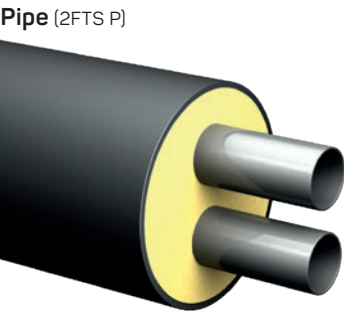


FINTHERM TWINS



The pre-insulated pipe system **Fintherm Twins** consists of a pair of steel carrier pipes insulated by rigid polyurethane foam in a polyethylene casing. It is manufactured according to EN 15698-1 and is used for underground heat distribution systems. The pre-insulated pipe system **Fintherm Twins** is designed for the maximum working pressure of 2.5 MPa and a working temperature of 130°C with a working life of 30 years. The maximum temperature difference between the supply and return pipes is 50°C.

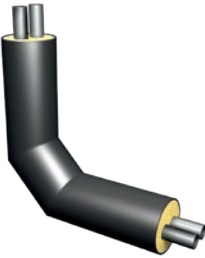
**Benefits:** Reduced heat loss, savings in the cost of construction work and reduced number of joints compared with a separate pipeline.

Dimensions of the steel carrier pipe P235 GH				Dimensions of HDPE casing	
DN dimension	Outer diameter (mm)	Wall thickness (mm)	Distance of carrier pipes (mm)	Insulation class 1 Outer diameter (mm)	Insulation class 2 Outer diameter (mm)
25 + 25	33,7	2,6	19	140	160
32 + 32	42,4	2,6	19	160	180
40 + 40	48,3	2,6	19	160	180
50 + 50	60,3	2,9	20	200	225
65 + 65	76,1	2,9	20	225	250
80 + 80	88,9	3,2	25	250	280
100 + 100	114,3	3,6	25	315	355
125 + 125	139,7	3,6	30	400	450
150 + 150	168,3	4,0	40	450	500
200 + 200	219,1	4,5	45	560	630
250 + 250	273,0	5,0	45	710	800

Vertical elbow  
(2FTS E-V)



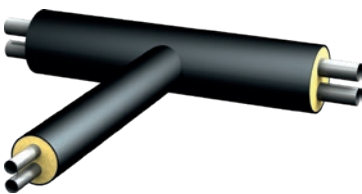
Horizontal elbow  
(2FTS E-H)



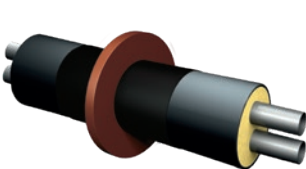
Elbow anchor  
(2FTS EA)



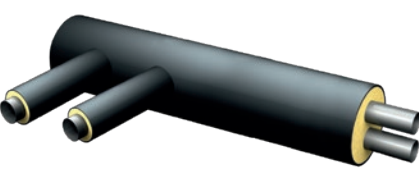
T-Branch  
(2FTS T)



Anchor  
(2FTS AP)



Change piece F  
(2FTS CPF)



Change piece Y  
(2FTS CPY)



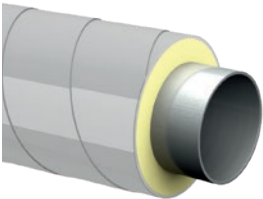
Shut-off valve  
(2FTS S-V)



Drain and air relief valve  
(2FTS D/A-V)

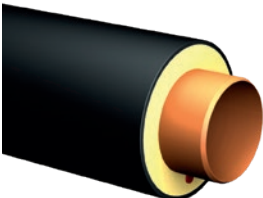


FINTHERM STANDARD SPIRO



Fintherm Standard Spiro pre-insulated pipe system is designed for above-ground hot and cold distribution systems. The steel carrier pipe is insulated by rigid polyurethane foam with a casing made of spiral overlaid zinc-coated steel sheets. The maximum operating parameters are the same as those of **Fintherm Standard**.

PIPING SYSTEMS FOR OTHER APPLICATIONS



The pre-insulated pipe systems of various materials according to specific customer requirements are designed for chemical and refrigeration industry, drinking water supply, sewerage and other applications. The carrier piping can be made of steel, stainless steel, copper, polyethylene, polypropylene (PPR), polybutene (PB), fibreglass, PEX, cast-iron, etc. The protective plastic pipe can be made of polyethylene or spiral overlaid sheet.

