

cuprofin® – STANDARD PATTERN

Inner-grooved seamless drawn copper tubes

Application

Condensation or dry expansion evaporation for ACR applications

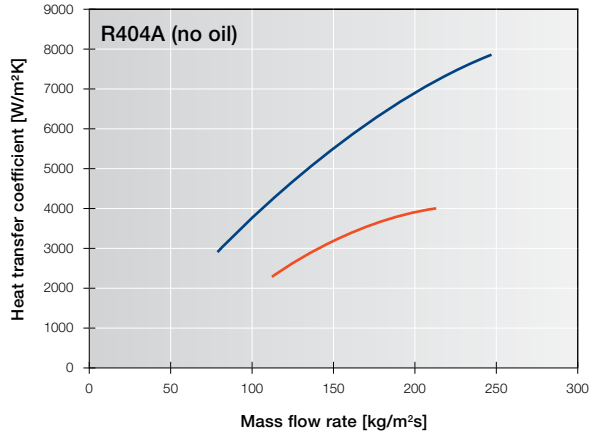
d ₁		s _k	h	n	α	Tube Code
mm	inch	mm	mm	-	°	
5.00		0.23	0.15	40	18	S2AD-50023/40/18/15
7.00		0.25	0.18	50	18	S2AD-70025/50/18/18
7.00		0.26	0.15	50	18	S2AD-70026/50/18/15
7.94	5/16	0.28	0.18	50	18	S2AD-79428/50/18/18
8.00		0.28	0.18	50	18	S2AD-80028/50/18/18
9.52	3/8	0.28	0.15	60	18	S2AD-95228/60/18/15
9.52	3/8	0.30	0.20	60	18	S2AD-95230/60/18/20
9.52	3/8	0.34	0.20	60	18	S2AD-95234/60/18/20
9.52	3/8	0.45	0.20	60	18	S2AD-95245/60/18/20
12.00		0.32	0.23	70	18	S2AD-12032/70/18/23
12.00		0.35	0.25	70	18	S2AD-12035/70/18/25
12.70	1/2	0.40	0.25	70	18	S2AD-12740/70/18/25
12.70	1/2	0.63	0.25	70	18	S2AD-12763/70/18/25
15.00		0.40	0.25	75	18	S2AD-15040/75/18/25
15.00		0.40	0.30	75	18	S2AD-15040/75/18/30
15.87	5/8	0.50	0.30	75	18	S2AD-15850/75/18/30
15.87	5/8	0.58	0.30	75	18	S2AD-15858/75/18/30

Other types upon request.

