

FUNKE

Quality Heat Exchangers



FP2000 SERIES

Gasketed Plate Heat Exchanger
DN 50

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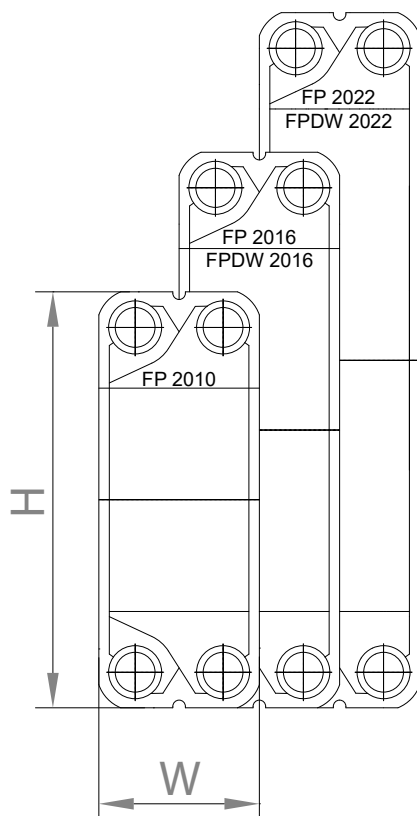
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Gasketed Plate Heat Exchanger DN 50

FP2000 is the new series with DN 50 connections with a thermally and hydraulically optimized heat transfer plate. This new series replaces the previous series FP10 / FP16 / FP22 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	FP2010	FP2016	FP2022	unit
Max. Area	0,41 - 20	0,75 - 37	1,05 - 52	m ²
W x H	230 x 596	230 x 796	230 x 996	mm
Plate structure	H / L	H / L	H / L	
Max. pressure	25	25	25	barg
Max. Temp.	200	200	200	°C

Materials

Plates	Material thickness	Gaskets
1.4404 / AISI 316L	0,35 / 0,50 / 0.60 mm	NBR-HT
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) for FP2016 and FP2022 possible
- 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
Painting	Standard-painting Funke : 1 x 80 µm Water based paint, RAL 5012 others e.g. other RAL, acc. Munsell, ISO 12944-5, ATEX, High temperature, against extra costs
Connection	Standard: threaded pipe male G2"
Threads	threaded pipe female G2"
Welded neck flanges	DN 50 / 2", stainless steel, C-Steel C22 - DIN EN 1092-1, ANSI B16.5 u.a.
Rubberliner	DN 50 / 2", NBR, EPDM, Viton I, for Flange - DIN EN 1092-1, ANSI B16.5 u.a.
Metal inserts	DN 50 / 2", stainless steel, Titanium - DIN EN 1092-1, ANSI B16.5 u.a
Tri-Clamp	DN 50, DIN 32676, 1.4404 / 1.4435, Pipe DIN 11866-A, 2" ASME BPE, 1.4404 / 1.4435, Pipe DIN 11866-C
Hygienic connection	DIN 11851, DN 50, 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 Technologyb 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)

Frame

- Compact design
- highly flexible (upgrade/downgrade)
- easy to service and maintain
- Modular system means short production times

Connection

- Rubber liner
- Metall insert
- Welded neck flange
- Tri-Clamp
- hygienic design
- Aseptik
- threads male/female