



## E-Cell MK-3PharmHT

### Hot water sanitizable EDI stack

#### MK-3PharmHT Features

- Provide Ultra Pure Water for pharmaceutical applications
- Hot water sanitizable up to 85 °C for 160 cycles
- Produce Ultra Pure quality water on a continuous basis
- No stack bolt tightening required
- Leak free, guaranteed
- Less sensitive to scale forming
- No caustic or acid required for regeneration
- No brine injection or concentrate recirculation required
- Operate at low voltage, < 300VDC

#### Typical Applications

- Pharmaceutical
- Laboratory
- Food and Beverage

#### Description and use

E-Cell MK-3PharmHT Stacks are hot water sanitizable EDI stacks, which use electrical current to deionize and polish reverse osmosis (RO) permeate water. The product water quality for the system is at greater than USP quality levels required in today's pharmaceutical applications.

#### E-Cell MK-3PharmHT Module Specifications

Flowrates min / nom / max	1,6 / 4,1 / 4,5	m <sup>3</sup> /h
Shipping weight	92	kg
Dimensions approx. (w x h x d)	305 x 610 x 480	mm

#### Typical Performance

Product Resistivity**	> 10	MΩ•cm
TOC (as C)	< 500	ppb

#### Operation Parameters

Recovery	Up to 96	%
Voltage	0 - 300	VDC
Amperage	0 - 5,2	ADC
Inlet Pressure	(Counter-Current) 4,1 - 6,2 (Co-Current)* 3,1 - 6,2	bar
Pressure Drop	1,4 - 2,4	bar

#### Maximum Feed Water Specifications

Total Exchangeable Anions (TEA as CaCO <sub>3</sub> )	< 25	mg/l
Conductivity NaHCO <sub>3</sub> equivalent	< 43	µS/cm
Total Hardness (as CaCO <sub>3</sub> )*	< 1,0	mg/l
Silica (SiO <sub>2</sub> )	< 1,0	mg/l
Total Organic Carbon (TOC)	< 0,5	mg/l
Total Chlorine (Cl <sub>2</sub> )	< 0,05	mg/l
Temperature	5 - 40	°C

#### Hot Water Sanitization

No. of 1 hour sanitizations	160	cycles
Sanitization temperature	up to 85	°C
Maximum sanitization pressure	2,1	bar

#### Quality Assurance

- CE, RoSH & CSA marked
- Manufactured in a ISO 9001 and ISO 14001 facility

\* Co-Current operation only acceptable when total feed hardness <0,1 ppm as CaCO<sub>3</sub>.

\*\* Actual performance may vary depending on site conditions, contact DeionX for detailed projection.