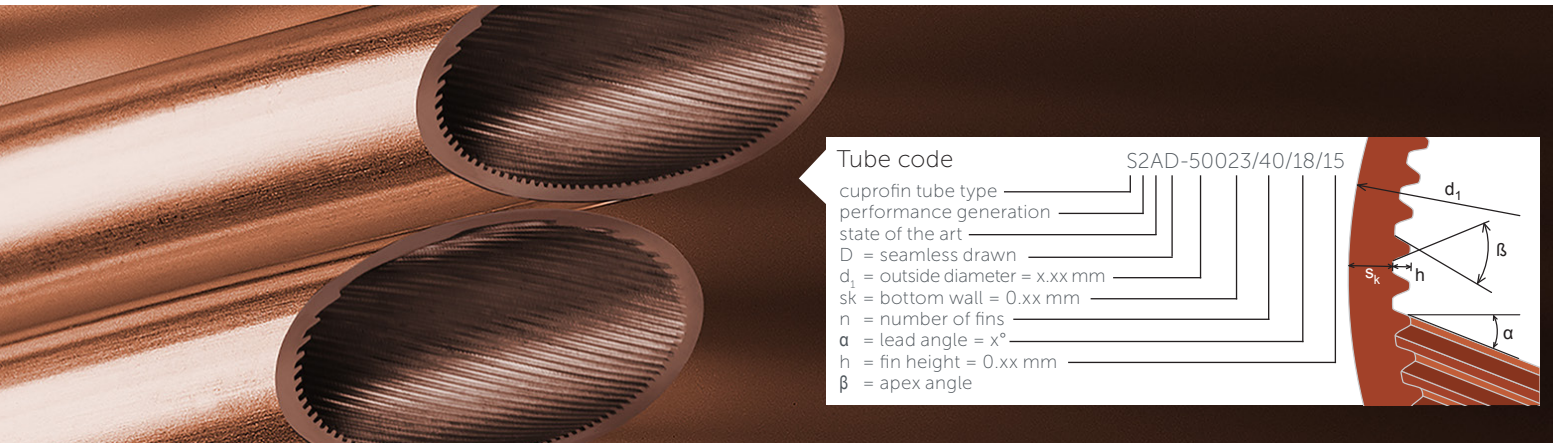


cuprofin[®]-Standard Pattern

Inner-grooved seamless drawn copper tubes



Application

Wieland cuprofin-Standard tubes are efficient heat transfer tubes that are universally usable for both condensation and dry expansion evaporation in all kinds of ACR applications.

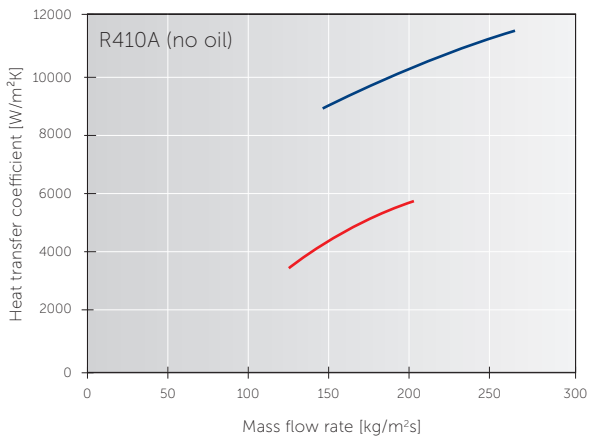
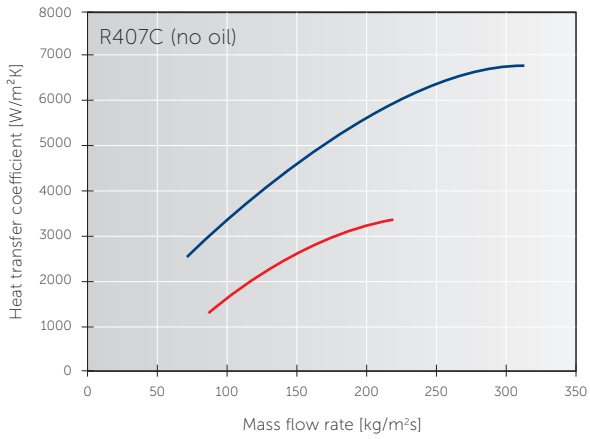
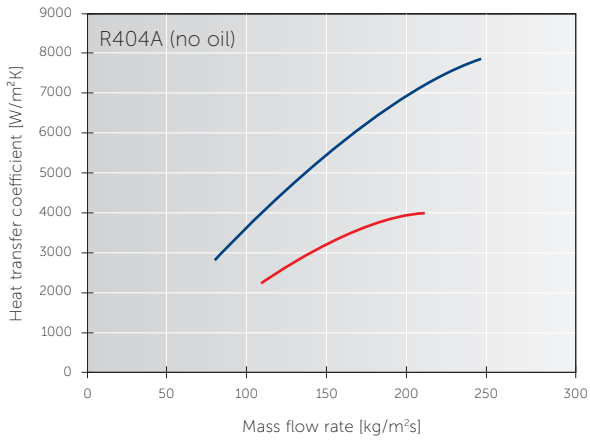
The product range has been extended and new light weight S2LD structures have been added to the portfolio.

