

<i>Customer</i>		<i>Date</i>	06/13/23
<i>Project</i>		<i>Engineer</i>	Miroslav Stibor
<i>HEX Type</i>	XB52M-1-70	<i>Contact Person</i>	
<i>Product Code</i>	004H4527	<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	502.73	
<i>Inlet Temperature</i>	°C	70.0	41.0
<i>Outlet Temperature Actual</i>	°C	48.1	62.5
<i>Mass Flow Rate</i>	kg/s	5.46	5.62
<i>Volumetric Flow Rate</i>	L/min	335.00	340.00
<i>Total Pressure Drop</i>	kPa	27.13	27.07
<i>Pressure Drop in Port</i>	kPa	1.93	2.00
<i>Surface Margin</i>	%	0.03	
<i>LMTD</i>	ΔK	7.3	
<i>HTC (Available/Required)</i>	W/m ² ·K	9619 / 9616	
<i>Port Velocity</i>	m/s	2.63	2.67
<i>Shear Stress</i>	Pa	58.05	57.76

Properties of Fluid	Unit	Side 1	Side 2
<i>Fluid</i>		Water	Water
<i>Liquid Viscosity</i>	mPa·s	0.4749	0.5334
<i>Liquid Density</i>	kg/m ³	984.5303	988.0590
<i>Liquid Heat Capacity</i>	kJ/kg·K	4.1827	4.1803
<i>Liquid Thermal Conductivity</i>	W/m·K	0.6489	0.6413

Specifications	Unit	Side 1	Side 2
<i>HEX Type</i>		XB52M-1-70	
<i>Number of Plates</i>		70	
<i>Grouping</i>		1*34M/1*35M	
<i>Plate Material</i>		AISI316L	
<i>Effective Area</i>	m ²	7.14	
<i>Brazing Material</i>		Cu	
<i>Volume</i>	l	5.5	5.7
<i>Weight, empty/operating</i>	kg	26.29 / 37.38	
<i>Connection</i>		Inlet	G 2 Thread
		Outlet	G 2 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>			