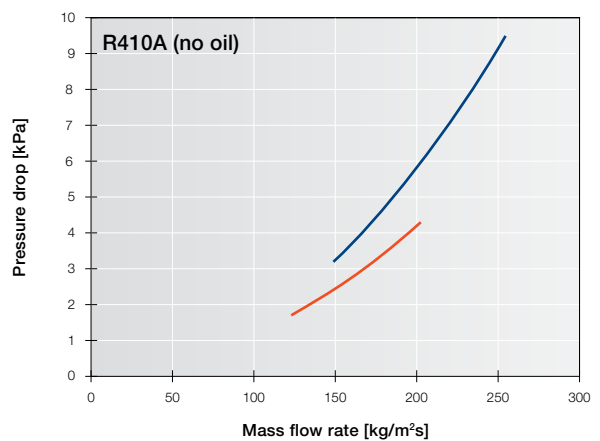
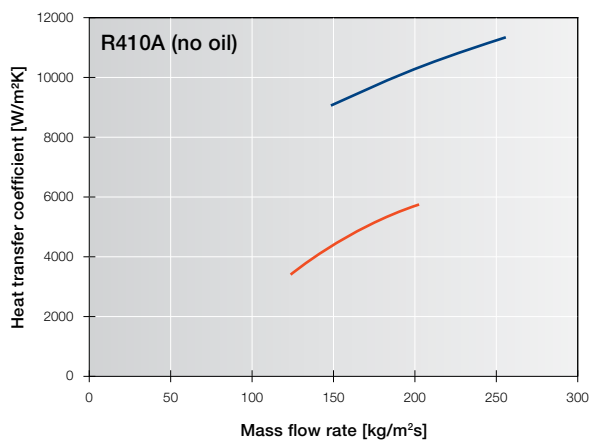
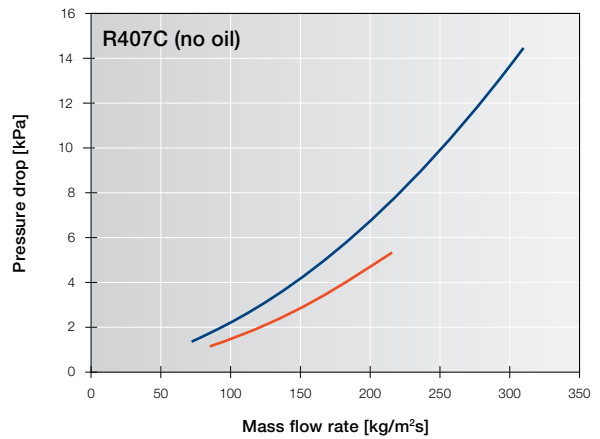
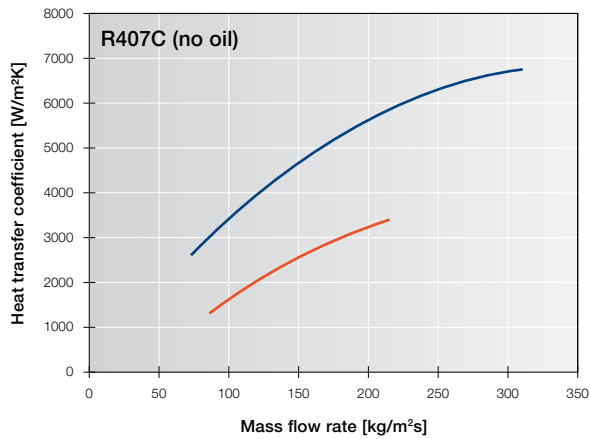
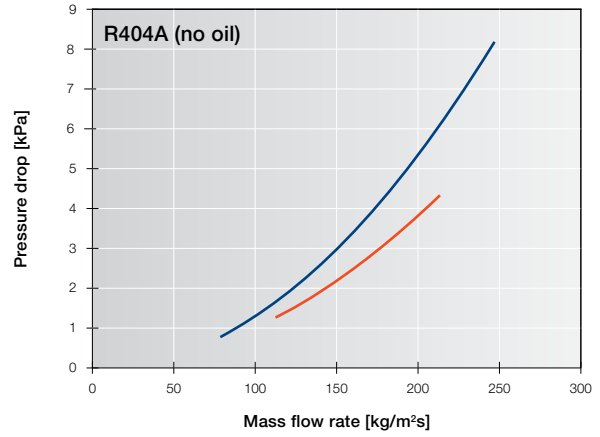
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EVAPORATION – PERFORMANCE DATA, SINGLE TUBE TESTS

Heat transfer performance



Pressure drop



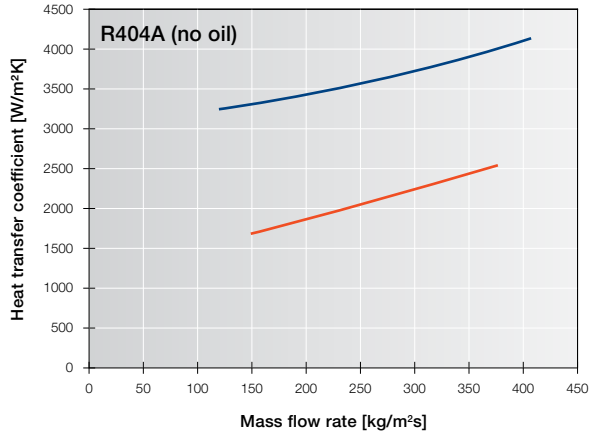
Test conditions Evaporation – 9.52 mm tubes
 $t_0 = 0\text{ }^\circ\text{C}$
 superheat $\sim 5\text{ K}$, inlet quality 20 %
 tube length 2 m

