

PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ares	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A1S-P10-22-H L=300 AISI 316L 0.5 EPDM HT		
REV NO		HOT SIDE	COLD SIDE
HEAT EXCHANGED	kW	20,00	
MASS FLOWRATE	kg/s	0,24	0,24
VOLUMETRIC FLOWRATE	m³/h	0,86	0,86
INLET TEMPERATURE	°C	90,00	60,00
OUTLET TEMPERATURE	°C	70,00	80,00
PRESSURE DROP	bar	0,01	0,02
FLUID PROPERTIES			
MEDIUM		Water	Water
DENSITY	kg/m³	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	(m².°C)/kW	0,00	0,00
OVERSURFACE FACTOR		0,23	
INLET PORT		F1	F3
OUTLET PORT		F4	F2
DESIGN AND MECHANICAL SPECIFICATION			
HOT SIDE FLOW ARRANGEMENT		11 × 1 + 0 × 0	
COLD SIDE FLOW ARRANGEMENT		10 × 1 + 0 × 0	
TOTAL NUMBER OF PLATES		22	
CHANNEL MIXING (NUMBER/TYPE)		21 H	
EFFECTIVE HEAT TRANSFER AREA	m²	0,84	
CLEAN U-VALUE	W/(m².°C)	2 386,51	
SERVICE U-VALUE	W/(m².°C)	2 380,95	
LMTD	°C	10,00	
PLATE THICKNESS / MATERIAL		0.50 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	3,45	
MAX. NUMBER OF PLATES		65	
NET WEIGHT	kg	24,40	
FLOODED WEIGHT	kg	27,85	
CONNECTION HOT		DN32 Threaded BSP AISI 316	
CONNECTION COLD		DN32 Threaded BSP AISI 316	