

Disinfectant Probe				
	F1	F2	F3	T1
<b>Measurement Type:</b>	Free Chlorine	Free Chlorine	Free Chlorine	Total Chlorine
<b>Available Range:</b>	0.5, 2, 5, 10 & 20 PPM	2, 5, 10, 20 & 200 PPM	1, 2 & 5 PPM	0.5, 2, 5, 10 & 20 PPM
<b>Range Selection:</b>	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range
<b>Conductivity:</b>	Fresh water only	Fresh water or Sea water (10 µS/cm – 50 mS/cm)	Fresh water only	Fresh water (Sea Water w/ MCH-F2 cap)
<b>Measurement Method:</b>	Amperometric 2-electrode	Amperometric Potentiostatic 3-electrode	Amperometric Potentiostatic 3-electrode	Amperometric Potentiostatic 3-electrode
<b>Membrane Cap:</b>	MCH-F1	MCH-F2	-	MCH-T1
<b>Electrolyte:</b>	REH-F1	REH-F2	REH-F3	REH-T1
<b>Flow Cell Type:</b>	Open Flow Cell with Bubble Trap & Diverter	Open Flow Cell with Bubble Trap & Diverter	Pressurized Flow Cell	Open Flow Cell with Bubble Trap & Diverter
<b>Sample Flow:</b>	approx. 15-30 l/h (4-8 gal/h)	approx. 15-30 l/h (4-8 gal/h)	approx. 45-90 l/h (12-24 gal/h)	approx. 15-30 l/h (4-8 gal/h)
<b>Max. Pressure:</b>	0.5 bar (7 PSI)	0.5 bar (7 PSI)	1 bar (15 PSI)	0.5 bar (7 PSI)
<b>Water Temp :</b>	0-45°C (113°F)	0-45°C (113°F)	0-50°C (122°F)	0-45°C (113°F)
<b>pH Range:</b>	6-8 pH	4-9 pH	5-9 pH	4-12 pH
<b>pH Dependence:</b>	Natural ⇒ pH 7.5 = 80% signal ⇒ pH 8.0 = 40% signal ⇒ pH 8.5 = Not suitable	Reduced	Natural	Reduced
<b>pH Compensation:</b>	Recommended	Optional	Optional	Optional
<b>Self Cleaning:</b>	No	No	Yes (CEH-F3 Cleaning Head)	No
<b>Measurement Interferences:</b>	ClO <sub>2</sub> , O <sub>3</sub> Water cannot contain: • Surfactants	ClO <sub>2</sub> , O <sub>3</sub> Combined Cl <sub>2</sub> will increase measurement value. Water cannot contain: • Hardness stabilizers • Corrosion inhibitors	ClO <sub>2</sub> , O <sub>3</sub> Chlorite will increase measurement value. Water cannot contain: • Corrosion inhibitors	ClO <sub>2</sub> , O <sub>3</sub> Water cannot contain: • Hardness stabilizers • Corrosion inhibitors
<b>Response Time:</b>	T <sub>90</sub> : approx. 30 sec.	T <sub>90</sub> : approx. 2 min	T <sub>90</sub> : approx. 30 sec.	T <sub>90</sub> : approx. 2 min
<b>Start-up Time:</b>	approx. 1 hour	approx. 2 hours	1 hour up to 2 days	approx. 2 hours
<b>Absence of Cl<sub>2</sub>:</b>	24 hours max.	24 hours max.	24 hours max.	24 hours max.
<b>Control of Signal:</b>	Once per week minimum.			
<b>Maintenance:</b>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte once per year</li> <li>• Clean electrode once per year</li> </ul>	<ul style="list-style-type: none"> <li>• No cleaning head: Clean gold electrodes every 4-12 weeks</li> <li>• With cleaning head: Clean gold electrodes every 6-12 months</li> <li>• Change electrolyte every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>

### NOTES:

1. Some values (e.g. maintenance) are dependent on sample water quality and chlorine residual levels.
2. This information should be used as a guideline only.

