



English version



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Technology of components used in heating.

## Chapter 44

### The Ultimheat Snap-In concept

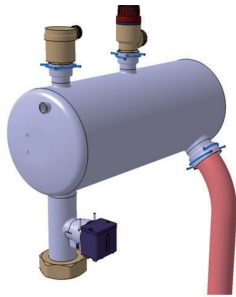


# The Ultimheat Snap-In concept

## Ultimheat Snap-In\* pipe joint concept

In high volume professional applications, assembly time of pipes, fittings and controls used on pipes are time consuming. Watertight, pressure-tight, and orientation are the main quality issues.

Ultimheat has developed a simple concept designed for liquid heaters which allows easy assembly, adjustable and waterproof joint. The connection of the heater to accessories (flow switch, pressure switch, overpressure valve, air bleeder) and user's own pipes is simple and fast and can be done without costly investment.



This system is also compatible with pipe end forming existing on the market.

**Average cost saving :** (compared to threaded solutions)

- On fittings price : 70%
- On assembly time : 80 to 90%

### Operating Principle:



The male part is formed to create a ring of larger diameter than the nominal diameter.

This increase in diameter can be achieved by forming the tube, welded brass fitting, crimped ring, or be molded, stamped or machined on accessories.

The smooth portion between the ring and the end of the tube receives an O-ring.

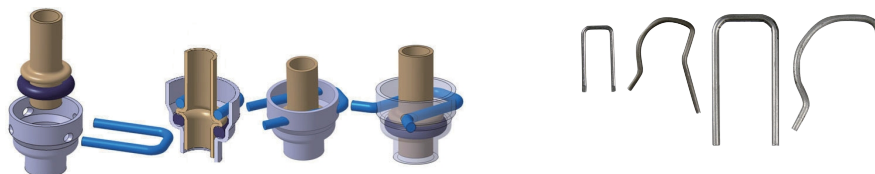
The female part, usually mounted on the heater is flared to receive the male part, and compressing the O-ring.



The female part also has four holes for the passage of a clip that will lock the two parts together, while still rotatable on 360°, and allows a substantial alignment and length position tolerance.

The assembly takes a few seconds.

The clips may have different forms that allow or not a subsequent removal.



Main dimensions of female parts achievable on stainless steel heater output or input.

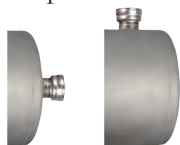
|             |             |             |
|-------------|-------------|-------------|
| <p>DN10</p> | <p>DN15</p> | <p>DN20</p> |
| <p>DN25</p> | <p>DN32</p> |             |

DN10  
DN15

# The Ultimheat Snap-In concept

DN20  
DN25  
DN32

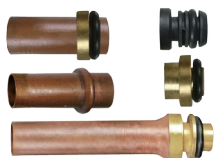
Female part formed directly on tanks.



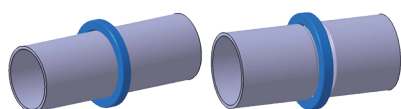
Female part forming on input or output pipe.



Ends of male parts compatible (Ultimheat can supply the male pipes with formed ends on request).

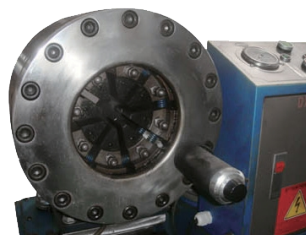


The system of crimping retainer rings Ultimheat . (rings available at Ultimheat)



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| DN10 | DN15 | DN20 | DN25 | DN32 |

Hand Tools and crimping machines for ring crimping available from Ultimheat.



Available accessories: flow switch, pressure switch, overpressure valve, automatic air bleeder. The flow switch special design avoids wrong flow orientation.

Also on request, using the same design: remote or direct pressure gauge, sensor pocket, drain valve.

