

Data Sheet

FH PEXa Pipes

Application



The Danfoss PEXa pipe is a high quality floor heating pipe with an EVOH oxygen barrier. 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	Length	Code no.
FH PEXa pipes	14,0 × 2,00	240 m	088X0950
FH PEXa pipes	16,0 × 2,00	120 m	088X0951
FH PEXa pipes	16,0 × 2,00	240 m	088X0952
FH PEXa pipes	16,0 × 2,00	400 m	088X0969
FH PEXa pipes	16,0 × 2,00	600 m	088X0953
FH PEXa pipes	16,0 × 2,20	240 m	088X0954
FH PEXa pipes	18,0 × 2,00	240 m	088X0957
FH PEXa pipes	18,0 × 2,00	600 m	088X0958
FH PEXa pipes	20,0 × 2,00	120 m	088X0959
FH PEXa pipes	20,0 × 2,00	400 m	088X0961
FH PEXa pipes	25,0 × 2,30	200 m	088X0963

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	6 bar
Max. flow temperature (Short term)	110 °C
Max. working temperature	95 °C
Oxygen barrier	EVOH
Linear expansion coefficient	$1,4 \times 10^{-4} \text{ K}^{-1}$
Thermal conductivity	$\lambda = 0,41 \text{ W/m K}$
Oxygen-tightness according to DIN 4726	$< 0,1 \text{ g/m}^3 \times \text{d}$
Colour	Natural

