

28/01/2026

PHE-Type	SP 120B-50D	Hot side	Cold side
Flowrate	(kg/s)	1,73	2,31
Inlet temperature	(°C)	80,00	55,00
Outlet temperature	(°C)	60,00	70,00
Pressure drop	(kPa)	4,39	7,07
Heat exchanged	(kW)	145	

Thermodynamic properties:		Water	Water
Density	(kg/m ³)	978,06	982,16
Specific heat	(kJ/kg*K)	4,19	4,18
Thermal conductivity	(W/m*K)	0,66	0,65
Mean viscosity	(mPa*s)	0,43	0,48
Wall viscosity	(mPa*s)	0,48	0,43
Fouling factors	(m ² *K/kW)	0,08	0,08
Dimensioning factor	%	78,37	
Inlet branch		F1	F3
Outlet branch		F4	F2

Design of Frame / Plates:

Plate arrangement (passes*channel)		1	x	24	+	0	x	0
Plate arrangement (passes*channel)		1	x	25	+	0	x	0
Number of plates		50						
Effective heat surface	(m ²)	7,06						
Overall K-value Duty/Clean	(W/m ² *K)	2.848,82	5.081,56					
Plate material		0.4 mm AISI 316						
Gasket material / Max. temp.		COPPER/BRAZED / 185						
Max. design temperature	(°C)	100,00						
Max. Working/test pressure	(MPa)	1,00	1,30					
Max. Differential pressure	(MPa)	1,00						
Approval		None						
Liquid volume	(dm ³)	16						
Frame length	(mm)	154						
Net weight	(kg)	37						
Frame type		BR						
Connections HOT side :								
Connections COLD side:								