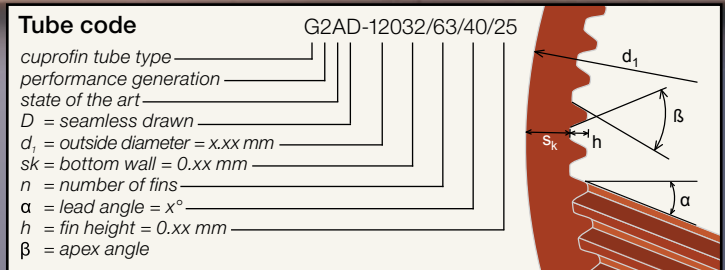
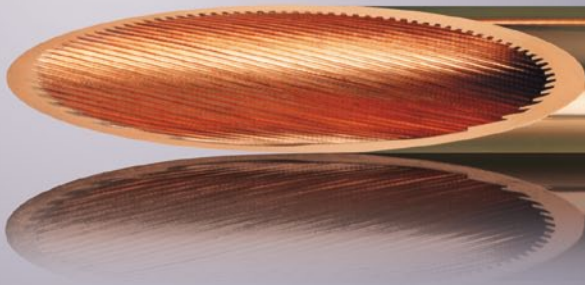


cuprofin[®]-G

Inner-grooved seamless drawn copper tubes

Wieland Thermal Solutions[®]
PROVIDING EFFICIENCY



Application

Wieland cuprofin-G tubes are highly efficient heat transfer tubes, which are specifically designed for re-cooling of liquids such as water-glycol mixtures. The grooves on the inside of the

tubes are optimised for single-phase heat transfer, allowing the development of more compact heat exchangers.

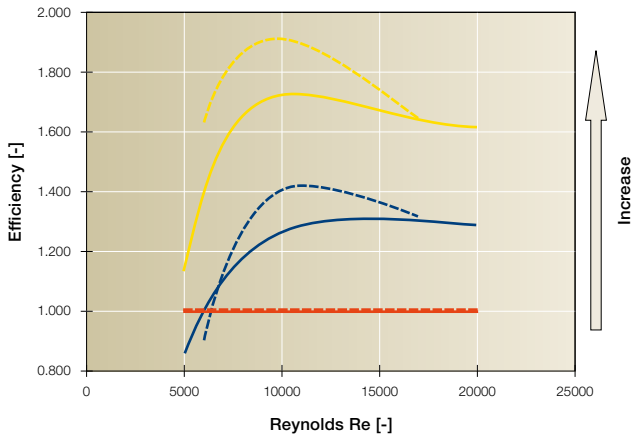
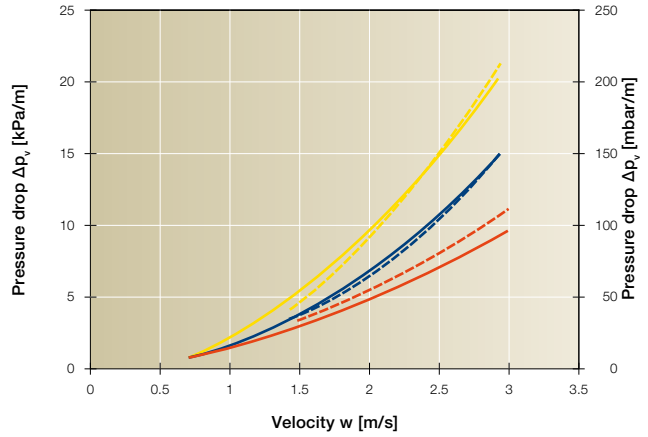
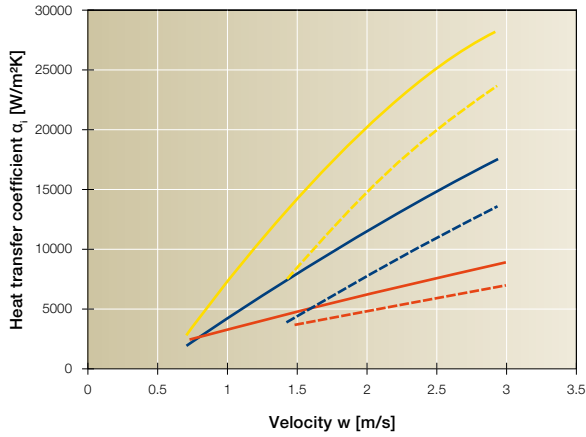
Form of delivery

Level-wound coils			
Material	Copper Cu - DHP	Copper C 12200	Copper SF - Cu
Standard	EN 12735-2*	ASTM SB 359	VdTÜV 420/6
Temper	annealed Y40	light annealed O50	annealed F22
Straight lengths			
Material	Copper Cu - DHP	Copper C 12200	Copper SF - Cu
Standard	EN 12735-1*	ASTM SB 359	VdTÜV 420/7
Temper	hard R 290	hard drawn H80	hard F 36

*conforms to the Pressure Equipment Directive PED 97/23/EC

d_1		s_k	h	n	α	Tube code
mm	inch					
12.0		0.32	0.25	63	40	G2AD-12032/63/40/25
12.7	$\frac{1}{2}$	0.36	0.25	63	40	G2AD-12736/63/40/25
12.7	$\frac{1}{2}$	0.40	0.25	63	40	G2AD-12740/63/40/25
15.87	$\frac{5}{8}$	0.40	0.30	68	40	G2AD-15840/68/40/30

Other types upon request.



Test conditions

Tube dimensions [mm]:
 cuprofin-G 12.7 x 0.36
 cuprofin S2AD 12.7 x 0.36
 plain tube 12.7 x 0.36

Anti-freeze agent:
 Antifrogen L 30 % (1.2-propylene glycol)

Formula:

$$\text{Efficiency} = \frac{\frac{\alpha_{i, \text{cuprofin}^\circ}}{\Delta p_{v, \text{cuprofin}^\circ}}}{\frac{\alpha_{i, \text{plain tube}}}{\Delta p_{v, \text{plain tube}}}}$$

Efficiency means the increase of the heat transfer coefficient α_i of the cuprofin-tube referring to the increase of pressure drop Δp_v . For each case the reference is the plain tube (efficiency =1).

— cuprofin-G } Pr = 14.7 - - - cuprofin-G } Pr = 24
— cuprofin S2AD } - - - cuprofin S2AD }
— plain tube } - - - plain tube }

Tube Type	Standard	E	EDX	C	This leaflet		
Tube Application	evaporation condensation	evaporation	evaporation	condensation	G	L10	XSt
Process Application	fin coils shell & tube	fin coils	shell and tube evaporators	fin coils	single phase heat transfer	evaporation condensation	evaporation condensation
Material	copper	copper	copper	copper	highly viscous liquids	seawater	fin coils shell and tube
					copper	cupro Nickel	stainless steel

