

AquaLyse®

By ProCare Water Treatment

APPROVED

Proven Legionella Control and Prevention Technology

Copper Silver Ionization Chamber Cell

CSIDefender® ICR-820 Copper Silver Ionization Chamber Cells are constructed of cut grooved (1) schedule 40 Stainless Steel (2) and to use Victaulic® unions or Vic Flanges.

Industrial grade connectors (3) links eight internal alloy silver ionization electrodes (4) per CSIDefender® internal to deliver ionization with these electrodes are spaced and a safety-approved enclosure (5).

Patent pending internal components offer the highest electrode to water surface contact "Cross section" (6) configuration in the industry to maximize ionic performance combined with corrosion isolators. Includes laminar flow hydro dynamic features to eliminate electrode water erosion of electrodes and eliminates internal water turbulence, cause of sedimentation (7).

Also includes built-in dielectric galvanic corrosion

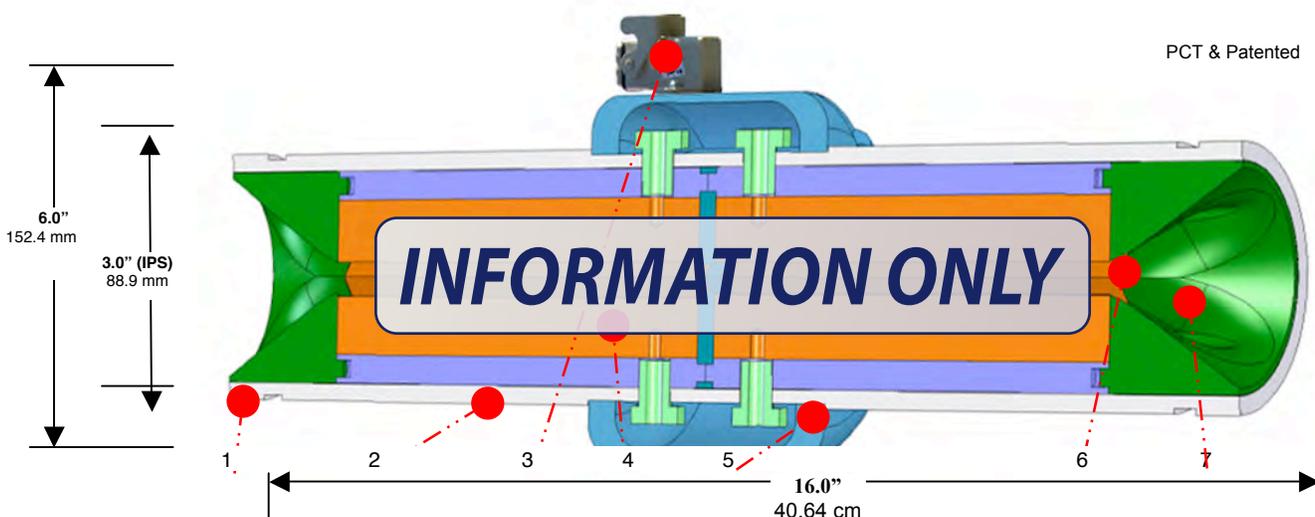


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|-----------------------------------|---------------------------------|
| Exterior Cell Enclosure: | Schedule 40 Stainless Steel |
| Dimension: | (3.0"IPS x 16") 89mm OD x 16.0" |
| Supplied Ion Chambers: | E1 = 1 Cell, E2 = 2 Cells |
| Union Type: | Victaulic® (optional) |
| Maximum ICR-820 pressure: | 820 PSI / 56.5 Bar / 5653 kPa |
| Victaulic® Style 75: | 500 PSI / 24 Bar / 2413 kPa |
| Maximum ICR-820 Temp.: | 135°C / 275°F |
| Maximum Union Temp.: | 110°C / 230°F |
| AquaLyse® Flow Capacity: | 4 to 65 GPM ea. cell |
| Copper Silver Chamber Cell | 23 lbs ea. |
| Water Pipe Fittings Sizes: | Available based on requirements |

CSIDefender® ICR-820 Medical, Commercial and Military grade stainless steel ionization chamber cells meet all commercial building plumbing and fire safety codes. All internal components are pre assembled and then mounted within the stainless steel enclosure using a 250-tonne press.

Internal ionization copper-silver alloy electrodes are composed of certified high quality copper and medical grade 5-9 silver metals.

Each CSIDefender® ICR-820 ionization chamber cell can treat 25,000 GPD (DHW) and accommodate water flows velocities of 10 gpm up to 65 gpm. The cells have the highest water temperature and pressure rating in the industry.



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CSIDefender® ICR-820

Copper Silver Ionization Chamber Cell Engineering Features

International Plumbing Codes:

The CSIDefender® copper silver ionization chamber cell is constructed of a schedule 40 stainless steel outside jacket. This engineering feature provides an amazing water pressure rating of over 820 PSI (56.5 Bar / 5,653 kPa) in any liquid water temperature. CSIDefender® ionization cells meets International Plumbing Code 605.4 - That states: "water distribution pipe and tubing shall have a pressure rating of not less than 100 PSI (6.9 Bar / 690 kPa) at 180°F (82°C)."



Cross Configuration:

With eight (8) custom molded copper/silver alloy electrodes mounted inside each ionization chamber cell, AquaLyse® patented internal "cross configuration" offers the flow capacity unmatched by any

other cell on the market. Unlike the traditional exposed-end electrodes.



Industrial Connectors:

CSIDefender® focus groups with engineers made it very clear that the use of standardized unions and flanges was preferable for preventative maintenance access. This is why the use of industry known and accepted Victaulic® unions (or flanges) for 3" IPS are used in conjunction with the CSIDefender® cut grooved schedule 40 stainless steel ionization chamber cells. This ease of use makes CSIDefender® chamber cells reliable and easy to install regardless of your geographical location world wide.



Max Water Pressures:

820 PSI (56.5 Bar / 5,653 kPa)

@ 48.8C/120F - CPVC= 208 PSI - AquaLyse®= 820 PSI
@ 65.5C/150F - CPVC= 150 PSI - AquaLyse®= 820 PSI
@ 82.2C/180F - CPVC= 80 PSI - AquaLyse®= 820 PSI
@ 98.8C/210F - CPVC= 52 PSI - AquaLyse®= 820 PSI

Plumbing Code 605.4: "water distribution pipe and tubing shall have a pressure rating of not less than 100 PSI (6.9 Bar / 690 kPa) at 180°F (82°C)."



Fire Code Compliance:

Unlike PVC and CPVC, CSIDefender® corrosion proof schedule 40 stainless steel cells are engineered to meet all fire building codes. The new CSIDefender® 820 series cell now offers a fire-resistant sustained



pressures tolerances of well over 820 PSI and at any liquid water temperature.

Laminar Flow Engineering:

CSIDefender® was the first and is still the only brand of copper silver ionization chamber cells to offer it's patented internal laminar flow configuration. CSIDefender® provides a unique internal electrode water erosion prevention feature that extends the lifespan of the cells by over 19% compared to any other cell on the market. CSIDefender® unique engineering features eliminates internal water eddies that cause premature sedimentation combined with almost double electrode surface contact with the flowing potable water.



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