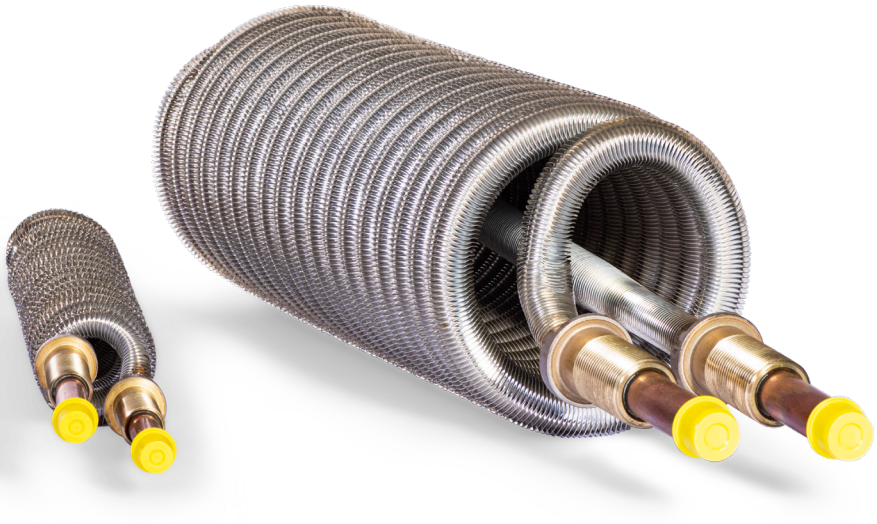


Wieland WRK

Finned copper tube heat exchanger for use with refrigerants

Wieland WRK Heat Exchangers are helical coils made with medium-high finned copper tube GEWA-D and flange mounting out of brass. The extruded fins on the outside and grooved inner surface optimizes the heat transfer. The standard galvanic tin-plated outside surface reduces the corrosion risk of galvanized steel pipes connected downstream.

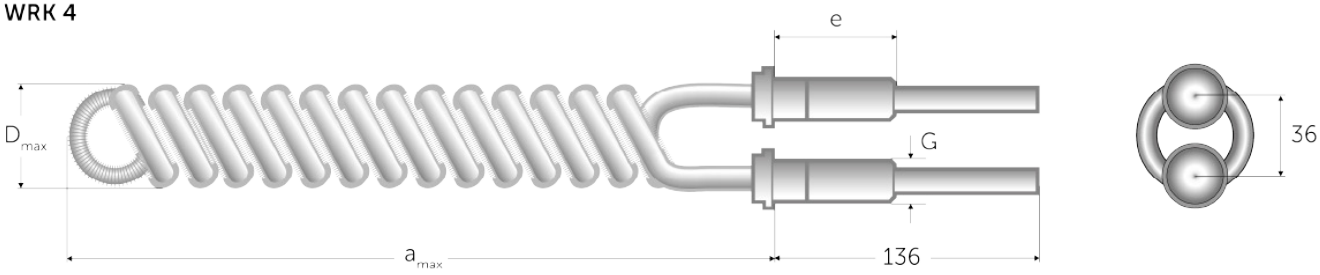
Available Versions

Type	Max. condensation performance Q [kW]*	Outer surface area [m²]	Finned tube no.	Tube length [mm]	Volume refrigerant [liters]	Dimensions [mm]				Weight appt. [kg]
						D_{max}	a_{max}	e	G	
WRK 4	3.0	0.4	D-1135.12100-00	2,450	0.2	63	410	62	1/2"	2.0
WRK 9	6.0	0.9	D-1135.12100-00	4,800	0.4	140	350	62	1/2"	3.5
WRK 13	8.5	1.3	D-1135.14100-00	6,000	0.7	147	410	62	3/4"	5.3
WRK 18	12.5	1.8	D-1135.18100-00	6,950	1.5	170	440	65	1"	7.5
WRK 23	16.0	2.3	D-1135.18100-00	8,750	1.9	170	540	65	1"	9.3

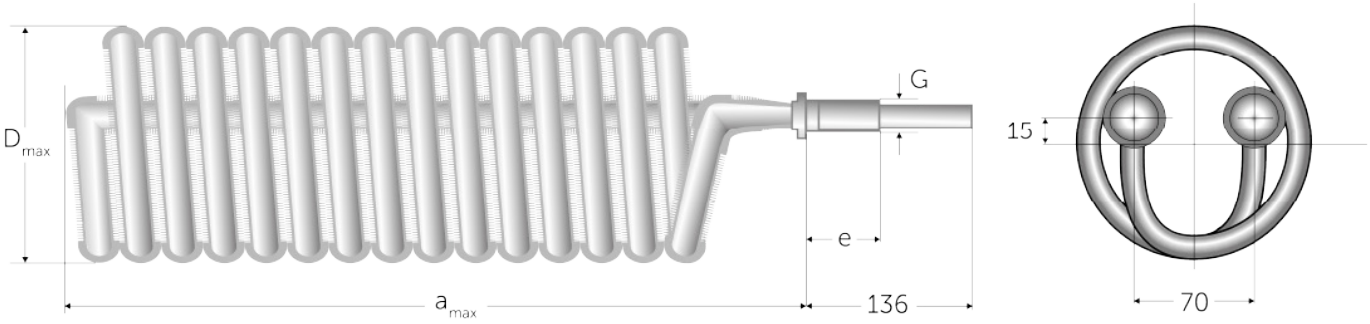
Available from stock. Customized design possible on request.

