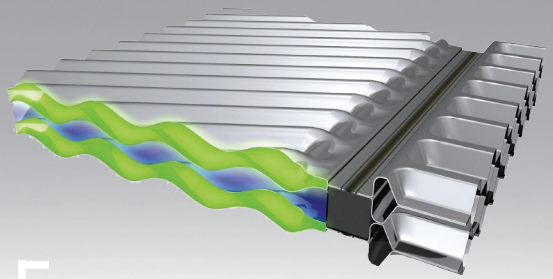
LWC Series

Laser-Welded Plate Heat Exchangers





The **LWC Series** has two high efficiency heat transfer plates that are laser-welded in pairs, minimizing the need for gaskets, making it a good match for ammonia and other aggressive media applications. Oxygen-free laser welding is an option for special media applications. The LWC is offered in corrosive resistant plate materials for a long maintenance-free life cycle.

Laser-Welded Plate Heat Exchangers

These semi-welded plate heat exchangers are available in eight sizes. A high performance design provides a lower refrigerant charge within a compact footprint.

OptiWave™—Computer-modeled heat transfer area design provides even flow distribution across the entire plate surface, maximizing heat transfer while minimizing fouling rates, plate count, and cost.

PosLoc™—Heat transfer plates have multiple lead-ins that ensure self-alignment of the plate pack for ease in closing. This feature reduces downtime when servicing the unit.

EcoLoc™—Adhesive-free gasket attachment makes replacement a snap. A special design keeps gaskets in place even after several service cycles.

LWC Versatility

- Flooded / DX / Recirculated Evaporators
- Condensers
- Desuperheater / Heat Recovery
- Economizers / Subcoolers
- Gas, Oil and Product Coolers
- Solvent Recovery
- Product Heater
- Up to 550 psig pressure - welded side
- Up to 360 psig pressure - gasketed side

Made in USA

LWC Series: Technical data

Heat Transfer Plate Material: 316L Stainless as standard. Optional Titanium Gr. 1 and Gr. 11, 304 Stainless, Hastelloy C-276, SMO 254, Alloy 686, Alloy 59, Stainless 904L. Available with oxygen-free welding for added corrosion resistance.

Gasket: Dual Material EPDM/Neoprene as standard. NBR, NBR High Temperature, NBR-LT, EPDM, EPDM High Temperature, Viton, and others are available.

Port Connection: Metal Lined (Stainless, Titanium and others on request), Welded Neck Flange and others are available.

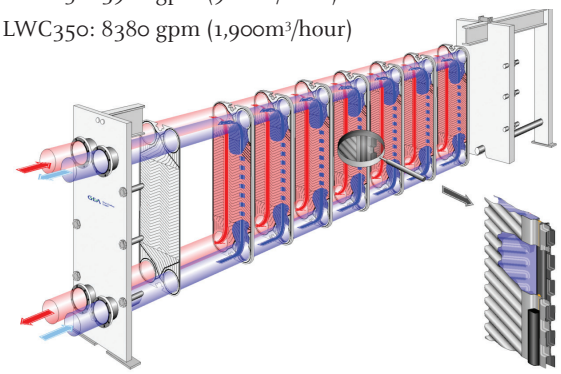
Pressure Plate: Carbon Steel, Stainless cladded and others are available.

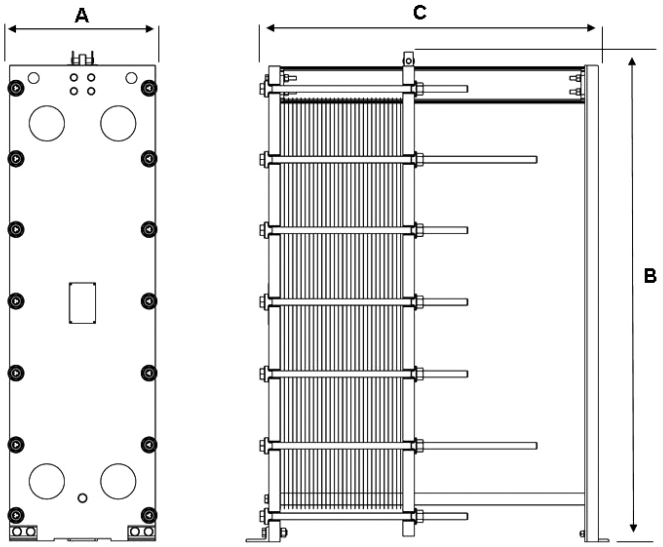
Maximum Pressure: Maximum standard pressure for the refrigerant side is 360 psig (25 barq). Maximum standard pressure is 225 psig (16 barq) for the non-refrigerant side.

Temperature Range: Varies with the media and gasket selection. Maximum is 410°F (210°C). Minimum is -49°F (-45°C). Contact GEA for details.

Approximate Maximum Liquid Flow Rate:

LWC100: 830 gpm (190m³/hour)
LWC150: 1540 gpm (350m³/hour)
LWC250: 3960 gpm (900m³/hour)
LWC350: 8380 gpm (1,900m³/hour)





Technical Data

Model	Connection Size	Dim A	Dim B	Dim C
LWC 100 T	4" nominal	23.0" (584 mm)	51.1" (1298 mm)	Up to 158" (4013 mm)
LWC 100 M	4" nominal	23.0" (584 mm)	67.5" (1716 mm)	Up to 158" (4013 mm)
LWC 100 X	4" nominal	23.0" (584 mm)	83.5" (2121 mm)	Up to 158" (4013 mm)
LWC 150 S	6" nominal	26.2" (665 mm)	70.1" (1781 mm)	Up to 159" (4039 mm)
LWC 150 L	6" nominal	26.2" (665 mm)	89.4" (2271 mm)	Up to 159" (4039 mm)
LWC 250 S	10" nominal	35.2" (895 mm)	89.5" (2273 mm)	Up to 159" (4039 mm)
LWC 250 L	10" nominal	35.2" (895 mm)	112.8" (2866 mm)	Up to 159" (4039 mm)
LWC 350 S	14" nominal	44.7" (1134 mm)	115.4" (2930 mm)	Up to 238" (6045 mm)

The specifications contained in this printing are intended only to serve the non-binding description of our products and services and are not subject to guarantee. Binding specifications, especially pertaining to performance data and suitability for specific operating purposes, are dependent upon the individual circumstances at the operation location and can, therefore, only be made in terms of precise requests.

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GEA Heat Exchangers

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About GEA:

GEA Heat Exchangers provides one of the most extensive product portfolios in the heat exchange market worldwide for a wide range of applications. GEA Heat Exchangers manufactures plate, shell and tube, air-cooled heat exchangers, air filter systems, synthetic fillings for numerous areas of application, wet cooling towers and dry cooling systems, as well as air-conditioning facilities. As a result, GEA Heat Exchangers provides reliable and comprehensive coverage of the entire spectrum for heat exchange.