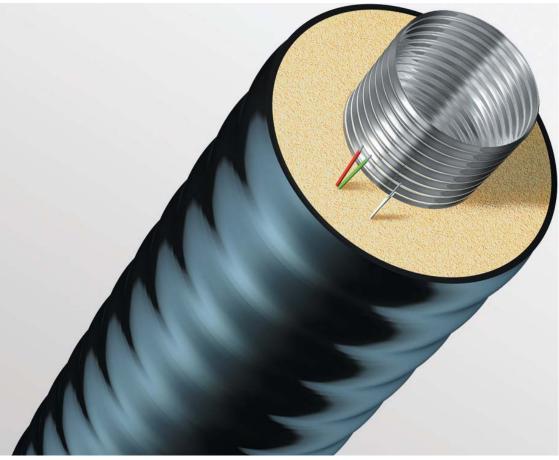
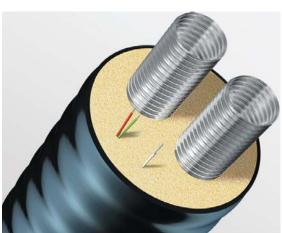
CASAFLEX®

HIGH TEMPERATURE PRE-INSULATED PIPING SYSTEM



PRODUCT OVERVIEW
EFFECTIVE FROM 15T JANUARY 2010













Casaflex® the pipe system

CASAFLEX® a brand of Brugg Pipesystems is a flexible, self-compensating, pre-insulated pipe system featuring single or twin pipes made of stainless steel. Produced in large, project specific lengths at the factory, the pipe's main construction element is the helical, corrugated profile of the pipe itself.

Outstanding heat insulation even at high temperatures

The diffusion barrier and the design of CASAFLEX® pipe systems guarantee minimal heat loss even at high temperatures: operating temperature up to 160 °C, peak temperature up to 180 °C.

Structure

CASAFLEX° features a corrugated stainless steel carrier pipe. The pipe is insulated against heat loss by an outstandingly efficient, flexible, CFC-free hard polyurethane (polyisocyanurate) foam. A multilayer barrier film under the outer PE-LD cladding prevents the escape of cellular gases from the PIR hard foam.

The quality of a high temperature system lies in the heat insulation. The insulation of the CASAFLEX® tubes consists of fine-pored polyurethane foam that is blown using pentane. With a low volume and thin insulation, this achieves an excellent Lambda value of 0.025 W/mK. The low heat loss saves heating costs and reduces energy consumption over the long term.

Uses

CASAFLEX® domestic pipe systems are designed for use in local and district heating networks, in industry and in the use of renewable energies (including solar energies, wood chip/pellet boilers and soild fuel systems).



Flexible, self purging, self-compensating

The unique spiral corrugations are ideal for optimum flow rates and give the stainless steel pipe its special qualities, such as self purging and the elimination of linear expansion.

Safe and easily monitored

The use of three leak detecting conductors as standard means that CASAFLEX® is compatible with leading monitoring systems.

Cut planning costs: save on excavation

Cut costs on materials, assembly and excavation

Pipe systems that have proved to be extremely practical for large-scale mains construction are not necessarily competitive for the smaller distribution systems intended for end users.

It is virtually impossible to make further cost savings on the installation of traditional pipelines or the excavation work involved.

Trenching, pipeline installation and flange insulation can only be carried out consecutively and not simultaneously. With the result that construction sites obstruct road traffic for weeks on end.

No-hassle CASAFLEX®

The perfect solution to the problem is CASAFLEX°, the domestic connection system from Polytherm.

CASAFLEX® offers maximum flexibility without affecting quality or safety standards in the slightest. The trenches required are narrow and shallow and can be refilled rapidly, meaning major savings on excavations.







The one-day site

The connection from the mains pipe to the end user is a single, direct and continuous link. Combined with the fact that the pipe is laid directly from a roll, this slashes installation time to an absolute minimum. Apart from this, CASAFLEX° always permits you to take the shortest route from the mains or boiler house to the house connection.

CASAFLEX® bends easily, so the pipe can be routed around obstacles such as trees, bushes or even other pipes at different levels wherever and whenever necessary.

Flexible, simple & safe

Easy to install

CASAFLEX° is cut to the length specified by the customer and then delivered straight from our warehouse to the site as a roll. A fixing device allows the pipe to be rolled off a little at a time without sacrificing stability.

