PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ostrava	DATE	28-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A1L-P10-87-H L=500 AISI 316L 0.5 EPDM HT		

REV NO		HOT SIDE		COLD SIDE
HEAT EXCHANGED	kW		150,00	
MASS FLOWRATE	kg/s	3,57		3,58
VOLUMETRIC FLOWRATE	m³/h	12,88		12,90
INLET TEMPERATURE	°C	90,00		75,00
OUTLET TEMPERATURE	°C	80,00		85,00
PRESSURE DROP	bar	0,30		0,31

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	0,05		0,05
OVERSURFACE FACTOR			38,47	
INLET PORT		F1		F3
OUTLET PORT		F4		F2

DESIGN AND MECHANICAL SPECIFICATION

HOT SIDE FLOW ARRANGEMENT		43 × 1 + 0 × 0
COLD SIDE FLOW ARRANGEMENT		43 × 1 + 0 × 0
TOTAL NUMBER OF PLATES		87
CHANNEL MIXING (NUMBER/TYPE)		86 H
EFFECTIVE HEAT TRANSFER AREA	m²	7,14
CLEAN U-VALUE	W/(m².°C)	6 828,23
SERVICE U-VALUE	W/(m².°C)	4 201,68
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	18,23
MAX. NUMBER OF PLATES		88
NET WEIGHT	kg	68,06
FLOODED WEIGHT	kg	86,29
CONNECTION HOT		DN32 Threaded BSP AISI 316
CONNECTION COLD		DN32 Threaded BSP AISI 316