

Data Sheet

FH PEXa Pipes

Application



The Danfoss PEXa pipe is a high quality floor heating pipe with an EVOH oxygen barrier made in Spain. All layers are permanently bonded with each other during the production process.

PEX-a (peroxide) pipes give greater flexibility than PEX pipes cross-linked by other systems.

They can be cold bent and curved very easily and without special tools, saving joints and installation time.



The EVOH oxygen anti-diffusion barrier is a thin layer of ethylene vinyl alcohol copolymer which prevents permeability of the pipe to oxygen diffusion. This construction eliminates problems with addition of oxygen to the flow water and the resulting corrosion of metal parts in the installation, extending the working life of the whole installation.

5-layer piping made of cross-linked polyethylene and produced by the peroxide method, with oxygen anti-diffusion barrier, according to the requirements of European standard EN 1264-4. Pipe cross linking degree >70 % according to ISO 15875.

Ordering



Product	Size (mm)	Length (m)	Code no.
FH PEX-A pipe EVOH 5-layer	16 x 2,00	400	088X0872
FH PEX-A pipe EVOH 5-layer	16 x 2,00	600	088X0873
FH PEX-A pipe EVOH 5-layer	18 x 2,00	240	088X0874
FH PEX-A pipe EVOH 5-layer	18 x 2,00	600	088X0875
FH PEX-A pipe EVOH 5-layer	20 x 2,00	400	088X0877

Accessories

Product	Connection	Size	Code no.
	Screw coupling	16,0 × 2,0 mm	088X1030
		20,0 × 2,0 mm	088X1031
	Press coupling "TH" jaw profile.	16,0 × 2,0 mm	088X1032
		18,0 × 2,0 mm	088X1033
		20,0 × 2,0 mm	088X1034

* We recommend to use compatible "TH" jaws profile from the suppliers: Novopress, Rems and Klauke.

Accessories

Product	Connection	Size	Code no.
 external thread	G 1/2" A, external thread	14,0 × 2,0 mm	013G4144
		16,0 × 2,0 mm	013G4146
 internal thread	G 3/4", internal thread	14,0 × 2,0 mm	013G4154
		16,0 × 2,0 mm	013G4156
		16,0 × 2,2 mm	013G4163
		18,0 × 2,0 mm	013G4158
		20,0 × 2,0 mm	013G4160

Technical specifications

Materials	PEXa / EVOH	
Max. working pressure at same temperature over 50 years	20 °C	15 bar
	40 °C	10 bar
	60 °C	8 bar
	70 °C	7 bar
Max. flow temperature (Short term)	110 °C	
Max. working temperature	95 °C	
Oxygen barrier	EVOH	
Linear expansion coefficient	0,026 mm/m°K	
Thermal conductivity	$\lambda = 0,35 - 0,38 \text{ W/m}\cdot\text{K}$	
Oxygen-tightness according to DIN 4726	0,08 g/m ³ × d	
Colour	Natural	
Roughness	0,007 mm	

