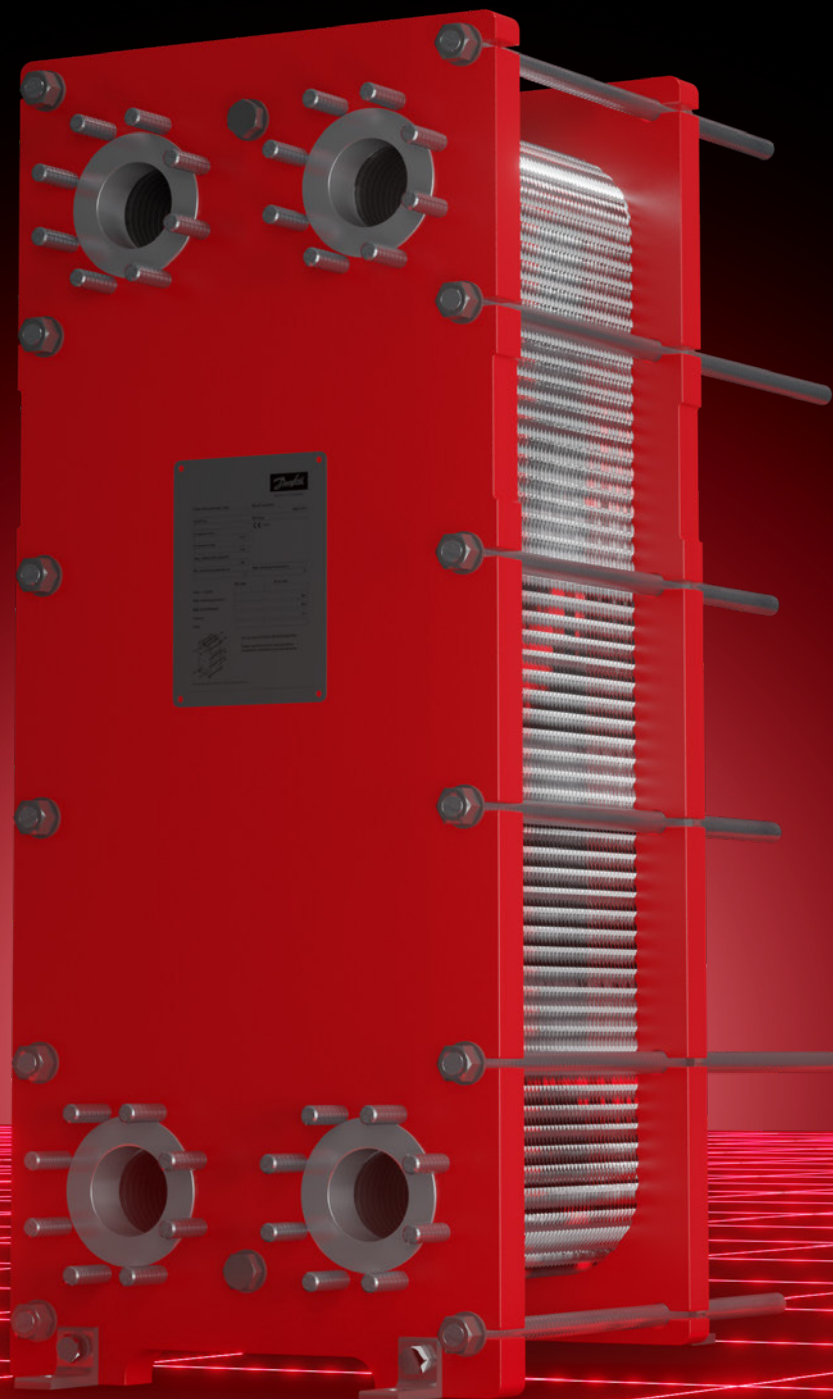


ENGINEERING  
TOMORROW

*Danfoss*

Danfoss | D-plate technology

Experience **D-power** with the  
**revolutionary** new **D-plate**  
**technology**





# Introducing the **revolutionary D-plate technology** - experience **the D-power**

**Our Danfoss engineers have enhanced the way heat exchanger plates are designed with the introduction of the new D-plate series. Drawing on years of experience within heat transfer technology and deep application knowledge, we have made significant upgrades to the traditional Fishbone plates to truly redefine the way we think of heat exchanger plates.**

Maximizing both performance and product lifetime, the D-plate series is a milestone in innovation and moves plate heat exchanger technology into a bright new era of advanced, yet simple solutions.

Someone once said that all gasketed plate heat exchangers are not the same and that you should always look at the features on offer. This is a belief that we share at Danfoss, and why we never settle for mediocre solutions. Just because something works doesn't mean that it can't be improved, which is why we never stop innovating: to bring you the best solution possible.

