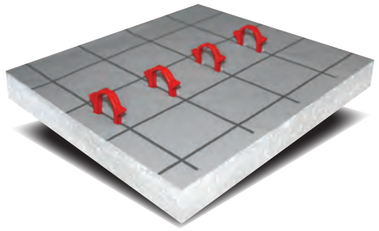
FLOOR HEATING PANELS

MEET THE FAMILY

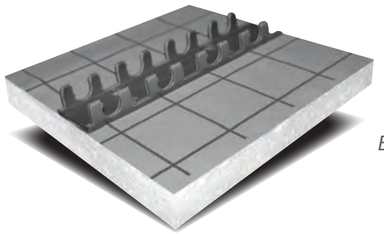
Basic™ screed systems

Using tools and laying pipes at the same time is difficult. No tools are required for BasicRail™ and BasicGrip™. This means that one person can lay the pipes alone when using BasicRail™ and BasicGrip™.

For BasicRail™ the rails need to be installed first. The BasicGrip™ panel, on the other hand, contains both insulation and knobs that hold the pipes in place. That means fewer work processes with BasicGrip™.



BasicClip™



BasicRail™

BasicGrip™

Panels
What to consider

1.

INSTALLATION

Is 1-person installation important?

YES

NO

CHOOSE
BasicClip™

2.

WORK PROCES

Is few work processes important?

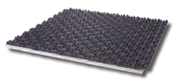
YES

NO

CHOOSE
BasicRail™

CHOOSE
BasicGrip™

FLOOR HEATING PANEL
OVERVIEW



BasicGrip™

BasicClip™

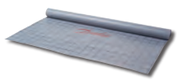
BasicRail™

Clips for BasicRail™
088X0043

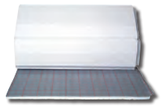
Clips for foil
088X0060

Connection panel
088X0053

Manifold/multi-panel
088X0054



Foil
088X0130



Insulation roll
088x0072

BasicClip™ Tool
088X0061

Conduit elbow
088X0058

Perimeter insulation
088X0065

Basic movement gap strip
088X0066

Basic pipe sleeve
088X0067

System overview	Installation time (min./ m² at c/c 300 mm)	Available insulation thickness (mm)	Installation tools needed
BasicGrip™	7,5	0, 11, 35	None
BasicClip™	8	0, 20, 35 (panels) / 30 (10 m² rolls)	BasicClip Tool
BasicRail™	6,5	0, 20, 35	None

BasicRail™	Code no.	Consumption (m/m²)
FH-BRA – Rails, 2 meters for 16x2 pipe	088X0040	1,2
FH-BRC – Rails, 3 meter, for 20x2,25 pipe	088X0042	1,2
FH-BRD – Clips for BasicRail™, 500 pcs	088X0043	

BasicClip™	Code no.	Consumption, pcs./m² with c/c 300 mm	Consumption, pcs./m² with c/c 250 mm	Consumption, pcs./m² with c/c 200 mm	Consumption, pcs./m² with c/c 150 mm	Consumption, pcs./m² with c/c 100 mm
FH-BCB – Clips for BasicClip™, 300 pcs	088X0062	7	8	10	13	20
FH-BCC – Clips for foil, 200 pcs.	088X0060					

BasicGrip™ panels and rolls	Code no.	Form	Insulation thickness (mm)	Size (m²)
FH-BGA – Standard panel	088X0050	Panel	35	1
FH-BGB – Standard panel	088X0051	Panel	11	1
FH-BGC – Standard panel	088X0052	Panel	0	1
FH-BGD – Connection panel	088X0053	Panel	0	0,1
Manifold/multi-panel	088X0054	Panel	35	0,5
Manifold/multi-panel	088X0055	Panel	11	0,5
Manifold/multi-panel	088X0056	Panel	0	0,5
Basic Panel Standard	088X1051	Panel	18	0,62
Basic Panel Ultra	088X1052	Panel	18	0,62