Minimum bending radius with bending springs

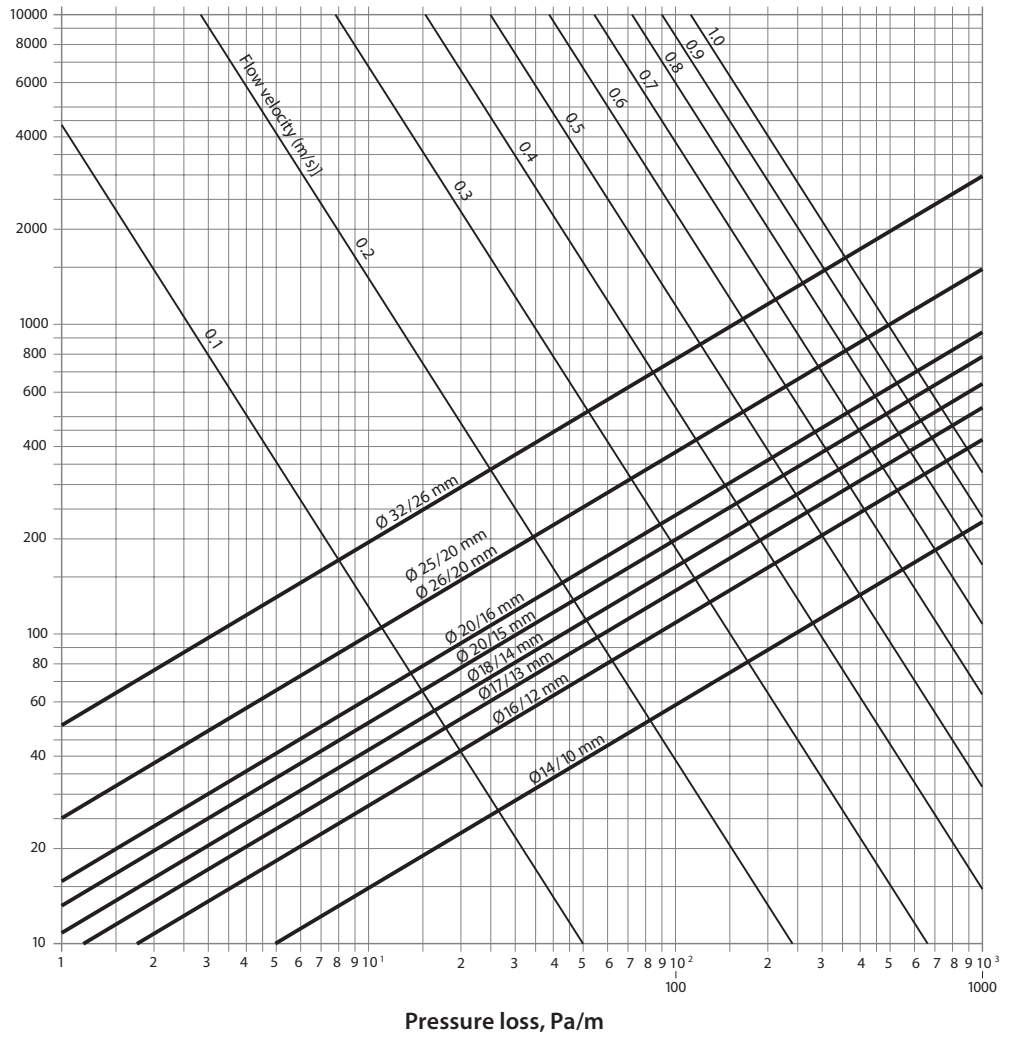
Pipe dimension	Manual pipe bender radius
16 mm	80 mm (5 × outside diameter)
20 mm	100 mm (5 × outside diameter)
25 mm	125 mm (5 × outside diameter)

Classification according to service conditions

Application class	Application	Type of temperature	Temperature (°C)	Time (years)
1	Hot water (60 °C)	Design temperature	60	49
		Maximum design temperature	80	1
		Malfunction temperature	95	100 hours
2	Hot water (70 °C)	Design temperature	70	49
		Maximum design temperature	80	1
		Malfunction temperature	95	100 hours
4	Radiant floor heating and low temperature radiators	Design temperature	20	2.5
		Design temperature	40	20
		Design temperature	60	25
		Maximum design temperature	70	2.5
		Malfunction temperature	100	100 hours
5	High temperature radiators	Design temperature	20	14
		Design temperature	60	25
		Design temperature	80	10
		Maximum design temperature	90	1
		Malfunction temperature	100	100 hours

