

PLATE HEAT EXCHANGER TECHNICAL SPECIFICATION

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| CUSTOMER | Výměníky Ostrava | DATE | 27-II-2016 |
| PROJECT | | ITEM | Stibor Miroslav ing. |
| PHE MODEL | A1L-P10-69-H L=500 AISI 316L 0.5 EPDM HT | | |
| REV NO | | HOT SIDE | COLD SIDE |
| HEAT EXCHANGED | kW | 250,00 | |
| MASS FLOWRATE | kg/s | 2,98 | 2,98 |
| VOLUMETRIC FLOWRATE | m ³ /h | 10,75 | 10,77 |
| INLET TEMPERATURE | °C | 90,00 | 60,00 |
| OUTLET TEMPERATURE | °C | 70,00 | 80,00 |
| PRESSURE DROP | bar | 0,28 | 0,29 |
| FLUID PROPERTIES | | | |
| MEDIUM | | Water | Water |
| DENSITY | kg/m ³ | 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 | (m ² .°C)/kW | 0,04 | 0,04 |
| OVERSURFACE FACTOR | | 34,94 | |
| 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/TYP) | | 68 H | |
| EFFECTIVE HEAT TRANSFER AREA | m ² | 5,63 | |
| CLEAN U-VALUE | W/(m ² .°C) | 6 827,57 | |
| SERVICE U-VALUE | W/(m ² .°C) | 4 442,08 | |
| 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 | 14,37 | |
| MAX. NUMBER OF PLATES | | 88 | |
| NET WEIGHT | kg | 61,22 | |
| FLOODED WEIGHT | kg | 75,59 | |
| CONNECTION HOT | | DN32 Threaded BSP AISI 316 | |
| CONNECTION COLD | | DN32 Threaded BSP AISI 316 | |