

PLATE & GASKET TYPE HEAT EXCHANGERS

Sr#	Parameter	Unit	Side "A"	Side "B"	Qty
1	Fluid	----	Water	Water	One
	Flow Rate	m ³ /hr	≥10.0	≥11.5	
	Flow Rate	kg/hr	≥9990	≥11488	
	Inlet Temperature	°C	≈12.0	≈7.0	
	Outlet Temperature	°C	≈8.0	≈10.5	
	Density	kg/m ³	≈999		
	Specific Heat	kJ/kg.K	≈4.19kJ/kg.K		
	Thermal Conductivity	W/m.K	≈0.57		
	Viscosity	cP	≈1.3		
	Pressure Drop	kPa	≈52	≈67	
	Heat Load	kW	≥46.5		
	LMTD	K	≈1.23		
	Effective Heat Transfer Area	m ²	≥9.3m ²		
	Design Margin	%	At least 20%		
	Fouling Factor	m ² K/kW	≈0.086		
	Number of Plates	No	19		
	Effective Plates	No	17(2 End Plates)		
	Plate Thickness	mm	≈0.5		
	Plate Material	----	AISI 316		
	Gasket Material	----	NBR/Clip on		
	Connection material	----	Stainless Steel 304/316		
	Frame Material	----	Carbon Steel Frame		
	Frame Paint	----	Two Under Coats of Zinc Primer and two Overcoats of Epoxy Paint by Spray Gun Method		
	Connection Size	DN	DN-100/80	DN-100	
	Number of Passes	----	1	1	
	Design Code	----	ASME VIII D.1		
	Flange Code	----	DIN		
	Design Pressure	Bar	≤10	≤10	
	Test Pressure	Bar	≤13	≤13	
	Design Temperature (Max)	°C	≈110		
	Length, Width, Height	mxmxm	≤1.0 x ≤0.6 x ≤1.2		
	Net Weight	kg	< 1000 kg		

PLATE & GASKET TYPE HEAT EXCHANGERS

Sr#	Parameter	Unit	Side "A"	Side "B"	Qty
2	Fluid	----	Water	Water	2
	Flow Rate	m ³ /hr	≥40.0	≥160	
	Flow Rate	kg/hr	≥39520	≥158080	
	Inlet Temperature	°C	≈42.0	≈30.0	
	Outlet Temperature	°C	≈32.0	≈32.5	
	Density	kg/m ³	≈988	≈990	
	Specific Heat	kJ/kg.K	≈4.18kJ/kg.K		
	Thermal Conductivity	W/m.K	≈0.63	≈0.62	
	Viscosity	cP	≈0.7	≈0.78	
	Pressure Drop	kPa	≈4.62	≈71	
	Heat Load	kW	≥463		
	LMTD	K	≈4.8		
	Effective Heat Transfer Area	m ²	≥29m ²		
	Design Margin	%	At least 20%		
	Fouling Factor	m ² K/kW	≈0.086		
	Total Plates	No	19		
	Effective Plates	No	17		
	Plate Thickness	mm	≈0.5		
	Plate Material	----	AISI 316 or Aluminum		
	Gasket Material	----	NBR/Clip on		
	Connection Material	----	Stainless Steel 304/316		
	Frame Material	----	Carbon Steel Frame		
	Frame Paint	----	Two Under Coats of Zinc Primer and two Overcoats of Epoxy Paint by Spray Gun Method		
	Connection Size	DN	DN-100	DN-100	
	Number of Passes	----	1	1	
	Design Code	----	ASME VIII D.1		
	Flange Code	----	DIN		
	Design Pressure (Max)	bars	≤14	≤14	
	Test Pressure	bars	≤18	≤18	
	Design Temperature	°C	≈110		
	Length, Width, Height	mxmxm	≤1.5 x ≤0.6 x ≤1.2		
	Net Weight	kg	< 1000 kg		