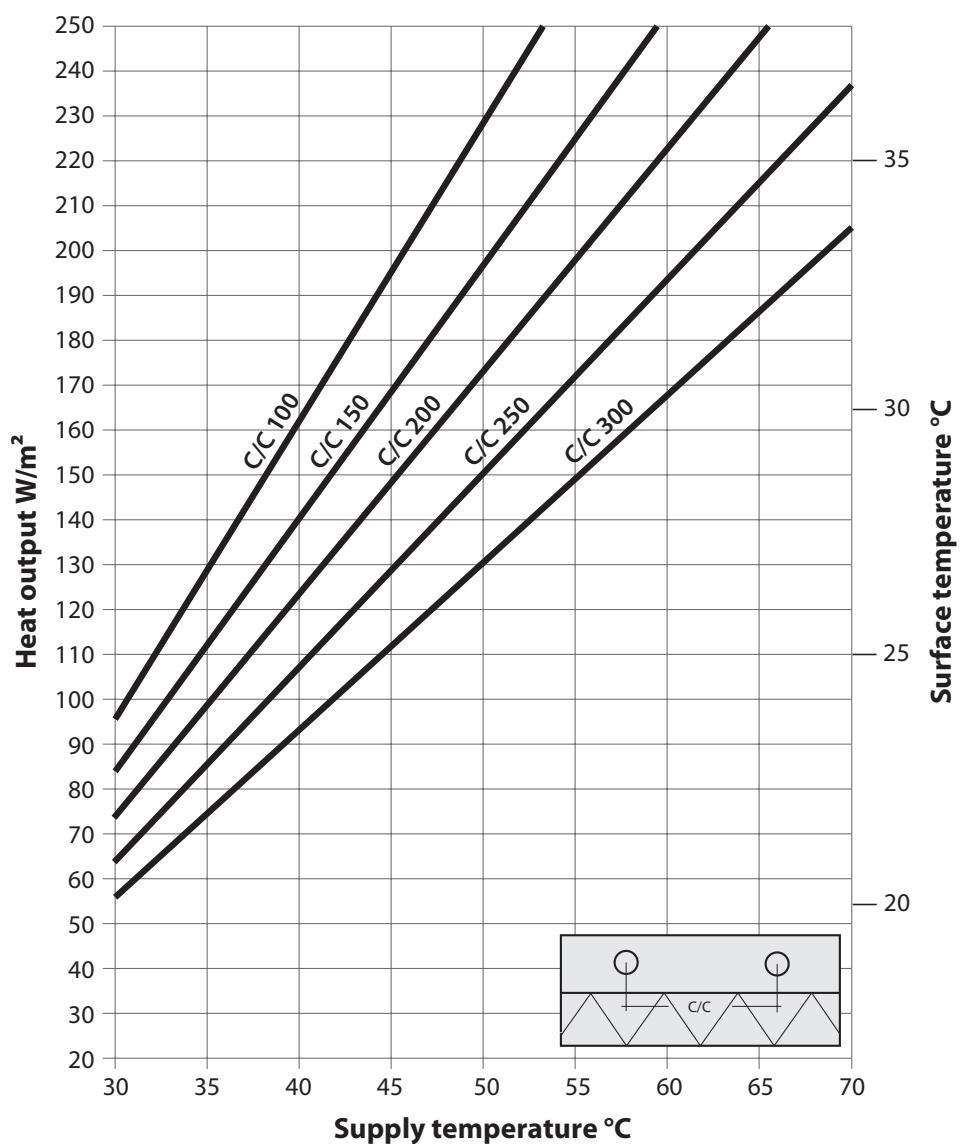
Pressure loss

Mass flow, kg/h