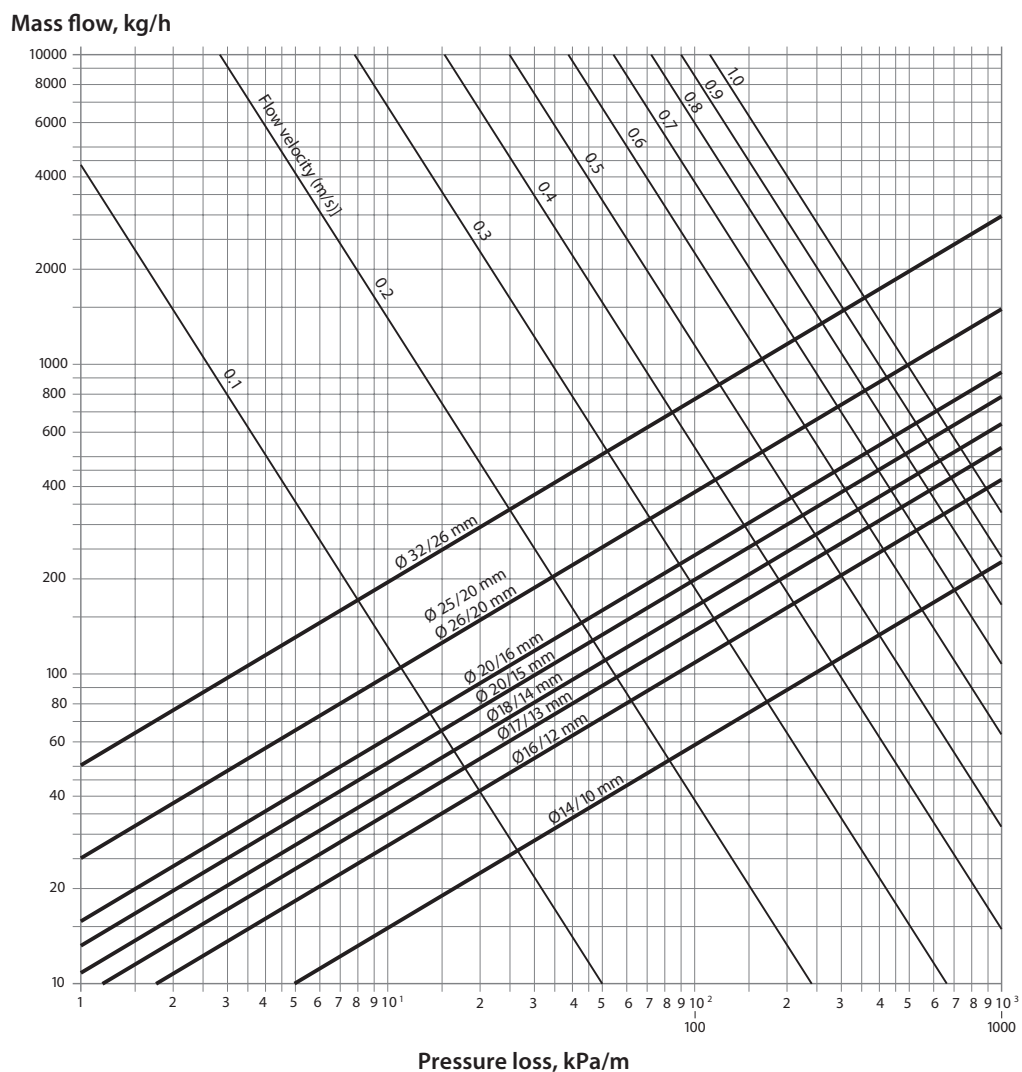
Working conditions

Temperature	Time	Safety Factor	Pressure	
			Normal	Reinforced
20 °C	50 years	1,5	18 bar	19,8 bar
40 °C	50 years	1,5	14 bar	15,6 bar
60 °C	50 years	1,5	11 bar	12,4 bar
70 °C	25 years	2,0	7 bar	8,4 bar
