Specification Sheet

Project: 202506-1131

Date: 06/06/25

Contact:
Direct Line:

Plate & Frame Heat Exchanger

Version: 4.19.11 (15/2/4)

Item:	**Unit: F 2016-55-1-EH**

Technical data per HX		Hot side			Cold side	
Fluid		**Water**			**Water**	
Mass flow rate	[kg/s]	5.99			[kg/s]	5.99
Volume flow rate	[m³/h]	21.786			[m³/h]	21.764
Inlet temperature	[°C]	45.00			[°C]	38.00
Outlet temperature	[°C]	40.00			[°C]	43.00
Operating pressure	[barg]	2.00			[barg]	2.00
Physical properties		In	Out		In	Out
Dynamic viscosity	[cP]	0.599	0.655		0.680	0.620
Density	[kg/m³]	988.2	990.3		991.0	989.0
Specific heat capacity	[kJ/kgK]	4.175	4.177		4.178	4.176
Thermal conductivity	[W/mK]	0.638	0.635		0.634	0.637

P.H.E characteristic values

Heat duty	[kW]		125.00		
Eff. heat transfer area	[m²]		6.72		
Log./Effective temperature difference	[K]		2.00 / 2.00		
Heat transfer coeff. req./act.	[W/m²K]		9299 / 9906		
Fouling factor total	[m²K/W]		0.0000066		
Overdesign	[%]		6.53		
Pressure loss	[kPa]	32.067		[kPa]	31.893
Channel Velocity	[m/s]	0.41 / 0.76		[m/s]	0.41 / 0.76
Connection Velocity	[m/s]	2.73		[m/s]	2.73
No. of passes in series		1			1
No. of plates total			55		
Mix of Channeltype			21*HH + 6*HL		

Construction

Weight Dry/Wet		[kg]		approx. 167/181	
Volume		[dm³]	7.327		7.327
Design pressure		[barg]		16.0	
Max. working temperature		[°C]		110.00	
Material		DIN			
	Plates	AISI 316L / 1.4404 (0.50 mm)			
	Gaskets	EPDM HT			
	Frame	S 355 J2+N (Pressure Plates), max. plates: 80, Extensibility 45%			
	Painting	Standard, RAL 5002, <= 150°C,			
Connection	Hot side	F1 => F4 : Threaded pipe, male, DN 50, Stainless steel, G 2"			
	Cold side	F3 => F2 : Threaded pipe, male, DN 50, Stainless steel, G 2"			
Design Code		AD-2000			
Inspection Code		PED 2014/68/EU			

Remark

Construction sheet

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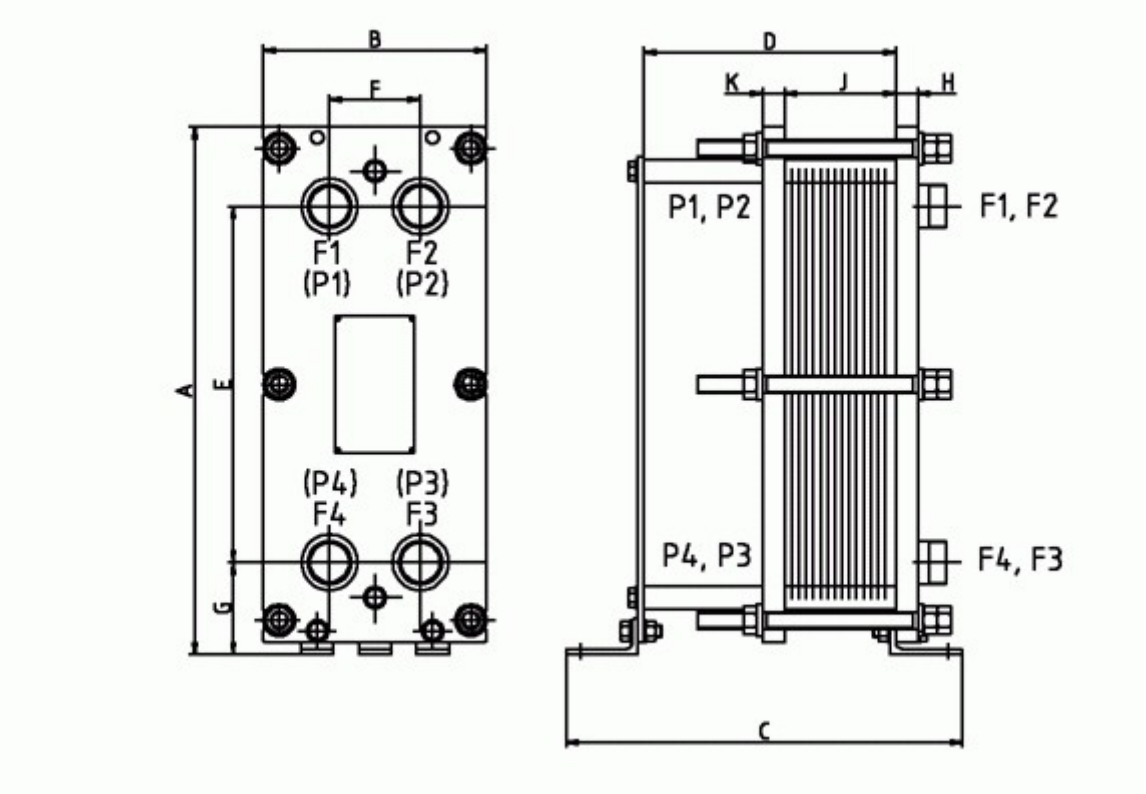
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Item:	**Unit: F 2016-55-1-EH**

Dimensional sketch - not Certified



Dimensions [appr. mm, inch], max. no. of plates 80		**:mm**	**:inch**
A:	Total height	:932.5	:36.7
B:	Total width	:310	:12.2
C:	Total length	:593	:23.3
D:	Length of carrier bar	:495	:19.5
E:	Distance between connections, vertical	:694	:27.3
F:	Distance between connections,horizontal	:126	:5.0
G:	middlepoint of connection from the ground	:128	:5.0
H:	Thickness of frame plate	:25	:1.0
K:	Thickness of pressure plate	:25	:1.0
J:	Length of the plate-package	:159.5	:6.3

Connections

Hot side: F1 => F4 :
Threaded pipe, male,
DN 50, Stainless steel, G 2"

Cold side: F3 => F2 :
Threaded pipe, male,
DN 50, Stainless steel, G 2"

Preliminary Dimensions