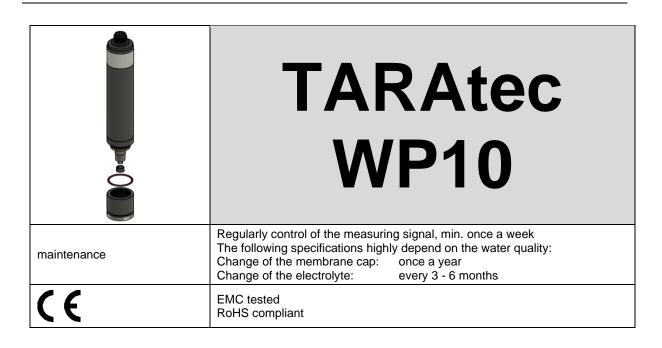


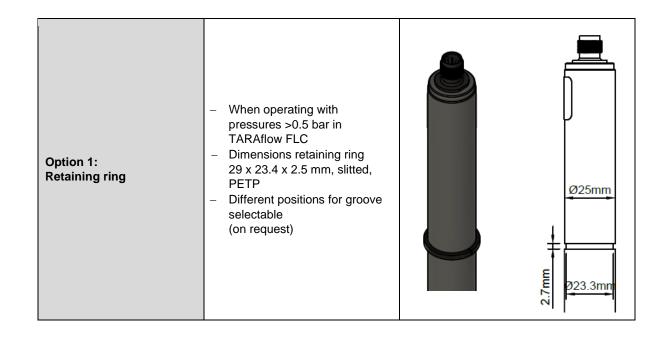
	TARAtec WP10
indicator	Hydrogen peroxide
Application	All kinds of water treatment, also sea water, especially for high H ₂ O ₂ -concentrations. The membrane system is mechanical resistant. The membrane system is highly resistant to surfactants (tensides).
Measuring system	Membrane covered, amperometric 2-electrode system.
Electronic	Analog version: - voltage output - not galvanically isolated electronics - analog internal data processing - output signal: analog (analog-out/analog) Digital version: - electronic is completely galvanically isolated - digital internal data processing - output signal: analog (analog-out/digital) or digital (digital-out/digital) - current output analog - not galvanically isolated electronics
Information about the measuring range	- output signal: analog (analog-out/analog) The actual slope of a sensor can vary production-related between 65% and 150% of the nominal slope
measuring range	Note: With a slope > 100% the measuring range is reduced accordingly. (Ex.: 150% slope → 67% of the specified measuring range)
Working temperature	Measuring water temperature: 0 +45 °C (no ice crystals in the measuring water)
Tronwing tomporation	Ambient temperature: 0 +55 °C
Temperature compensation	Automatically, by an integrated temperature sensor Response time t ₉₀ = approx. 8 min. Max. change in temperature: 5 °C per hour, sudden temperature changes must be avoided
Max. allowed working pressure	Operation without retaining ring: - 0.5 bar - no pressure impulses and/or vibrations Operation with retaining ring in TARAflow FLC: - 1.0 bar,
	no pressure impulses and/or vibrations (see option 1)
Flow rate (Incoming flow velocity)	approx. 15-30 l/h (15 – 30 cm/s) in TARAflow FLC, small flow rate dependence is given
pH-range	pH 2 – pH 11



	TARAtec WP10					
Run-in time	First start-up approx. 5 h					
Response time	T ₉₀ : approx. 8 min.					
Accuracy after calibration at repeatability conditions (25°C, pH 7.2 in drinking water) of the upper full scale	 Measuring range 200 ppm: at 40 ppm <2% at 160 ppm <2% Measuring range 2000 ppm: at 400 ppm <0,5% at 1600 ppm <2% 					
Zero point adjustment	Not necessary					
calibration	At the device, by analytical determination					
interferences	Cl ₂ : must not be present PAA: must not be present O ₃ : must not be present Sulfides: contaminate the measuring system Phenol: aqueous solution >3 % phenol, destroys the membrane system					
Absence of the disinfectant	Max. 24 h					
Connection	mV version: 5-pole M12, plug-on flange Modbus version: 5-pole M12, plug-on flange 4-20 mA version: 2-pole terminal or 5-pole M12, plug-on flange					
max. length of sensor cable	analog < 30 m					
(depending on internal signal processing)	digital > 30 m are permissible Maximum cable length depends on application					
Protection type	5-pole M12 plug-on flange: IP68 2-pole terminal with mA-hood: IP65					
material	Elastomer membrane, PVC-U, stainless steel 1.4571					
Size	diameter: Length: mV version approx. 25 mm approx. 190 mm (analog signal processing) approx 205 mm (digital signal processing) approx. 205 mm 4-20 mA version approx. 220 mm (2-pole-terminal) approx. 190 mm (5-pole-M12)					
Transport	+5 +50 °C (Sensor, electrolyte, membrane cap)					
storage	Sensor: dry and without electrolyte no limit at +5 +40 °C Electrolyte: in original bottle protected from sunlight at +5 +35 °C mir 1 year or until specified EXP-Date Membrane cap: in original packing no limit at +5 +40 °C					









