SWEP International AB
P O Box 105
Järvgatan 3B
SE-261 44 Landskrona, Sweden
www.swepgroup.com

SINGLE PHASE - DESIGN
2 HEAT EXCHANGERS : E6THx34/1P

SWEP DThermX

Date: 04/02/2026

Number of parallel units: 2

SSP Alias: E6T

DUTY REQUIREMENTS		Side 1		Side 2
Fluid		**Water**		**Water**
Flow type			**Counter-Current**	
Circuit		Inner		Outer
Heat load	kW		**31.00**	
Inlet temperature	°C	**75.0**		**45.0**
Outlet temperature	°C	**55.0**		**65.0**
Flow rate	kg/s	0.3701		0.3706
Pressure drop (Design PD)	kPa	1.36 **(30.00)**		1.26 **(30.00)**
Thermal length		2.00		2.00

PLATE HEAT EXCHANGER		Side 1		Side 2
Total heat transfer area	m²		0.896	
Heat flux	kW/m²		34.6	
Mean temperature difference	K		10.0	
Overall heat transfer coefficient required	W/m²,°C		3460	
Pressure drop - total*	kPa	1.36		1.26
- in ports	kPa	0.421		0.421
Port diameter (up/down)	mm	16.0/16.0		16.0/16.0
Number of channels per pass		16		17
Number of plates			34	
Oversurfacing	%		0	
Fouling factor	m²,°C/kW		-0.003	
Reynolds number		730.7		592.0
Port velocity (up/down)	m/s	0.939/0.939		0.935/0.935
Channel velocity	m/s	0.0808		0.0757
Shear stress	kPa	4.47e-3		4.00e-3
Average wall temperature	°C	60.4		59.9
Largest wall temperature difference	K		0.8	
Min./Max. wall temperature	°C	50.5/70.5		49.7/69.7

**Excluding pressure drop in connections.*

NOTES

i This result consists of 2 units in parallel

PHYSICAL PROPERTIES		Side 1	Side 2
Reference temperature	°C	65.0	55.0
Dynamic viscosity	cP	0.434	0.504
Density	kg/m³	980.5	985.7
Heat capacity	kJ/kg,°C	4.188	4.183
Thermal conductivity	W/m,°C	0.6590	0.6492
Film coefficient	W/m²,°C	7680	7200

TOTALS		Side 1	Side 2
Total weight empty (no connections)*	kg	3.59	
Total weight filled (no connections)*	kg	4.43	
Hold-up volume (Inner Circuit)	dm³	0.42	
Hold-up volume (Outer Circuit)	dm³	0.44	
Port size F1/P1	mm	16	
Port size F2/P2	mm	16	
Port size F3/P3	mm	16	

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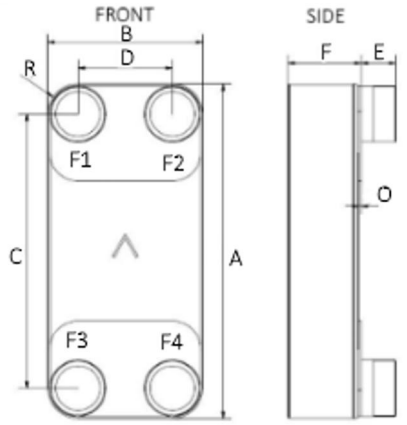
TOTALS		Side 1	Side 2
Port size F4/P4	mm		16

**Weight depends on the selected product.*

DIMENSIONS



A	mm	210 ±2
B	mm	73 ±1
C	mm	172 ±1
D	mm	40 ±1
E	mm	12 (opt. 20) ±1
F	mm	73.68 +4%/-3.3%
G	mm	7 ±1
Q	mm	2
R	mm	16

**This is a schematic sketch. For correct drawings please use the order drawing function or contact your SWEP representative.*

CARBON FOOTPRINT	Unit	Value
Sweden - Landskrona	kg CO_2e	18.5
USA - Tulsa	kg CO_2e	19.4
Slovakia - Košice	kg CO_2e	21.0
Malaysia - Kuala Lumpur	kg CO_2e	29.3
China - Suzhou	kg CO_2e	50.2