PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ostrava	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A4S-P10-75-H L=600 AISI 316L 0.4 EPDM HT		

REV NO		HOT SIDE		COLD SIDE
HEAT EXCHANGED	kW		1 500,00	
MASS FLOWRATE	kg/s	17,88		17,91
VOLUMETRIC FLOWRATE	m³/h	64,49		64,60
INLET TEMPERATURE	°C	90,00		60,00
OUTLET TEMPERATURE	°C	70,00		80,00
PRESSURE DROP	bar	0,57		0,58

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			3,12	
INLET PORT		F1		F3
OUTLET PORT		F4		F2

DESIGN AND MECHANICAL SPECIFICATION

HOT SIDE FLOW ARRANGEMENT		37 × 1 + 0 × 0
COLD SIDE FLOW ARRANGEMENT		37 × 1 + 0 × 0
TOTAL NUMBER OF PLATES		75
CHANNEL MIXING (NUMBER/TYPE)		74 H
EFFECTIVE HEAT TRANSFER AREA	m²	17,52
CLEAN U-VALUE	W/(m².°C)	8 837,19
SERVICE U-VALUE	W/(m².°C)	8 561,64
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	43,80
MAX. NUMBER OF PLATES		81
NET WEIGHT	kg	340,75
FLOODED WEIGHT	kg	384,55
CONNECTION HOT		DN100 Flange St.37 PN10
CONNECTION COLD		DN100 Flange St.37 PN10