| d_1 | | s_k | h | n | α | Weight approx. g/m | | Tube code |
|-------|------|-------|------|-----|----------|--------------------|-----------------|---------------------|
| mm | inch | | | | | LWC | straigth length | |
| 5.00 | | 0.20 | 0.15 | 40 | 18 | 33 | - | S2AD-50020/40/18/15 |
| 7.00 | | 0.25 | 0.15 | 50 | 18 | 55 | - | S2AD-70025/50/18/15 |
| 7.00 | | 0.25 | 0.18 | 50 | 18 | 57 | - | S2AD-70025/50/18/18 |
| 7.94 | 5/16 | 0.25 | 0.18 | 50 | 18 | 64 | - | S2AD-79425/50/18/18 |
| 7.94 | 5/16 | 0.25 | 0.20 | 50 | 18 | 65 | - | S2AD-79425/50/18/20 |
| 9.52 | 3/8 | 0.28 | 0.15 | 60 | 18 | 81 | - | S2AD-95228/60/18/15 |
| 9.52 | 3/8 | 0.28 | 0.20 | 60 | 18 | 87 | - | S2AD-95228/60/18/20 |
| 9.52 | 3/8 | 0.28 | 0.20 | 56 | 18 | 85 | - | S2LD-95228/56/18/20 |
| 9.52 | 3/8 | 0.45 | 0.20 | 60 | 18 | 129 | - | S2AD-95245/60/18/20 |
| 12.00 | | 0.32 | 0.23 | 70 | 18 | 126 | - | S2AD-12032/70/18/23 |
| 12.00 | | 0.32 | 0.25 | 70 | 18 | 129 | - | S2AD-12032/70/18/25 |
| 12.00 | | 0.32 | 0.18 | 90 | 18 | 121 | - | S2LD-12032/90/18/18 |
| 12.70 | 1/2 | 0.32 | 0.25 | 70 | 18 | 135 | - | S2AD-12732/70/18/25 |
| 12.70 | 1/2 | 0.32 | 0.25 | 66 | 18 | 132 | - | S2LD-12732/66/18/25 |
| 12.70 | 1/2 | 0.63 | 0.25 | 70 | 18 | 237 | - | S2AD-12763/70/18/25 |
| 15.00 | | 0.38 | 0.25 | 75 | 18 | 183 | - | S2AD-15038/75/18/25 |
| 15.00 | | 0.38 | 0.30 | 75 | 18 | 192 | - | S2AD-15038/75/18/30 |
| 15.87 | 5/8 | 0.38 | 0.30 | 75 | 18 | 200 | - | S2AD-15838/75/18/30 |
| 15.87 | 5/8 | 0.63 | 0.30 | 75 | 18 | 307 | 319 | S2AD-15863/75/18/30 |

