

## Technical data - Select the type that fits your application

BPHE Data	B3-012	B3-014	B3-014B	B3-014C	B3-014D	B3-020	B3-027	B3-030	B3-048	B3-052	B3-095	B3-113	B3-136	B3-210	B3-260
Cooling Capacity/Heat Load (ton) (Max)	0.14 - 1.14	0.14 - 1.42	0.14 - 1.42	0.14 - 1.42	0.14 - 1.42	0.57 - 2.84	1.42 - 4.27	0.85 - 8.53	8.53 - 22.75	2.84 - 17.06	8.53 - 56.87	17.06 - 56.87	17.06 - 56.87	42.65 - 127.96	42.65 - 142.17
Heat exchange area (ft <sup>2</sup> )	(n-2) x 0.129	(n-2) x 0.151	(n-2) x 0.151	(n-2) x 0.151	(n-2) x 0.151	(n-2) x 0.240	(n-2) x 0.280	(n-2) x 0.323	(n-2) x 0.520	(n-2) x 0.540	(n-2) x 1.022	(n-2) x 1.226	(n-2) x 1.464	(n-2) x 2.260	(n-2) x 2.800
Design temperature (°F)	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392	-320.8/+392
Standard Design pressure Q1-Q2/Q3-Q4 (psi)	145.04	145.04	145.04	145.04	145.10	145.10	435.11	435.11	435.11	435.11	435.11	435.11	435.11	435.11	362.60
High Design pressure Q1-Q2/Q3-Q4 (psi)	435.11	580.15	435.11	435.11	435.11	435.11	652.67	652.67	580.15	652.67	652.67	580.15	580.15	580.15	580.15
Test pressure standard (psi)	217.56/652.67	217.56/870.23	217.56/652.67	217.56/652.67	217.56/652.67	217.56/652.67	652.67/979	652.67/979	652.67/870.23	652.67/979	652.67/979	652.67/870.23	652.67/870.23	652.67/870.23	543.90
Distribution								Q	Q	Q	Q	Q		Q	
Dual circuit									D			D			
Channel pattern	H	H,L,M	H	H	H	H,L,M	H,L,M	H	H	H,L,M	H,L,M	H	H	H	H
Max. number of plates	50	60	50	50	50	60	150	150	118	150	250	198	200	250	250
Height/Width (inch) 1)	7.32/2.83	8.15/3.03	7.60/3.27	7.60/3.37	8.19/3.11	12.36/2.83	12.24/4.37	12.80/3.74	15.35/7.68	20.75/4.37	24.29/7.56	19.29/9.84	19.29/9.84	29.09/12.68	31.42/14.29
Weight (lbs), empty (n=number of plates)	0.6+0.10 x n	0.7+0.13 x n	0.4+0.13 x n	0.4+0.13 x n	0.7+0.13 x n	1.1+0.20 x n	1.2+0.28 x n	1+0.198 x n	1.8+0.51 x n	1.8+0.51 x n	4.6+0.90 x n	6.5+0.84 x n	6.5+0.84 x n	13+01.76 x n	13.5+2.14 x n
Max. size of welded connection 2)	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1 3/8"	1 3/8"	1 5/8"	1 5/8"	2 1/8"	2 5/8"	3"	3 1/8"	4"
Max. size of thread connection 2)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	1 1/4"	1 1/4"	1 1/2"	1 1/4"	2"	2 1/2"	3"	3 1/8" clamp	4" clamp
Standard plate material 3)	AISI 304	AISI 304	AISI 304	AISI 304	AISI 316L	AISI 304	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L	AISI 316L
Brazing material	Copper or Nickel	Copper or Nickel	Copper	Copper	Copper	Copper or Nickel	Copper or Nickel	Copper	Copper	Copper or nickel	Copper or nickel	Copper	Copper	Copper	Copper

1) Look for all dimensions and drawings in data sheet  
2) Find various thread and welded connections in the table  
3) SMO 254 or AISI 316L Steel plates on demand

## Heat Exchanger plates and channels

BPHE type B is available with 2 different types of plates and 3 types of channels, that are responsible for the thermal characteristics of the heat exchanger.

The **H** type plate has obtuse angles that result in higher heat transfer efficiency by increasing the turbulence of the fluid.

The **L** type plate has acute angles. This reduces the pressure drop and reduces the turbulence and lowers heat transfer efficiency.

The **H** channel is made by two H plates, with high heat transfer coefficient and high pressure drop

The **L** channel is made by two L plates, with lower heat transfer coefficient and lower pressure drop

The **M** channel is made by one H plate and one L plate, with both medium of pressure drop and heat transfer coefficient.

## Expression of Type of BPHE

### B3-052-50-3.0-H Q

- Braced plate heat exchangers
- Copper braze
- Single plate heat transfer area m<sup>2</sup>
- Number of plates
- Design pressure MPa
- Channel type H,L,M
- Distributor

## Channel Type H-L-M

