

Data sheet

# Micro plate heat exchanger (MPHE): XB05

Description



Micro Plate Heat Exchangers - a revolutionary technology from Danfoss. Characterized by their unique plate pattern, MPHEs enable heat to be transferred more effectively than any previous model of heat exchangers.

**Benefits:**

- Energy and cost savings
- Better heat transfer
- Lower pressure loss
- More flexible design
- Longer life time

more on:  
[store.danfoss.com](http://store.danfoss.com)

XB05 is heat exchanger, designed and configured for District Heating, District Cooling and other Heating applications.

**Approval:**

Pressure Equipment Directive (PED).

Ordering

1-pass heat exchanger

Picture	No. of plates, n	Connection	XB05 Cu			XB05 StS	
			XB05M-1	XB05X-1	XB05H-1	XB05X-1	XB05H-1
			Code No.			Code No.	
	10	Thread G 3/4	004B3556	004B3556	004B3556	079G1242	004B3556
	16		004B3557	004B3557	004B3557	079G1243	004B3557
	20		004B3558	004B3558	004B3558	079G1244	004B3558
	26		004B3559	004B3559	004B3559	079G1245	004B3559
	30		004B3560	004B3560	004B3560	079G1246	004B3560
	36		004B3561	004B3561	004B3561	079G1247	004B3561
	40		004B3562	004B3562	004B3562	079G1248	004B3562
	50		004B3563	004B3563	004B3563	079G1249	004B3563
	60		004B3564	004B3564	004B3564	079G1250	004B3564
	70		004B3565	004B3565	004B3565	079G1251	004B3565

Accessories-Tailpieces

Picture	Description	Connection	Code No. <sup>1)</sup>
	Solder tailpieces	G 3/4 / 15 mm	004B2945
	Weld-on tailpieces	G 3/4 / DN 15	003H6908
		G 3/4 / DN 20	004B2944
	Threaded tailpieces	G 3/4 / G 3/4	004B2947
		G 3/4 / G 1	004B2953

<sup>1)</sup> One set contains 2 tailpieces with union nuts and gaskets  
<sup>2)</sup> PL08 to be contacted for further details

Accessories-Insulation set XB05-1

Picture	No. of plates, n	Code No.
	M: 10-26 X: 10-20 H: 10-36	079G1283
	M: 30-40 X: 26-30 H: 40-50	079G1284
	M: 50 X: 36-40 H: 60-70	079G1285
	M: 60-70 X: 50	079G1286

Data sheet

**XB05**

Technical data

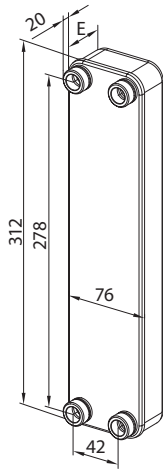
Type		XB05M-1	XB05X-1	XB05H-1
Max. working pressure <b>Cu</b>	bar	25		
Max. working pressure <b>StS</b>		/	10	10
Min. / Max. temperature	°C	-10/180	-10/150	-10/180
Flow medium	DH: Circulation water / glycolic water up to 50% DC: ethylene-, propylene-glycolic water, ethanol-water solutions and other suitable heat transfer media. (Please contact your Danfoss representative).			
Volume/channel	Ltr	0.021	L <sup>1)</sup> : 0.037 H <sup>2)</sup> : 0.026	0.016
Connection type	Cylindrical external thread acc. to DIN ISO 228/1			
Connection size	G ¾			
Weight	kg	0.58 + 0.045 × n	0.51 + 0.048 × n	0.46 + 0.045 × n
<b>Materials</b>				
Plate	Stainless steel, EN 1.4404 (AISI 316L)			
Brazing	Copper (Cu); Stainless steel (StS)			

- <sup>1)</sup> Low pressure drop side - can be either primary or secondary side, depends on selection in Hexact.  
<sup>2)</sup> High pressure drop side - can be either primary or secondary side, depends on selection in Hexact.  
n = number of plates

**Insulation**

Type		Expanded Polypropylene Insulation	
Wall thickness	mm	20	
Heat conductivity, λ	W/mK	0.036	
Operating temperature	Design	°C	110
	Contact surface		60

Dimensions

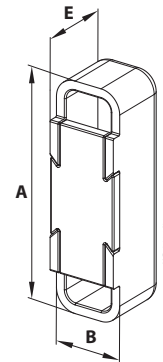


Type	Connection	E (mm)	Weight empty (kg)
XB05M -...	G ¾ <sup>1)</sup>	8 + 1.19 × n	0.58 + 0.045 × n
XB05X -...	G ¾ <sup>1)</sup>	7.1 + 1.6 × n	0.51 + 0.048 × n
XB05H -...	G ¾ <sup>1)</sup>	6.85 + 0.95 × n	0.46 + 0.045 × n

<sup>1)</sup> Cylindrical external thread acc. to DIN ISO 228/1  
n = number of plates

**Insulation XB05-1**

No. of plates, n	A	B	E	Code No.
	mm			
M: 10-26 X: 10-20 H: 10-36	348	105	79.5	<b>079G1283</b>
M: 30-40 X: 26-30 H: 40-50			97.5	<b>079G1284</b>
M: 50 X: 36-40 H: 60-70			111.0	<b>079G1285</b>
M: 60-70 X: 50			133.5	<b>079G1286</b>



**Tailpieces**

Picture	Description	Connection	a	b	SW <sup>2)</sup>	Code No.
			mm			
	Solder tailpieces	G ¾ / 15 mm	15	35	32	<b>004B2945</b>
		G ¾ / 18 mm	18	35	32	<b>004B2946</b>
	Weld-on tailpieces	G ¾ / DN 20	21.2	35	32	<b>004B2944</b>
	Threaded tailpieces	G ¾ / G ¾	¾"	40	32	<b>004B2947</b>
		G ¾ / G 1	1"	22	32	<b>004B2953</b>

<sup>2)</sup> Union nut, with across flats

**Danfoss A/S**

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