Wieland Safety Heat Exchanger series

safe. efficient. ecological.
Wieland Safety Heat Exchanger outstanding in safety and efficiency

Domestic hot water heat pump outstanding economical, low-maintenance and energy-saving.

The heat exchanger is directly immersed in the domestic hot water storage tank for best heat transfer without any losses.

Safe heat recovery of supermarket refrigeration for drinking water.

The double-walled design ensures high safety.

The direct condensation in the storage tank is notably energy-saving. Unlike wrap-around condenser variants, the new Wieland Safety Heat Exchanger manages with smallest temperature differences due to direct contact with the tap water in the storage tank. Heat losses are avoided. Thus the domestic hot water heat pump achieves highest COP values - measured in accordance with DIN EN 16147. The double-walled GEWA-safe tube offers protection against contamination and makes leaks detectable by a leakage gap.

Absolutely reliable media separation with double wall tube

- The heat exchangers are designed on the water side (outside) with a medium-high finned GEWA-D tube.
- On the refrigerant side (inside) is a second copper tube with inner grooving applied.
- With its double-wall design and leak detection possibility, the new Wieland Safety Heat Exchanger complies with the safety regulations of many European countries for heating drinking water with refrigerant, such as DIN EN 1717.
4 good reasons for the Wieland Safety Heat Exchanger series

Low cost  minimum usage of refrigerant and material combined with increased efficiency
Efficient  highest COP values according to DIN EN 16147 possible by installing the heat exchanger directly in the storage tank
Safe  absolutely reliable media separation with double wall tubes
Easy handling  simply mounting and dismounting

Standard series  Wieland Safety Heat Exchanger

This series consists of double-sided structured tubes made of copper (Cu-DHP), a especially corrosion-resistant material. In combination with the additional galvanic tin plating of the outer surfaces an optimal corrosion protection is guaranteed.

Available in two sizes (in stock)

<table>
<thead>
<tr>
<th>Typ</th>
<th>Max. condensation performance* [kW]</th>
<th>Outer surface area [m²]</th>
<th>Volume refrigerant side [l]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wieland Safety Heat Exchanger 10</td>
<td>3.2</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Wieland Safety Heat Exchanger 22</td>
<td>8.5</td>
<td>2.2</td>
<td>0.7</td>
</tr>
</tbody>
</table>

* Max. condensation performance for R410A at \( t_{\text{e}} = 0 \, ^{\circ} \text{C}, t_{\text{c}} = 40 \, ^{\circ} \text{C} \) und \( \Delta T = 12 \, \text{K} \)

Customized  Wieland Safety Heat Exchanger flex

Flexible designs, tube variants and tin plating of the outer surface – individually according to your requirements.

Contact us

Wieland Thermal Solutions  |  wieland-thermalsolutions.com
P  +49 731 944 1133  @  thermalsolutions@wieland.com
Wieland Thermal Solutions.
Globally leading in heat transfer and forming technologies.

Maximizing heat transfer while minimizing material and thermal input: that’s our goal when designing and producing enhanced surface tubes and heat exchangers for refrigeration, air conditioning, and heating systems, as well as for mechanical engineering and process technology applications. Our heat transfer solutions are trusted by our customers the world over. Because they are cost-effective, safe, and durable, and because they ensure the highest energy efficiency.