

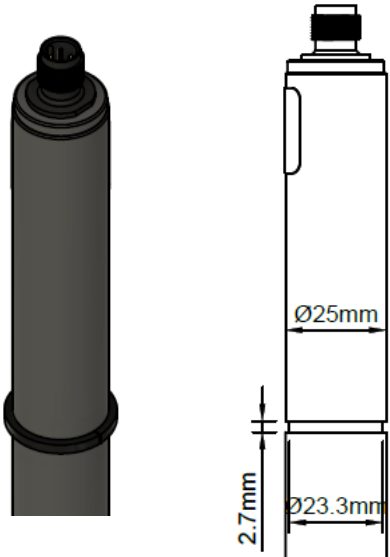
	<h1>TARAtec WP7</h1>	
pH-range	pH 2 – pH 11	
Run-in time	First start-up approx. 5 h	
Response time	T ₉₀ : approx. 5 ... 10 min.	
Zero point adjustment	Not necessary	
calibration	At the device, by analytical determination	
interferences	Cl ₂ : must not be present PAA: must not be present O ₃ : must not 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 TARAtflow 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)


A potential-free electrical connection is necessary as the sensor electronic is not equipped with a galvanical isolation.

	Measuring range in ppm	Resolution in ppm	Output Output resistance	Nominal slope in mV/ppm	Voltage supply	Connection
WP7H-M12	0.5...200.0	0.1	0...-2000 mV 1 kΩ	-10	±5 - ±15 VDC 10 mA	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.

(Subject to technical changes!)

2. WP7 (analog output, digital internal signal processing) analog-out / digital


- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

	Measuring range in ppm	Resolution in ppm	Output Output resistance	Nominal slope in mV/ppm	Power supply	Connection
WP7H-An-M12	0.5... 200.0	0.1	analog 0...-2 V (max. -2.5 V)	-10	9-30 VDC approx. 20-56 mA	5-pole M12 plug-on flange Function of wires: PIN1: measuring signal PIN2: +U PIN3: power GND PIN4: signal GND PIN5: n. c.
WP7N-An-M12	5... 2000	1	1 kΩ	-1		
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		

(Subject to technical changes!)

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

- The power supply is galvanically isolated inside of the sensor.
- The output signal is galvanically isolated too, that means potential-free.

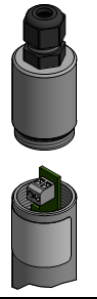
	Measuring range	Resolution	Output Output resistance	Power supply	Connection
	in ppm	in ppm			
WP7H-M0c	0.5... 200.0	0.1	Modbus RTU	9-30 VDC	5-pole M12 plug-on flange Function of wires: PIN1: reserved PIN2: +U PIN3: power GND PIN4: RS485B PIN5: RS485A
WP7N-M0c	5... 2000	1	There are no terminating resistors in the sensor.	approx. 20-56 mA	

(Subject to technical changes!)

4. WP7 4-20 mA (Analog output, analog internal signal processing)


A potential-free electrical connection is necessary as the sensor electronic is not equipped with a galvanical isolation.

4.1 Electrical connection: 2 pole terminal clamp

	Measuring range	Resolution	Output Output resistance	Nominal slope	Voltage supply	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	2-pole terminal (2 x 1 mm ²) Recommended: Round cable ∅ 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)		

(Subject to technical changes!)

4.2 Electrical connection: 5 pole M12 plug-on flange

	Measuring range	Resolution	Output Output resistance	Nominal slope	Voltage supply	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	5-pole M12 plug-on flange
WP7MA-D-M12	5.0...500.0 ppm	0.1 ppm		0.032 mA/ppm		Function of wires: PIN1: n. c. PIN2: +U PIN3: -U PIN4: n. c. PIN5: n. c.
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)		

(Subject to technical changes!)

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!)