FUNKE
Quality Heat Exchangers



FP2000 SERIES

Gasketed Plate Heat Exchanger
DN 50

HYDAC

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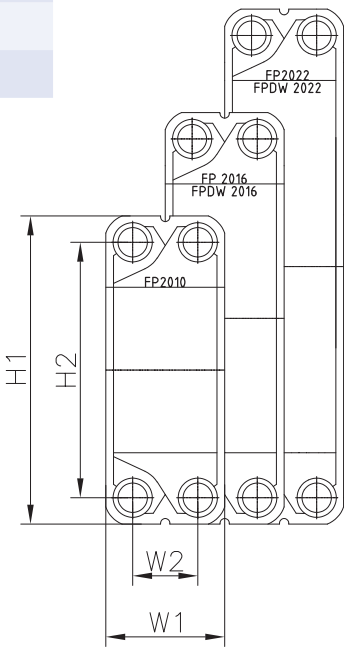


The FP2000 series features DN 50 connections and a heat exchanger plate that has been optimised for both thermal and hydraulic performance.

In FUNKE's system of gasketed plate heat exchangers which features connection sizes ranging from DN 25 to DN 500, this series replaces the previous FP10, FP16, and FP22 series.

Featuring a new, science-based, optimised plate design and innovative features, such as the bypass-stop system, this product line has been developed to be significantly more efficient than the units in the previous series.

Model types	FP2010	FP2016	FP2022
Max. area	24 m²	36 m²	48 m²
Size W1 × H1	230 x 600 mm	230 x 800 mm	230 x 1000 mm
Centre W2 × H2	126 × 494 mm	126 x 694 mm	126 × 894 mm
Plate structure	H / L	H / L	H / L
Max. pressure	25 barg	25 barg	25 barg
Max. temp.	200°C	200°C	200°C



Materials

Plate material	Material thickness
1.4404 / AISI 316L	0.35 / 0.50 / 0.60 mm
1.4301 / AISI 304	0.4 mm
3.7025 / titanium	0.50 / 0.60 mm
1.4547 / 254 SMO	0.50 / 0.60 mm
2.4819 / alloy C276	0.60 mm

Gaskets
NBR-HT
HNBR
EPDM-HT
Viton I
Viton S
Viton G

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Gasketed plate heat exchanger DN 50

Design codes & standards

AD2000/PED 2014/68/EU; EN13445; ASME VIII Div. 1 & U-Stamp; API 662, NACE MR0175 & MR0103

Special designs

- Double wall plates (FPDW; 2 x 0,35 mm, 1.4404) possible for FP2016 and FP2022
- Multipass design
- Horizontal units
- 2-section cooler for three-fluid circle

Special features

- **Opti Flow:** Optimised inlet area: optimal fluid distribution across the entire width of the heat exchanger plate ensures maximum utilisation of the surface area
- **Best Wave:** Science-based optimised wave design for the best possible balance between pressure loss and heat transfer
- **Clip-on gaskets** for best fit even after repeated opening
- **Bypass Stop design:** Minimised bypasses for optimal heat transfer

Frame

Pressure ranges	10, 16, 25 bar (standard according to AD2000, -10°C to 150°C)
Material	Painted / solid stainless steel, 1.4404
Paint finish	Standard paint finish - FUNKE single-layer paint: 1 x 80 µm water-based paint, RAL 5007 Other options include RAL, Munsell, ISO 12944-5, ATEX, and high-temperature coatings available Available for an additional fee.
Connections	Standard: External thread G2″, stainless steel Additional connections are available on request.
Thread	Internal thread G2″, stainless steel
Welded neck flange	DN50 / 2″ stainless steel, carbon steel
Rubber lining	DN50 / 2″ NBR, EPDM, Viton
Metal lining	DN 50 / 2″ stainless steel, titanium
Design codes	AD 2000, ASME VIII, EN13445

Possible applications

HVAC	Industry	Power plants	Chemical industry	Renewable energy
District heating and cooling	Hydraulics	Central cooling systems	Basic chemical substances (acids, alkalis, etc.)	Solar power plants
Thermal Power stations	Automotive industry	Lubrication oil coolers	Speciality chemicals (adhesives, coat-ings, etc.)	Hydropower plants
Swimming pool technology	Process technology (thermal systems, plastics)	Generator cooling	Fine chemicals	Bioenergy
Supply technology	Surface treatment	Auxiliary system cooling	Pharmaceutical industry	

Device applications

- Energy recovery
- Process coolers/heaters
- Steam condensers
- Process condensers

Best Wave: Science-based optimised plate design

Your benefits at a glance

Plate pack

- High thermal performance
- Highly efficient self-cleaning
- Visual gasket identification (colour codes)

Frame

- Compact design
- High degree of flexibility (upgrade/downgrade)
- Easy to service and maintain
- Short production times thanks to a modular system

Connections

- Rubber lining
- Metal lining
- Welded neck flange
- Threaded connections: M/F

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