

[9] Dirker, J., Meyer, J.P. (2005). Convective heat transfer coefficients in concentric annuli. *Heat Transfer Engineering*, 26(2): 38–44. <http://dx.doi.org/10.1080/01457630590897097>

[10] Nonino, C., Savino, S., Del Giudice, S. (2015). Annular ducts: Nusselt number correlations for laminar flows of liquids with temperature dependent properties. 11th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT 2015, Kruger National Park, South Africa. <http://dx.doi.org/10.1088/1742-6596/547/1/012041>

q''	Heat Flux, Wm^{-2}
\dot{Q}	Heat transfer rate, W
T	Temperature, C or K
U	Overall heat transfer coefficient, $Wm^{-2}K^{-1}$
\vec{V}	Velocity vector, ms^{-1}
X^*	Non-dimensional tube length,-

Greek symbols

Δ	Difference (P, T etc.)
ϵ	Effectiveness,-
ρ	Density, kgm^{-3}
μ	Dynamic viscosity, Pas
$\bar{\tau}$	Stress tensor, Pa

NOMENCLATURE

c	Specific heat, $J.kg^{-1}.K^{-1}$
d	Diameter, m
D_h	Hydraulic diameter, m
\vec{g}	Gravitational acceleration vector, ms^{-2}
h	Convection coefficient, $Wm^{-2}K^{-1}$
Nu	Nusselt number, -
P	Pressure, Pa or kPa
Pe	Peclet number, -
Pr	Prandtl number, -
R	Thermal resistance, WK^{-1}
Re	Reynolds number, -

Subscripts

c	cold side
h	hot side
i	inner side
in	inlet
m	mean value
o	outer side
out	outlet