Disinfectant Probe				
	D1	D2	D3	C1
<b>Measurement Type:</b>	Chlorine Dioxide	Chlorine Dioxide	Chlorine Dioxide	Chlorite
<b>Available Range:</b>	0.5, 2, 5, 10 & 20 PPM	0.5, 2, 5, 10, 20 & 200 PPM	1 & 2 PPM	2 PPM
<b>Range Selection:</b>	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range
<b>Conductivity:</b>	Fresh water only	Fresh water or Sea water	Fresh water only	Fresh water only
<b>Measurement Method:</b>	Amperometric 2-electrode	Amperometric 2-electrode	Amperometric Potentiostatic 3-electrode	Amperometric Potentiostatic 3-electrode
<b>Membrane Cap:</b>	MCH-F1	MCH-H4 MCH-D2-L1 for 200 PPM	-	MCH-T1
<b>Electrolyte:</b>	REH-D1	REH-D1	REH-F3	REH-C1
<b>Flow Cell Type:</b>	Open Flow Cell with Bubble Trap & Diverter	Open Flow Cell with Bubble Trap & Diverter	Pressurized Flow Cell	Open Flow Cell with Bubble Trap & Diverter
<b>Sample Flow:</b>	approx. 15-30 l/h (4-8 gal/h)	approx. 15-30 l/h (4-8 gal/h)	approx. 45-90 l/h (12-24 gal/h)	approx. 15-30 l/h (4-8 gal/h)
<b>Max. Pressure:</b>	0.5 bar (7 PSI)	0.5 bar (7 PSI)	1 bar (15 PSI)	0.5 bar (7 PSI)
<b>Water Temp :</b>	0-45°C (113°F)	0-50°C (122°F)	0-50°C (122°F)	0-40°C (104°F)
<b>pH Range:</b>	1-12 pH	1-12 pH	1-12 pH	6-9 pH
<b>pH Dependence:</b>	ClO <sub>2</sub> decomposition begins at pH ≥12	ClO <sub>2</sub> decomposition begins at pH ≥12	ClO <sub>2</sub> decomposition begins at pH ≥12	-
<b>Self Cleaning:</b>	No	No	Yes (CEH-F3 Cleaning Head)	No
<b>Measurement Interferences:</b>	Cl <sub>2</sub> , O <sub>3</sub>	O <sub>3</sub> Sudden temp. changes must be avoided.	Cl <sub>2</sub> Chlorite will increase measurement value. Sudden temp. changes must be avoided. Water cannot contain: • Corrosion inhibitors	Fe <sup>2+</sup> , Mn <sup>2+</sup> , Nitrite Water cannot contain: • Hardness stabilizers • Corrosion inhibitors
<b>Response Time:</b>	T <sub>90</sub> : approx. 15 sec.	T <sub>90</sub> : approx. 1.5 min.	T <sub>90</sub> : approx. 30 sec.	T <sub>90</sub> : approx. 1 min
<b>Start-up Time:</b>	approx. 1 hour	approx. 1 hour	1 hour up to 2 days	approx. 24 hours
<b>Absence of disinfectant:</b>	24 hours max.	24 hours max.	24 hours max.	24 hours max.
<b>Control of Signal:</b>	Once per week minimum.			
<b>Maintenance:</b>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• No cleaning head: Clean gold electrodes every 4-12 weeks</li> <li>• With cleaning head: Clean gold electrodes every 6-12 months</li> <li>• Change electrolyte every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>

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Disinfectant Probe				
	PE4	H4	B1	O1
<b>Measurement Type:</b>	Peracetic Acid	Hydrogen Peroxide	Free Bromine	Ozone
<b>Available Range:</b>	200, 500, 1000 & 2000 PPM	200, 500 & 2000 PPM	2, 5, 10 & 20 PPM	0.5, 2, 5, 10 & 20
<b>Range Selection:</b>	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range	target <sub>PPM</sub> x 1.5 = range
<b>Conductivity:</b>	All water	All water	Fresh water	Fresh Water
<b>Measurement Method:</b>	Amperometric 2-electrode	Amperometric 2-electrode	Amperometric Potentiostatic 3-electrode	Amperometric 2-electrode
<b>Membrane Cap:</b>	MCH-H4	MCH-H4	MCH-T1	MCH-F1
<b>Electrolyte:</b>	REH-PE4	REH-H4	REH-T1	REH-O1
<b>Flow Cell Type:</b>	Open Flow Cell with Bubble Trap & Diverter	Open Flow Cell with Bubble Trap & Diverter	Open Flow Cell with Bubble Trap & Diverter	Open Flow Cell with Bubble Trap & Diverter
<b>Sample Flow:</b>	approx. 15-30 l/h (4-8 gal/h)	approx. 15-30 l/h (4-8 gal/h)	approx. 15-30 l/h (4-8 gal/h)	approx. 15-30 l/h (4-8 gal/h)
<b>Max. Pressure:</b>	0.5 bar (7 PSI)	0.5 bar (7 PSI)	0.5 bar (7 PSI)	0.5 bar (7 PSI)
<b>Water Temp :</b>	0-45°C (113°F)	0-45°C (113°F)	0-45°C (113°F)	0-45°C (113°F)
<b>pH Range:</b>	1-6 pH	2-11 pH	6.5-9.5 pH	2-11 pH
<b>pH Dependence:</b>	-	-	Reduced	-
<b>Self Cleaning:</b>	No	No	No	No
<b>Measurement Interferences:</b>	ClO <sub>2</sub> , O <sub>3</sub> , H <sub>2</sub> O <sub>2</sub>	Water cannot contain: <ul style="list-style-type: none"> <li>• Cl<sub>2</sub>, O<sub>3</sub> or PAA</li> <li>• Sulfides</li> <li>• Phenol</li> </ul>	Cl <sub>2</sub> , ClO <sub>2</sub> , O <sub>3</sub> Water cannot contain: <ul style="list-style-type: none"> <li>• Hardness stabilizers</li> <li>• Corrosion inhibitors</li> </ul>	Cl <sub>2</sub> , ClO <sub>2</sub>
<b>Response Time:</b>	T <sub>90</sub> : approx. 3 min.	T <sub>90</sub> : approx. 5-10 min.	T <sub>90</sub> : approx. 2 min	T <sub>90</sub> : approx. 15 sec.
<b>Start-up Time:</b>	approx. 1-3 hours	approx. 5 hours	approx. 2 hours	approx. 1 hour
<b>Absence of disinfectant:</b>	24 hours max.	24 hours max.	24 hours max.	24 hours max.
<b>Control of Signal:</b>	Once per week minimum.			
<b>Maintenance:</b>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>• Change membrane cap once per year</li> <li>• Change electrolyte every 3-6 months</li> <li>• Clean electrode every 3-6 months</li> </ul>

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