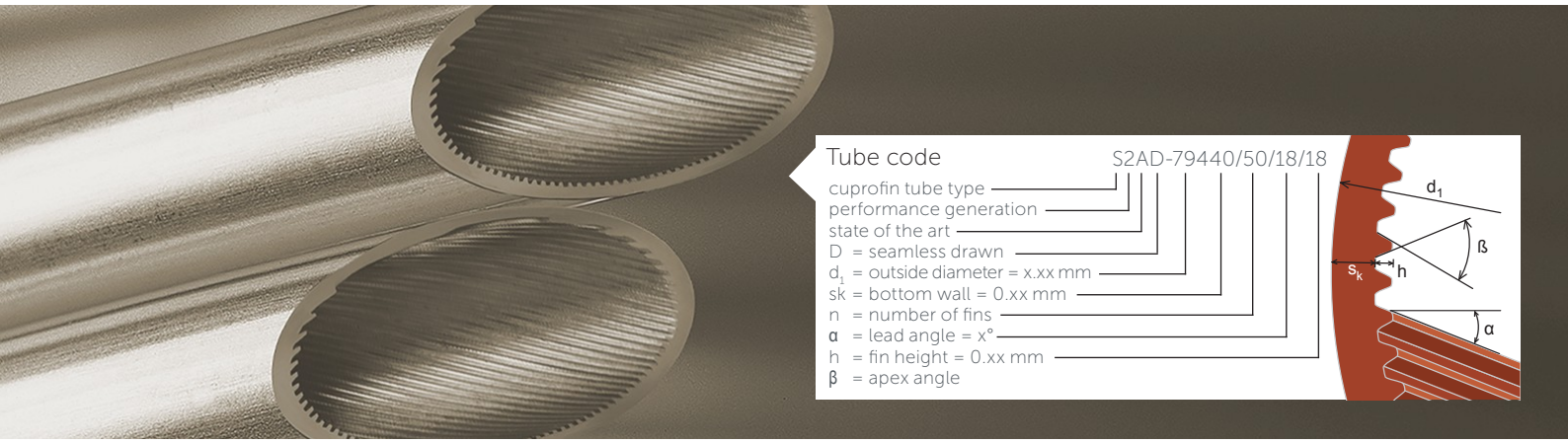
wieland

cuprofin®-L10

Inner-grooved seamless drawn cupronickel tubes for seawater applications



Application

Wieland cuprofin-L10 tubes are highly efficient heat transfer tubes,which are especially qualified for sea-water applications and other saline water, as well as their environment (e.g. coastal area). This is due to the very high resistance of L10 to corrosion and erosion through fast-flowing, saline water, in particular seawater, and also to the insensitivity to stress corrosion and corrosion fatigue in these fluids.

Form of delivery

Level-wound coils		
Material	Cupronickel CuNi10Fe1Mn	Cupronickel C 70600
Standard	Wieland R-1191	ASTM B 359
Temper	annealed R290 (EN 12451*)	annealed O61
Straight lengths		
Material	Cupronickel CuNi10Fe1Mn	Cupronickel C 70600
Standard	Wieland R-1190	ASTM B 359
Temper	annalead R290 (EN 12451*) hard	annalead 061 on request

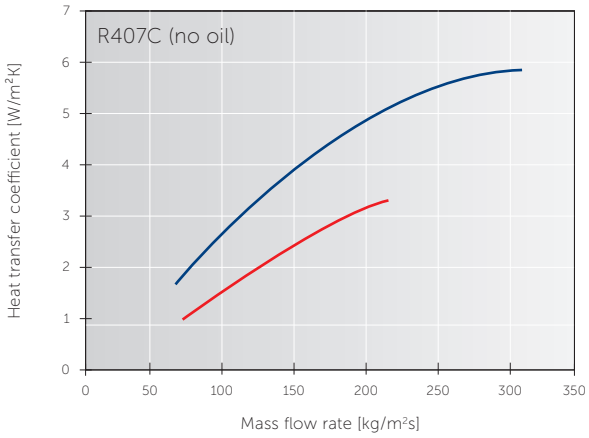
**Particular material appraisal 3.2 required for conformity to the Pressure Equipment Directive PED 2014/68/EU.*

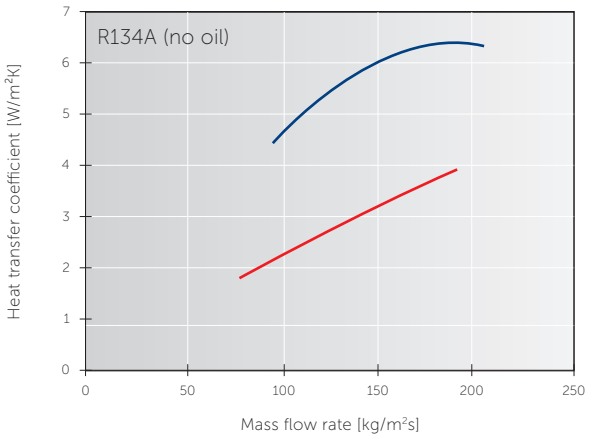
d_1		s_k	h	n	α	Weight approx.	Tube code
mm	inch	mm	mm	–	°	[g/m]	
7.94	5/16	0.40	0.18	50	18	95	S2AD-79440/50/18/18
8.00	-	0.40	0.18	50	18	95	S2AD-80040/50/18/18
9.52	3/8	0.45	0.20	60	18	129	S2AD-95245/60/18/20
12.00	-	0.50	0.25	70	18	186	S2AD-12050/70/18/25
12.70	1/2	0.50	0.25	70	18	196	S2AD-12750/70/18/25
15.00	-	0.56	0.30	75	18	265	S2AD-15056/75/18/30
15.87	5/8	0.58	0.30	75	18	288	S2AD-15858/75/18/30

