


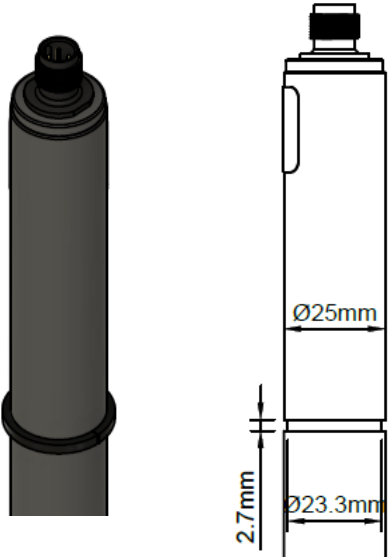
	<h1>TARAtec WP7</h1>
indicator	Hydrogen peroxide
Application	<p>All kinds of water treatment, also sea water (e. g. bottle washing machine, CIP-plants) The membrane system is mechanical resistant. Surfactants (tensides) are partially tolerated.</p>
Measuring system	Membrane covered, amperometric 2-electrode system
Electronic	<p>Analog version:</p> <ul style="list-style-type: none"> - voltage output - not galvanically isolated electronics - analog internal data processing - output signal: analog (analog-out/analog) <p>Digital version:</p> <ul style="list-style-type: none"> - electronic is completely galvanically isolated - digital internal data processing - output signal: analog (analog-out/digital) or digital (digital-out/digital) <p>mA-version:</p> <ul style="list-style-type: none"> - current output analog - not galvanically isolated electronics - output signal: analog (analog-out/analog)
Information about the measuring range	<p>The actual slope of a sensor can vary production-related between 65% and 150% of the nominal slope</p> <p>Note: With a slope > 100% the measuring range is reduced accordingly. (Ex.: 150% slope → 67% of the specified measuring range)</p>
Working temperature	<p>Measuring water temperature: 0 ... +45 °C (no ice crystals in the measuring water)</p>
	<p>Ambient temperature: 0 ... +55 °C</p>
Temperature compensation	<p>Automatically, by an integrated temperature sensor Max. change in temperature: 5 °C per hour, sudden temperature changes must be avoided</p>
Max. allowed working pressure	<p>Operation without retaining ring:</p> <ul style="list-style-type: none"> – 0.5 bar – no pressure impulses and/or vibrations
	<p>Operation with retaining ring in TARAflow FLC:</p> <ul style="list-style-type: none"> – 1.0 bar, – no pressure impulses and/or vibrations (see option 1)
Flow rate (Incoming flow velocity)	<p>approx. 15-30L/h (15 – 30 cm/s) in TARAflow FLC, small flow rate dependence is given</p>


	<h1>TARAtec WP7</h1>	
pH-range	pH 2 – pH 11	
Run-in time	First start-up approx. 5 h	
Response time	T ₉₀ : approx. 5 ... 10 min.	
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 (depending on internal signal processing)	analog	< 30 m
	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: approx. 25 mm Length: mV version approx. 190 mm (analog signal processing) approx.. 205 mm (digital signal processing) Modbus version 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 min. 1 year or until specified EXP-Date
	Membrane cap:	in original packing no limit at +5 ... +40 °C (used membrane caps can not be stored)

	<h1>TARAtec WP7</h1>
<p>maintenance</p>	<p>Regularly control of the measuring signal, min. once a week The following specifications depend on the water quality: Change of the membrane cap: once a year Change of the electrolyte: every 3 - 6 months</p>
	<p>EMC tested RoHS compliant</p>

<p>Option 1: Retaining ring</p>	<ul style="list-style-type: none"> – When operating with pressures >0.5 bar in TARAflow FLC – Dimensions retaining ring 29 x 23.4 x 2.5 mm, slitted, PETP – Different positions for groove selectable (on request) 	
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Technical Data