BasicClip™ and BasicRail™ rolls	Code no.	Form	Insulation thickness (mm)	Size (m²)	System	
					BasicClip™	BasicRail™
Basic insulation roll	088X0072	Roll	30	10	✓	
Basic insulation roll	088X0073	Roll	20		✓	

Other accessories	Code no.	For which system			Comments
		BasicGrip™	BasicClip™	BasicRail™	
FH-BGI – Conduit elbow	088X0058	✓			For 16-20 mm pipe.
FH-BK – Perimeter insulation	088X0065	✓	✓	✓	
FH-ACA – Basic movement gap strip	088X0066	✓	✓	✓	2 meters.
FH-ACB – Basic pipe sleeve	088X0067	✓	✓	✓	For 16 mm pipe and pipe length 40 cm.

QUALITY

PIPES

Pipes
What to consider

1. LOW TEMPERATURE
Is the pipe installed in temperatures below -10 °C?

NO

YES
USE COMPOSITE PIPES WITH ALUMINIUM

2. PIPE EXPANSION
Is it important that the pipe does not expand?

NO

YES
USE COMPOSITE PIPES WITH ALUMINIUM

3. PRESSURE AND TEMPERATURE
Is pressure higher than 6 bars or does temperature exceed 60 °C?

NO

YES
USE PEXa OR COMPOSITE PIPES WITH ALUMINIUM

CHOOSE
ANOTHER PIPE

COMPOSITE PIPE WITH ALUMINIUM

PE-RT inner pipe, stabilized for high temperatures

Adhesive layer

Homogeneous, longitudinally, butt-welded and totally circular aluminium pipe

Adhesive layer

Polymer outer pipe stabilized for high temperatures. Grey and UV stabilized

PEXa PIPE

PEXa pipe wall

Adhesive layer

Oxygen (O_2) diffusion barrier layer

Adhesive layer

Protective PE layer

FIVE LAYERS OF QUALITY

No matter which Danfoss pipe you choose it always has five layers. Having the oxygen barrier protected by a pipe wall and adhesive layer will ensure that minimal oxygen will be able to enter your installation and help ensure that the installation will remain corrosion free over time.

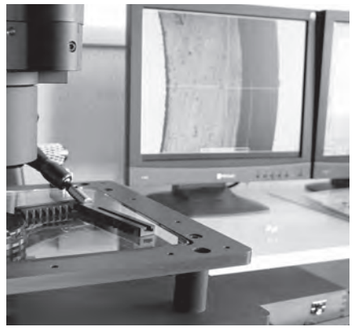
CROSS LINKED FOR MAXIMUM OUTPUT

Our PEXa pipes are produced according to the ISO 15875 standard and has a cross linking degree of min. 70 %. The heat transfer coefficient of the pipe is 0,41 W/m K which will ensure that energy is transferred in the fastest possible way from water to the floor.

TESTING OUR PIPES
TO THE MAX

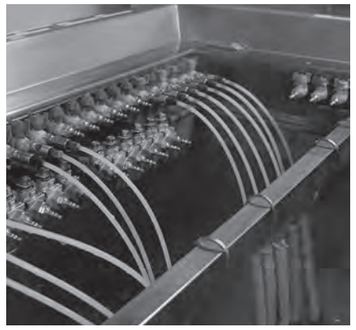
All pipes are thoroughly tested to meet the highest quality standards.

Danfoss pipes are subjected to a range of different tests to ensure optimum product quality and working life. During production, the pipes undergo real life simulation tests and quality inspections to meet our precise tolerances.



Layer and wall thickness

The thickness of each layer is measured. Thickness needs to be kept within narrow tolerances to ensure that the fittings precisely match the pipes, enabling them to withstand high pressures.

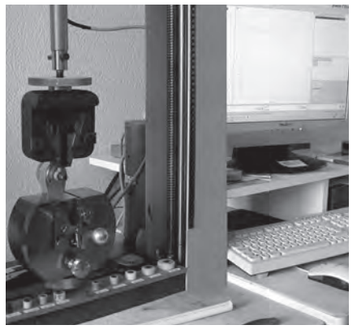


Long-term pressure test

The pipes undergo a thermal cycle test. The test simulates the conditions that pipes are exposed to during their lifetime. The test is based on the ISO 22391 standard.

