

Data Sheet

Micro Plate Heat Exchanger Type **HDW30-C**

For more efficient Chillers & Heat Pumps



HDW30-C is double wall heat exchanger designed for application as condenser or desuper heater where the flow mediums are not allowed to mix.

The double wall heat exchanger prevents primary media to be mixed with the secondary media if there is an internal leak in the unit.

40% charge compared with a traditional BPHE. The ideal solution to meet the world's climate and energy spirations.

Features :

- Minimal hold up volume: Less refrigerant charge
- High heat transfer: For a more efficient system where heat exchanger is implemented
- Reduced CO₂ footprint: Environmentally friendly with high heat transfer and minimal refrigerant charge

Product specification

Operating conditions

Preconditions:

Max number of plates: 70

Pressure and temperature data:

Min.working temperature: -196 °C (-320 °F)

Max.working temperature: 200 °C (390 °F)

Max. working pressure: 35 bar(508psi) refrigerant side / 35 bar(508psi) water side

NOTE:

Pressure and temperature details, refers to [Third party approvals](#)

Weight

HDW30-C: $0.82 + 0.116 * (N - 1)$ (1.81lb + 0.26 * (N - 1))

N: Number of Plate

NOTE:

Weight Excluding connections and accessories

Material specification

Table 1: Standard materials

Item	Material	Specification
Cover plates	Stainless steel	AISI 304L
Plates	Stainless steel	AISI 316Ti
Connections	Stainless steel	AISI 304L, AISI 316L (water side)
Brazing filler	Pure copper	Cu

Hold up volume

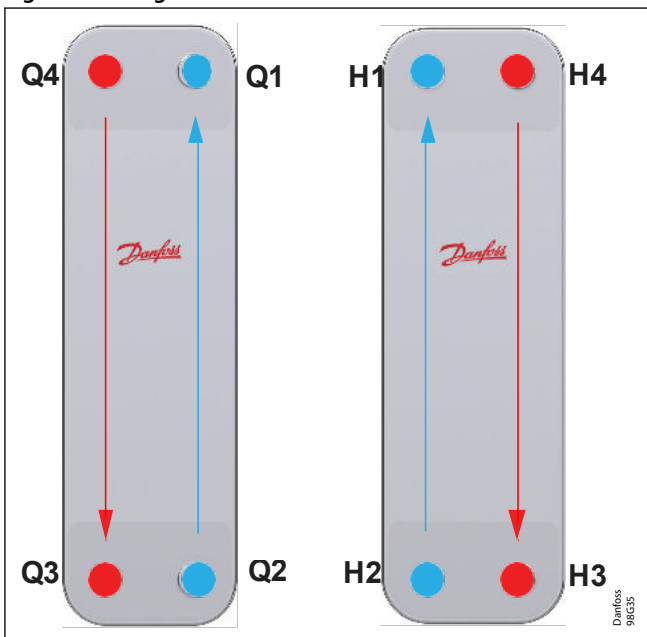
Q1 - Q2 (l): $0.0171 \times N / 2$

Q3 - Q4 (l): $0.0171 \times (N - 2) / 2$

N: Number of Plate

Configuration flow

Figure 1: Configuration flow



Parallel flow:

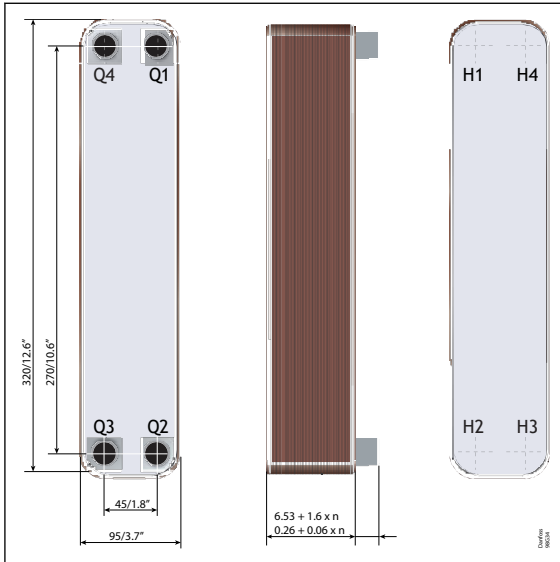
Micro Plate Heat Exchanger, Type HDW30-C

Q1- Q2 [H1 - H2]: brine/secondary side

Q3 - Q4 [H3 - H4]: refrigerant/primary side

Dimensions

Figure 2: Dimensions



Ordering

Global or local standard code numbers can be accessed via Store.Danfoss.com on local subsites, with full set of technical data as well as relevant assets such as documentation and drawings.

Configuring and calculating products

HDW30-C can be easily customized based on the application needs; model size can be evaluated using HEXSelector software.

For details, product configuration and code creation please contact your Danfoss Sales representative.

Mechanical connections

Table 2: Mechanical connections

Circuits	Connection type options	Connection size option [in.]
Q1-Q2 (water-brine side) Q3-Q4 (Refrigerant inlet)	BSP male	3/4, 1
	NPT	1/2
	Soldering	3/8, 1/2, 5/8, 3/4

Accessories and spare parts

Stud bolts on front and/or back plates for mounting support are available upon request. Please contact your Danfoss sales representative for further information.

Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.

Third party approvals

AllMPHE and BPHE are certified to European Pressure Equipment Directive (PED) and are approved by Underwriters Laboratories (UL).

Other certifications are available upon request: Kraia, EAC, UA, AS; for others and more details please contact your local Danfoss representative.

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