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 09-39-1-EH**

Technical data per HX		Hot side			Cold side	
Fluid		**Water**			**Water**	
Mass flow rate	[kg/s]	2.63			[kg/s]	2.63
Volume flow rate	[m³/h]	9.586			[m³/h]	9.576
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]		55.00			
Eff. heat transfer area	[m²]		3.07			
Log./Effective temperature difference	[K]		2.00 / 2.00			
Heat transfer coeff. req./act.	[W/m²K]		8955 / 9451			
Fouling factor total	[m²K/W]		0.0000059			
Overdesign	[%]		5.54			
Pressure loss	[kPa]	35.194			[kPa]	35.475
Channel Velocity	[m/s]	0.60 / 0.60			[m/s]	0.59 / 0.59
Connection Velocity	[m/s]	4.17			[m/s]	4.17
No. of passes in series		1				1
No. of plates total			39			
Mix of Channeltype			19*HH			

Construction

Weight Dry/Wet		[kg]		approx. 72/79		
Volume		[dm³]	3.344			3.344
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: 44, Extensibility 13%				
	Painting	Standard, RAL 5002, <= 150°C,				
Connection	Hot side	F1 => F4 : Threaded pipe, male, DN 32, Stainless steel, G 1 1/4"				
	Cold side	F3 => F2 : Threaded pipe, male, DN 32, Stainless steel, G 1 1/4"				
Design Code		AD-2000				
Inspection Code		PED 2014/68/EU				

Remark

Construction sheet

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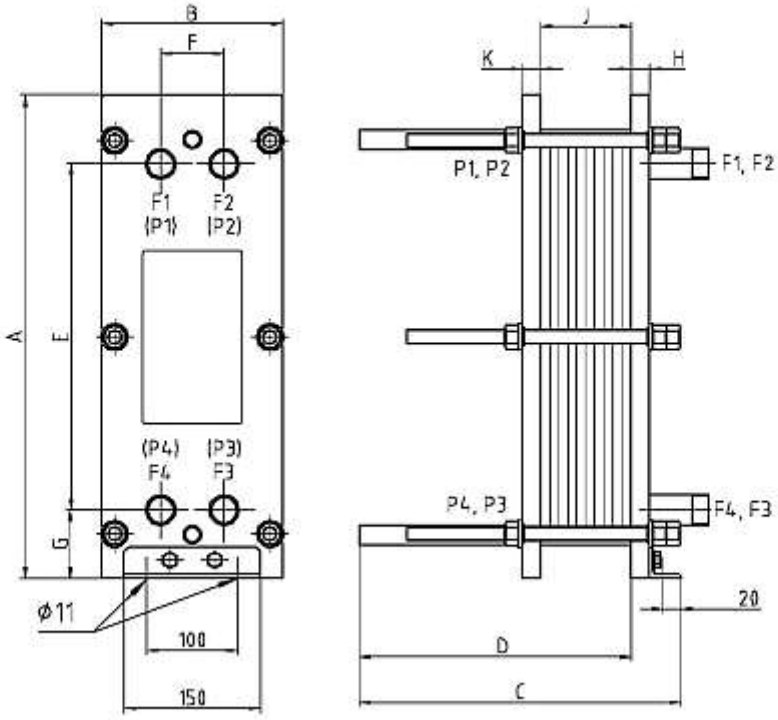
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Item:	**Unit: F 09-39-1-EH**

Dimensional sketch - not Certified



Dimensions [appr. mm, inch], max. no. of plates 44		**:mm**	**:inch**
A:	Total height	:827	:32.6
B:	Total width	:200	:7.9
C:	Total length	:365	:14.4
D:	Length of carrier bar	:300	:11.8
E:	Distance between connections, vertical	:676	:26.6
F:	Distance between connections,horizontal	:70	:2.8
G:	middlepoint of connection from the ground	:75	:3.0
H:	Thickness of frame plate	:20	:0.8
K:	Thickness of pressure plate	:20	:0.8
J:	Length of the plate-package	:105.3	:4.1

Connections

Hot side: F1 => F4 :
Threaded pipe, male,
DN 32, Stainless steel, G 1 1/4"

Cold side: F3 => F2 :
Threaded pipe, male,
DN 32, Stainless steel, G 1 1/4"

Preliminary Dimensions