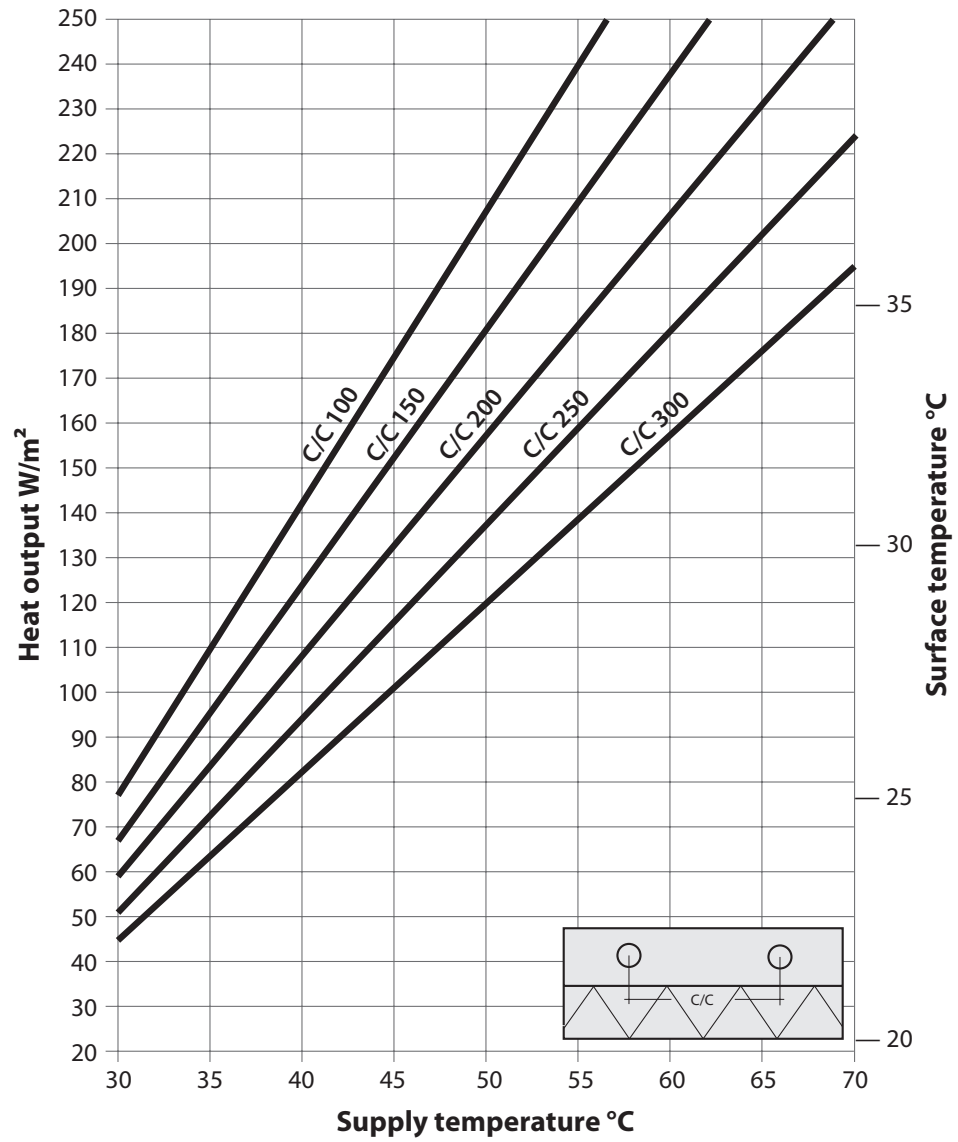


Water temperature: 40 °C.