95 °C	25 years	2,0	5 bar	6,4 bar

Minimum bending radius with bending springs

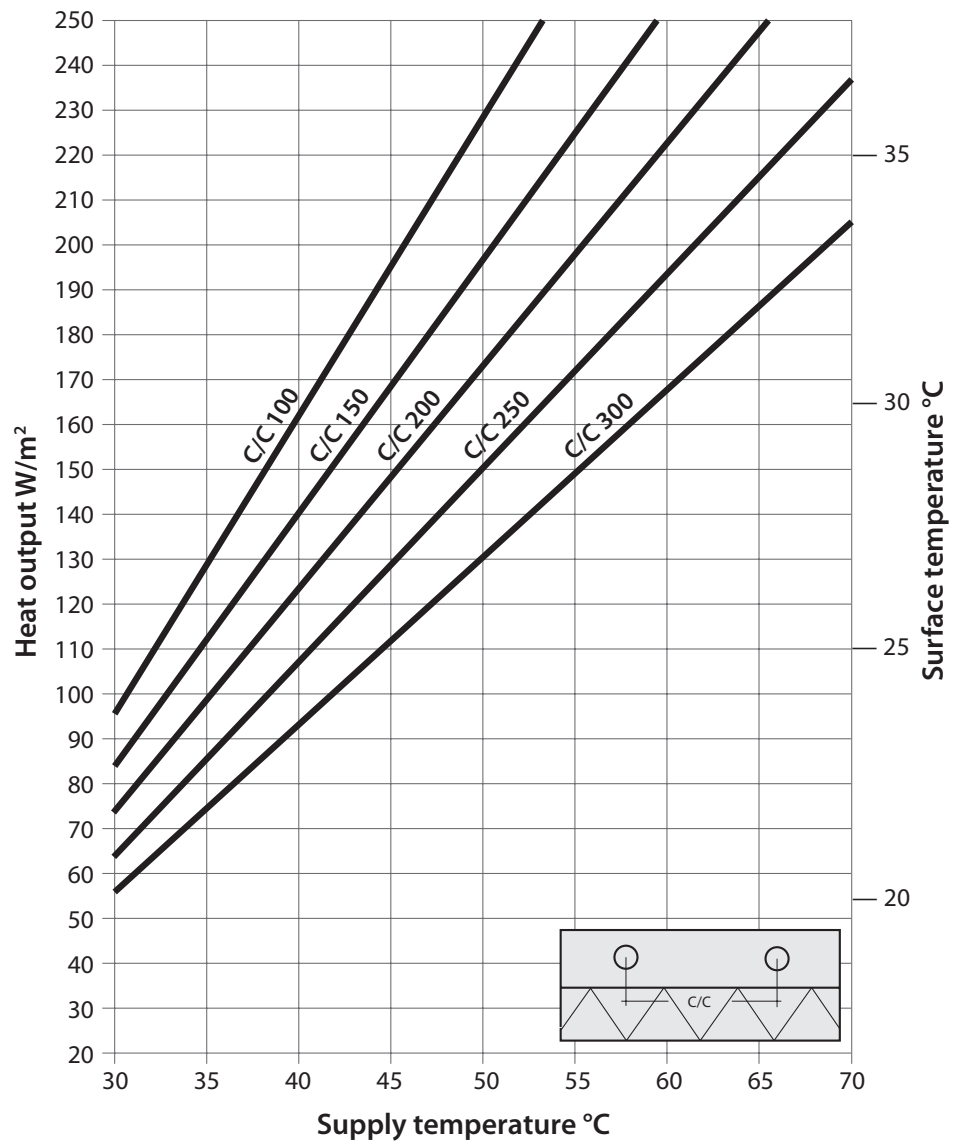
Pipe dimension	Manual pipe bender radius
16 mm	80 mm (5 × outside diameter)
20 mm	100 mm (5 × outside diameter)
25 mm	125 mm (5 × outside diameter)

