

# CALPEX Low Temperature System

Flexibly towards a safe future



**NEW: CALPEX PLUS**  
22% improved  
insulation

# 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.



**New: CALPEX 75+75/202**

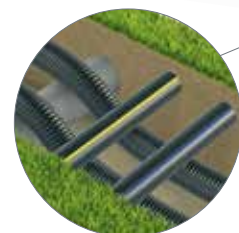
Up to 80 metres per coil, with a flow rate of up to 70,000 kg/h (1600 kW with  $\Delta T$  20°C)



**Leak-tight connections for a warm reception**  
Screw fittings, press fittings and weldable fittings for reliable connections underground and inside buildings.



**Reliable and sophisticated**  
CALPEX clip shells provide perfect protection for junctions and connections underground.



**CALPEX lets nothing**  
Any existing gas, water or other utilities are protected with sections up to 100 mm.

# 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



**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.

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

# 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

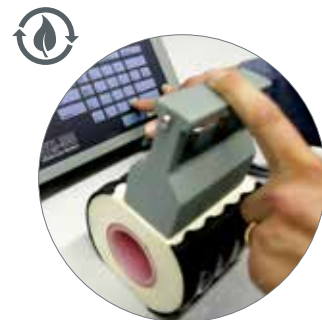
CALPEX - with its corrugated contours and patented outer casing provides a very high degree of flexibility during laying and reliably protects against mechanical influences. CALPEX makes it possible to achieve small bending radii and to guide the pipe around tight curves along the route with low force 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

**NEW: CALPEX PLUS**  
22% improved  
insulation

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

Type mm	DN	Inches "	Bending radius (m)	Delivery length (m)
25/ 76	20	¾	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	1¼	0.55	up to 715
40/111 PLUS			0.75	up to 450
50/111	40	1½	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	2½	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-DUO Heating

Type mm	Bending radius (m)	Delivery length (m)
25+25/ 91	0.55	up to 715
25+25/111 PLUS	0.75	up to 450
32+32/111	0.60	up to 450
32+32/126 PLUS	1.20	up to 291
40+40/126	1.00	up to 291
40+40/142 PLUS	0.85	up to 260
50+50/162	1.10	up to 149
50+50/182 PLUS	1.30	up to 86
63+63/182	1.20	up to 86
63+63/202 PLUS*	1.40	up to 80
75+75/202*	1.40	up to 80

\*Available on request

### CALPEX-UNO Sanitary

Type mm	DN	Inches "	Bending radius (m)	Delivery length (m)
22/ 76	16	⅝	0.45	up to 1000
28/ 76	20	¾	0.50	up to 1000
32/ 76	25	1	0.50	up to 1000
40/ 91	32	1¼	0.55	up to 715
50/111	40	1½	0.60	up to 450
63/126	50	2	1.00	up to 291

### CALPEX-DUO Sanitary

Type mm	DN	Inches "	Bending radius (m)	Delivery length (m)
28+22/ 91	20+16	¾+⅝	0.55	up to 715
32+22/111	25+16	1+⅝	0.60	up to 450
40+28/126	32+20	1¼+¾	1.00	up to 291
50+32/126	40+25	1½+1	1.00	up to 291

### CALPEX-QUADRIGA Heating/Sanitary

Type mm	DN	Inches "	Bending radius (m)	Delivery length (m)
25+25+28+22/142	20+20+20+16	¾+¾+¾+⅝	0.70	up to 180
32+32+28+22/142	25+25+20+16	1+1+¾+⅝	0.70	up to 180
32+32+32+22/142	25+25+25+16	1+1+1+⅝	0.70	up to 180
40+40+40+28/162	32+32+32+20	¼+1¼+1¼+¾	1.10	up to 105

# Pipe systems for the future

Heating systems – 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 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.

### 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 Pipesystems UK Ltd

3 Kelvin Road, Manor Trading Estate,  
Benfleet, Essex. SS7 4QB  
phone +44 (0)1268 759567  
fax +44 (0)1268 569932  
sales.bpuk@brugg.com  
www.bruggpipesystems.co.uk

A company of the BRUGG Group