

1 - Create a new project

Select Liquid-to-Liquid or Steam-to-Liquid pattern



Calculation type: Selection
 Calculation mode: Standard Mode
 Type of PHE: GPHE (Selected)
 Design standard: PED 2014/68/EU
 Product line: Standard
 Design pressure (PS): 10 bar
 Design temperature (TS): 80 °C
 Plates material: AISI 316L (EN 1.4404)
 Gaskets material: NBR
 Frame material: Carbon steel

Capacity: 100 kW
 Total oversizing: %
 Heat transfer area: m²

Heat transfer coeff. (calc. / req.): W/(m² K)
 LMTD: °C
 Fouling factor (calc.): (m² K)/W

COLD SIDE

Fluid: Water
 Fluid flow rate: m³/h
 INLET temperature: °C 50
 OUTLET temperature: °C 60
 Pressure drop (req. / calc.): kPa 50
 Operating pressure: bar G 5
 Fouling factor (required): (m² K)/W 0

HOT SIDE

Fluid: Water
 Fluid flow rate: m³/h
 INLET temperature: °C 80
 OUTLET temperature: °C 70
 Pressure drop (req. / calc.): kPa 50
 Operating pressure: bar G 5
 Fouling factor (required): (m² K)/W 0

Fixed No. of passes: 1
 Pressure drop filter %: 0
 Price filter %: 0

2 - Configure your project



Set calculation data and product configuration



Calculate the solutions

3 - Select proper GPHE

Select a solution from proposed list



If needed, optimize selected solution

List Price	GEOMETR Y	Plates A [%]	Connectio n	No. of pas ses	No. of plat es	Thickness [mm]	Heat trans fert area [m ²]	Total over sizing (cal c.) [%]	PD (cold si de) [kPa]	PD (hot si de) [kPa]	PED	W x H x L [mm]
581.30	PD02H-A	100	DN32 / J-J	1 - 1	27	0.4	0.52	23.05	43.22	44.36	-	200 x 500 x 251
858.80	PD04J-A	100	DN32 / J-J	1 - 1	33	0.4	1.27	117.82	46.62	48.01	-	200 x 470 x 351
1727.40	PD07H-B	0	DN50 / J-J	1 - 1	9	0.4	0.54	13.31	26.89	26.87	-	310 x 470 x 400
1217.60	PD07H-M	53	DN50 / J-J	1 - 1	11	0.4	0.70	84.95	45.27	45.56	-	210 x 470 x 400
1332.20	PD07H-A	100	DN50 / J-J	1 - 1	17	0.4	1.16	200.79	42.00	42.50	-	310 x 510 x 400
1402.70	PD10H-B	0	DN63 / J-J	1 - 1	7	0.4	0.59	10.29	23.06	23.41	-	385 x 270 x 400

Capacity: 100 kW
 Total oversizing: 171.82 %
 Heat transfer area: 1.28 m²

Heat transfer coeff. (calc. / req.): W/(m² K) 13074 / 3934
 LMTD: °C 70
 Fouling factor (calc.): (m² K)/W 0.00090021

COLD SIDE

Fluid: Water
 Fluid flow rate: m³/h 8.7371
 INLET temperature: °C 50
 OUTLET temperature: °C 60
 Pressure drop (req. / calc.): kPa 50 / 46.62
 Operating pressure: bar G 5
 Fouling factor (required): (m² K)/W 0

Pressure drop (connections): kPa 7.8361
 Fluid velocity (connections): m/s 2.6716
 Fluid velocity (channels): m/s 0.5277
 Reynolds: 5329
 Heat transfer coefficient: W/(m² K) 27620
 Shear index (Hot Rec: >1; Cold >2): 5

No. of passes: 17
 No. of plates: 1

HOT SIDE

Fluid: Water
 Fluid flow rate: m³/h 8.8012
 INLET temperature: °C 80
 OUTLET temperature: °C 70
 Pressure drop (req. / calc.): kPa 50 / 48.01
 Operating pressure: bar G 5
 Fouling factor (required): (m² K)/W 0

Pressure drop (connections): kPa 7.0795
 Fluid velocity (connections): m/s 2.6464
 Fluid velocity (channels): m/s 0.5619
 Reynolds: 6559
 Heat transfer coefficient: W/(m² K) 29400
 Shear index (Hot Rec: >1; Cold >2): 5.17

No. of passes: 1
 No. of plates: 1

For further information, please refer to the User's Manual

