

Parameter	Symbol	Value	Unit
Salinity coefficient of freezing equation	$a$	-0.0572	$^{\circ}\text{C PSU}^{-1}$
Constant coefficient of freezing equation	$b$	0.0788	$^{\circ}\text{C}$
Pressure coefficient of freezing equation	$c$	$7.77 \times 10^{-8}$	$^{\circ}\text{C Pa}^{-1}$
Thermal expansion coefficient in EOS	$\alpha$	$7.5 \times 10^{-5}$	$^{\circ}\text{C}^{-1}$
Salt contraction coefficient in EOS	$\beta$	$7.7 \times 10^{-4}$	$\text{PSU}^{-1}$
Reference density in EOS	$\rho_*$	1033	$\text{kg m}^{-3}$
Latent heat of fusion	$L$	$3.34 \times 10^5$	$\text{J kg}^{-1}$
Heat capacity of sea water	$c_p$	3974	$\text{J kg}^{-1} ^{\circ}\text{C}^{-1}$
Density of ice	$\rho_i$	910	$\text{kg m}^{-3}$
Density of sea water	$\rho_w$	1028	$\text{kg m}^{-3}$
Turbulent salinity exchange velocity	$\gamma_S$	$2 \times 10^{-6}$	$\text{m s}^{-1}$
Turbulent temperature exchange velocity	$\gamma_T$	$5 \times 10^{-5}$	$\text{m s}^{-1}$
Effective turbulent temperature exchange velocity	$\gamma_T^*$	$2 \times 10^{-5}$	$\text{m s}^{-1}$
OVERTURNING strength	$C$	$1 \times 10^6$	$\text{m}^6 \text{s}^{-1} \text{kg}^{-1}$