PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

CUSTOMER	Výměníky Ostrava	DATE	27-II-2016
PROJECT		ITEM	Stibor Miroslav ing.
PHE MODEL	A2M-P10-69-H L=700 AISI 316L 0.4 EPDM HT		

REV NO		HOT SIDE		COLD SIDE
HEAT EXCHANGED	kW		250,00	
MASS FLOWRATE	kg/s	5,95		5,96
VOLUMETRIC FLOWRATE	m³/h	21,47		21,50
INLET TEMPERATURE	°C	90,00		75,00
OUTLET TEMPERATURE	°C	80,00		85,00
PRESSURE DROP	bar	0,29		0,30

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	0,03		0,03
OVERSURFACE FACTOR			31,53	
INLET PORT		F1		F3
OUTLET PORT		F4		F2

DESIGN AND MECHANICAL SPECIFICATION

HOT SIDE FLOW ARRANGEMENT		34 × 1 + 0 × 0
COLD SIDE FLOW ARRANGEMENT		34 × 1 + 0 × 0
TOTAL NUMBER OF PLATES		69
CHANNEL MIXING (NUMBER/TYPE)		68 H
EFFECTIVE HEAT TRANSFER AREA	m²	10,05
CLEAN U-VALUE	W/(m².°C)	7 266,28
SERVICE U-VALUE	W/(m².°C)	4 975,12
LMTD	°C	5,00
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	23,17
MAX. NUMBER OF PLATES		80
NET WEIGHT	kg	164,34
FLOODED WEIGHT	kg	187,51
CONNECTION HOT		DN50 Threaded BSP AISI 316
CONNECTION COLD		DN50 Threaded BSP AISI 316