Simple connection technology

Advanced connection and component technologies permit time-saving connections to conventional pipe systems and standard connecting fittings.

Connections at the house and to the mains are exceptionally simple thanks to a patented connection system from Brugg.

A few simple bolts secure all the necessary connections quickly and reliably with no need for special tools. No welding or calibration work is required, which means CASAFLEX® can be installed by skilled operatives at any time.

Quality from the specialists

The CASAFLEX® domestic connection system is manufactured under continual industrial batch conditions on computerized production lines developed specially by Brugg Pipesystems.

Qualified personnel combined with meticulous production and quality control guarantee the highest standards of safety and reliability for all CASAFLEX* district heating systems.



CASAFLEX° UNO



CASAFLEX® DUO



UNO ENDCAP



DUO ENDCAP



FITTING

22/91 20	Туре			Min. Bend Radius	Part No.	Pipe Connector
30/91	mm	DN	Inches	m		(d x s) mm
339/111 32 11/4" 1.00 83801490 42.4 x 3.2 488/111 40 11/2" 1.00 83801690 48.3 x 3.2 60/126 50 2" 1.20 83801890 60.3 x 3.6 75/142 65 21/2" 1.50 83802590 76.1 x 3.6 98/162 80 3 1.80 83802790 88.9 x 4.0 127/182 100 4 2.00 83803000 114.3 x 4.5 CASAFLEX DUO 22+22/111 20 3/4" 1.10 83803190 33.7 x 3.2 39+39/142 32 11/4" 1.50 83803390 42.4 x 3.2 48+48/162 40 11/2" 1.80 83803390 48.3 x 3.2 60+60/182 50 2 2.00 83803490 60.3 x 3.6 UNO ENDCAP 22/91 20 3/4" 0.80 8391195 26.9 x 2.6 330/91 25 1" 0.80 8391195 26.9 x 2.6 330/91 25 1" 0.80 8391195 42.4 x 3.2 48/111 40 11/2" 1.00 83911690 48.3 x 3.2 60/126 50 2" 1.20 83911690 48.3 x 3.2 60/126 50 2" 1.20 83911890 60.3 x 3.6 ENDENDICA SOLUTION SOLUTIO	22/91	20	3/4"	0.80	83801091	26.9 x 2.6
48/111 40 11 ¹ / ₂ " 1.00 83801690 48.3 x 3.2 60/126 50 2" 1.20 83801890 60.3 x 3.6 75/142 65 2 ¹ / ₂ " 1.50 83802590 76.1 x 3.6 98/162 80 3 1.80 83802790 88.9 x 4.0 127/182 100 4 2.00 8380300 114.3 x 4.5 CASAFLEX DUO 22+22/111 20 3 ¹ / ₄ " 1.10 8380390 26.9 x 2.6 30+30/126 25 1" 1.40 8380390 42.4 x 3.2 48+48/162 40 11 ¹ / ₂ " 1.80 8380390 48.3 x 3.2 60+60/182 50 2 2.00 8380390 60.3 x 3.6 UNO ENDCAP 22/91 20 3 ¹ / ₄ " 0.80 83911195 26.9 x 2.6 30/91 25 1" 0.80 83911295 33.7 x 3.2 3994111 32 11 ¹ / ₄ " 1.00 83911495 42.4 x 3.2 48/111 40 11 ¹ / ₂ " 1.00 83911690 48.3 x 3.2 60/126 50 2" 1.20 83911890 60.3 x 3.6 50/142 65 2 ¹ / ₂ " 1.50 83912190 76.1 x 3.6 98/162 80 3 1.80 8391290 76.1 x 3.6 98/162 80 3 1.80 8391290 76.1 x 3.6 98/162 80 3 1.80 8391290 76.1 x 3.6 98/162 80 3 8.80 8391290 76.1 x 3.6 98/162 80 3 1.80 8391290 76.1 x 3.6 98/162 80 3 1.80 8391290 76.1 x 3.6 98/162 80 3 3 1.80 8391290 76.1 x 3.6 98/162 80 3 3 1.80 8391290 76.1 x 3.6 98/162 80 3 3 1.80 8391290 76.1 x 3.6 98/162 80 3 3 1.80 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6 98/162 80 3 3 3.8 8391290 76.1 x 3.6	30/91	25	1"	0.80	83801290	33.7 x 3.2
