GEA ECOFLEX Plate Heat Exchanger: NT500M B-10

Thermal data for 8 unit(s) in parallel and 1 unit(s) in series

	hot side	cold side	
Media:	Sea-water	Ethylene glycol 20,0 %	
Media group acc. PED 97/23/EC:	Group 2 - others	Group 2 - others	
Heat exchanged:	158140,16		kW
Mass flow:	28495034	33140789	kg/h
Volume flow:	28000,00	32000,00	m³/h
Temperature inlet:	15,00	4,60	°C
Temperature outlet:	10,00	9,00	°C
Pressure drop:	0,52	1,00	bar
Working pressure inlet:	5,00	5,00	barg

Product properties

Density:	1017,68	1035,65	kg/m³
Heat capacity:	0,95500	0,93380	kcal/kg°C
Thermal conductivity:	0,50720	0,43299	kcal/mh°C
Dyn. viscosity inlet:	1,107	3,065	cP
Dyn. viscosity outlet:	1,244	2,636	cP

Unit Data

Plate Type:	NT500M V			
Heat transfer area (total / per unit):	16396,80	2049,60		m²
Number of plates (total / per unit):	5872	734		
Plate thickness:	0,50			mm
LMTD:	5,69			K
Surface margin:	8,7			%
Plate material:	Titanium			
Gasket material / Gasket type:	NBR	glueless		
Internal flow (passes x channels):	1 x 366	1 x 367		
No. of frames (par. / ser. / total):	8	1	8	
Frame material und surface:	S235JR+N alternative: S355 J2+N	painted	RAL5002	

The connection types and positions are defined in the attached dimension sheet.

Design temperature:	**Min.:**	-10,00 / -10,00	**Max.:**	60,00 / 60,00	°C
Design pressure:	**Min.:**	0,00 / 0,00	**Max.:**	6,00 / 6,00	barg

Test pressure: 7,80 / 7,80 barg **Design code:** PED 97/23/EC AD-2000 Checkfactor 1.3

PED category: Art.3, Abs. 3, , Normal

Conformity assessment diagram: Medium innocuous and steam pressure at Tdesign> 0.5 barg