

The corresponding sensor for any application:

Application recommendations for pH and ORP electrodes

The table provides an orientation to the large variety of our electrodes. The listed electrodes give an example for similar measuring models, i.e. variation only regarding the connecting system or the integrated temperature sensor. The electrode BlueLine 11 pH for instance also represents the versions 12 pH, 14 pH, 15 pH, 17 pH, 18 pH and 19 pH. Regarding the ScienceLine and IoLine pH electrodes there is special attention to be drawn to the versions N 62 and H 62 as well as to IL-pH-A120MF and IL-pH-H120MF; these models are also available with larger shaft lengths.

An extension of length under the same application conditions delivers faster and more stable measuring results; additionally it enables a longer lifespan of the electrode. The higher electrolyte stand along with the increased electrolyte outflow reduces unwanted diffusion potentials on the diaphragm and rinses it free.

Some applications may require other electrode recommendations due to certain operation conditions, as identical applications can differ fundamentally with varying concentrations and temperatures. Please also note the material resistance of the sensor towards the measuring media. The recommended and additional sensors with the corresponding technical data are stated on the following pages of our catalogue. Please contact us via telephone, fax or email whenever you cannot find your application or have any queries regarding certain operation conditions.



... and conductivity cells

Electrode series		IoLine	pH measuring ScienceLine										BlueLine				ORP ScienceLine				BL*				Conductivity ScienceLine																				
Application area	Sensor example		IL-pH-A120MF	IL-pH-H120MF	IL-Micro-pH-A	IL-SP-pH-A	A 157	A 7780	H 62	H 64	N 1048 A	L 32	L 39	L 6880	L 8280	N 62	N 64	N 6000 A	N 6003	11 pH	22 pH	13 pH	16 pH	21 pH	27 pH	Ag 6280	Pt 62	Pt 6140	Pt 8280	Pt 5900 A	31 RX	32 RX	LF 213 T	LF 313 T	LF 313 T NFTC	LF 413 T	LF 613 T	LF 713 T							
	Application																																												
Chemistry	Etching and degreasing baths		■	■				■	■						■	■				■	■					■				■															
	Bleach and dyeing solutions		■	■				■	■							■	■				■	■					■				■														
	Cutting oil emulsions		■												■	■	■				■	■					■				■														
	Cyanide detoxification		■	■				■	■							■	■				■	■					■				■														
	Dispersion paint		■	■				■	■							■	■				■	■					■				■														
	Emulsions, water-based		■	■				■	■						■	■					■	■					■				■														
	Emulsions, partly water-based		■														■	■																											
	Paint/varnish, water-soluble		■	■				■	■								■	■				■	■				■				■														
	Fixing bath		■	■				■	■								■	■				■	■				■				■														
	Varnish, water-based		■	■				■	■								■	■				■	■				■				■														
	Varnish, partly water-based		■														■	■				■	■				■				■														
	Lye, extreme			■				■	■								■	■				■	■				■				■														
	Oil/water-emulsions		■														■	■				■	■				■				■														
	Organic percentile high		■														■	■				■	■				■				■														
	Paper extract		■	■				■	■								■	■				■	■				■				■														
	Acid, extreme		■	■				■	■								■	■				■	■				■				■														
	Sulphide containing liquid		■	■													■	■				■	■				■				■														
	Suspension, water-based		■	■					■	■						■	■					■	■				■				■														
	Ink		■	■					■	■							■	■				■	■				■				■														
Viscose samples		■							■												■	■				■				■															
Field measurements	Beck		■					■								■	■				■	■				■				■															
	Ground water		■					■								■	■				■	■				■				■															
	Lake water		■					■								■	■				■	■				■				■															
	Seawater		■					■								■	■				■	■				■				■															
	Rain water		■					■								■	■				■	■				■				■															
Drinks production	Beer		■					■								■	■				■	■				■				■															
	Fruit juice		■					■								■	■				■	■				■				■															
	Vegetable juice		■					■								■	■				■	■				■				■															
	Lemonades/soda		■					■								■	■				■	■				■				■															
	Mineral water		■					■								■	■				■	■				■				■															
	Juice		■					■								■	■				■	■				■				■															
	Spirits		■					■								■	■				■	■				■				■															
	Wine		■					■								■	■				■	■				■				■															