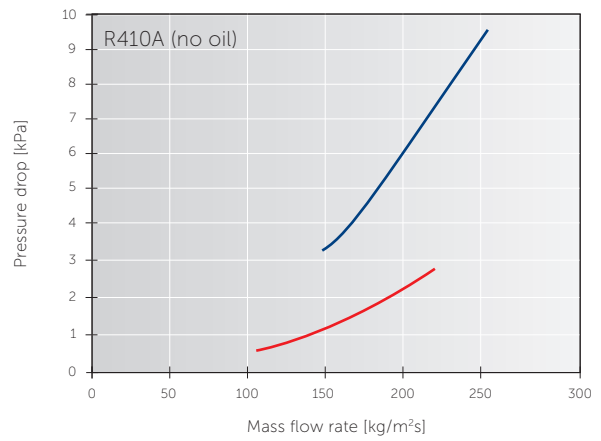
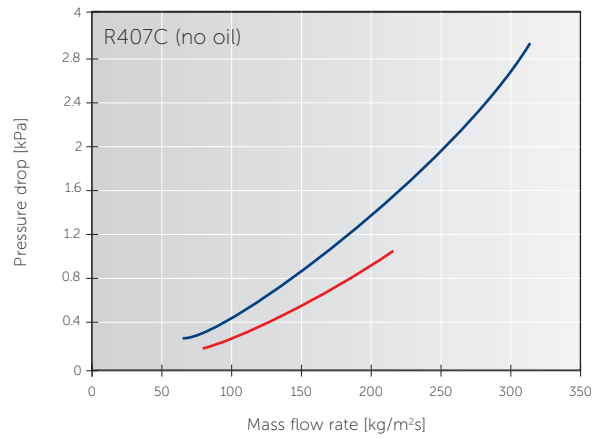
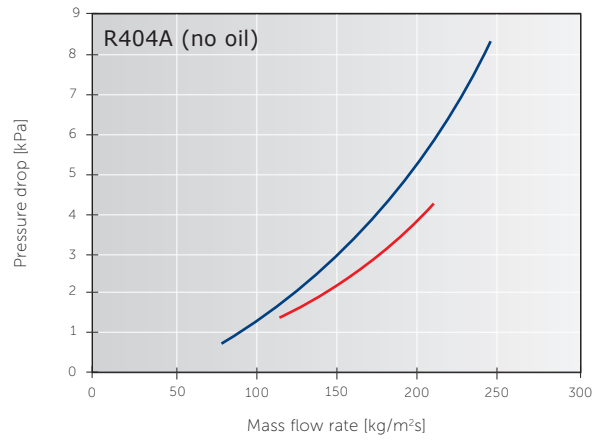
Other types and wall thicknesses are available upon request.

Evaporation – performance data, single tube tests

Heat transfer performance



Pressure drop



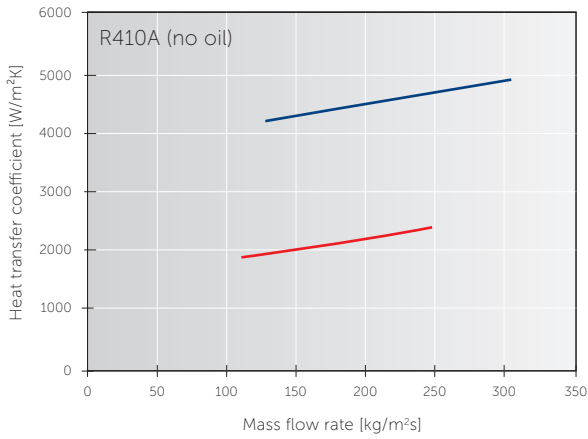
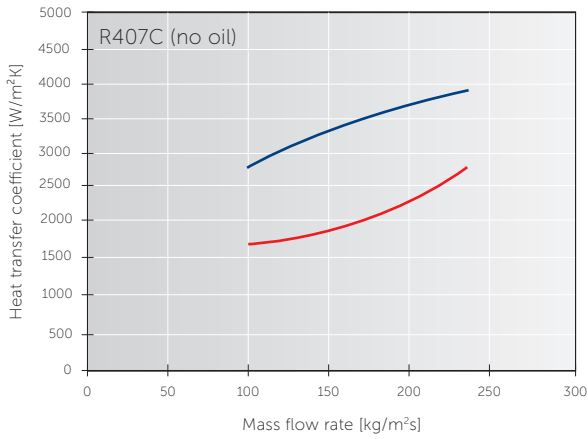
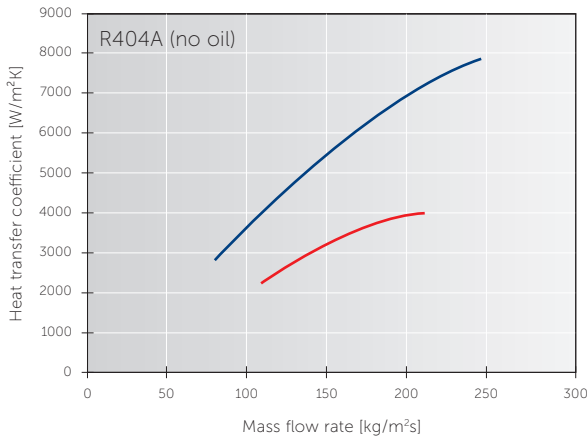
Test conditions

