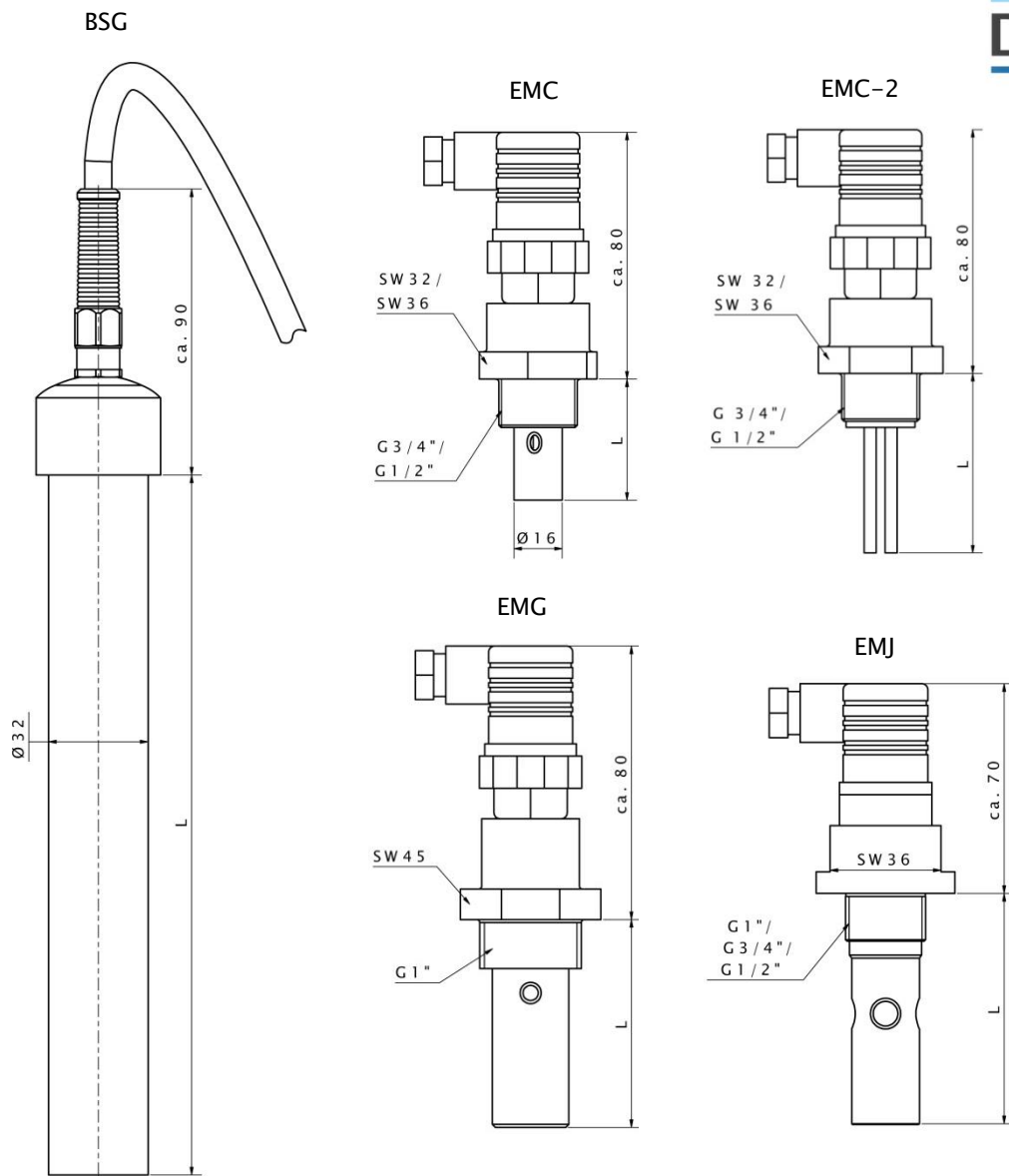
- universal conductivity measurements for industrial applications and laboratories
- preferred operation in waste water treatment, water purification as well as exhaust air plants

Technical data

Parameter		BSG	EMC	EMC-2	EMG	EMJ
sensor type		immersion sensor	screw-in sensor			
electrode material		graphite	stainless steel	stainless steel	graphite	stainless steel
electrode design		2-pin	2-pin	2-pin	3-ring	coaxial
measuring range		100 to 5000 $\mu\text{S}/\text{cm}$	50 to 20000 $\mu\text{S}/\text{cm}$	0 to 500 $\mu\text{S}/\text{cm}$	500 to 50000 $\mu\text{S}/\text{cm}$	0,05 to 10 $\mu\text{S}/\text{cm}$
cell constants		$K = 1.0 \text{ cm}^{-1}$	$K = 1.0 \text{ cm}^{-1}$	$K = 0.1 \text{ cm}^{-1}$	$K = 2.5 \text{ cm}^{-1}$	$K = 0.01 \text{ cm}^{-1}$
installation length L		min. 100 mm	min. 43 mm	min. 62 mm	min. 75 mm	74 mm (G 1/2") 76 mm (G 3/4") 78 mm (G 1")
length above thread		approx. 90 mm	approx. 80 mm	approx. 80 mm	approx. 80 mm	approx. 70 mm
thread	SW36, R3/4"	-	x (SW36)	x (SW36)	-	x (SW36)
	SW32, R1/2"	-	x (SW32)	x (SW32)	-	x (SW36)
	SW45, R1"	-	-	-	x (SW45)	x (SW36)
housing	PVC	x	x	x	x	-
	PVDF	x	x	x	x	x
temperature compensation (depending on utilized measuring device)		none				
		PT100				
		PT1000				
		NTC				
electrical connection		-	3-pin coupler socket (+ PE) according to DIN EN 175301-803			
		fixed connection				
permitted temperature range	PVC	0 to +50°C				-
	PVDF	0 to +115°C				
max. permitted pressure		6 bar				9 bar

Pin assignment:

- Pin ① conductivity
- Pin ② temperature
- Pin ③ temperature
- Pin ⊕ conductivity



When ordering please indicate the following properties:

- desired installation length
- size of thread
- housing material
- temperature compensation
- cable length (in case of fixed connection)

We will be pleased to assist you by selecting the suitable options that meet your requirements. In addition to the displayed measuring cells special customized designs are certainly possible. Please contact us!

The necessary accessories such as connecting cables or screw-in armatures can be found in the respective technical data sheets.

Specifications are subject to modifications.