Specification Sheet

Project:

Date: 09/12/25

Contact:
Direct Line:

Plate & Frame Heat Exchanger

Version: 4.19.16 (20/1/4)

Item:	**Unit: K042-49-1-N**

Technical data per HX		Hot side			Cold side	
Fluid		**Water**			**Water**	
Mass flow rate	[kg/s]	3.36			[kg/s]	3.35
Volume flow rate	[m³/h]	12.292			[m³/h]	12.262
Inlet temperature	[°C]	60.00			[°C]	50.00
Outlet temperature	[°C]	55.00			[°C]	55.00
Operating pressure	[barg]	2.00			[barg]	2.00
Physical properties		In	Out		In	Out
Dynamic viscosity	[cP]	0.468	0.506		0.549	0.506
Density	[kg/m³]	981.4	983.8		986.1	983.8
Specific heat capacity	[kJ/kgK]	4.173	4.173		4.174	4.173
Thermal conductivity	[W/mK]	0.645	0.642		0.640	0.642

P.H.E characteristic values

Heat duty	[kW]		70.00			
Eff. heat transfer area	[m²]		1.94			
Log./Effective temperature difference	[K]		5.00 / 5.00			
Heat transfer coeff. req./act.	[W/m²K]		7218 / 9312			
Fouling factor total	[m²K/W]		0.0000312			
Overdesign	[%]		29.02			
Pressure loss	[kPa]	20.813			[kPa]	20.896
Channel Velocity	[m/s]	0.55 / 0.55			[m/s]	0.55 / 0.55
Connection Velocity	[m/s]	3.79			[m/s]	3.78
No. of passes in series		1				1
No. of plates total			49			
Mix of Channeltype			24*HH			

Construction

Weight Dry/Wet		[kg]		approx. 43/47		
Volume		[dm³]	2.376			2.376
Design pressure		[barg]		10.0		
Max. working temperature		[°C]		110.00		
Material		DIN				
	Plates	AISI 316L / 1.4404 (0.50 mm)				
	Gaskets	NBR				
	Frame	S 355 J2+N (Pressure Plates), max. plates: 64, Extensibility 31%				
	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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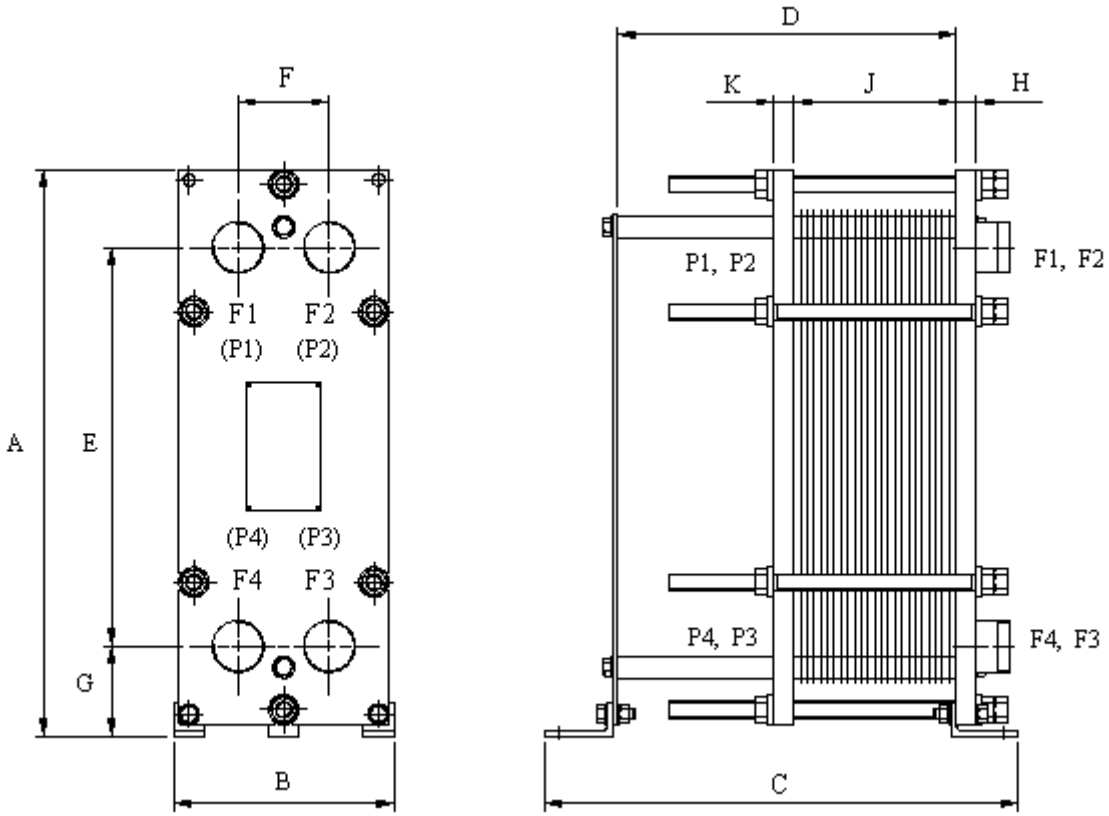
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Item:	**Unit: K042-49-1-N**

Dimensional sketch - not Certified



Dimensions [appr. mm, inch], max. no. of plates 64		**:mm**	**:inch**
A:	Total height	:470	:18.5
B:	Total width	:200	:7.9
C:	Total length	:363.5	:14.3
D:	Length of carrier bar	:300	:11.8
E:	Distance between connections, vertical	:380	:15.0
F:	Distance between connections,horizontal	:68	:2.7
G:	middlepoint of connection from the ground	:45	:1.8
H:	Thickness of frame plate	:10	:0.4
K:	Thickness of pressure plate	:10	:0.4
J:	Length of the plate-package	:142.1	:5.6

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