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75/142 65 2 ¹ / ₂ " 1.50 83802590 76.1 x 3.6 98/162 80 3 1.80 83802790 88.9 x 4.0 127/182 100 4 2.00 83803000 114.3 x 4.5 CASAFLEX DUO 22+22/111 20 3 ¹ / ₄ " 1.10 8380390 26.9 x 2.6 30+30/126 25 1" 1.40 83803190 33.7 x 3.2 39+39/142 32 11 ¹ / ₄ " 1.50 83803290 42.4 x 3.2 48+48/162 40 11 ¹ / ₂ " 1.80 83803490 60.3 x 3.6 UNO ENDCAP 22/91 20 3 ¹ / ₄ " 0.80 83911195 26.9 x 2.6 30/91 25 1" 0.80 83911295 33.7 x 3.2 39/111 32 11 ¹ / ₄ " 1.00 83911495 42.4 x 3.2 48/111 40 11 ¹ / ₂ " 1.00 83911495 42.4 x 3.2 48/111 40 11 ¹ / ₂ " 1.00 83911690 48.3 x 3.2 60/126 50 2" 1.20 83911890 60.3 x 3.6 60/126 50 2" 1.20 83911890 60.3 x 3.6 75/142 65 21 ¹ / ₂ " 1.50 83912190 76.1 x 3.6 98/162 80 3 1.80 83912390 88.9 x 4.0 127/182 100 4 2.00 N/A 114.3 x 4.5 DUO ENDCAP 22+22/111 20 3 ¹ / ₄ " 1.10 83911690 33.7 x 3.2 39+39/142 32 11 ¹ / ₄ " 1.40 83911890 33.7 x 3.2	48/111	40	11/2"	1.00	83801690	48.3 x 3.2
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DUO ENDCAP 22+22/111 20 3/4" 1.10 83911690 26.9 x 2.6 30+30/126 25 1" 1.40 83911890 33.7 x 3.2 39+39/142 32 11/4" 1.50 83912190 42.4 x 3.2	98/162	80	-	1.80	83912390	88.9 x 4.0
22+22/111 20 3/4" 1.10 83911690 26.9 x 2.6 30+30/126 25 1" 1.40 83911890 33.7 x 3.2 39+39/142 32 11/4" 1.50 83912190 42.4 x 3.2	127/182	100	4	2.00	N/A	114.3 x 4.5
22+22/111 20 3/4" 1.10 83911690 26.9 x 2.6 30+30/126 25 1" 1.40 83911890 33.7 x 3.2 39+39/142 32 11/4" 1.50 83912190 42.4 x 3.2	DUO END <u>C</u> AI	p				
30+30/126 25 1" 1.40 83911890 33.7 x 3.2 39+39/142 32 1 ¹ / ₄ " 1.50 83912190 42.4 x 3.2	22+22/111		3/″	1.10	83911690	26.9 x 2.6
39+39/142 32 1 ¹ / ₄ " 1.50 83912190 42.4 x 3.2						33.7 x 3.2
·	39+39/142	32	11/,"	1.50	83912190	
	48+48/162	40		1.80	83912390	48.3 x 3.2

2.00

HEATING FITTINGS (STEEL)								
Туре		Part No.						
mm	DN	Inches						
26.9 x 2.6	20	3/4"	83900195					
33.7 x 3.2	25	1"	83900295					
42.4 x 3.2	32	$1^{1}/_{4}^{"}$	83900395					
48.3 x 3.2	40	11/2"	83900495					
60.3 x 3.6	50	2	83900595					
76.1 x 3.6	65	21/"	83900694					
88.9 x 4.0	80	3	83900894					
114.3 x 4.5	100	4	N/A					

SANITARY FITTINGS (Stainless Steel)							
Туре	Part No.						
mm	DN	Inches					
26.9 x 2.6	20	3/"	83900190				
33.7 x 3.2	25	1″	83900290				
42.4 x 3.2	32	11/4"	83900390				
48.3 x 3.2	40	11/"	83900490				
60.3 x 3.6	50	2	83900590				
76.1 x 3.6	65	21/"	83900696				
88.9 x 4.0	80	3	83900896				
114.3 x 4.5	100	4	N/A				

60.3 x 3.6

83912490

Operating parameters

48+48/162 60+60/182

Operating temperature up to 160° C Peak temperatures up to 180° C Design: PN 16/25