** Refrigerant R134a and ΔT = 25K (difference between condensation and water temperature)*

WRK 4



WRK 9 – WRK 23



Customized design

With customized series Wieland WRK flex additional flexible designs are available with suitable connecting parts or different tubes and materials for special applications like higher pressure situations.

Contact us!

Application

Advantages

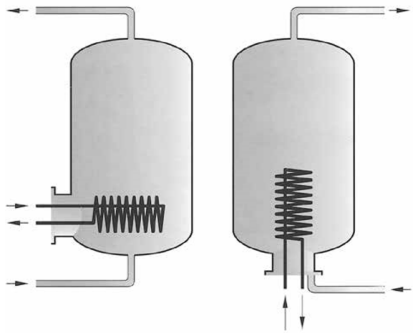
- Powerful at lowest temperature differences and pressure drop
- Enables buffer tank with highest COP-values
- High resistance against corrosion
- Hygienic material with anti-microbial properties

Applications

- Direct condensation or evaporation within the storage tank / domestic hot water tank
- Heat recovery of condensation heat from refrigerant applications
- Desuperheater in refrigeration

Operating range

- Max. operating pressure: 35 bar
- Max. operating temperature:
- up to + 150°C



Assembly instructions

As a rule, for the use as condenser / desuperheater the Wieland WRK is placed into the bottom part of the hot water tank. Its position may be horizontal or vertical. To avoid vibration failure, the finned tube heat exchanger should be braced in the tank not only for transportation but also in operation. The mounting to the storage flange is by means of a hexagon nut and hollow disk (included).

The seal is generally placed on the outside, but is also possible on the inside. When fixing the nut, it is necessary to counterhold at the fitting flats. Connected refrigerant pipes should be soldered to the pipe ends and fully absorb vibrations. A muffler should be mounted where the refrigerant vapour enters.

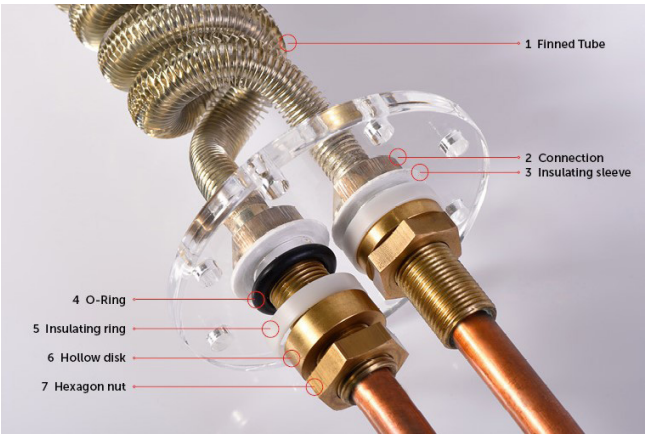
Accessories

Electric insulation

Enameled hot water tanks are usually fitted with magnesium or impressed-current anodes to protect inadequately coated areas of the steel vessel against pitting corrosion. To maintain this protective effect, we recommend the use of insulation sets to ensure electrical separation of the heat exchanger from the storage tank. Retrofitting of hot water storage tanks is possible at any time.

Insulating set F

The insulating set F (for flange mounting) consists of an insulating sleeve and an insulating ring. For an outside seal it is fitted between the heat exchanger and the storage tank flange as shown in the figure. Alternately a sealing from the inside is possible. If the flange is less than 8 mm thick, a distance washer (not supplied with the set) should be positioned between the hollow disk and the hexagon nut. Insulating sets are accessories and are supplied on request, two sets are required per heat exchanger.



Part no.	Description	Material
1	Finned tube GEWA-D	Cu-DHP | K21
2	Connection	CuZn40Pb2
3*	Insulating sleeve	PA
4**	O-ring	EPDM
5*	Insulating ring	POM-CE
6	Hollow disk	CuZn40Pb2
7	Hexagon nut	CuZn40Pb2

** not supplied with the set | max. operating temperature: + 95°C*
*** max. operating temperature: + 130°C | do not use grease containing mineral oil*

Quality Assurance

Responsibility begins with a high standard of quality. As the first company for semi-finished products in Europe, we have been on the path to certified quality management since 1987.

Today, we have DIN EN ISO 9001:2015 certifications for all producing plants, and our testing laboratories in Ulm and Vöhringen are additionally accredited to DIN EN ISO/IEC 17025:2018.

Technical Service

WRK heat exchangers correspond with the Pressure Equipment Directive 2014/68/EU. Our standard heat exchangers are leak-tested with an overpressure of 50 bar. On the refrigerant side, they are cleaned in accordance with DIN 8964, dried, filled with nitrogen and sealed with plastic caps.

Contact us!

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