

KOMO® product certificate

K84665-5



Valid from

2025-10-01

Replaces

K84665-04

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GEROTHERM® PE100 pipes for geothermal energy systems (pipes for soil heat exchangers and horizontal supply and return pipes)

HakaGerodur AG

STATEMENT BY KIWA

This product certificate is based on Guideline/BRL 5219 "Plastics piping systems intended for closed geothermal energy systems" dated 1 September 2023, issued according to the Kiwa-Regulation for Certification.

The quality system and the product characteristics of this product are checked periodically. Based on this, **Kiwa declares that** there is legitimate confidence that:

Upon delivery, the product supplied by the certificate holder meets the requirements:

- Of the technical specifications laid down in this product certificate,
- The product requirements laid down both in this product certificate and in the Guideline/RRI

Provided the product is accompanied by the KOMO® quality mark in the manner set out in this product certificate.

Wim van Loon

Managing Director Nederland

This product certificate is also included on the KOMO foundation websites: www.komo.nl and www.komo-online.nl. Users of this product certificate are advised to check whether it is still valid. For this purpose consult the website of Kiwa: www.kiwa.com.

Kiwa Nederland B.V.

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- Quality system
- Product

Periodic control

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GEROTHERM® PE100 pipes for geothermal energy systems (pipes for soil heat exchangers and horizontal supply and return pipes)

TECHNICAL SPECIFICATION

This product certificate relates to the product characteristics of HDPE pipes for soil heat exchangers as well as horizontal supply and return pipes intended for closed geothermal energy systems according to evaluation guideline BRL 5219.

The following product(s) are part of this product certificate:

- PE100 pipes for soil heat exchangers with diameters 25mm, 32mm, 40mm and 50mm, provided in coils;
 - o Including type "VARIO" with variable wall thickness;
- PE100 horizontal supply and return pipes with diameters 25 63mm, provided in coils and bars.

The PE100 pipes for closed geothermal energy systems are part of a standard vertical system, class cold and designed to be used for operational pressures of maximum 16 bar (SDR 11), 20 bar (SDR 9) or 25 bar (SDR 7,4).

The colour of the products is black.

MARKING AND DESIGNATIONS

The products are marked with the KOMO°- image mark or KOMO°- word mark.

The realization of the KOMO°- image mark is as follows: :



Pipes for soil heat exchangers and horizontal supply and return pipes

The pipes of the soil heat exchangers and the horizontal supply and return pipes shall be marked at a mutual distance of no more than 2 metres as follows.

- KOMO® word mark:
- Certificate number of the technical approval-with-product certificate;
- Name certificate holder, factory name, trade name or company logo;
- System name;
- Class "Cold";
- Material of the pipes: "PE100";
- Maximum operational pressure: "16 bar" or "20 bar" or "25 bar;
- SDR or S class;
- Maximum temperature: 20 °C;
- Nominal outside diameter(s) and wall thickness of the pipe(s) in mm;
- Production code or date;
- "Bodem-warmtewisselaar" and "bestemd voor toepassing in gesloten bodemenergiesystemen" (the latter may also be provided on the packaging), (not applicable for horizontal supply and return pipes);
- The pipe for the soil heat exchanger must have a depth indication per metre. Hereby, the zero point of the depth indication must start at the base of the soil heat exchanger (not applicable for horizontal supply and return pipes).

PRODUCT CHARACTERISTICS

The products are in accordance with the product requirements as laid down in BRL 5219.

APPLICATION AND USE

The products are intended to be used for closed geothermal energy systems, with a lifetime of 50 years at a temperature profile of -20 °C till +20 °C and with a nominal operating pressure of maximum 16 bar or 20 bar.

The products are to be stored and installed in such a way that they are not exposed to direct sunlight.

RECOMMENDATIONS FOR USERS

Check on delivery of the products listed under the "technical specification" whether:

- The product(s) and material(s) ordered are delivered in accordance with the agreement you made.
- The brand and the method of marking is correct
- No defects or damage is visible (for example, resulting from the transportation).



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If on the basis of the foregoing you decide to proceed to rejection, please contact

HakaGerodur AG;

And if necessary,

Kiwa Nederland B.V.

Carry out storage, transport and processing in accordance with the provisions as included in this product certificate and/or documents of the certificate holder.

Check whether this product certificate is still valid, consult the website www.kiwa.com/en.