— cuprofin standard
 — plain tube

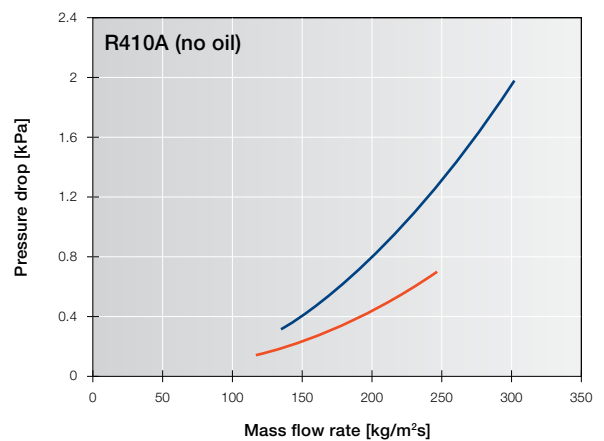
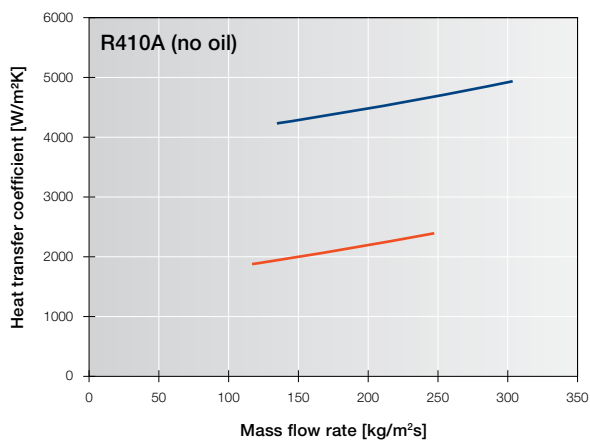
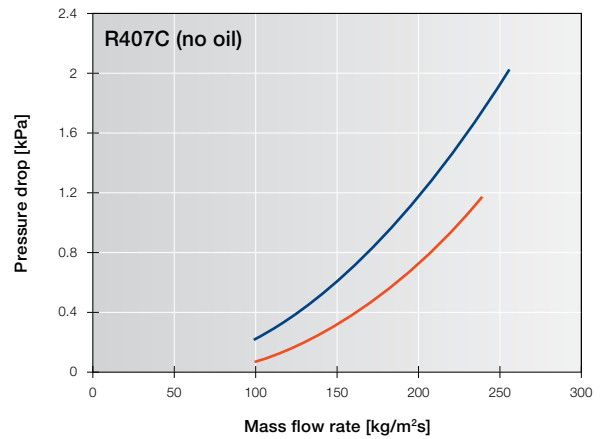
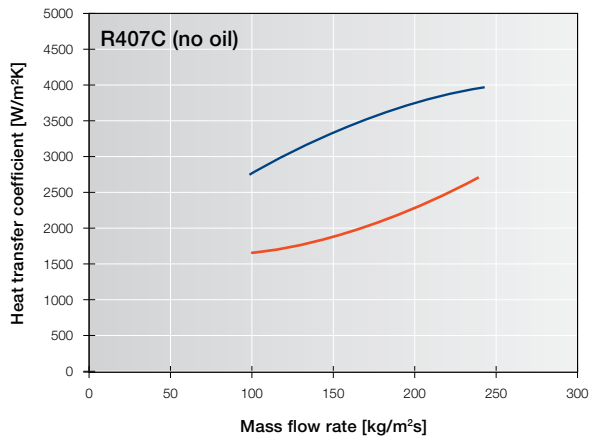
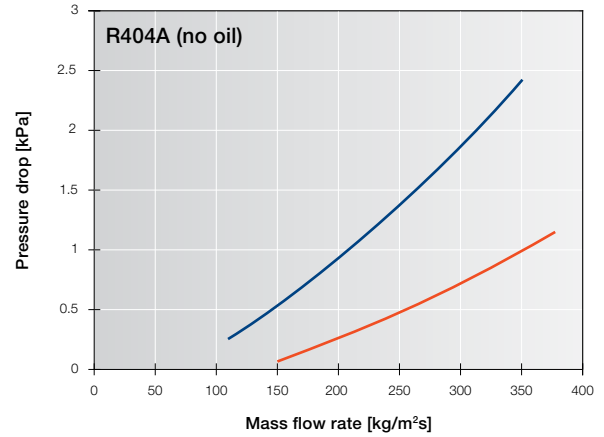
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CONDENSATION – PERFORMANCE DATA, SINGLE TUBE TESTS

Heat transfer performance



Pressure drop



Test conditions Condensation – 9.52 mm tubes
 $t_c = 35\text{ °C}$
 subcooling ~2 K, inlet superheat ~5 K
 tube length 2 m

— cuprofin standard
 — plain tube

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Form of delivery

Level-wound coils			
Material	Copper Cu - DHP	Copper C 12200	Copper SF - Cu
Standard	EN 12735-2*	ASTM B 359	VdTÜV 420/6
Temper	annealed Y040	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/E.

Tube Type	This leaflet					
	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 evaporators	fin coils	highly viscous liquids	seawater
Material	copper	copper	copper	copper	copper	cupro nickel

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