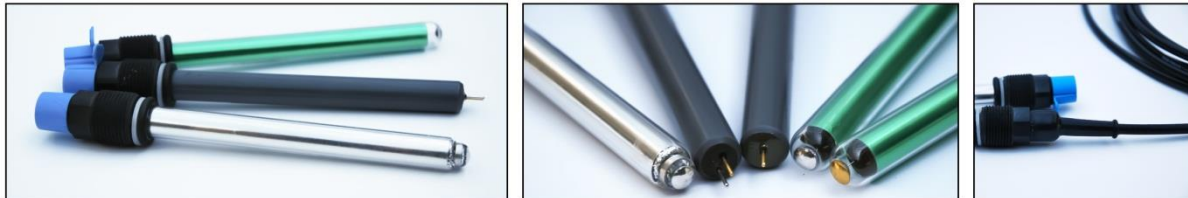


## rH Metal Electrodes

measurement of redox potentials



The redox metal electrodes can be individually adjusted to the specific task and conditions by a wide-ranged modular configuration system including various types of sensor designs and available materials. Combined with the respective reference system in all fields of industrial process technology, monitoring and laboratory applications universal and precise redox potential measurements are available.

### Features

- utilization as single or double measuring sensor in combination with a reference system
- various sensor designs selectable (calotte, bar, pin)
- sensor material platinum, gold, silver oder antimony
  - gold uneligibile in case of permanent high cyanide concentrations
- silver bar suitable for amalgamation and available with sulfide coating
  - sulfide-coating not applicable in the presence of iron, pH-dependent
- automatic temperature compensation by PT100, PT1000 or NTC possible
- high measuring rate
- high accuracy and long-term stability
- low maintenance required in combination with long service life
- robust, shock-protected design
- installation length variable
- several shaft materials available
- universally applicable at temperatures up to +90 °C (depending on shaft material)
- electrical connection by threaded plug head connector PG 13.5, plug head connector S+ or fixed connection
- appropriate for installation in armatures

## Application fields

- redox measurements in combination with a reference system for industrial applications and laboratories
- operation in waste water treatment plants and swimming pools
- double measuring sensor appropriate for auxiliary current operated redox measurement
- measurements in fluids with high sulfide contents (silver)

## Technical data

Parameter		Description
sensor material		platinum (99.99 Pt)
		gold (99.99 Au)
		silver (99.95 Ag)
		antimony (99.80 Sb)
sensor design	single measurement sensor	platinum calotte
		gold calotte
		platinum pin, Ø 1 mm, length 7 mm
		gold pin, Ø 1 mm, length 7 mm
		silver bar, Ø 4 mm, length 8 mm (sulfide-coated also available)
		antimony bar, Ø 4 mm, length 8 mm
	double measurement sensor	platinum pin / gold pin, Ø 1 mm each, length 10 mm
		platinum pin / platinum pin, Ø 1 mm each, length 10 mm
		platinum calotte / platinum ring
		gold calotte / platinum ring
shaft material		normal-purpose glass
		plastic (PMMA)
shaft diameter		12 mm
installation length		fabrication according to customer request
temperature compensation		PT100
		PT1000
		NTC
electrical connection		threaded plug head connector PG 13.5
		plug head connector S+
		fixed connection
permitted temperature range		normal-purpose glass shaft: 0 to +90 °C
		plastic shaft: 0 to +60 °C
max. permitted pressure		6 bar

## Order options

design measuring system		membrane/diaphragm reference system		electrolyte reference system		electrical connection			design measuring sensor		temperature comp.		shaft properties			installation length		electrolyte refilling		
PT		-		-		PA			E		O		D			12		-		
Order example	gold calotte	AU	not applicable	-	not applicable	-	connector	plug head connector S+ <sup>1</sup>	S+	double sensor	D	PT100	P	plastic	Standard, PVC	K	variable, indication in cm	XX	not applicable	-
	platinum calotte	PT	-	-	-	no thread		plug head connector S+, 4-pin <sup>2</sup>	S4	single sensor	E	PT1000	L		with sensor protection					
	gold pin	AD						fixed connection, X=cable length in m, measuring transducer with...	no connector <sup>1</sup>	FX		NTC	N	normal-purpose glass	D					
	platinum pin	PD							no connector <sup>2</sup>	AX		none	O							
	gold calotte / platinum ring	AP							BNC connector straight <sup>1</sup>	FXG										
	platinum calotte / platinum ring	PC							BNC connector angled <sup>1</sup>	FXB										
	gold pin / platinum pin	PA							DIN connector <sup>1</sup>	FXD										
	silver bar	AG							thread PG 13:5	connector	threaded plug head connector PG 13.5 <sup>1</sup>	PA								
	silver bar, sulfide coated	AGS									threaded plug head connector PG 13.5, 4-pin <sup>2</sup>	C4								
	antimony bar	SB									no connector <sup>1</sup>	EX								
											no connector <sup>2</sup>	EAX								
											BNC connector straight <sup>1</sup>	EXG								
		BNC connector angled <sup>1</sup>					EXB													
		DIN connector <sup>1</sup>	EXD																	

<sup>1</sup>electrode without automatic temperature compensation

<sup>2</sup>electrode with automatic temperature compensation

Not all options are combinable. We will be pleased to assist you by selecting the suitable options that meet your requirements. In addition to the displayed order options special customized designs are certainly possible. Please contact us!

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

Specifications are subject to modifications.