* BL = BlueLine

Further application recommendations for pH

Electrode series		IoLine	pH measuring ScienceLine	BlueLine	ORP ScienceLine	BL*	Conductivity ScienceLine
Application area	Sensor example	IL-pH-A120MF IL-pH-H120MF IL-Micro-pH-A IL-SP-pH-A	A 157 A 7780 H 62 H 64 N 1048 A L 32 L 39 L 6880 L 8280 N 62 N 64 N 6000 A N 6003	11 pH 22 pH 13 pH 16 pH 21 pH 27 pH	Ag 6280 Pt 62 Pt 6140 Pt 8280 Pt 5900 A	31 RX 32 RX	LF 213 T LF 313 T LF 313 T NFTC LF 413 T LF 613 T LF 713 T
	Application						
Cosmetics	Creme	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hair dye	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hair gel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Hair mousse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Lotions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Make-up	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Mouth wash	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Shaving foam	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Sun lotion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Tooth paste	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Agriculture	Ground (extract/slug)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fertilizer solution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Vegetables	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Liquid manure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Food production	Bread/dough/pastry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Vinegar	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Grease	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Fish	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Meat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Honey	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Margarine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Coffee extract	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Jam/marmelade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Mayonnaise	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dairy	Sausage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Butter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Yoghurt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Cheese	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Milk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Surface	Cream	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Skin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Leather	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Paper	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Textiles	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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... ORP electrodes and conductivity cells

Electrode series		IoLine	pH measuring ScienceLine							BlueLine			ORP ScienceLine				BL*			Conductivity ScienceLine																						
Application area	Sensor example	IL-pH-A120MF	IL-pH-H120MF	IL-Micro-pH-A	IL-SP-pH-A	A 157	A 7780	H 62	H 64	N 1048 A	L 32	L 39	L 6880	L 8280	N 62	N 64	N 6000 A	N 6003	11 pH	22 pH	13 pH	16 pH	21 pH	27 pH	Ag 6280	Pt 62	Pt 6140	Pt 8280	Pt 5900 A	31 RX	32 RX	LF 213 T	LF 313 T	LF 313 T NFTC	LF 413 T	LF 613 T	LF 713 T					
	Application																																									
Pharmacy, biology, biotechnology, medicine, microbiology	Agar-agar gel				■					■		■	■											■																		
	Enzyme solution	■	■	■																■	■					■													■			
	Infusion solutions	■	■	■											■	■				■						■														■		
	Small vessels/sample quantity			■		■												■	■										■													
	Bacteria cultures	■	■	■		■	■									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	Gastric juice		■													■	■			■						■														■		
	NMR tubes																		■																							
	Precision measurement	■	■	■												■	■									■																
	Protein containing liquid	■	■	■												■	■									■																
	Serum	■	■	■		■										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Tris puffer	■	■	■																																					■	
	Urine	■	■	■												■	■				■						■													■		
	Vials			■		■																							■													
Technical	Cooling water	■					■								■	■										■																
	Lye, hot		■					■	■																	■															■	
	Acid, hot		■					■	■																	■														■		
Washing agents	Detergents	■													■	■									■															■		
	Disinfectant	■													■	■									■															■		
	Cleaning agent	■													■	■									■															■		
	Soap solution	■													■	■									■															■		
	Dishwashing liquid	■													■	■									■															■		
	Tenside solution	■													■	■									■															■		
Water	Waste water, general	■					■	■					■	■	■										■															■		
	Aquarium water	■					■								■	■									■															■		
	Demineralization/ion exchanger	■													■	■									■															■		
	pH values, extreme		■					■	■																■															■		
	Media containing low ions	■					■								■	■									■															■		
	Boiler feed water	■					■								■	■									■															■		
	Condensate	■					■								■	■									■															■		
	Purity water	■														■	■								■															■		
	Salt solution		■				■	■						■											■		■													■		
	Drinking water	■					■									■	■								■															■		
	Drops															■	■								■															■		

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