Other types and wall thicknesses are available upon request.

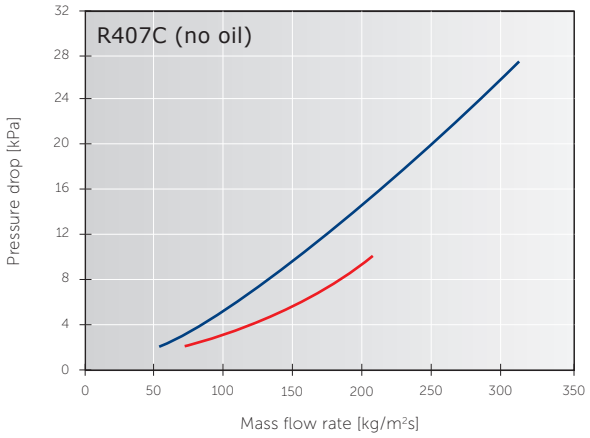
Evaporation

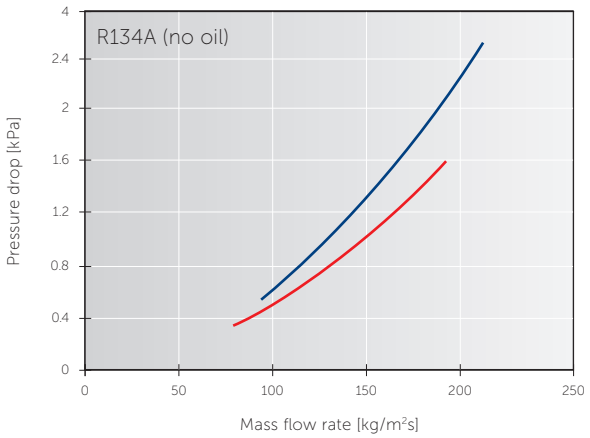
Heat tranfer performance





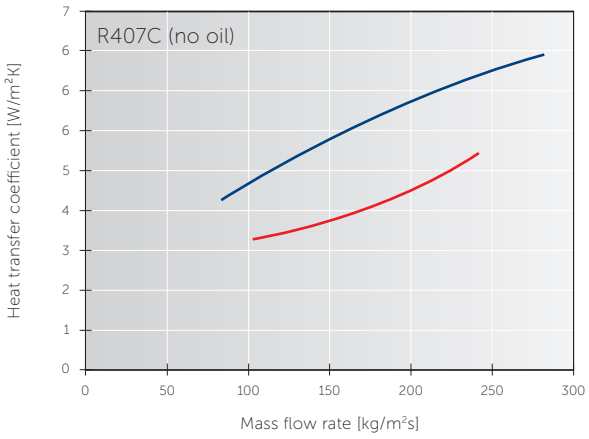
Pressure drop



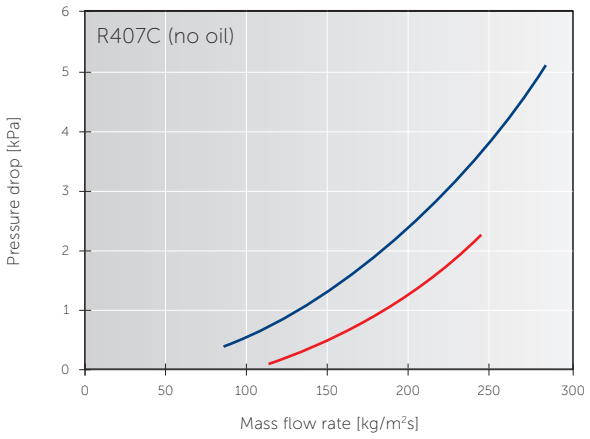


Condensation

Heat tranfer performance



Pressure drop



Test conditions

Evaporation – 9.52 mm tubes
tc = 0 °C
superheat ~5 K, inlet quality 20 %
tube length 2 m

Condensation – 9.52 mm tubes
tc = 35 °C
subcooling ~2 K, inlet superheat 5K
tube length 2 m

cuprofin standard
plain tube

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

Wieland-Werke AG | Graf-Arco-Straße 36 | 89079 Ulm | Germany
info@wieland.com | wieland.com

12.21 | EX.ZM.UL/Sr (MC.ED.UL)