

Specification sheet

Project.:

Date: 29/10/2012

contact person:

Direct dialing:

Plate-Heat-Exchanger, bolted

Version: 4.05.4.0e [HVAC]

Pos.:	Unit: K042-13-1-N
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Technical data	Hot side	Cold side
Fluid	Water	Water
Mass flow rate	[kg/s] 0.67	[kg/s] 0.22
Volume flow rate	[m³/h] 2.429	[m³/h] 0.805
Inlet temperature	[°C] 50.00	[°C] 28.00
Outlet temperature	[°C] 45.00	[°C] 43.00

Physical properties

Dynamic viscosity	[cP] 0.573097	[cP] 0.713625
Density	[kg/m³] 987.161	[kg/m³] 991.991
Specific heat capacity	[kJ/kgK] 4.1742	[kJ/kgK] 4.17929
Thermal conductivity	[W/mK] 0.638788	[W/mK] 0.632557

P.H.E characteristic values

Heat duty	[kW] 13.90	
Eff. heat transfer area	[m²] 0.45	
Log./Effective temperature difference	[K] 11.27/11.27	
Heat transfer coefficient reqd./act.	[W/m²K] 2716.81/4446.40	
Fouling factor	[m²K/W] 0.0001432	
Overdesign	[%] 63.66	
Pressure loss	[kPa] 19.197	[kPa] 2.360
No. of passes in series	1	1
No. of channels total	12	
Mix of Channeltyp	6*HH	

Construction

Weight Dry/Wet	[kg] approx. 31/32	0.594
Volume	[dm³] 0.594	0.594
Design pressure gage	[bar] 16.0	
Max. working temperature	[°C] 110.00	
Material	Plates 1.4404 (0.50 mm)	
	Gaskets NBR	
	Frame C-Steel, DIN, max. no. of plates: 14	
	Painting RAL 5002, Standard	
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"	

Remark

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Dimensional sketch

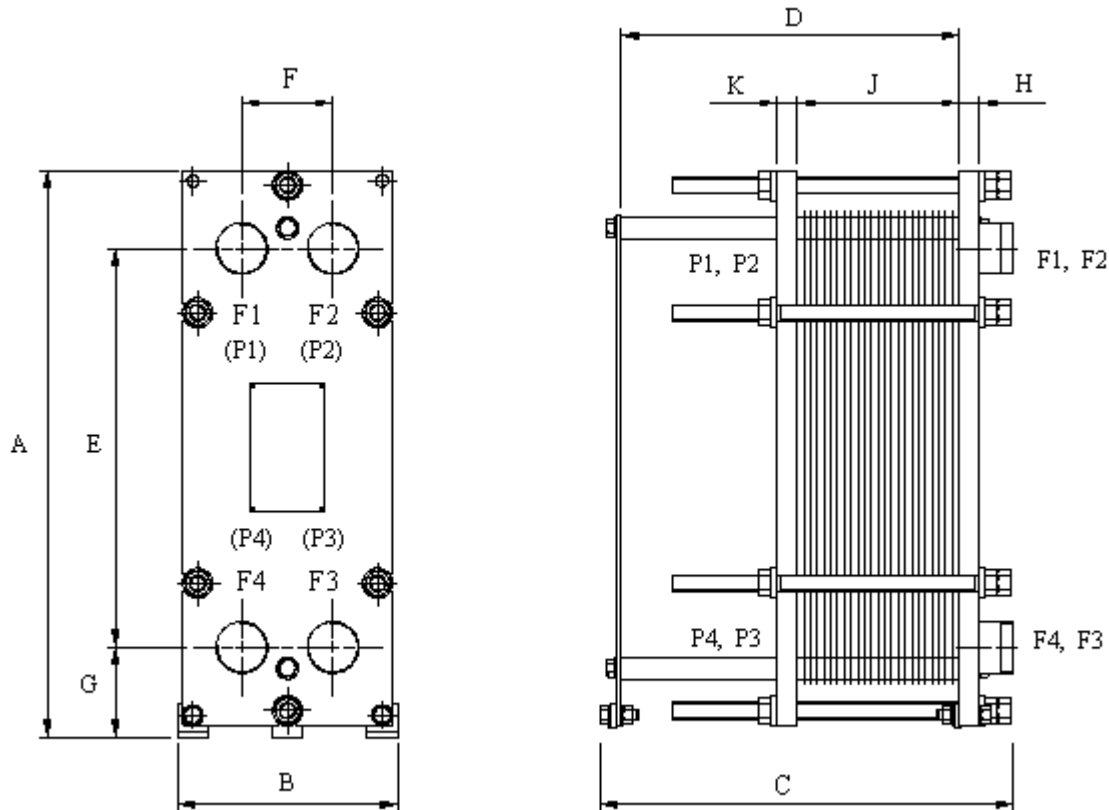


table of masses [appr. mm, inch], max. no. of plates 14

	:mm	:inch
A: Total height	:470	:18.5
B: Total width	:200	:7.9
C: Total length	:165	:6.5
D: Length of carrier bar	:110	:4.3
E: Distance between nozzles, vertical	:380	:15.0
F: Distance between nozzles, horizontal	:45	:1.8
G: midpoint of nozzle from the ground	:15	:0.6
H: Thickness of frame plate	:15	:0.6
K: Thickness of pressure plate	:0	:0.0
J: Length of the plate-package	:37.7	:1.5

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"

Subject to change