

Data sheet

Plate Heat Exchanger XGM032

Description



Benefits:

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

more on:
MPHE.danfoss.com

XGM032 is gasketed plate heat exchanger, designed and configured for District Heating and other Heating applications.

Heat exchanger XGM032 will be available in plate corrugation H, M and L. It will be available in 1-pass version (with 4 connections) and 2-pass version (with 6 connections). Heat exchanger can be dimensioned in Danfoss calculation software "Hexact" which can be downloaded from hexact.danfoss.com.

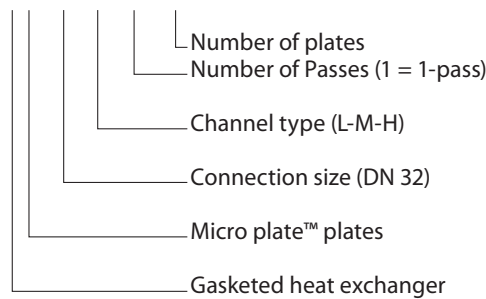
Micro Plate Heat Exchangers - a revolutionary technology from Danfoss. Characterized by their unique plate pattern, MPHEs enable heat to be transferred more efficient than any previous model of heat exchangers.

Approvals:

- Pressure Equipment Directive (PED)
- GOST/Russia

Ordering

XGM 032 H - 1 - 10



1-pass gasketed heat exchangers type **XGM032 (PN 16)**

Picture	No. of plates (n)	Connection	XGM032L	XGM032M	XGM032H
			Code No.		
	20	Thread G 1¼	004H7096	004H7087	004H7078
	30		004H7097	004H7088	004H7079
	40		004H7098	004H7089	004H7080
	50		004H7099	004H7090	004H7081
	60		004H7100	004H7091	004H7082
	70		004H7101	004H7092	004H7083
	80		004H7102	004H7093	004H7084
	90		004H7103	004H7094	004H7085
	100		004H7104	004H7095	004H7086

Ordering - continuous
Accessories - Insulations

Type coverage (plate nos)	Code No.
20-40	079G0052
41-70	079G0053
71-100	079G0054

Accessories - EPDM Gasket



Type	Code No.
Gasket for XGM032, I-p * 10 pcs	079H9030
Gasket for XGM032, I-p * 250 pcs	079H9031

* I-p: Industrial pack

Accessories for gasketed heat exchanger type XGM

Type	Code No.
Plates 4H 0.4 XGM032H 1.4404 I-P 10	079B0416
Plates 4H 0.4 XGM032L 1.4404 I-P 10	079B0417
Plates 4H 0.4 XGM032L 1.4404 I-P 10	079B0418
XGM032H: spec. plates 1-pass versions, including gaskets 0,4	079H9036
XGM032M: spec. plates 1-pass versions, including gaskets 0,4	079H9037
XGM032L: spec. plates 1-pass versions, including gaskets 0,4	079H9038
XGM032H: spec. plates 2-pass versions, including gaskets 0,4	079H9042
XGM032M: spec. plates 2-pass versions, including gaskets 0,4	079H9043
XGM032L: spec. plates 2-pass versions, including gaskets 0,4	079H9044

Tailpieces for gasketed heat exchanger type XG

Picture	Description	Connection	Code No. ¹⁾
	Solder tailpieces	G 1¼ A/22 mm, 28 mm	004B1358
	Weld-on tailpieces	G 1¼ A/DN 25	003H6910
		G 1¼ A/DN 32	004B1343

¹⁾ One set contains 2 tailpieces with union nuts and gaskets

Technical data

Max. working pressure	PN (bar)	16 & 25
Max. operating temperature	°C	150
Min. operating temperature ¹⁾		-10
Flow medium	Circulation water / glycolic water up to 50 %	
Volume / Channel	Ltr	0.097
Primary side volume		(n/2) -1 x volume/channel
Secondary side volume		(n/2) x volume/channel
Connection type	Cylindrical external thread acc. to DIN ISO 228/1	
Connection size	G 1¼	
Plate material	Stainless steel, mat. no. EN 1.4404	
Plate thickness	mm	0.4
Gasket type	Glue free	
Gasket material, rubber	EPDM	

¹⁾ At flow temp. below 2 °C glycolic water must be used

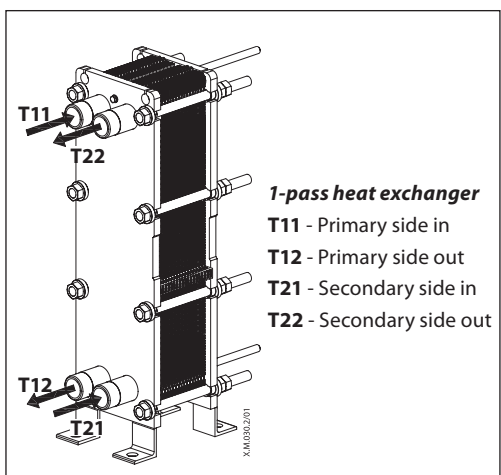
Insulation properties

Type		Aluminium stucco and mineral wool	
Heat conductivity, λ	W/mK	0.042	
Max temperature	Permanent	°C	150
	Short term peak		180
Wall thickness	mm	40	

Note:

For more details about insulation please contact your Danfoss sales representative.

Design and function



The heat exchangers are made of shape-pressed heat plates between which the flow channels are created. Gaskets between the plates separate the flow channels from each other so that the flows do not mix. The heavy turbulence and counter-flow principle enables efficient heat transfer. The task of the heat exchanger is to transfer heat from the primary to secondary flow through a heat transfer plate thus preventing the flows from mixing with each other. The plate heat exchanger with gaskets can be opened for cleaning and for replacement of plates and gaskets. A steeples output adjustment can be carried out by changing the number of plates.

The choice of heat exchanger is determined by the desired heat output, required temperatures and the permitted pressure losses.

Sizing

XGM032 will be available as standard and tailor made unit. It can be calculated in latest version of Danfoss calculation software "Hexact" ver. 2.1.3 which can be downloaded from hexact.danfoss.com.

Mounting

The heat exchanger must be mounted in vertical position. Prepare the foundation for the heat exchanger if necessary, always according to local regulations. It is recommended that all pipes connected to the heat exchanger are equipped with shut-off valves for maintenance purposes.

The pipes to be connected must be mounted so that the strain caused by the thermal expansion, for instance, does not harm the heat exchanger.

The pipes must be equipped with brackets to prevent any torsional stress concentration at the heat exchanger's pipe connections.

It is recommended that the heat exchanger is equipped with insulation.

A safety valve must be installed between the heat exchanger and the shut-off valves on the secondary side of the heat exchanger. If the safety valve is not installed, thermal expansion of fluid might destroy the heat exchanger when the shut-off valves are closed.

Dimensions¹⁾

Heat exchanger

No. of plates	A	B	C	D	E	G	Weight (kg)
10-40	2.4 x n	180	63	470	65	630	0.21 x n + 36.14
41-70							0.21 x n + 43.51
71-100							0.21 x n + 50.88

n = number of plates

Insulation

G	B	I	H	Weight (kg)	Code No.
633	276	55	360	10	079G0052
			460	12	079G0053
			560	14	079G0054

¹⁾ Dimensions for 2-pass and PN25 version can be extract from calculating software "Hexact" in tab "Dimensional data".

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