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## Abbreviation

AEM	Anion Exchange Membrane
BWRO	Brackish Water Reverse Osmosis
CEM	Cation Exchange Membrane
CP	Concentration Polarization
ED	Electrodialysis
EDR	Electrodialysis Reversal
IEM	Ion Exchange Membrane
RO	Reverse Osmosis
SEM	Scanning Electron Microscope
ZLD	Zero Liquid Discharge

## Nomenclature

$z$	counter-ion valence
$F$	Faraday constant, C/eq
$D$	diffusion coefficient of the counter-ion in the solution, m <sup>2</sup> /s
$C^0$	electrolyte concentration in the solution, N
$\delta$	diffusion boundary layer thickness, m
$t^m$	transport number of the counter-ion in the ion exchange membrane
$t^s$	transport number of the counter-ion in the solution
$k_d$	Mass transfer coefficient, m/sec
$i_{lim}$	Limiting current density, A/m <sup>2</sup>

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