Technical Data

1. WP10 (Analog output, analog internal signal processing)

	Measuring range	Resolution	Output Output resistance	Nominal slope	Voltage supply	Galvanic isolation required in the measuring device/controller *	Connection
WP10H-M12	0.5200 ppm	0.1 ppm		-10 mV/ppm			5-pole M12 plug-on flange
WP10N-M12	52000 ppm	1 ppm	02000 mV -1 mV/ppm	-1 mV/ppm	±5 - ±15 VDC 10 mA	yes	Function of wires: PIN1: measuring signal PIN2: +U PIN3: -U PIN4: signal GND PIN5: n. c.
WP10L-M12	0.0052 % (20000 ppm)	0.001 % (10 ppm)	1 kΩ	-1000mV/% (-0.1 mV/ppm)			
WP10-20%-M12	0.05 20% (200000 ppm)	0.01 % (100 ppm)		-100 mV/% (-0.01 mV/ppm)			

^{*} for further information see brochure 'Technical information // galvanic isolation' (in the download area of our website www.reiss-gmbh.com)
(Subject to technical changes!)



2. WP10 (analog output, digital signal processing) analog-out / digital

	Measuring range	Resolution	Output Output resistance	Nominal slope	Power supply	Galvanic isolation required in the measuring device/controller *	Connection
WP10H-An-M12	0.5 200.0 ppm	0.1 ppm		-10 mV/ppm			
WP10N-An-M12	.50 2000 ppm	1 ppm	analog 02 V (max2.5 V) 1 kΩ	-1 mV/ppm	9-30 VDC	no	5-pole M12 plug-on flange Function of wires: PIN1: measuring signal PIN2: +U PIN3: power GND PIN4: signal GND PIN5: n. c.
WP10L-An-M12	0.005 2 % (20000 ppm)	0.001 % (10 ppm)		-1000 mV/% (-0.1 mV/ppm)			
WP10-20%-An-M12	0.05 20 % (200000 ppm)	0.01 % (100 ppm)		-100 mV/% (-0.01 mV/ppm)			
WP10H-Ap-M12	0.5 200.0 ppm	0.1 ppm		+10 mV/ppm	approx. 7-30 mA		
WP10N-Ap-M12	5 2000 ppm	1 ppm	analog 0+2 V (max. +2.5 V)	+1 mV/ppm			
WP10L-Ap-M12	0.005 2 % (20000 ppm)	0.001 % (10 ppm)	7	+1000 mV/% (+0.1 mV/ppm)			
WP10-20%-Ap-M12	0.05 20 % (200000 ppm)	0.01 % (100 ppm)		+100 mV/% (+0.01 mV/ppm)			

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(Subject to technical changes!)



3. WP10 (digital output, digital signal processing)

	Measuring range	Resolution	Output Output resistance	Power supply	Galvanic isolation required in the measuring device/controller *	Connection
WP10H-M0c	0.5 200.0 ppm	0.1 ppm				5-pole M12 plug-on flange
WP10N-M0c	5 2000 ppm	1 ppm	There are no terminating resistors	9-30 VDC approx. 7-30 mA	no	Function of wires: PIN1: reserved
WP10L-M0c	0.005 2 % (20000 ppm)	0.001 % (10 ppm)				PIN2: +U PIN3: power GND PIN4: RS485B
WP10-20%-M0c	0.05 20 % (200000 ppm)	0.01 % (100 ppm)				PIN5: RS485A

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(Subject to technical changes!)



