PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ostrava	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A1S-P10-36-H L=300 AISI 316L 0.5 EPDM HT		

REV NO		HOT SIDE		COLD SIDE
HEAT EXCHANGED	kW		20,00	
MASS FLOWRATE	kg/s	0,48		0,48
VOLUMETRIC FLOWRATE	m³/h	1,72		1,72
INLET TEMPERATURE	°C	90,00		75,00
OUTLET TEMPERATURE	°C	80,00		85,00
PRESSURE DROP	bar	0,02		0,02

FLUID PROPERTIES

MEDIUM		Water		Water
DENSITY	kg/m³	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	(m².°C)/kW	0,00		0,00
OVERSURFACE FACTOR			0,79	
INLET PORT		F1		F3
OUTLET PORT		F4		F2

DESIGN AND MECHANICAL SPECIFICATION

HOT SIDE FLOW ARRANGEMENT		18 × 1 + 0 × 0
COLD SIDE FLOW ARRANGEMENT		17 × 1 + 0 × 0
TOTAL NUMBER OF PLATES		36
CHANNEL MIXING (NUMBER/TYPE)		35 H
EFFECTIVE HEAT TRANSFER AREA	m²	1,43
CLEAN U-VALUE	W/(m².°C)	2 823,30
SERVICE U-VALUE	W/(m².°C)	2 801,12
LMTD	°C	5,00
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	5,86
MAX. NUMBER OF PLATES		65
NET WEIGHT	kg	27,20
FLOODED WEIGHT	kg	33,07
CONNECTION HOT		DN32 Threaded BSP AISI 316
CONNECTION COLD		DN32 Threaded BSP AISI 316