# **CALPEX Low Temperature System**

Flexibly towards a safe future





# **CALPEX low temperature system**

For local and district heating systems

CALPEX – the flexible plastic low-temperature system for reliable supply of service water and heat: flexible, energy-efficient, reliable, fast and competent.

CALPEX's new, high-quality, distinctively corrugated outer casing facilitates installation-friendly laying and lastingly protects the high-performance polyurethane composite system. CALPEX reliably and quickly provides access to heating networks and is an energy-efficient system to last for decades: an investment in a secure future.



# The flexible way to a secure future

The five strengths combined in the CALPEX Low Temperature System

# \* Flexible

Realise small bending radii with low force exertion

Energy-efficient
Reduce energy losses and cut costs

Reliable
Reliability reflected in quality and durability

Fast
Speeding up building and installation work will save time and money

Professional
We listen, innovate and keep our promises

We listen, innovate and keep our promises



**get in its way** er, electric or sewage lines can easily be avoided, 100 metres long.



# New: Flexibility up by 24% – bending radii down by 30%

Small bending radii make laying easy

With low force exertion and high flexibility, the pipe can be guided through the trench, even where curves are tight. Costs are reduced and the reliability of the system in operation is increased.

# Flexible and energy-efficient

So that you can realise tight bending radii without problems, while costly energy losses are kept to a minimum







Flexible laying, thanks to small bending radii and low force exertion.

High-quality insulating foam combined with the best long-term lambda values in a composite system.

#### Distinctive corrugation as a trademark

CALPEX - with its corrugated contours and patented outer casing provides a very high degree of flexibility during laying and reliably protects against mechanical influences.

CALPEX makes it possible to achive small bending radii and to guide the pipe around tight curves along the route with low force exertion.

#### Flexible on the construction site

The improved flexibility of CALPEX allows us to manufacture coils with a reduced internal diameter - so we can supply in even longer lengths. Thus, CALPEX can cope with all route conditions without limitations and with minimal planning expenditure, bringing additional cost savings.

#### **Excellent energy properties**

Very low heat losses ( $\lambda_{50}$  0.0216 W/mK) make CALPEX the frontrunner in terms of energy savings. Thanks to the high-quality, fine-pored, closed-cell, high-pressure foaming, quality is retained for the long term. These outstanding energy properties are confirmed by independent testing institutions. Using CALPEX reduces heating costs and increases energy efficiency in a sustainable manner.





# Reliable and fast

So that you can play it safe and meet schedules without stress







Top quality for reliable product solutions with a long service life.

Reduced laying cost due to long delivery lengths and sophisticated installation technology.

#### First-class accessories

The non-detachable press fittings for reliable connections and the CALPEX clip shells which can be used without tools for easy, quick and secure installation of supplementary insulation reduce laying expenditure and guarantee a long service life. Instead of laying many short pipe sections, we deliver pipes in the longest possible lengths which reduces the number of underground connections.

#### Lastingly secure

CALPEX, the top-quality composite system, is longitudinally watertight. If the pipe is damaged by external influences, no cavities (in which water could accumulate and flow towards the building) are formed.

#### Less excavation work

Thanks to the small outer diameter of the bonded pipe, the CALPEX system can be laid in narrow trenches. The smaller volume minimises the excavation work, speeds up the progress of construction work and thus leads to cost savings.





# **Professional**

Advice, experience and innovation included







Innovation, longstanding experience and individual advice according to requirements.

#### Strong brand

Brugg Pipesystems stands for high quality, innovative products and longstanding experience. We give you individual and goal-oriented advice. The internal quality control system and the observance of all relevant standards ensure that our supplying factories in Germany and Switzerland adhere to the strictest quality standards.

Our development team constantly analyses your future requirements. The obtained findings already get incorporated into today's product solutions, which we optimally adapt to your specific needs. With Brugg Pipesystems, you are on the safe side. One of our strengths is excellent stock availability.