4. WP10 4-20 mA (analog output, analog internal signal processing)

4.1 Electrical connection: 2 pole terminal clamp

	Measuring range	Resolution	Output Output resistance	Nominal slope	Voltage supply	Galvanic isolation required in the measuring device/controller *	Connection
WP10MA-200	0.5 200.0 ppm	0.1 ppm		0.08 mA/ppm			
WP10MA-2000	5 2000 ppm	1 ppm		0.008 mA/ppm	1230 VDC	yes	2-pole terminal (2 x 1 mm²)
WP10MA-2%	0.005 2 % (20000 ppm)	0.001 % (10 ppm)		8 mA/% (0.0008 mA/ppm)			
WP10MA-5%	0.05 5 % (50000 ppm)	0.01 % (100 ppm)	uncalibrated	3.2 mA/% (0.00032 mA/ppm)	R _L 50ΩR _L 900Ω		Recommended: Round cable Ø 4 mm
WP10MA-10%	0.05 10 % (100000 ppm)	0.01 % (100 ppm)		1.6 mA/% (0.00016 mA/ppm)			2 x 0.34 mm ²
WP10MA-20%	0.05 20 % (200000 ppm)	0.01 % (100 ppm)		0.8 mA/% (0.00008 mA/ppm)			

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4.2 Electrical connection: 5 pole M12 plug-on flange

	Measuring range	Resolution	Output Output resistance	Nominal slope	Voltage supply	Galvanic isolation required in the measuring device/controller *	Connection
WP10MA-200-M12	0.5 200.0 ppm	0.1 ppm		0.08 mA/ppm			
WP10MA-2000-M12	5 2000 ppm	1 ppm		0.008 mA/ppm			5-pole M12 plug-on flange
WP10MA-2%-M12	0.005 2 % (20000 ppm)	0.001 % (10 ppm)	420 mA	8 mA/% (0.0008 mA/ppm)	1230 VDC		Function of wires:
WP10MA-5%-M12	0.05 5 % (50000 ppm)	0.01 % (100 ppm)	uncalibrated	3.2 mA/% (0.00032 mA/ppm)	R _L 50ΩR _L 900Ω	yes	PIN1: n. c. PIN2: +U PIN3: -U
WP10MA-10%-M12	0.05 10 % (100000 ppm)	0.01 % (100 ppm)		1.6 mA/% (0.00016 mA/ppm)			PIN4: n c. PIN5: n. c.
WP10MA-20%-M12	0.05 20 % (200000 ppm)	0.01 % (100 ppm)		0.8 mA/% (0.00008 mA/ppm)			

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(Subject to technical changes!)



Spare Parts

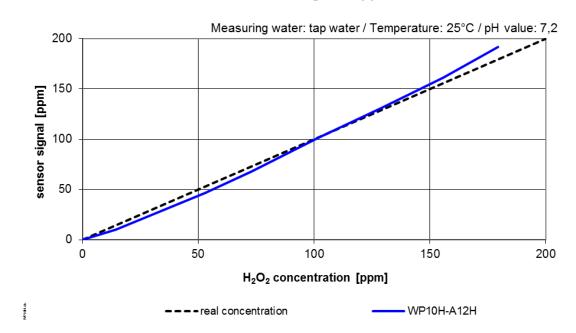
Туре	Membrane cap	Electrolyte	Emery	O-ring
All WP10H	M10.1H with G-holder		S2 Art. no. 11906	
All WP10N	Art. no. 11045.1			
All WP10L	M10.1D with G-holder			20 x 1.5 silicone Art. no. 11803
All WP10-20%	Art. no. 11041.1	EWP7/W, 100 ml Art. no. 11201		
All WP10MA-200	M10.1H with G-holder			
All WP10MA-2000	Art. no. 11045.1			
All WP10MA-2%				
All WP10MA-5%	M10.1D with G-holder			
All WP10MA-10%	Art. no. 11041.1			
All WP10MA-20%				

(Subject to technical changes!)

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Linearity of WP10H-A12n Measurement range 200 ppm



Linearity of WP10N-A12n Measurement range 2000 ppm