Condensation – 9.52 mm tubes
 $t_c = 0\text{ °C}$
 superheat ~5 K, inlet quality 20 %
 tube length 2 m

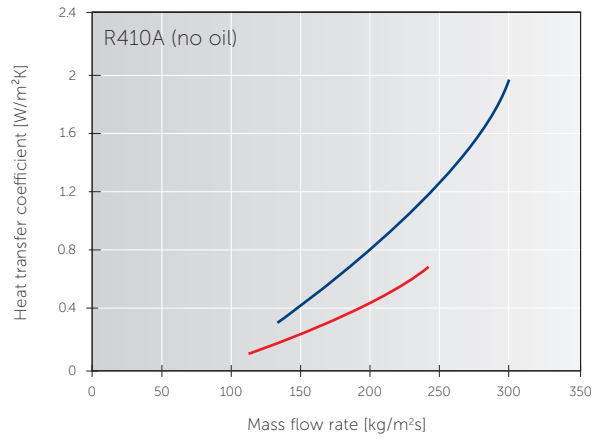
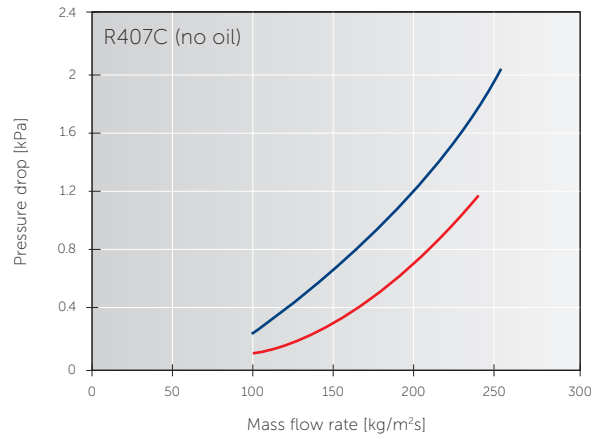
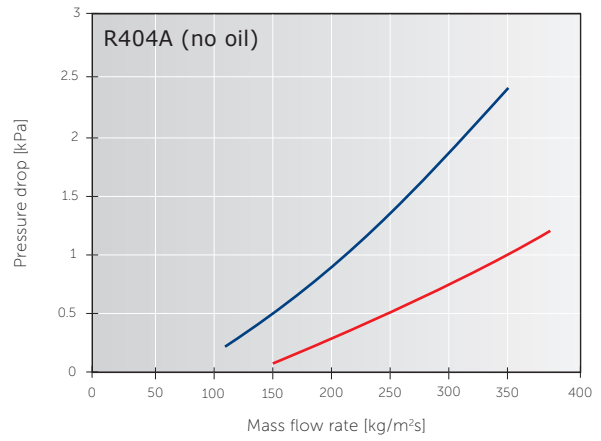
— cuprofin-standard
 — plain tube

Condensation – performance data, single tube tests

Heat transfer performance



Pressure drop



Test conditions

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

— cuprofin-standard
 — plain tube

Form of delivery

| Level-wound coils | | | |
|-------------------|---------------|--------------------|--------------|
| Material | Copper Cu-DHP | Copper C12200 | 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 dawn H80 | hard F 36 |

*Conforms to the Pressure Equipment Directive PED 2014/68/EU.

| | 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 |

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