FUNKE
Quality Heat Exchangers



FP7000 SERIES

Gasketed Plate Heat Exchanger
DN 300

HYDAC

FUNKE – a company of the HYDAC Group

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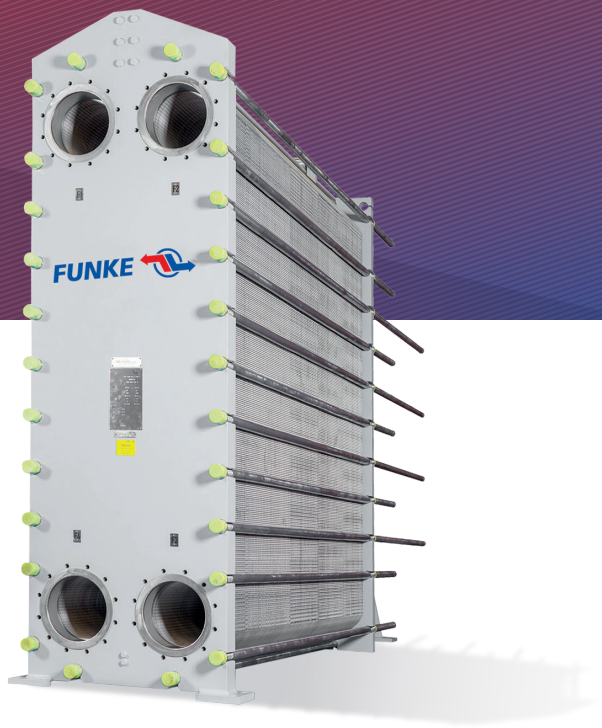
DN 300



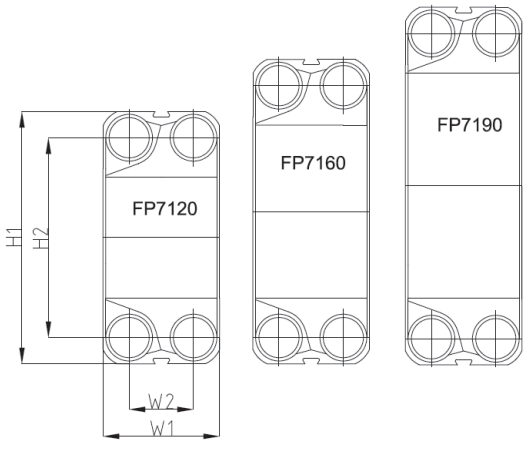
FP7000 is the new additional series with DN 300 (12“) connections and a thermo-hydraulically optimised heat exchanger plate. In the system of the gasketed plate heat exchangers from *FUNKE*, it supplements the FP81 / FP120 / FP160 / FP190 as a further FP7120/ FP7160 / FP7190 series.

With the new and effective embossing, its seal geometry optimised by FEM and other innovative features, such as the bypass-stop system, a new series was developed here, which shows maximum efficiency with large transmission capacities and simultaneously low LMTD values. This new series is also very suitable for applications where high NTU values (large temperature difference with low LMTD) are required.

Model-Type	FP7120	FP7160	FP7190
Max. Area	733 m²	1134 m²	1432 m²
Size W1 x H1	870 × 1880 mm	870 × 2269 mm	870 × 2657 mm
Center W2 x H2	480 × 1490 mm	480 × 1879 mm	480 × 2267 mm
Plate Structure	H / L	H / L	H / L
Max. Pressure	16 barg	16 barg	16 barg
Max. Temp.	200 °C	200 °C	200 °C

Materialien

Plates	Thickness	Gaskets
1.4404 / AISI 316L	0.5 / 0.6 mm	NBR-HT
1.4301 / AISI 304	0.5 / 0.6 mm	HNBR
3.7025 / Titan Gr.1	0.5 / 0.6 mm	EPDM-HT
		Viton I / S
		Viton G



FP7000 SERIE

Gasketed Plate Heat Exchanger DN 300

Design codes & standards

AD2000/PED 2014/68/EU; EN13445; ASME VIII Div 1 & U-Stamp; API662, NACE MR0175 & MR0103

Special design

- Multipass Design
- 2-Section Cooler for three-fluid-circle

Special features

- **Opti Flow:** Optimised inlet area, best distribution of the fluid over the entire width of the heat transfer plate for optimum utilization of the surface area
- **Best Wave:** science-based optimised wave design for the best possible ratio between pressure loss and heat transfer
- **Clip+Push gaskets:** Optimised by FEM for best fit even after repeated opening
- **Bypass-Stop Design:** Minimised bypasses for optimal heat transfer

Frame

Pressure level	6, 10, 16 bar (Standard: AD2000 -10 °C to +150 °C)
Material	C-Stahl S355J2+N, DIN 10025, painted
Painting	Standard-painting *FUNKE* one coat paint: 1 x 80 µm water-based paint, RAL 5012; other e.g. RAL, ISO 12944-5, ATEX, high temperature are possible
Connection	Standard: Rubber-liner DN 300, NBR, EPDM, Viton for flange PN 10, EN 1092-1
Welding neck flange	DN 300 / 12″ stainless steel, carbon steel C22/A105 - DIN EN 1092-1, ANSI B16.5
Metal liner	DN 300 / 12″ stainless steel, titanium - DIN EN 1092-1, ANSI B16.5
Design codes	AD2000, ASME VIII, EN13445

Possible uses

HVAC	Industry	Power Plants	Chemistry	Renewable Energies
District heating / cooling	Hydraulic	Central cooling	Basic chemistry (Acids, alkalines, etc.)	Geothermal power
Thermal power stations	Automotive industry	Lubricating oil cooler	Special chemistry (Adhesives, coating, etc.)	Solar power plants
Data Center	Process technology (therm. plants, plastics)	Generator cooling	Fine chemistry	Water power plants
Supply technology	Surface treatment	Auxiliary system cooling	Pharmaceutical industry	Bioenergy

Devices usages

- Energy-recovery
- Process-cooler/-heater
- Steam-condenser
- Process-condenser

Best Wave: Science based optimized plate design

Your advantages at a glance

Plate pack

- High thermal performance
- Highly efficient self-cleaning
- Optical gasket identification (colour coding)

Connection

- Rubber liner
- Metal insert
- Welding neck flange

Frame

- Compact design
- Highly flexible (upgrade/downgrade)
- Easy to service and maintain
- Modular system means short production times
- Graduated plate guide (easier installation of plates)

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