#### Additional customer benefits

- We produce as per EN 15632-1 /-2
- Medium pipes made of proven PEXa
- Casing material made of LLD-PE for excellent mechanical protection
- Screw, press- and welding connections belong to the standard range
- No thermal compensation measures are necessary
- · Cleverly bound ring coils for easy laying
- Special insulation thicknesses are available on request
- Special moulded parts available at short notice



# A range of products

whatever the application - CALPEX and CALPEX PLUS



CALPEX-UNO



**CALPEX-DUO** 



CALPEX-QUADRIGA



#### **Operating parameters**

Max.permitted operating temp: 95 °C Max.temp. for continuous operation: 80 °C Max.operating pressure: 6/10 bar

### Product structure

PEXa medium pipes
PUR insulation with foaming agent
cyclopentane
LLD-PE protective casing

### Applications

Local heating networks, drinking water pipes, sewage pipes, coolant pipes, industrial technology and swimming pool technology

#### **CALPEX-UNO Heating**

Туре	DN	Inches	Bending	Delivery	
mm		"	radius (m)	length (m)	
25/ 76	20	3/4	0.45	up to 1000	
25/ 91 PLUS			0.65	up to 715	
32/ 76	25	1	0.50	up to 1000	
32/ 91 PLUS			0.70	up to 715	
40/ 91	32	11/4	0.55	up to 715	
40/111 PLUS			0.75	up to 450	
50/111	40	11/2	0.60	up to 450	
50/126 PLUS			1.20	up to 291	
63/126	50	2	1.00	up to 291	
63/142 PLUS			0.85	up to 260	
75/142	65	21/2	0.70	up to 260	
75/162 PLUS			0.90	up to 149	
90/162	80	3	1.00	up to 149	
90/182 PLUS			1.20	up to 86	
110/162	100	4	1.10	up to 149	
110/182			1.20	up to 86	
110/202 PLUS*			1.40	up to 80	
125/182	125	5	1.30	up to 86	
125/202 PLUS*			1.50	up to 80	
140/202	125	5	1.40	up to 80	
160/250	150	6	-	12 (bars)	

### **CALPEX-UNO Sanitary**

Туре	DN	Inches	Bending Delivery	
mm		"	radius (m)	length (m)
22/ 76	16	5/8	0.45	up to 1000
28/ 76	20	3/4	0.50	up to 1000
32/ 76	25	1	0.50	up to 1000
40/ 91	32	11/4	0.55	up to 715
50/111	40	11/2	0.60	up to 450
63/126	50	2	1.00	up to 291

#### **CALPEX-DUO** Heating

0.55 0.75	up to 715 up to 450
0.75	
	up to 450
0.00	
0.60	up to 450
1.20	up to 291
1.00	up to 291
0.85	up to 260
1.10	up to 149
1.30	up to 86
1.20	up to 86
1.40	up to 80
	1.00 0.85 1.10 1.30

\*Available on request

## **CALPEX-DUO Sanitary**

Туре	DN	Inches	Bending	Delivery
mm		"	radius (m)	length (m)
28+22/ 91	20+16	3/4+5/8	0.55	up to 715
32+22/111	25+16	1+5/8	0.60	up to 450
40+28/126	32+20	11/4+3/4	1.00	up to 291
50+32/126	40+25	11/2+1	1.00	up to 291

## **CALPEX-QUADRIGA Heating/Sanitary**

Туре	DN	Inches	Bending	Delivery	
mm		"	radius (m)	length (m)	
25+25+28+22/142	20+20+20+16	3/4+3/4+3/4+5/8	0.70	up to 180	
32+32+28+22/142	25+25+20+16	1+1+3/4+5/8	0.70	up to 180	
32+32+32+22/142	25+25+25+16	1+1+1+5/8	0.70	up to 180	
40+40+40+28/162	32+32+32+20	1/4+11/4+11/4+3/4	1.10	up to 105	



#### Your partner for pipe systems

We are the people you should talk to when you need to find efficient solutions for transporting liquids. 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.

#### 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.

#### **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 would be pleased to advise you and find a made-to-measure solution.

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