FINTHERM

All products of **Fintherm** series comply with EN 253, 448, 488, EN 15698-1 and EN 489, which can be documented by a number of certificates issued by both Czech and foreign testing laboratories. Fintherm holds certificates by EHP (EUROHEAT & POWER) and German AGFW. Fintherm is certified for the installation of pre-insulated pipe joints according to German standards AGFW FW 603 and FW 605 by accredited testing laboratory SKZ. The company also holds the associated certificates of quality management ISO 9001, environmental management ISO 14001 and occupational safety management OHSAS 18001.



Please find current technical information on our website [www.fintherm.cz/ft-EN](http://www.fintherm.cz/ft-EN)

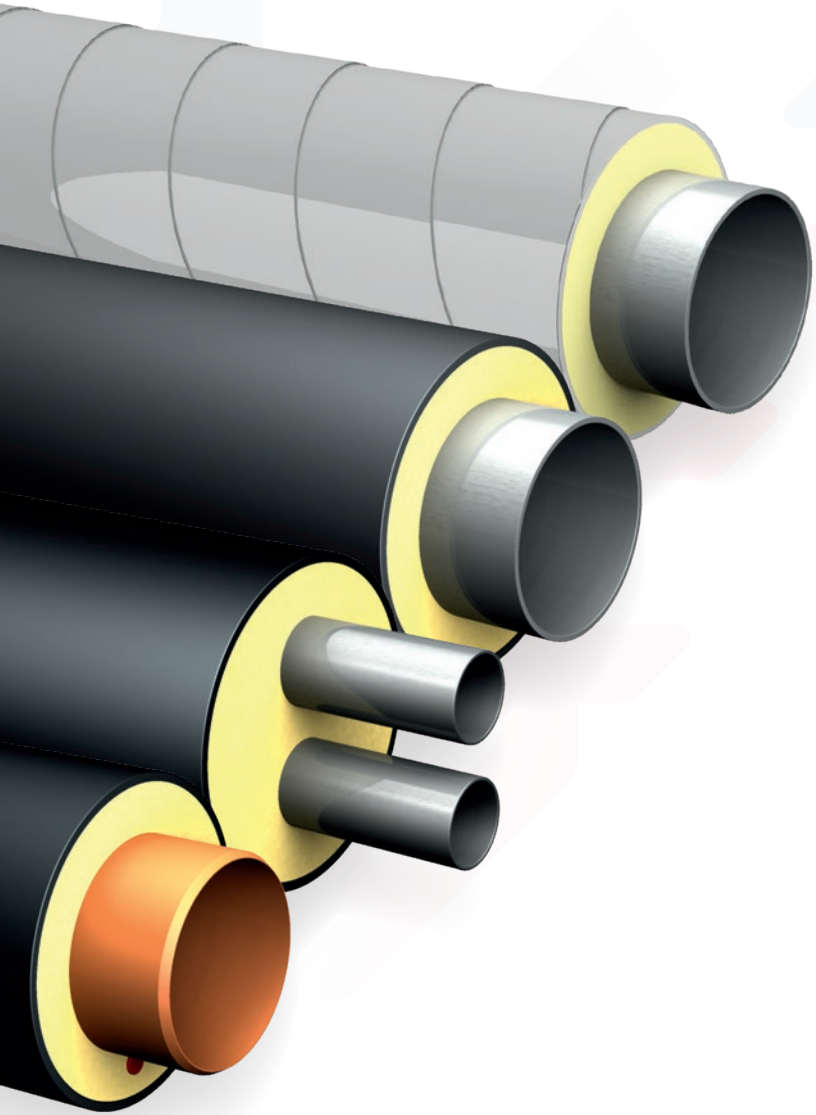
Fintherm a.s.  
Za Trati 197  
196 00 Prague 9  
Czech Republic

T +420 283 922 999  
F +420 283 933 015  
[www.fintherm.cz/ft-EN](http://www.fintherm.cz/ft-EN)



Fintherm a.s. reserves the right to make changes in its range of products without prior notice.

