however, does not affect the Nusselt number by a considerable amount. Since it depends mainly on temperature i.e. higher the average temperature, lower will be the Prandtl number, therefore working on lower Prandtl number is advisable as it yields better heat transfer result. Our presented correlations are valid for 500<Re<2500 and 3.5<Pr<7.5.

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NOMENCLATURE

A	Surface area for heat transfer, m^2
A_x	Channel flow area, m^2
b	Mean channel spacing, m
C_p	Specific heat capacity, J/kg.K
dx	Wall thickness, m
h	Individual convection heat transfer of fluid on each side, $W/m^2.K$
k	Thermal conductivity
k_f	Thermal conductivity of fluid, W/m.K
L	Characteristic length, m
LMTD	Log Mean Temperature Difference
m	Mass flow rate, kg/s
Pr	Prandtl number
q	Rate of heat transfer, W
Re	Reynolds number
t	Plate thickness, m
T	Temperature, K
U	Overall heat transfer coefficient, $W/m^2.K$
V	Mean velocity of fluid, m/s

Greek symbols

β	Chevron angle, degree
μ	Dynamic viscosity, $N.s/m^2$
p	Density of fluid, kg/m^3
Φ	Surface enlargement factor

Subscripts

c	Cold
h	Hot
i	Inlet
o	Outlet
w	Wall
avg	Average