1. WP7 (Analog output, analog internal signal processing)


	Measuring range in ppm	Resolution in ppm	Output Output resistance	Nominal slope in mV/ppm	Voltage supply	Galvanic isolation required in the measuring device/controller *	Connection
WP7H-M12	0.5...200.0	0.1	0...-2000 mV 1 kΩ	-10	±5 - ±15 VDC 10 mA	yes	5-pole M12 plug-on flange Function of wires: PIN1: measuring signal PIN2: +U PIN3: -U PIN4: signal GND PIN5: n. c.
WP7N-M12	5...2000	1		-1			
WP7Up-M12	5...2000	1	0...+2000 mV 1 kΩ	+1	10 – 30 VDC 10 mA		5-pole M12 plug-on flange Function of wires: PIN1: measuring signal PIN2: +U PIN3: power GND PIN4: signal GND PIN5: n. c.

* 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. WP7 (analog output, digital internal signal processing)


analog-out / digital

	Measuring range	Resolution	Output Output resistance	Nominal slope	Power supply	Galvanic isolation required in the measuring device/controller *	Connection
	in ppm	in ppm		in mV/ppm			
WP7H-An-M12	0.5... 200.0	0.1	analog 0...-2 V (max. -2.5 V)	-10	9-30 VDC approx. 7-30 mA	no	5-pole M12 plug-on flange
WP7N-An-M12	5... 2000	1	1 kΩ	-1			Function of wires: PIN1: measuring signal PIN2: +U PIN3: power GND PIN4: signal GND PIN5: n. c.
WP7H-Ap-M12	0.5... 200.0	0.1	analog 0...+2 V (max. +2.5 V)	+10			
WP7N-Ap-M12	5... 2000	1	1 kΩ	+1			

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(Subject to technical changes!)

3. WP7 (digital output, digital internal signal processing)


	Measuring range in ppm	Resolution in ppm	Output Output resistance	Power supply	Galvanic isolation required in the measuring device/controller *	Connection
WP7H-M0c	0.5... 200.0	0.1	Modbus RTU	9-30 VDC	no	5-pole M12 plug-on flange Function of wires: PIN1: reserved PIN2: +U PIN3: power GND PIN4: RS485B PIN5: RS485A
WP7N-M0c	5... 2000	1	There are no terminating resistors in the sensor.	approx. 7-30 mA		

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(Subject to technical changes!)

4. WP7 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
WP7MA-CC	0.5...200.0 ppm	0.1 ppm	4...20 mA uncalibrated	0.08 mA/ppm	12...30 VDC R _L 50Ω...R _L 900Ω	yes	2-pole terminal (2 x 1 mm ²) Recommended: Round cable Ø 4 mm 2 x 0.34 mm ²
WP7MA-D	5.0...500.0 ppm	0.1 ppm		0.032 mA/ppm			
WP7MA-MM	5...2000 ppm	1 ppm		0.008 mA/ppm			
WP7MA-XM	0.005...1% (10000 ppm)	0.001 % (10 ppm)		16 mA/% (0.0016 mA/ppm)			

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(Subject to technical changes!)

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
WP7MA-CC-M12	0.5...200.0 ppm	0.1 ppm	4...20 mA uncalibrated	0.08 mA/ppm	12...30 VDC R_L 50Ω... R_L 900Ω	yes	5-pole M12 plug-on flange Function of wires: PIN1: n. c. PIN2: +U PIN3: -U PIN4: n c. PIN5: n. c.
WP7MA-D-M12	5.0...500.0 ppm	0.1 ppm		0.032 mA/ppm			
WP7MA-MM-M12	5...2000 ppm	1 ppm		0.008 mA/ppm			
WP7MA-XM-M12	0.005...1% (10000 ppm)	0.001 % (10 ppm)		16 mA/% (0.0016 mA/ppm)			

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Spare Parts

Type	Membrane cap	Electrolyte	Emery	O-ring
WP7H	M7.1N Art. No. 11014.1	EWP7/W, 100 ml Art. no. 11201	S2 Art. no. 11906	14 x 1.8 NBR Art. no. 11806
WP7HUn				
WP7N				
WP7Un				
WP7Up				
WP7MA-CC				
WP7MA-D				
WP7MA-MM				
WP7MA-XM	M7.1D Art. no. 11015.1			

(Subject to technical changes!)