

# WQA-Hardness-S01 Hardness Water Quality Analyzer Datasheet

## Product overview

The WQA-Hardness-S01 is an on-line hardness water quality analyzer that measures the hardness of water by titration and colorimetry. Automatically pumps reagents into the water sample for reaction, determines the endpoint of the reaction by colorimetry, and then determines the hardness concentration in the water based on the amount of reagent added. By selecting different reagents, the analyzer can measure different hardness concentrations.



## Application

- Drinking water
- Raw water
- Boiler water
- Cooling water

## Features

- Accurate and reliable fully automatic hardness analyzer.
- With self-diagnosis, abnormal alarm, data exceeding the standard alarm function
- Interval measurement optional, minimum 5min
- Supports Modbus RS485 and 4-20mA signal outputs
- Support 4G, WiFi wireless data transmission



## Specifications

Specification	Detail
<b>Parameter</b>	Total hardness:
<b>Measurement method</b>	Titrimetric colorimetric method
<b>Range</b>	5.34-534.0 mg/L(ppm) CaCO <sub>3</sub> (see reagent type)
<b>Accuracy</b>	±5 % of the upper measured value of the respective reagent used
<b>Repeatability</b>	±5 % of the upper measured value of the respective reagent used
<b>Dimension(H x W x D)</b>	300x300x180 mm (11.81x11.81x7.09 inch)
<b>Weight</b>	Approx. 4 kg
<b>Power requirements</b>	100-240 VAC, 50/60 Hz
<b>Power consumption</b>	25 W
<b>Operating temperature</b>	5 - 45 °C (41 - 113 °F)
<b>Storage temperature</b>	5 - 45 °C (35.6 - 140 °F)
<b>Protection class</b>	IP54
<b>Humidity</b>	20 % - 95 %, indoor installation
<b>Cable length</b>	6 m (6.56 ft), Please contact us for other sizes
<b>Tubing requirements</b>	Inlet/Outlet: 6 mm outer diameter
<b>Pressure</b>	0.2 - 2 bar
<b>Communication Interface</b>	Modbus RS485
<b>Analog output</b>	0/4 – 20 mA
<b>Digital input</b>	1
<b>Digital output</b>	2 relays
<b>Wireless communication</b>	WiFi / 4G (optional Configurations)
<b>Data storage</b>	32 GB SD card
<b>Warranty period</b>	One year