Pressure loss

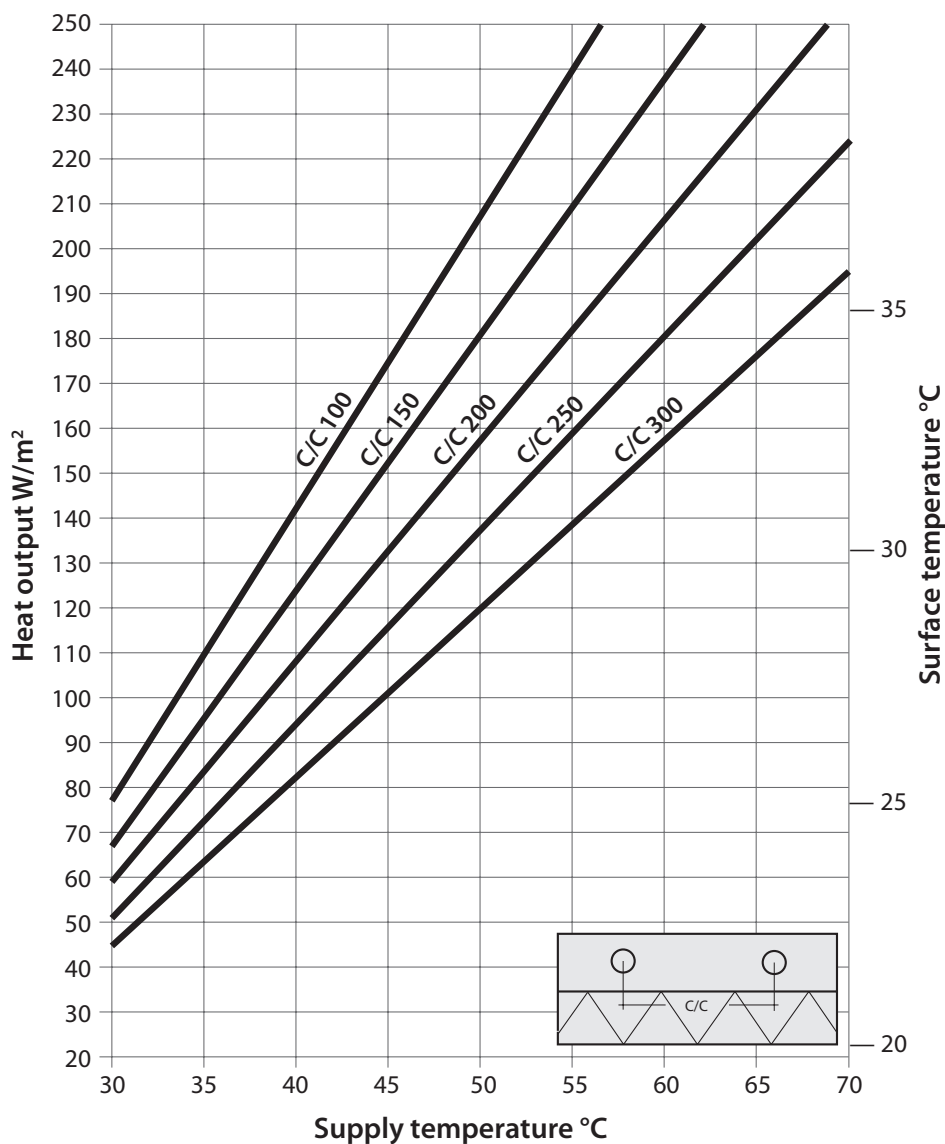


Water temperature: 40 °C.