### **The strongest plate to date**

The Composite Diagonal Reinforcement, together with a well-designed inlet pattern, is what makes thinner plates possible.

The component is made from an advanced glass-fiber reinforced polymer able to withstand a wide range of chemicals, acids, and alkalic fluids inside the gasketed plate heat exchanger standard design temperature range of: -20°C to +180°C.

Even though the component is not in direct media contact we have made sure that it is capable of handling a very wide range of even quite aggressive fluids.

### **Highly intuitive hanging system**

Our new hanging system uses a component made from a cost-effective, durable glass reinforced composite that makes servicing the plate pack highly intuitive and easy.

The Composite Hanging System offers two benefits:

- Better user experience (slides much better on carrying bar / guiding bar)
- It is placed more accurately (relative to the portholes) on the plate than a normal stamped hanging profile

### **Perfect plate alignment with corner locks**

Perfect plate alignment with our new corner locking system. The plate corners fit together to stabilize the plate pack and eliminate the risk of snaking.

The Corner Alignment system offers significant benefits, such as ensuring perfect alignment of plates which promotes higher first pass yield in the production and also makes it easier for the installer to seal a heat exchanger, after servicing.

Up to **10%**  
higher Heat Transfer Coefficient!

### **Powerful performance**

We have increased the thermal performance of our plates by up to 10% compared to the usual plate design.

### **Revolutionary D-Lock™**

The patented D-Lock™ gasket system is easy to attach. It snaps the gasket into the D-Lock™ sockets and keeps it firmly in place. The system is designed so that no part of the gasket is exposed to UV-light, thereby extending its lifetime.



# Technical specification overview

## Heat exchanger D110

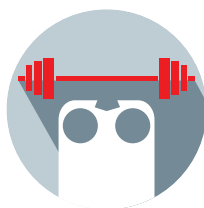
| Type                                      |           | D110   |
|---|-----------|--|
| Max. working pressure                     | PN (bar)* | 10, 16, 25   |
| Max. operating temperature                | °C        | Up to 180  |
| Min. operating temperature                |           | -20  |
| Flow medium                               |           | Water and different fluids, steam  |
| Volume / channel                          | l         | 3.2  |
| Connection size                           |           | DN 150 / 6"  |
| Connection type                           |           | DN 150/6" flanges.<br>Carbon steel or rubber lined<br>(Other materials available on request)   |
| Plate material*                           |           | Stainless steel EN 1.4404 (AISI 316L), EN 1.4301 (AISI 304), titanium Gr.1<br>Other materials available on request                               |
| Plate thickness*                          | mm        | 0.3; 0.4; 0.5  |
| Gasket material                           |           | NBR, EPDM,<br>Other materials available on request   |
| Gasket attachment type                    |           | D-Lock (D)   |
| Liners in connections                     |           | Stainless steel EN 1.4404 (AISI 316L), EN 1.4301 (AISI 304), SMO254, Hastelloy C276, titanium Gr.1, Rubber liners (requires 1.5 mm spacer plate) |
| Frame                                     |           | Painted frame, color RAL 3020 (RED)  |
| Frame type                                |           | All carbon steel (non-food) frames: IG/IS/DG/DS  |
| Frame paint specification                 |           | Painting available for corrosion categories C2L, C4M, C5M  |
| Composite used for hanging system         |           | Glass reinforced PPS type 1  |
| Composite used for diagonal reinforcement |           | Glass + Mineral reinforced PPS type 2  |

\*

|                        |                                 |                                 |                                 |                              |                              |
|------------------------|---------------------------------|---------------------------------|---------------------------------|------------------------------|------------------------------|
| D- plate configuration | AISI304/316<br>Thickness 0.3 mm | AISI304/316<br>Thickness 0.4 mm | AISI304/316<br>Thickness 0.5 mm | Titanium<br>Thickness 0.4 mm | Titanium<br>Thickness 0.5 mm |
| Max. design pressure   | PN16                            | PN25                            | PN25                            | PN16                         | PN25                         |



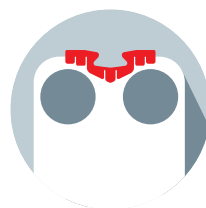
Up to **10% higher**  
heat transfer



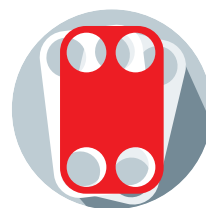
**Strongest** plate  
to date



**Revolutionary**  
**D-Lock™** gasket  
system



**Intuitive**  
hanging system



**Perfect** plate  
alignment



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