

**PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION**

CUSTOMER	Výměníky Ostrava	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A4M-P10-83-L L=1000 AISI 316L 0.4 EPDM HT		
REV NO		<b>HOT SIDE</b>	<b>COLD SIDE</b>
HEAT EXCHANGED	kW	1 500,00	
MASS FLOWRATE	kg/s	35,72	35,75
VOLUMETRIC FLOWRATE	m <sup>3</sup> /h	128,84	128,98
INLET TEMPERATURE	°C	90,00	75,00
OUTLET TEMPERATURE	°C	80,00	85,00
PRESSURE DROP	bar	0,48	0,49
<b>FLUID PROPERTIES</b>			
MEDIUM		<b>Water</b>	<b>Water</b>
DENSITY	kg/m <sup>3</sup>	966,06	968,98
SPECIFIC HEAT	kJ/(kg.°C)	4,20	4,20
THERMAL CONDUCTIVITY	W/(m.°C)	0,67	0,66
VISCOSITY - MEAN	mPa.s	0,33	0,36
VISCOSITY - WALL	mPa.s	0,36	0,36
FOULING FACTORS	(m <sup>2</sup> .°C)/kW	0,00	0,00
OVERSURFACE FACTOR		2,96	
INLET PORT		F1	F3
OUTLET PORT		F4	F2
<b>DESIGN AND MECHANICAL SPECIFICATION</b>			
HOT SIDE FLOW ARRANGEMENT		41 × 1 + 0 × 0	
COLD SIDE FLOW ARRANGEMENT		41 × 1 + 0 × 0	
TOTAL NUMBER OF PLATES		83	
CHANNEL MIXING (NUMBER/TYP)		82 L	
EFFECTIVE HEAT TRANSFER AREA	m <sup>2</sup>	41,63	
CLEAN U-VALUE	W/(m <sup>2</sup> .°C)	7 425,77	
SERVICE U-VALUE	W/(m <sup>2</sup> .°C)	7 205,65	
LMTD	°C	5,00	
PLATE THICKNESS / MATERIAL		0.40 mm AISI 316L	
GASKET MATERIAL / TYPE		EPDM HT	
DESIGN TEMPERATURE	°C	120,00	
WORKING PRESSURE	bar	10,00	
TEST PRESSURE	bar	13,00	
DESIGN CODE		PED 97/32/EC	
LIQUID VOLUME	L	93,15	
MAX. NUMBER OF PLATES		144	
NET WEIGHT	kg	895,04	
FLOODED WEIGHT	kg	988,19	
CONNECTION HOT		DN100 Flange Rubberliner NBR PN16	
CONNECTION COLD		DN100 Flange Rubberliner NBR PN16	