

<i>Customer</i>		<i>Date</i>	06/11/23
<i>Project</i>		<i>Engineer</i>	Miroslav Stibor
<i>HEX Type</i>	XB37M-1-26	<i>Contact Person</i>	
<i>Product Code</i>	004H7288	<i>E-mail</i>	
<i>Units Connected</i>	1 (Parallel)		

<b>Calculated Parameters</b>	<b>Unit</b>	<b>Side 1</b>	<b>Side 2</b>
<i>Flow Type</i>		CounterCurrent	
<i>Heat Load</i>	kW	14.06	
<i>Inlet Temperature</i>	°C	50.0	41.8
<i>Outlet Temperature Actual</i>	°C	43.4	47.9
<i>Mass Flow Rate</i>	kg/s	0.57	0.55
<i>Volumetric Flow Rate</i>	L/min	33.33	33.33
<i>Total Pressure Drop</i>	kPa	13.83	9.54
<i>Pressure Drop in Port</i>	kPa	0.73	0.65
<i>Surface Margin</i>	%	0.01	
<i>LMTD</i>	ΔK	1.8	
<i>HTC (Available/Required)</i>	W/m <sup>2</sup> ·K	5695 / 5694	
<i>Port Velocity</i>	m/s	1.34	1.34
<i>Shear Stress</i>	Pa	26.04	19.10

<b>Properties of Fluid</b>	<b>Unit</b>	<b>Side 1</b>	<b>Side 2</b>
<i>Fluid</i>		Ethylene glycol (35%)	Water
<i>Liquid Viscosity</i>	mPa·s	1.2524	0.6002
<i>Liquid Density</i>	kg/m <sup>3</sup>	1031.9190	991.0494
<i>Liquid Heat Capacity</i>	kJ/kg·K	3.7216	4.1763
<i>Liquid Thermal Conductivity</i>	W/m·K	0.4675	0.6332

<b>Specifications</b>	<b>Unit</b>	<b>Side 1</b>	<b>Side 2</b>
<i>HEX Type</i>		XB37M-1-26	
<i>Number of Plates</i>		26	
<i>Grouping</i>		1*12M/1*13M	
<i>Plate Material</i>		AISI316L	
<i>Effective Area</i>	m <sup>2</sup>	1.34	
<i>Brazing Material</i>		Cu	
<i>Volume</i>	l	1.0	1.1
<i>Weight, empty/operating</i>	kg	6.76 / 8.91	
<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>			