

CONTRA FLOW COAXIAL HEAT EXCHANGERS



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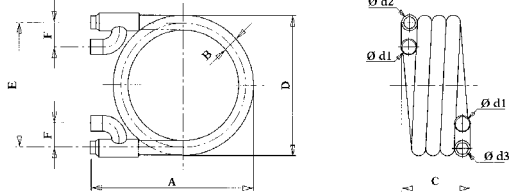
THE WTK RANGE

The steel/copper coaxial heat exchangers of WTK are designed for a number of applications. The most common ones are condenser and evaporator applications. Other available units are specially designed coaxial heat exchangers for air applications or units incorporated in a tank. The high efficiency of the coaxial units of WTK is guaranteed by the execution in co-current flow.

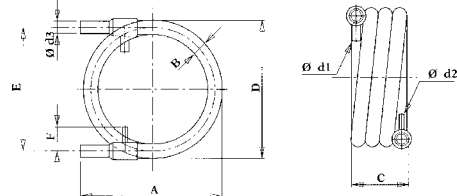
QUALITY ASSURANCE

All the coaxial heat exchangers are subject to a testing with a 30 bar pressure in water bath for both circuits. Each heat exchanger is pre-charged with nitrogen (1 bar) in order to avoid the formation of humidity and to maintain the tubes perfectly clean.

EVAPORATORS



CONDENSERS



TECHNICAL DATA

| MODEL | | Condensers | Evaporators |
|--------------------|--------------------|---------------------|-------------|
| CODE | | XC | XE |
| SHELL SIDE | | HCFC & HFC | Water |
| INTERNAL TUBE SIDE | | Water | HCFC & HFC |
| MAX | shell side | 25 bar | 10 bar |
| PRESSURE | internal tube side | 10 bar | 25 bar |
| MIN and MAX | shell side | -20 - +100 °C | |
| TEMP. | internal tube side | -20 - +100 °C | |
| CAPACITY RANGE | | from 4 kW to 100 kW | |

| EVAPORATOR | XE 5 | XE 7 | XE 10 | XE15 | XE22 | XE31 | XE39 | XE49 | XE63 | XE82 |
|-----------------------|------|------|-------|--------|--------|--------|--------|--------|--------|--------|
| Qn [kW] | 4,3 | 5,7 | 9,4 | 14 | 21 | 28,5 | 37,8 | 50 | 63,9 | 80 |
| Mw [m³/h] | 0,65 | 0,8 | 1,5 | 2,3 | 3,5 | 4,5 | 6 | 8 | 11 | 13 |
| Δp _n [bar] | 0,23 | 0,29 | 0,43 | 0,49 | 0,35 | 0,35 | 0,42 | 0,37 | 0,29 | 0,25 |
| A | 360 | 380 | 400 | 440 | 520 | 620 | 620 | 860 | 860 | 920 |
| B | 25 | 28 | 35 | 42 | 50 | 57 | 65 | 76,1 | 88,9 | 101,6 |
| C | 220 | 220 | 260 | 270 | 270 | 250 | 305 | 250 | 280 | 320 |
| D | 260 | 310 | 310 | 370 | 460 | 580 | 580 | 626 | 720 | 730 |
| E | 235 | 282 | 275 | 328 | 410 | 523 | 515 | 550 | 630 | 630 |
| F | 45 | 55 | 60 | 74 | 78 | 92 | 94 | 100 | 120 | 130 |
| d1 OD | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/4" | 1 1/2" | 1 1/2" | 2" | 2 1/2" | 2 1/2" |
| d2 ODS | 12 | 12 | 16 | 16 | 22 | 28 | 28 | 28 | 28 | 28 |
| d3 ODS | 16 | 16 | 22 | 22 | 28 | 35 | 35 | 35 | 42 | 42 |
| WEIGHT [kg] | 7 | 10 | 15 | 20 | 28 | 36 | 48 | 62 | 86 | 112 |
| CONDENSER | XC 5 | XC 7 | XC 12 | XC 19 | XC 24 | XC 31 | XC 42 | XC 54 | XC 63 | XC 100 |
| Qn [kW] | 4,5 | 6,5 | 11,5 | 17,9 | 23 | 30 | 41 | 52 | 63 | 105 |
| Mw [m³/h] | 0,69 | 0,69 | 1,2 | 2,2 | 3,5 | 3,9 | 5,5 | 6,1 | 7,2 | 12,4 |
| Δp _n [bar] | 0,14 | 0,28 | 0,26 | 0,4 | 0,37 | 0,32 | 0,36 | 0,34 | 0,29 | 0,35 |
| A | 250 | 260 | 310 | 330 | 440 | 520 | 620 | 620 | 620 | 850 |
| B | 22 | 22 | 28 | 35 | 42 | 50 | 57 | 57 | 65 | 82,5 |
| C | 100 | 170 | 200 | 250 | 270 | 280 | 255 | 255 | 305 | 260 |
| D | 200 | 220 | 280 | 310 | 370 | 460 | 580 | 580 | 580 | 636 |
| E | 178 | 198 | 252 | 265 | 328 | 410 | 523 | 523 | 515 | 554 |
| F | 60 | 60 | 60 | 70 | 50 | 53 | 57 | 57 | 62 | 72 |
| d1 OD | 13,5 | 13,5 | 16,5 | 22,2 | 1 1/4" | 1 1/2" | 1 1/2" | 1 1/2" | 2" | 2 1/2" |
| d2 ODS | 12 | 16 | 16 | 16 | 22 | 22 | 28 | 28 | 28 | 35 |
| d3 ODS | 12 | 12 | 12 | 12 | 12 | 16 | 16 | 18 | 16 | 22 |
| WEIGHT [kg] | 2,5 | 4 | 8 | 15 | 21 | 30 | 37 | 40 | 53 | 75 |