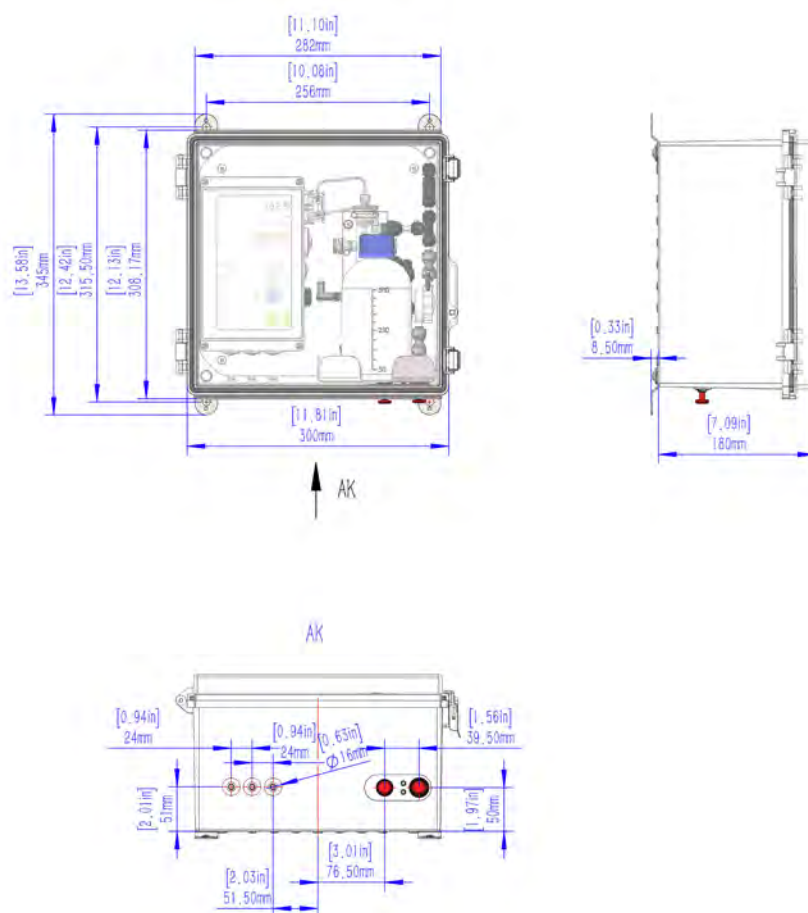
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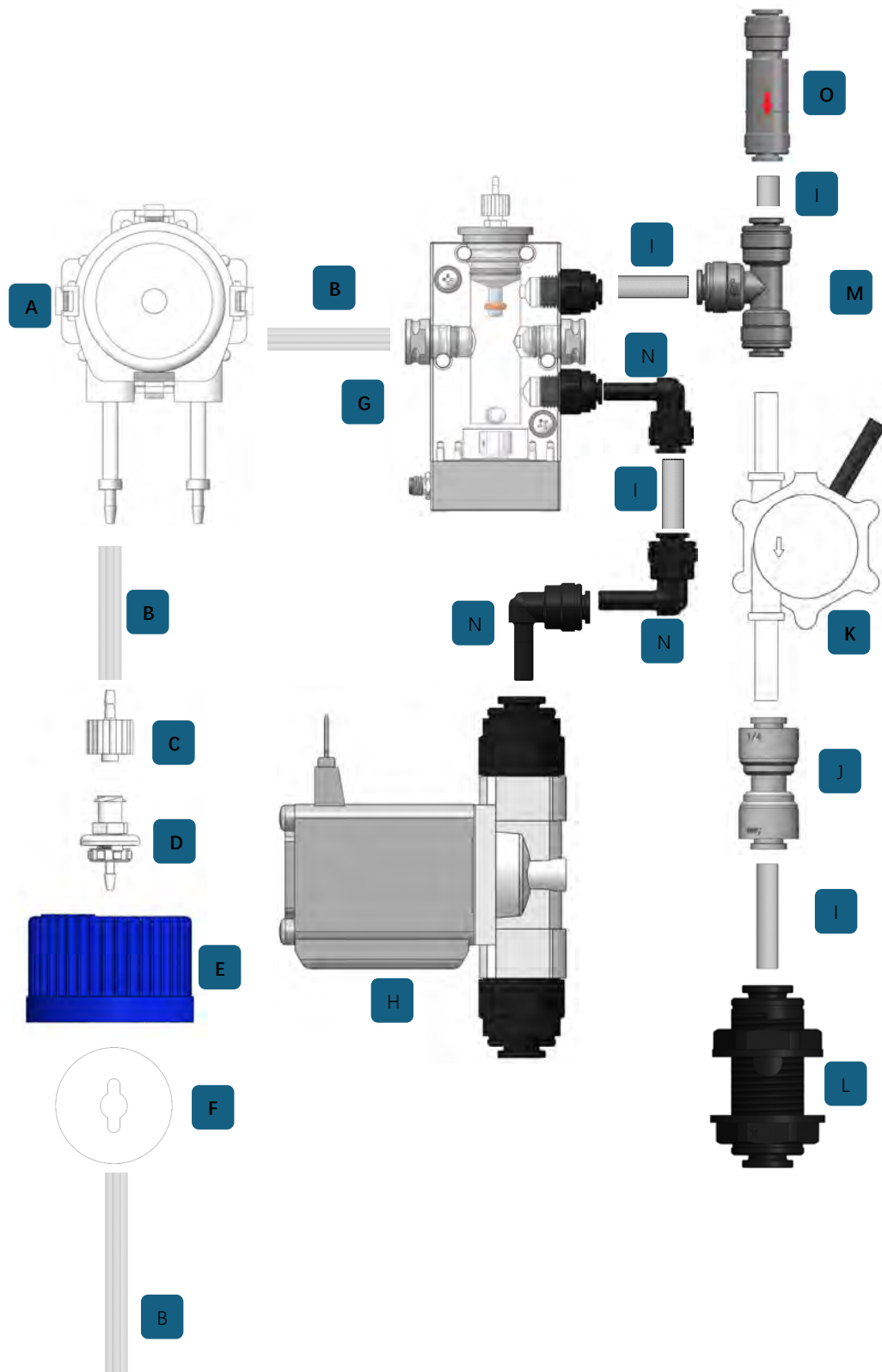
## Reagent range

Reagent type	mg/L(ppm) CaCO <sub>3</sub>	°dH	°f	mmol/L
WAR-Hardness-T04	5.34-53.4	0.3-3.0	0.534-5.340	0.053-0.534
WAR-Hardness-T05	16.02-160.2	0.9-9.0	1.602-16.02	0.160-1.602
WAR-Hardness-T06	26.7-267.0	1.5-15	2.670-26.70	0.267-2.670
WAR-Hardness-T07	53.4-534.0	3.0-30	5.340-53.40	0.534-5.340

## Dimensions



## Accessories and consumables



## Accessory list

No.	Name	Qty. per set	Encodings
A	Pump head	1	PRT010485
B	Reagent hose	3	PRT010663
C	Luer female fittings	1	SPZL001439
D	Luer bulkhead fitting	1	PRT010386
E	Bottle cap GL32	1	PRT010392
F	Luer bulkhead fitting mounting tab	1	PRT010863
H	Solenoids	1	PRT007784
I	6mm tube	1	SPZL002657
J	Pneumatic joint	1	SPZL002373
K	Flow meter	1	SPZL001486
L	Bulkhead joints	1	SPZL001536
M	Equal elbow (6 mm)	1	SPZL001851
N	Rod elbow (6 mm)	3	SPZL001538
O	Check valves	1	PRT008483

## Colorimetric module

No.	Name	Qty. per set	Encodings
G	Colorimetric module	1	ASM001497
<b>Note:</b> The colorimetric module contains the optical receiver (6), measurement chamber (10), magnetic agitator (11), drain plug (13), light source (14), and inlet plug (15) as described in Section 2.5.2. There is already a colorimetric module in the original product, the colorimetric module is not part of the accessories and consumables included in the above, if you need to replace the original colorimetric module, or if you need more colorimetric modules, please contact us to purchase separately.			