

pH/ORP 400

Glass body bulb electrode



PH/ORP 400

The FLS 400 glass-bodied pH/ORP electrode line is designed for a wide range of applications. The ceramic coupling guarantees high performance in terms of pressure and temperature. Different types of ceramic couplings are available for various solutions, depending on the application requirements: annular for a faster response time, 3 membranes for a higher pressure. The standard double couplings also prevent contamination of the reference solution and guarantee a long service life. Models with long external cable (9 m) with connection head (S7) are also available.

GLASS BODY BULB ELECTRODE

APPLICATIONS

- Water treatment
- Neutralisation systems
- Water quality monitoring
- Process control
- Agriculture and fertilizers
- Cooling towers and scrubbers
- Galvanic processes

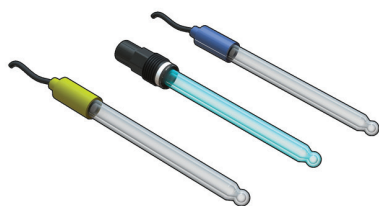
MAIN CHARACTERISTICS

- Glass body
- Sensors suitable for extreme applications
- Simple and cost-effective installation
- Cost-effective installation adapters
- Special models available on request
- High-performance electrodes

TECHNICAL DATA

General information	Operating range:
	– Electrodes for pH: 0–14 pH (0–12.3 pH without Na ⁺ error)
	– Electrodes for ORP: ±2000 mV
	Temperature compensation device (for TC models): Pt1000
	Pipe size range: from DN15 a DN100 (da 0,5" a 4")
	Value at 0 mV of the new electrodes: 7,00 pH ±0,2 pH
	New electrode efficiency: > 97% at 25°C (77°F)
	Response time of new electrodes:
	– pH: 2 s for 95% signal change
	– ORP: depends on the application
Standards & Approvals	Reference solution:
	– Electrolyte: 3M KCl polymer gel (different substrates depending on the model)
	Connection to the process:
	– In-line installation with: PG13.5 (PH435CD); ½ threaded adapter (PH431CD; ORP431CD)
	Max operating pressure/temperature:
	– 6 bar (90 psi) at 130°C (266°F); 16 bar (240 psi) at 25°C (77°F) (PH435CD)
	– 2 bar (30 psi) at 100°C (212°F); 10 bar (100 psi) at 25°C (PH431CD; ORP431CD)
	Materials in contact with liquids:
	– Body: glass
	– Coupling: ceramic annular (PH431CD; ORP431CD); ceramic double annular (PH4354CD)
	– Detection surface: glass membrane (pH) or platinum (ORP)
	Manufactured under ISO 9001
	Manufactured under ISO 14001
	CE
	EAC

PRODUCT CODES



PH4XX

Double junction bulb pH Electrodes with glass body

Code	Applications/ Operative Range	Detection surface	Max operating pressure at operating temperature	Cable**	Connection	O-ring	Installation	Weight (gr)
PH431CD	0-13 pH*	Glass type GX2	2 bar at 100°C (30psi at 212°F)	not required	9 m (27 ft)	-	GEG135	200
PH435CD	0-14 pH*	Glass type H	6 bar at 130°C (85 psi at 266°F)	CE5S7	S7	silicone	GEG135 GEG135SE EG135FS EG135FL	200

*(0-12,3 pH without Na⁺ error)

** (Sold separately)

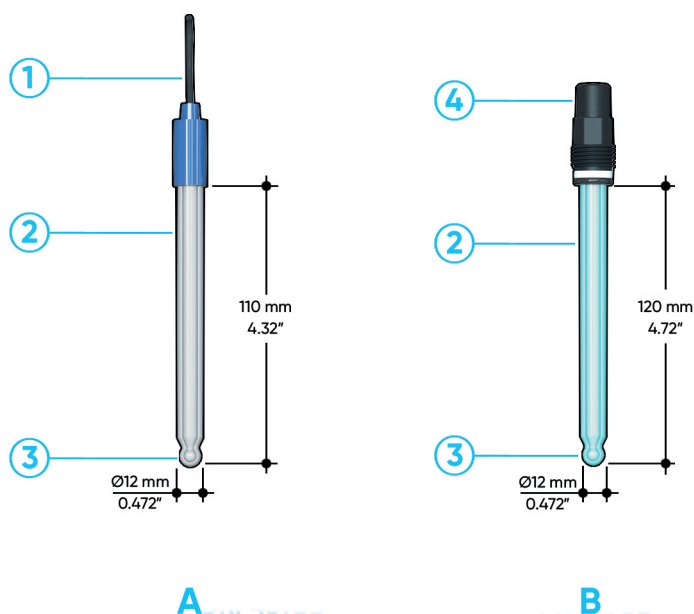
ORP4XX

Double junction bulb ORP Electrodes with glass body

Code	Applications/ Operative Range	Detection surface	Max operating pressure at operating temperature	Cable*	Connection	O-ring	Installation	Weight (gr)
ORP431CD	± 1000 mV	Platinum	2 bar at 100°C (30 psi at 212°F)	Not required	9 mt (27 ft.)	-	GEG135	200

* (Sold separately)

TECHNICAL DRAWINGS



A PH431CD, ORP431CD
B PH435CD

1 Cable: 9m
2 Glass body

3 pH glass bulb
4 S7