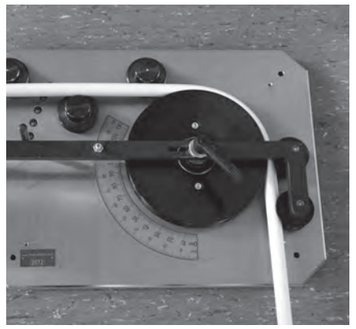
Outer diameter test

During production, random tests are carried out on the outer diameter of our pipes to ensure that tolerances are met.



Adhesion test

The pipes consist of several layers that are “glued” together. In the lab, their durability is thoroughly tested to prevent the layers from dissolving over time.



Bending relaxation test

The extent to which the pipe changes shape when bent is important for the resistance in the pipe. An oval pipe will increase resistance, which may affect pump requirments.

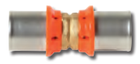
PIPE
OVERVIEW

FH composite pipe
088X0001

FH PEXa pipes
088X0950

Most popular pipes	Code no.	Dimension	Material type	Coil length	Oxygen barrier	Max. temper-ature	Max. pres-sure	Life ex-pectancy
Composite pipe	088X0001	16 x 2,0 mm	PE-RT/Alu/PE-HD	200 m	alu	95 °C	10 bar	50 years
Composite pipe	088X0003	16 x 2,0 mm	PE-RT/Alu/PE-HD	500 m	alu	95 °C	10 bar	50 years
PEXa pipe	088X0950	14 x 2,0 mm	PEXa	240 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0951	16 x 2,0 mm	PEXa	120 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0952	16 x 2,0 mm	PEXa	240 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0968	16 x 2,0 mm	PEXa	350 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0969	16 x 2,0 mm	PEXa	400 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0953	16 x 2,0 mm	PEXa	600 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe, reinforced	088X0954	16 x 2,2 mm	PEXa	240 m	EVOH	95 °C	10 bar	50 years
PEXa pipe	088X0957	18 x 2,0 mm	PEXa	240 m	EVOH	95 °C	6 bar	50 years
PEXa pipe	088X0958	18 x 2,0 mm	PEXa	600 m	EVOH	95 °C	6 bar	50 years
PEXa pipe	088X0959	20 x 2,0 mm	PEXa	120 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0961	20 x 2,0 mm	PEXa	400 m	EVOH	95 °C	6 Bar	50 years
PEXa pipe	088X0963	25 x 2,3 mm	PEXa	200 m	EVOH	95 °C	6 Bar	50 years

Press fitting 16 x 2 mm
088X0020



Press fitting 20 x 2,25 mm
088X0021

Screw coupling 16 x 2 mm
088X0025

Screw coupling 20 x 2,25 mm
088X0026

Fitting G ¾”,
internal thread

Accessories for pipes	Code no.	Composite pipe	PEXa pipe	Description
Fitting 14 x 2,0 mm	013G4154		X	Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 16 x 2,0 mm	013G4156		X	Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 16 x 2,0 mm	013G4186	X		Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 16 x 2,2 mm	013G4163		X	Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 18 x 2,0 mm	013G4158		X	Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 20 x 2,0 mm	013G4160		X	Fitting for connecting pipes to manifolds or valves with ¾” thread.
Fitting 20 x 2,25/3 mm	013G4093	X		Fitting for connecting pipes to manifolds or valves with ¾” thread.
Press fitting 16 x 2,0 mm	088X0020	X		Connection fitting for joining two pipes e.g. for repairs (press tool required).
Press fitting 20 x 2,25 mm	088X0021	X		Connection fitting for joining two pipes e.g. for repairs (press tool required).
Screw coupling 16 x 2,0 mm	088X0025	X	X	Connection fitting for joining two pipes e.g. for repairs (fittings incl. insulator ring).
Screw coupling 20 x 2,25 mm	088X0026	X		Connection fitting for joining two pipes e.g. for repairs (fittings incl. insulator ring).