

PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ostrava	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A2M-P10-113-H L=1000 AISI 316L 0.4 EPDM HT		
REV NO		HOT SIDE	COLD SIDE
HEAT EXCHANGED	kW	1 000,00	
MASS FLOWRATE	kg/s	11,92	11,94
VOLUMETRIC FLOWRATE	m ³ /h	42,99	43,07
INLET TEMPERATURE	°C	90,00	60,00
OUTLET TEMPERATURE	°C	70,00	80,00
PRESSURE DROP	bar	0,48	0,49
FLUID PROPERTIES			
MEDIUM		Water	Water
DENSITY	kg/m ³	968,98	974,52
SPECIFIC HEAT	kJ/(kg.°C)	4,20	4,19
THERMAL CONDUCTIVITY	W/(m.°C)	0,66	0,66
VISCOSITY - MEAN	mPa.s	0,36	0,41
VISCOSITY - WALL	mPa.s	0,41	0,41
FOULING FACTORS	(m ² .°C)/kW	0,02	0,02
OVERSURFACE FACTOR		23,62	
INLET PORT		F1	F3
OUTLET PORT		F4	F2
DESIGN AND MECHANICAL SPECIFICATION			
HOT SIDE FLOW ARRANGEMENT		56 × 1 + 0 × 0	
COLD SIDE FLOW ARRANGEMENT		56 × 1 + 0 × 0	
TOTAL NUMBER OF PLATES		113	
CHANNEL MIXING (NUMBER/TYP)		112 H	
EFFECTIVE HEAT TRANSFER AREA	m ²	16,65	
CLEAN U-VALUE	W/(m ² .°C)	7 863,12	
SERVICE U-VALUE	W/(m ² .°C)	6 006,01	
LMTD	°C	10,00	
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	38,38	
MAX. NUMBER OF PLATES		150	
NET WEIGHT	kg	206,18	
FLOODED WEIGHT	kg	244,56	
CONNECTION HOT		DN50 Threaded BSP AISI 316	
CONNECTION COLD		DN50 Threaded BSP AISI 316	