

<i>Customer</i>		<i>Date</i>	06/11/23
<i>Project</i>		<i>Engineer</i>	Miroslav Stibor
<i>HEX Type</i>	XB37M-1-36	<i>Contact Person</i>	
<i>Product Code</i>	004H7290	<i>E-mail</i>	
<i>Units Connected</i>	1 (Parallel)		

Calculated Parameters	Unit	Side 1	Side 2
<i>Flow Type</i>		CounterCurrent	
<i>Heat Load</i>	kW	19.99	
<i>Inlet Temperature</i>	°C	50.0	42.2
<i>Outlet Temperature Actual</i>	°C	43.8	48.0
<i>Mass Flow Rate</i>	kg/s	0.86	0.83
<i>Volumetric Flow Rate</i>	L/min	50.00	50.00
<i>Total Pressure Drop</i>	kPa	16.75	12.46
<i>Pressure Drop in Port</i>	kPa	1.71	1.56
<i>Surface Margin</i>	%	0.01	
<i>LMTD</i>	ΔK	1.8	
<i>HTC (Available/Required)</i>	W/m ² ·K	5936 / 5936	
<i>Port Velocity</i>	m/s	2.01	2.01
<i>Shear Stress</i>	Pa	28.88	22.08

Properties of Fluid	Unit	Side 1	Side 2
<i>Fluid</i>		Ethylene glycol (35%)	Water
<i>Liquid Viscosity</i>	mPa·s	1.2486	0.5976
<i>Liquid Density</i>	kg/m ³	1031.8216	990.9504
<i>Liquid Heat Capacity</i>	kJ/kg·K	3.7221	4.1765
<i>Liquid Thermal Conductivity</i>	W/m·K	0.4676	0.6335

Specifications	Unit	Side 1	Side 2
<i>HEX Type</i>		XB37M-1-36	
<i>Number of Plates</i>		36	
<i>Grouping</i>		1*17M/1*18M	
<i>Plate Material</i>		AISI316L	
<i>Effective Area</i>	m ²	1.90	
<i>Brazing Material</i>		Cu	
<i>Volume</i>	l	1.4	1.5
<i>Weight, empty/operating</i>	kg	8.36 / 11.37	
<i>Connection</i>			
<i>Inlet</i>		G 1 Thread	G 1 Thread
<i>Outlet</i>		G 1 Thread	G 1 Thread
<i>Certification/Approval Type</i>			
<i>Minimum Design Temperature</i>	°C	-10.0	
<i>Maximum Design Temperature</i>	°C	180.0	
<i>Maximum Design Pressure</i>	bar(g)	25.0	25.0
<i>H420.2-1.3.21</i>			