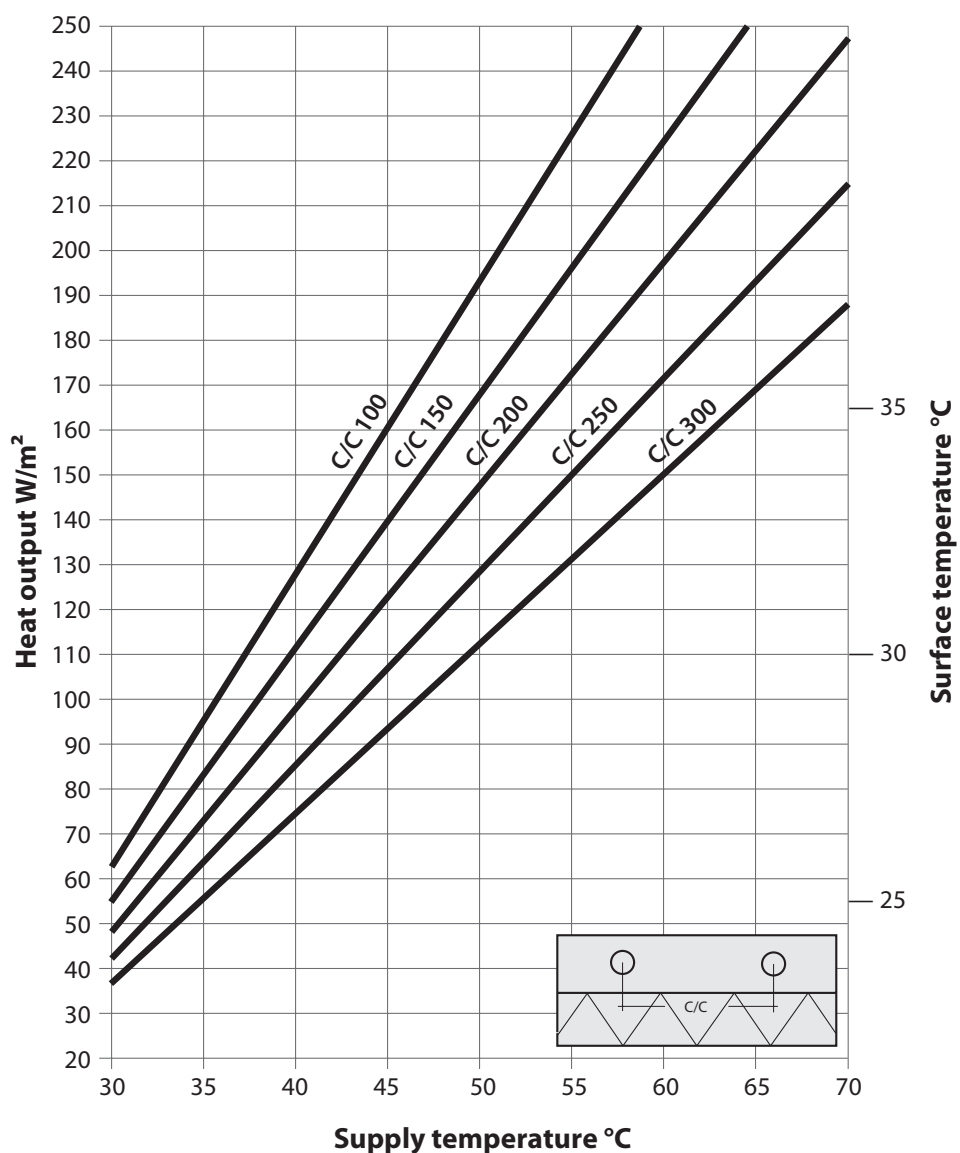
Heat Output
at room temp. 15 °C



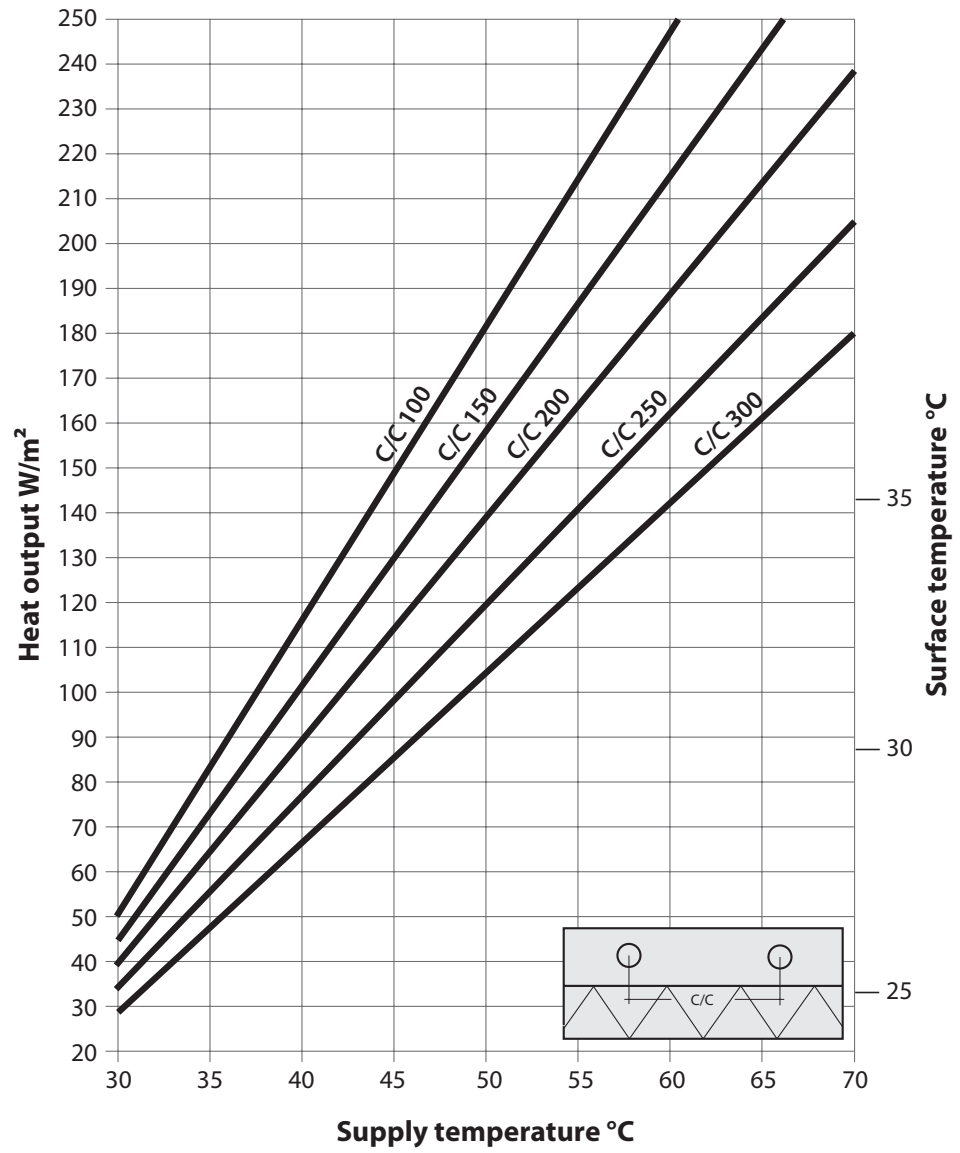
Heat Output
at room temp. 18 °C



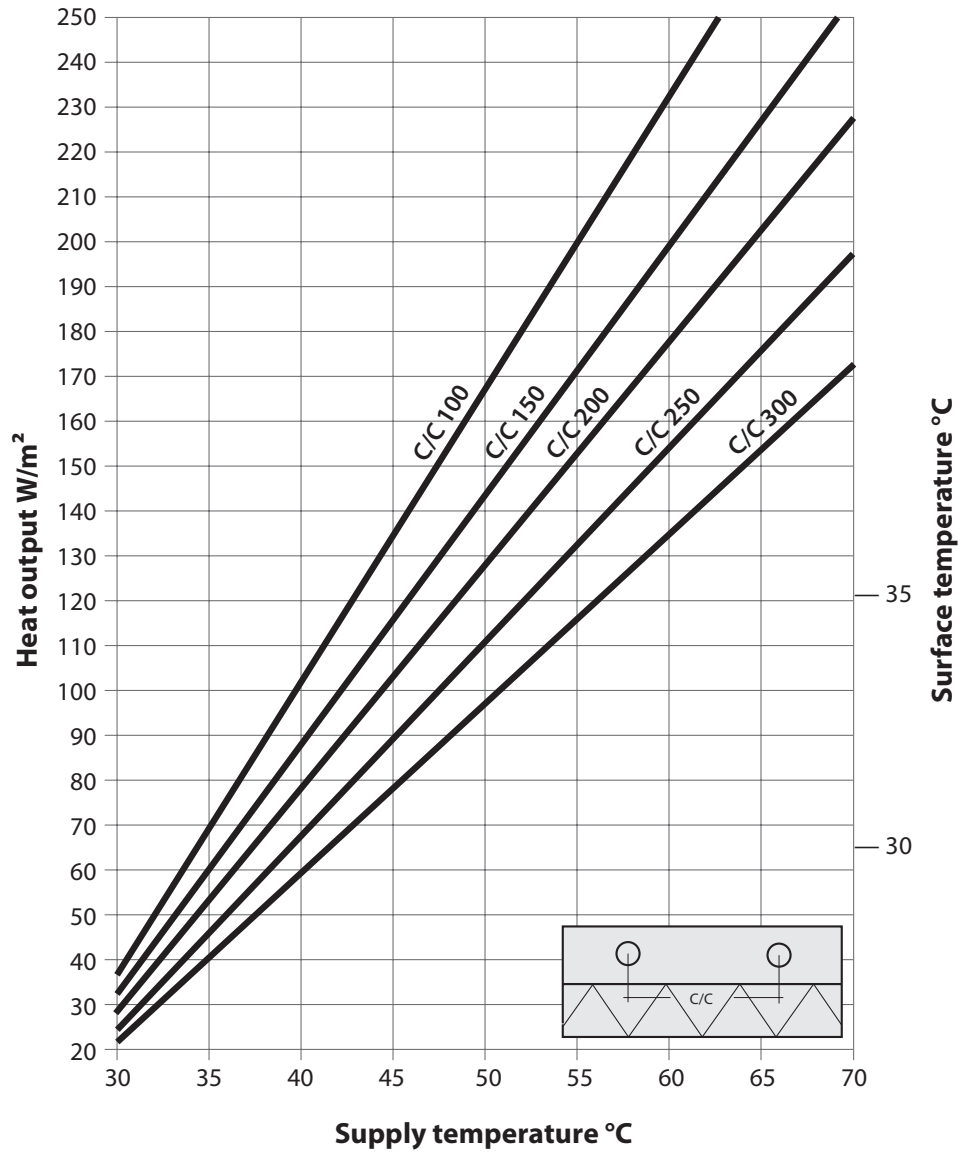
Heat Output
at room temp. 20 °C



Heat Output
at room temp. 22 °C



**Heat Output
at room temp. 24 °C**



Danfoss A/S

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