

JANSEN powerwave coax

Maximum performance. Safety guaranteed.

JANSEN

Innovative technology for maximum performance

The JANSEN powerwave coax coaxial probe with corrugated tube technology offers maximum efficiency. Their external corrugated tube enables better energy absorption from the ground, as well as safe and fast installation.



5 Probe base
With a simple, robust holder for Jansen probe weights, which can be coupled and extended as required.



1 Corrugated tube on the outside
Smooth tube segments every 100 cm enable the flexible adjustment of the overall length.

2 Smooth tube on the inside
The ideal diameter ensures perfect hydraulics and improved thermal separation between the brine flows.

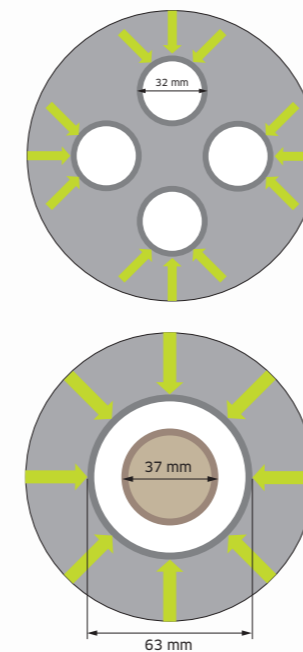
3 Connection
Secure connection with commercially available PE fittings (e.g. electrofusion sockets).

4 Coaxial probe head
The patented coaxial probe head ensures the optimal hydraulic guidance of the heat transfer fluid. Thanks to three versions, the design with the smallest space requirement can be tailored to suit the installation method.



Ideal in the event that drilling depth is restricted

Due to the relatively shallow probe depth, the thermal regeneration behavior of the substrate is ideal. In addition, the energy can flow around the absorber tube in a 360 degree radius.



Maximum power

As TRT evaluations* show, the performance levels achieved by the JANSEN powerwave coax are in the top segment.

Probe type	Flow	Borehole resistance ¹	Extraction capacity ²
JANSEN powerwave coax	turbulent	0.040 (m²K)/W	45 W/m
Double U-probe 32 mm	laminar	0.135 (m ² K)/W	33 W/m

*TRT = Thermal Response Test, evaluation of thermal performance
¹ Measured values, test facility in England; GRD drilling method; Source: Tracto Technik
² Calculated extraction capacity at 10°C ground temperature; 2.5 WmK thermal conductivity; Source: GLD

Safety guaranteed.

The interlocking of the corrugated structure with the backfill ensures the best possible sealing of the drill hole. The probe is factory-welded and tested. Installation can be realized with an ordinary probe reel.



Our quality. Your safety.

Technical data

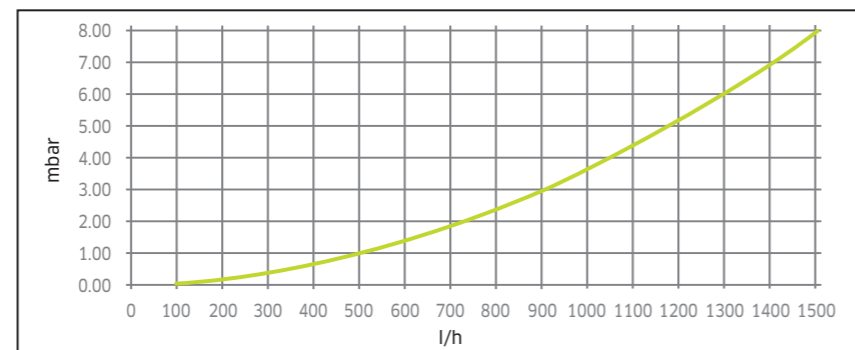
JANSEN powerwave coax geothermal probes are made from the latest generation of notch-resistant, high-quality PE 100RC material. Thanks to state-of-the-art production technologies and highly qualified employees, Jansen – a Swiss manufacturer – guarantees a first-class, durable product that is certified to the latest standards and meets the requirements of SIA 384/6, ÖWAV regulation sheet 207, and VDI 4640. The factory-welded probe base is supplied with an individual factory certificate in accordance with EN 10204.

With additional components such as fittings, injection pipes, smooth geothermal tubes, tools, and pressing suspensions, the Jansen system offers practical expansion options and combination variants.

Information on available lengths and accessories can be found in our current price list. If you have any questions regarding possible applications, please contact our technical advisors.

Raw material	PE 100 RC (polyethylene, resistant to crack) in accordance with PAS 1075
Continuous operating temperature	-20°C to +40°C
Certification	SKZ A591
Outer tube	63 × 2.9 mm corrugated tube with smooth tube segment every 100 cm
Inner tube	37 × 3.5 mm smooth tube
Pressure rating	PN 7.4
Probe head	32 mm smooth tube connections, available in straight, 90°, or 45° versions
Probe base	External diameter 67 mm, factory-welded and tested
Filling capacity	1.9 l per meter of probe

JANSEN powerwave coax; pressure loss per 1 meter of probe
(measured values with water at 15°C)



Slim design enabling efficient installation solutions

The JANSEN powerwave coax geothermal probe can be installed in the conventional manner, using a traditional drilling rig. In addition, the slim design also enables the use of space-saving and cost-effective solutions.

Small devices

The small drilling diameter saves costs when installing the system and enables alternative installation methods using smaller devices. For example, installation in driven steel pipes or foundation piles represents a quick and intelligent option. Small drilling rigs enable geothermal installation, even in very confined spaces or locations that are difficult to access.

Ideally suited for renovations

The JANSEN powerwave coax can be conveniently used with angled drilling methods (e.g. GRD) or horizontal drilling. This means that barely any excavation work is required and ground disturbance is relatively low.

Simple connection

JANSEN powerwave coax geothermal probes can be connected in series, which reduces the size of the distribution system or may even render them unnecessary, while also reducing installation costs.

This means that the JANSEN powerwave coax can be used to tap into geothermal energy on almost any type of ground, guaranteeing long-term security of supply for heating, cooling, and hot water preparation. Clean, odorless and without any noise emissions or visual restrictions, the use of geothermal energy sustainably protects the environment.



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