

FUNKE

Quality Heat Exchangers



FP4000 SERIES

Gasketed Plate Heat Exchanger
DN 100

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FP4000 is the new series with DN 100 connections with a thermally and hydraulically optimized heat transfer plate. This new series replaces the previous series FP206 / FP31 / FP40 / FP50 und FP71 in the system of Funke gasketed plate heat exchangers with nominal connection diameters from DN 25 to DN 500.

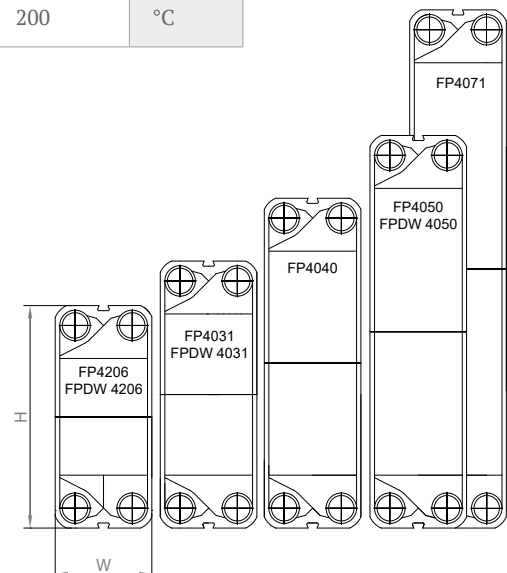
With a new type of embossing optimised by CFD and innovative features such as the bypass stop system, a new series has been developed here that is significantly more efficient than the previous units in this series.



Model	FP4206	FP4031	FP4040	FP4050	FP4071	unit
Max. Area	1 - 83	1,4 - 111	1,9 - 188	2,4 - 238	3,4 - 337	m ²
W x H	380x875	380x1050	380x1297	380x1544	380x2038	mm
Plate structure	H / L	H / L	H / L	H / L	H / L	
Max. pressure	25	25	25	25	25	barg
Max. Temp.	200	200	200	200	200	°C

Materials

Plates	Material thickness	Gaskets
1.4404 / AISI 316L	0,35 / 0,50 / 0,60 mm	NBR-HT
1.4301 / AISI 304	0,50 / 0,60 mm	HNBR
Titan / 3.7025	0,50 / 0,60 mm	EPDM-HT
254 SMO / 1.4547	0,50 / 0,60 mm	Viton I
Alloy C276 / 2.4819	0,60 mm	Viton S
Alloy 904L / 1.4539	0,60 mm	Viton G



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Design Codes & Standards

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

Special design

- Double wall plates (FPDW; 2 x 0,35 mm, 1.4404) möglich für FP4206, FP4031 und FP4050
- Multipass Design
- horizontal units
- 2-Section Cooler for three-fluid circle

Special Features

- Opti Flow: Optimized 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: CFD optimized plate design for best possible ratio of pressure loss and heat transfer
- Clip-On gaskets optimised by FEM for best fit even after repeated opening
- Bypass-Stop Design: Minimized bypasses for optimal heat transfer
- Double gaskets with leakage groove

Frame

Design pressure	10, 16, 25 bar // 150 lbs
Material	C-Steel S355J2+N, DIN 10025, painted, solid stainless steel, 1.4401 (only FP4206, FP4031)
Painting	Standard-painting Funke : 1 x 80 µm Water based paint, RAL 5012 others e.g. other RAL, acc. Munsell, ISO 12944-5, ATEX, Hight temperature, agains extra costs
Connection	Standard: Rubberliner DN 100, NBR, EPDM, Viton for Flange PN 16, EN 1092-1
Threads	DN 100, DN 80 / 3", 4" stainless steel, C-Steel C22/A105 - DIN EN 1092-1, ANSI B16.5 u.a.
Welded neck flanges	DN 100, DN 80 / 3", 4" NBR, EPDM, Viton I, for Flange - DIN EN 1092-1, ANSI B16.5 u.a.
Rubberliner	DN 100, DN 80 / 3", 4" stainless steel, Titan - DIN EN 1092-1, ANSI B16.5 u.a
Tri-Clamp	DN 100, DIN 32676, 1.4404 / 1.4435, Pipe DIN 11866-A 4", ASME BPE, 1.4404 / 1.4435, Pipe DIN 11866-C
Hygienic connection	DIN 11851, DN 100, 1.4404/1.4435, Pipe DIN 11866-A

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
Swimming pool technology	Process Technology thermal plants, plastics	Generator cooling	Fine chemistry	Water power plants
Supply technology	Surface treatment	Auxiliary system cooling	Pharmaceutical industry	Bioenergy
and others				

Devise usages

- Energie-Recovery
- Prozess-Cooler/-heater
- steam-condensator
- Prozess-condensator

Best Wave:
CFD optimised
plate design

Your advantages at a glance

Plate pack

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

Gestell

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

Anschlüsse

- Rubber liner
- Metall insert
- Welded neck flange
- Tri-Clamp
- Hygienic connection