PRE-INSULATED  
PIPES  
WITH PUR INSULATION



Wide range of pre-insulated  
piping products

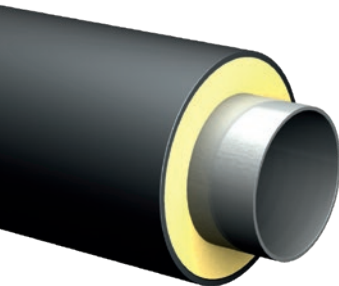
Pre-insulated piping from  
DN 25 to DN 1200

High heat resistance  
of insulating PUR foam

Low heat loss

FINTHERM STANDARD

Pipe (FTS P)



The pre-insulated pipe system **Fintherm Standard** is used for underground hot and cold distribution systems. The steel carrier pipe is insulated by rigid polyurethane foam blown by cyclopentane. A plastic pipe made of high density polyethylene protects the pre-insulated pipe from external effects.

The maximum operating temperature of the pipe is 153°C (short term 160°C) with a maximum working pressure of 2.5 MPa. This will give an anticipated working life of 30 years. Pipe with insulation PUR foam with increased temperature resistance up to 165°C is also available upon request.

**Fintherm Standard** meets all the requirements of European standards EN 253, EN 448, EN 488 and EN 489, including the requirements of the European Association EUROHEAT & POWER and the German Association AGFW/FW401.

Dimensions of the steel carrier pipe P235 GH			Dimensions of HDPE casing		
DN dimension	Outer diameter (mm)	Wall thickness (mm)	Insulation class 1 Outer diameter (mm)	Insulation class 2 Outer diameter (mm)	Insulation class 3 Outer diameter (mm)
25	33,7	2,6	90	110	125
32	42,4	2,6	110	125	140
40	48,3	2,6	110	125	140
50	60,3	2,9	125	140	160
65	76,1	2,9	140	160	180
80	88,9	3,2	160	180	200
100	114,3	3,6	200	225	250
125	139,7	3,6	225	250	280
150	168,3	4,0	250	280	315
200	219,1	4,5	315	355	400
250	273,0	5,0	400	450	500
300	323,9	5,6	450	500	560
350	355,6	5,6	500	560	630
400	406,4	6,3	560	630	670
450	457,0	6,3	560	630	710
500	508,0	6,3	630	710	800
600	610,0	7,1	710	800	900

700 to 1200 upon request

In addition, it is possible to supply the pipes also in non-standard dimensions and made of specific materials, e.g. thickness of steel carrier pipes according to AGFW/FW401.

SERVICES

We provide comprehensive services in the field of district heating and cooling. They include strength calculations, design layout and technical reports. We also provide technical consulting and professional training. Our broad portfolio of services also includes special assembly works, such as drilling branches in operation, determination of insulation condition, fault location, assembly of joints and their machine foaming.



FINTHERM STANDARD

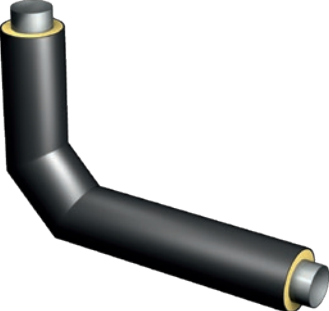
Bend 12 m (FTS PB)



Elbow (FTS E)



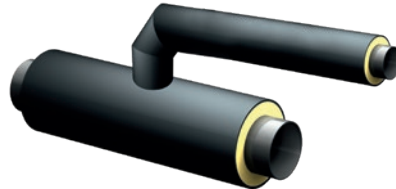
Building entry elbow (FTS E L1 x L2)



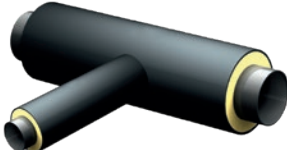
Elbow anchor (FTS EA)



Parallel T-branch (FTS P-T)



Straight T-branch (FTS S-T)



Elevated T-branch (FTS E-T)



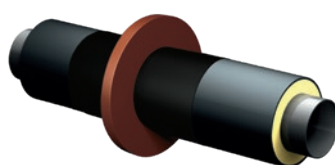
Recoil (FTS J)