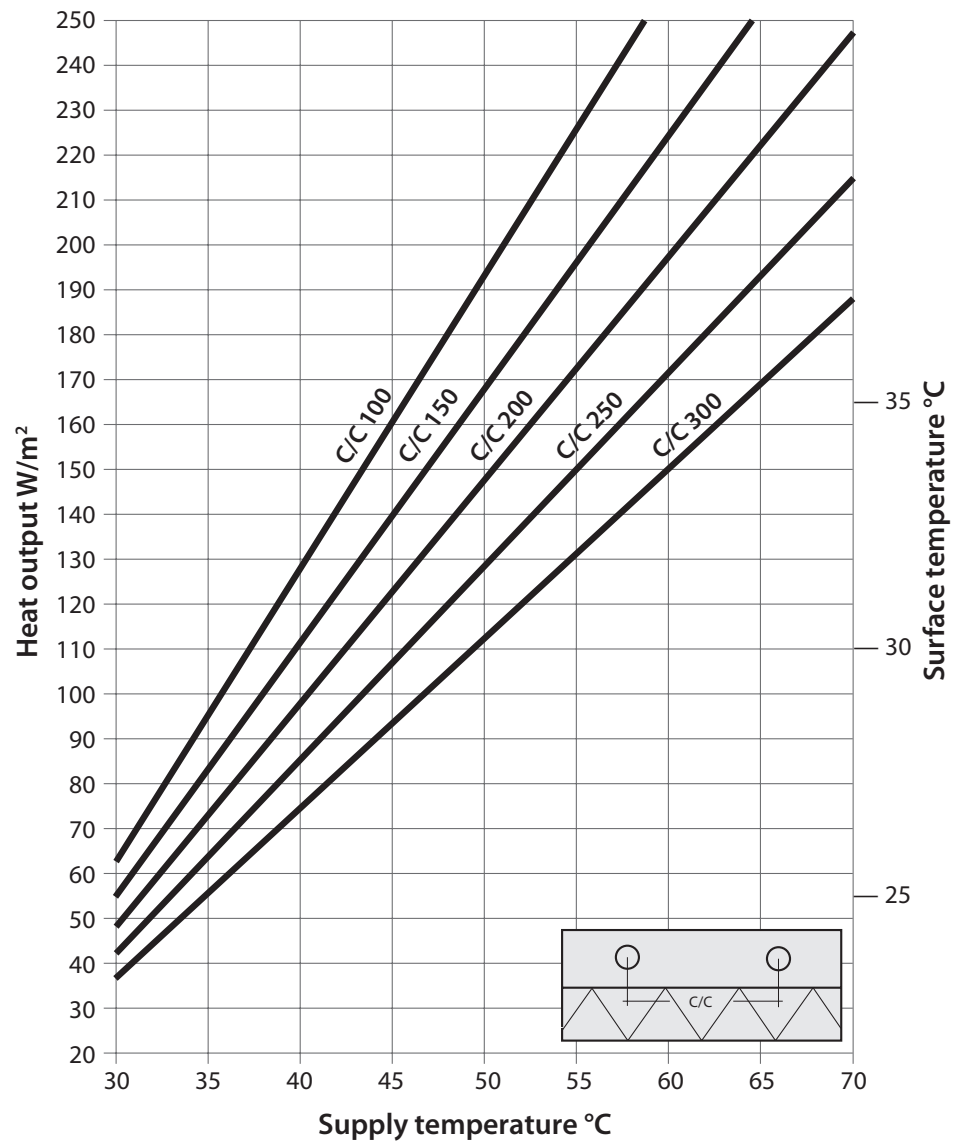
Heat Output
at room temp. 15 °C



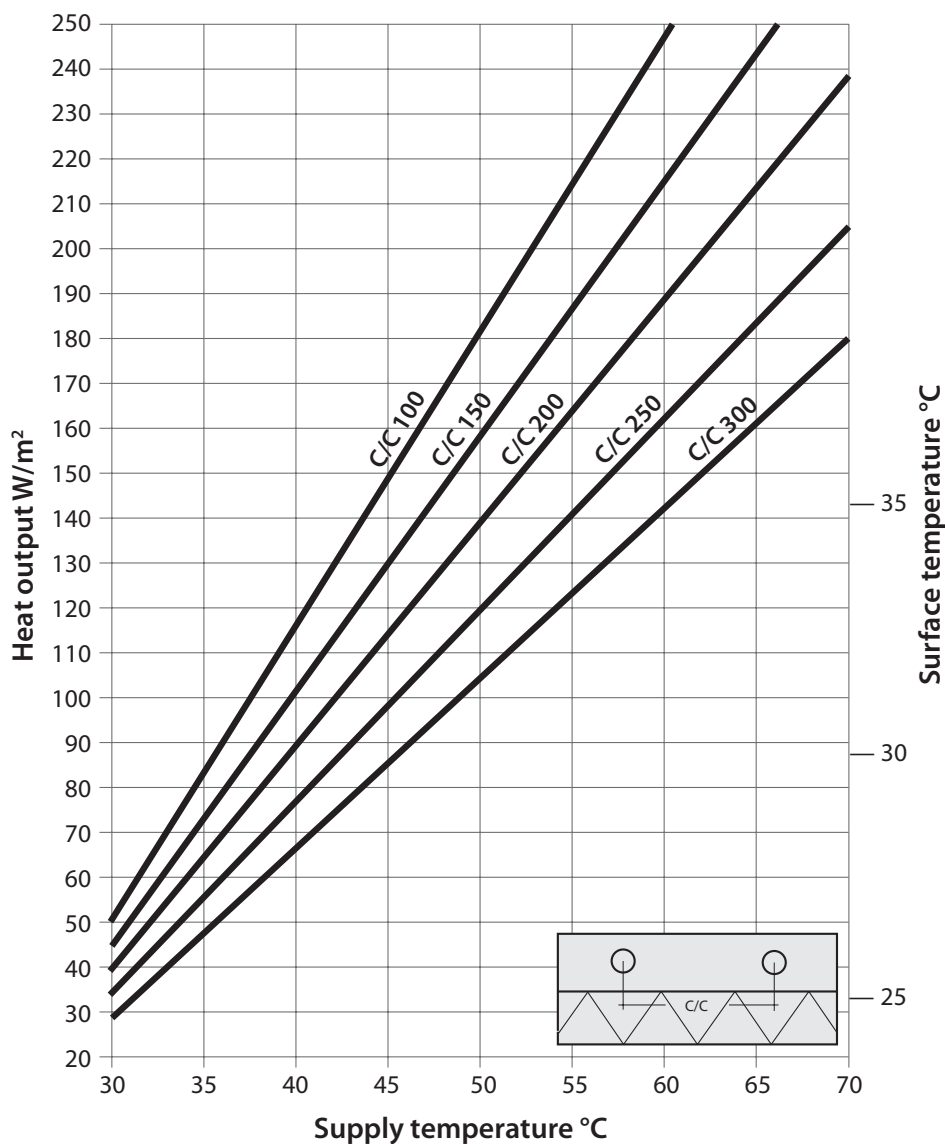
Heat Output
at room temp. 18 °C



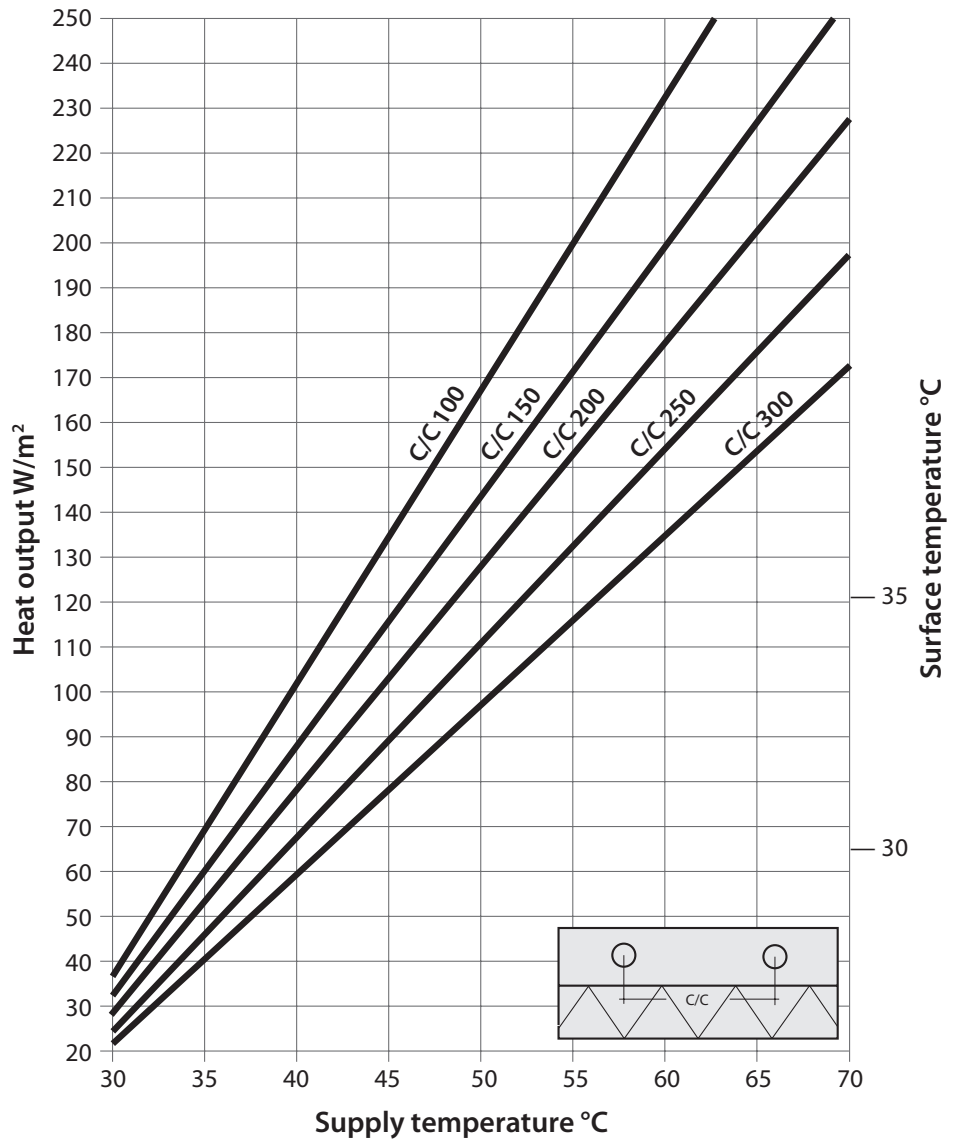
Heat Output
at room temp. 20 °C



Heat Output
at room temp. 22 °C



**Heat Output
at room temp. 24 °C**



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