# **HEAT PUMP PIPE KITS**

PRE-INSULATED PIPE SYSTEM



ALL-IN-ONE PRE-INSULATED PIPE PACKAGE FOR QUICK AND **EFFICIENT CONNECTIONS FROM HEAT PUMP TO PLANT ROOM** 

#### **BENEFITS**

- Flexible, pre-insulated plastic pipe system Flexalen® 600 with high pressure rating 95°C
- The only Cradle to CradleTM certified preinsulated pipe system in the world
- Delivered in cardboard box, convenient for storage and transport
- Fast and easy installation with mechnaical connections
- Feed and Return in one pipe carrier

Have a change of direction ? - we can supply factory fabrications to suit your sizing - ask us.

#### **HEAT PUMP KIT - CONTENTS**

Flexalen 600 pre-insulated twin pipe

4 x compression fitting SDR11 male thread

2 x rubber end cap for double pipe

I x trace warning tape, I00m roll



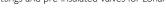






Full range of accessories and tools available to buy/hire

- Wall entries
- Restraining clamps (recommended)
- Fabrications and change of direction fittings and pre-insulated valves for zonal flow control





Polyethylene corrugated pipe, PE

Flexibility and mechanical protection

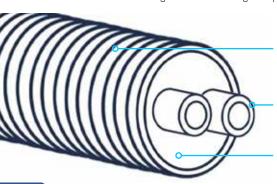
Polybutene service pipe, PB-I

Polyolefin foam

Closed-cell, CFC-free

# **APPLICATIONS**

- Heat pumps
- Geothermal heat distribution lines
- Connection of
  - adjacent buildings
  - plant rooms
  - boiler plants
- Biomass / Pellet plants





## **TECHNICAL PROPERTIES**

Flexalen® 600 is a pre-insulated flexible plastic pipe system produced conform the European standard EN15632-

I,3 and KIWA system certified as well as thirdparty controlled according BRL KOMO 5609-2 and BRL-K17401.

| PB-1 service pipe (EN-ISO 15876) |             |  |  |  |  |
|----------------------------------|-------------|--|--|--|--|
| Max. service temperature         | 95°C        |  |  |  |  |
| Continuous service temperature   | 80°C        |  |  |  |  |
| Max. operating pressure          | 8bar*(95°C) |  |  |  |  |

| *depending | on | the | diameter |
|------------|----|-----|----------|

| Thermal Insulation               |
|----------------------------------|
| Polyolefin foam                  |
| Closed-cell structure, CFC-free  |
| Water vapour diffusion µ ≥ 3,500 |

### FLEXALEN® 600 HEAT LOSSES

| Heat loss q [W/m] for one Double/Twin line (Feed/Return) |                              |       |       |        |        |        |        |
|--|------------------------------|-------|-------|--------|--------|--------|--------|
| Flexalen®  | Operating temperature T [°C] |       |       |        |        |        |        |
| 600 Single line  | 20°C                         | 30°C  | 40°C  | 50°C   | 60°C   | 70°C   | 80°C   |
| 25 + 25 / 125  | 2.992                        | 4.987 | 6.981 | 8.976  | 10.971 | 12.965 | 14.960 |
| 32 + 32 / 125  | 3.826                        | 6.377 | 8.928 | 11.478 | 14.029 | 16.580 | 19.131 |
| 40 + 40 / 160  | 3.356                        | 5.680 | 8.004 | 10.328 | 12.652 | 14.976 | 17.300 |

Calculation parameter

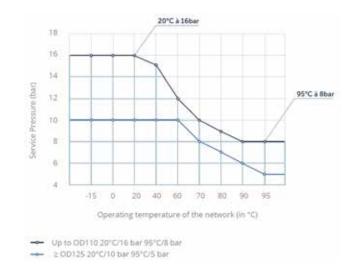
soil: 1.00 W/m ·K

R soil surface to ambient air: 0.0685 m2  $\mbox{K/W}$ 

T soil: 10.0 °C

Soil covering: 0.8 m

The heat loss characteristics are in accordance with the European standard for flexible heating pipes systems EN15632. During the expected lifetime of the product these values will increase by  $7-10\,\%$ .



# **AVAILABILITY - HEATING / COOLING**

| Double / Twin Pipe |                           |                             |                        |                         |             | Packaging       |             |
|--------------------|---------------------------|-----------------------------|------------------------|-------------------------|-------------|-----------------|-------------|
| Product code       | Dimension                 | Service pipe<br>OD x s [mm] | Jacket pipe<br>OD [mm] | Min. Bending radius (m) | Length (m)• | Dimensions (cm) | Weight (kg) |
| 1033-125025-020    | -<br>- 25 + 25 / 125<br>- | 25 × 2.3                    | 125                    | 0.6                     | 8           | 145 × 145 × 35  | 21.7        |
| 1033-125025-035    |                           |                             |                        |                         | 12          | 145 × 145 × 35  | 27.4        |
| 1033-125025-040    |                           |                             |                        |                         | 16          | 145 × 145 × 50  | 33.8        |
| 1033-125025-045    |                           |                             |                        |                         | 20          | 145 × 145 × 50  | 39.5        |
| 1033-125032-020    | -<br>- 32 + 32 / 125<br>- | 32 × 3.0                    | 125                    | 0.6                     | 8           | 145 × 145 × 35  | 23.5        |
| 1033-125032-035    |                           |                             |                        |                         | 12          | 145 × 145 × 35  | 30          |
| 1033-125032-040    |                           |                             |                        |                         | 16          | 145 × 145 × 50  | 37.2        |
| 1033-125032-045    |                           |                             |                        |                         | 20          | 145 × 145 × 50  | 43.7        |
| 1033-160040-020    | 40 + 40 / 160             | 40 × 3.7                    | 160                    | 0.8                     | 8           | 145 × 145 × 35  | 32.2        |
| 1033-160040-035    |                           |                             |                        |                         | 12          | 145 × 145 × 35  | 42.1        |
| 1033-160040-040    |                           |                             |                        |                         | 16          | 145 × 145 × 50  | 51.7        |

<sup>•</sup>Fixed length, other lengths available on request