Prefabricated reducer (FTS RED)



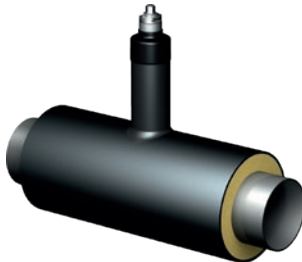
Anchor (FTS AP)



Drain and air relief valve (FTS D/A-V)



Shut-off valve (FTS S-V)



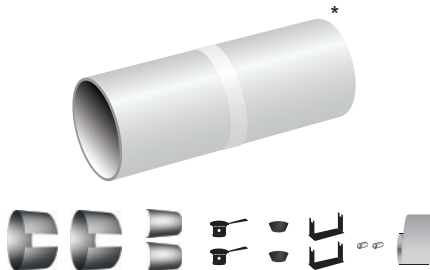
Combination valve (FTS COMBI V)



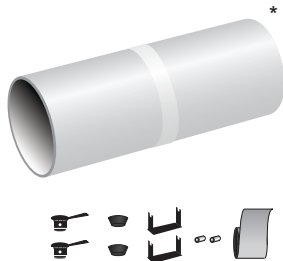
ACCESSORIES

We also offer a complete range of accessories for all pre-insulated piping systems.

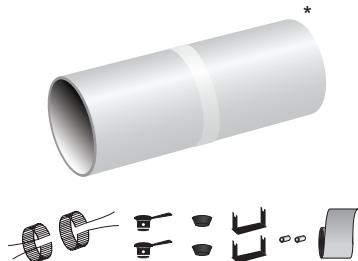
Doublesealed shrinkable joint (FTS DSJ)



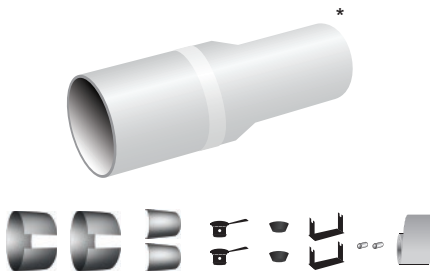
Cross-linked shrinkable joint (FTS JZ)



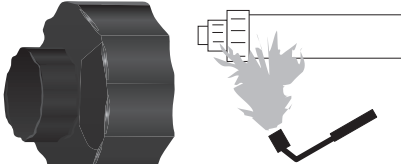
Electrically weldable joint (FTS JT)



Modular shrinkable reducer (FTS SRK SJ)



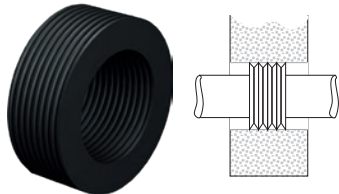
Insulation end sealing (FTS ES)



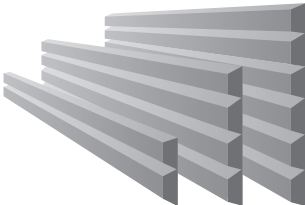
Marking tape (FTS MT)



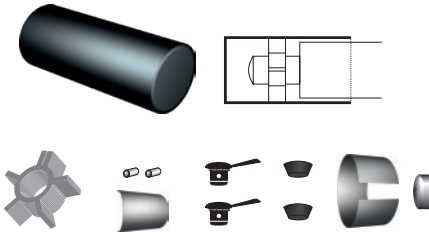
Channel rubber (FTS CR)



Expansion profile pads (FTS FPP)



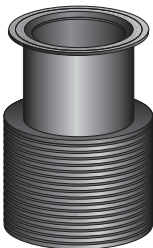
Piping end fitting kit (FTS ECK)



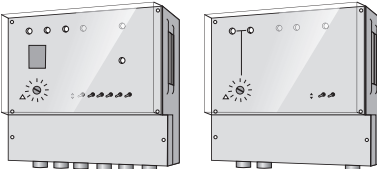
Components of PUR foam



Polyethylene shaft for fittings (FTS PE-well)



Leak detection systems for pre-insulated pipes



\* Shrinkable joints are shown together with white protective foil.