

# CASAFLEX

House connection pipe



# Flexible – simple – safe – easy monitoring

CASAFLEX



**CASAFLEX is a flexible, self-compensating, heat-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. The design of the corrugated pipe takes account of factors related to fluid dynamics.**

## **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.

Lower heat loss delivers both economic and environmental benefits: more efficient usage safeguards resources, and CO<sub>2</sub> emissions that damage the climate are reduced. For Brugg Pipesystems, «saving energy as a source of energy» is not merely a catchphrase: thanks to CASAFLEX, this principle can already be implemented to improve cost efficiency.

## **Structure**

CASAFLEX features a corrugated stainless steel carrier pipe. The pipe is insulated against heat loss by an outstandingly efficient, flexible, CFC-free PIR (polyisocyanurate) foam. A multilayer barrier film under the outer PE-LD cladding prevents the escape of cellular gases from the PIR foam. Thanks to this improvement, CASAFLEX meets the requirements of the German Energy Saving Ordinance (EnEV) for plant and equipment in buildings. In fact, CASAFLEX significantly exceeds the demanding German requirements for underground pipelines.

## **Uses**

CASAFLEX domestic pipe systems are designed for use in local and district heating networks, in industry, and in the field of renewable energy (including solar energy).

# Cut planning costs

CASAFLEX



- No U-bends, compensators, expansion elbows or anchors needed in the ground
- Low planning and construction supervision costs
- Continuous and unbroken surveillance – leaks and faults in the district heating network are easy to localize

## 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 these pipelines or the excavation work involved.

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

## No-hassle CASAFLEX

The perfect solution to the problem is CASAFLEX, the domestic connection system from Brugg: CASAFLEX offers maximum flexibility without compromising quality or safety standards in the slightest.

The trenches required are narrow and shallow and can be refilled rapidly, meaning major savings on excavation times.

## The one-day site

The connection from the mains pipe to the end-user is a single, direct and continuous link. This combined with the fact that the pipe is laid directly from a roll, slashes installation time to an absolute minimum.

Furthermore, CASAFLEX always enables you to take the shortest route from the mains 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.

# Save on excavation costs

CASAFLEX



- **Narrow trench widths and shorter routes**
- **Less excavation quantities**
- **Cost savings when restoring the surface**
- **Lower costs for securing the site and for road and pedestrian bridges**

## **Simple connection technology**

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

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

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.

All connections to pipe installations in buildings and trenches, as well as straight joints and T-junctions, are made using the tried-and-tested CASAFLEX connection set.



# A range of products

whatever the application

## CASAFLEX-UNO



**Operating temperature:**

up to 180 °C

**Operating pressure:**

PN 16 to PN 25

## CASAFLEX-UNO

Type	DN	Inches	Inner pipe		Outer casing D mm	Min. Bending radius m	Volume Inner pipe l/m	Weight kg/m	Maximum delivery lengths			
			d x d <sub>1</sub> x s mm						Coil <sup>1)</sup> m	Coil <sup>2)</sup> m	Coil <sup>3)</sup> m	Coil <sup>4)</sup> m
22/ 91	20	¾"	25 x	22 x 0.3	91	0.8	0.44	1.30	320	480	560	–
30/111	25	1"	34 x	30 x 0.3	111	1.0	0.80	1.48	205	290	360	–
39/126	32	1¼"	44 x	39 x 0.4	126	1.2	1.35	2.15	155	230	250	–
48/126	40	1½"	55 x	48 x 0.5	126	1.2	2.04	2.46	155	230	250	–
60/142	50	2"	66 x	60 x 0.5	142	1.3	3.12	3.02	100	150	200	–
75/162	65	2½"	86 x	75 x 0.6	162	1.8	5.12	4.10	55	100	145	–
98/162	80	3"	109 x	98 x 0.8	162	1.8	8.43	5.70	55	100	145	–
127/202	100	4"	143 x	127 x 0.9	210	2.8	14.30	8.80	–	40	–	75

<sup>1)</sup> Coil dimensions Ø 2800 x 800 mm (width)

<sup>2)</sup> Coil dimensions Ø 2800 x 1200 mm (width)

<sup>3)</sup> Coil dimensions Ø 3000 x 1200 mm (width)

<sup>4)</sup> Coil dimensions Ø 3000 x 1400 mm (width)

Supplied in drums on request

## CASAFLEX-DUO



**Operating temperature:**

max. 180 °C

**Operating pressure:**

PN 16

## CASAFLEX-DUO

Type	DN	Inches	Inner pipe		Outer casing D mm	Min. Bending radius m	Volume Inner pipe l/m	Weight kg/m	Maximum delivery lengths			
			d x d <sub>1</sub> x s mm						Coil <sup>1)</sup> m	Coil <sup>2)</sup> m	Coil <sup>3)</sup> m	Coil <sup>4)</sup> m
22+22/111	20	¾"	25 x	22 x 0.3	111	1.1	0.44	2 x 2.5	205	290	360	–
30+30/126	25	1"	34 x	30 x 0.3	126	1.4	0.80	2 x 3.1	155	230	250	–
39+39/142	32	1¼"	44 x	39 x 0.4	142	1.5	1.35	2 x 3.7	100	150	200	–
48+48/162	40	1½"	55 x	48 x 0.5	162	1.8	2.04	2 x 4.2	55	100	145	–
60+60/182*	50	2"	66 x	60 x 0.5	182	2.0	3.12	2 x 5.1	55	80	–	–

\* Max. permitted operating temp. T<sub>Bmax</sub> 130 °C (not available in Germany)

<sup>1)</sup> Coil dimensions Ø 2800 x 800 mm (width)

<sup>2)</sup> Coil dimensions Ø 2800 x 1200 mm (width)

<sup>3)</sup> Coil dimensions Ø 3000 x 1200 mm (width)

<sup>4)</sup> Coil dimensions Ø 3000 x 1400 mm (width)

Supplied in drums on request

# Pipe system for the future

District heating – Industry – Petrol stations – System packages



### Your partner for pipe systems

We are the people you should talk to when you need to find efficient solutions for transporting liquid materials. With our project engineers, development department, in-house production unit and our professional team of fitters, we have the know-how and the resources to look after your projects competently and reliably. For all types of heating systems, petrol station construction, industrial plant construction and system packages.

### Customer-specific solutions

Brugg is the full service provider in the field of single-wall, double-wall and insulated pipe systems. This know-how allows us to manufacture project-specific customised items.

### Give us a call!

Our engineers will be pleased to advise you and find a made-to-measure solution.

### International network

Our global partnership network can be reached on site at any time. More than 34 partners in 20 different countries will look after you wherever you are.

**Brugg Rohrsystem AG**  
Industriestrasse 39  
CH-5314 Kleindöttingen  
phone +41 (0)56 268 78 78  
fax +41 (0)56 268 78 79  
pipesystems@brugg.com  
www.pipesystems.com

**BRUGG Rohrsysteme GmbH**  
Adolf-Oesterheld-Straße 31  
D-31515 Wunstorf  
phone +49 (0)50 31 170-0  
fax +49 (0)50 31 170-170  
info@brugg.de  
www.brugg.de

A company of the BRUGG Group