Geothermal Loop

MGS geothermal probes offer the ultimate in quality and performance for geothermal heating and cooling sources. They are available in diameters of 25mm, 32mm and 40mm, in PEIO0 RC SDRII PN16 according to DIN 8074 and PAS 1075, as single or double probes in any meter length depending on project requirements. They are also available with an integrated Tremie sacrificial tube for ease of installation and the potting process. They are made of PEI00-RC (polyethylene resistant to cracks) and are designed for up to 16 bar.

The MGS geothermal probe base is designed according to VDI 4060 to ensure a maximum hydraulic loss of 10 mbar at I m3/h flow and is manufactured in accordance with the requirements of SKZ HR3.26. Each probe has a unique serial number and is pressure tested at the factory.

Applications

- Vertical ground source heat exchangers

Features

- Available as single or double loops
- 25, 32 & 40mm diametres (DIN 8074)
- Range of lengths as shown, right
- Metre markings
- Made from PE100-RC
- Meets VDI 4060 standards
- SKZ certified
- Each individual loop is pressure tested

Lengths	
Loops	**Lengths**
25mm double	20, 25, 30, 35, 40, 50, 60 70, 80, 90, 100mm
32mm single & double	30, 40, 50, 60 70, 80, 90, 100, 110, 120, 130, 140, 150mm
40mm single & double	20, 30, 40, 50, 60 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 270, 180, 190, 200mm

Material Specifications			
Property	**Unit**	**Value**	**Standard**
Density	g/cm³	0.960	DIN EN ISO 1183
Tensile modulus of elasticity	MPa	1100	DIN EN ISO 527
Yield stress	MPa	23	DIN EN ISO 527
Elongation at yield	%	9	DIN EN ISO 527
Impact strength	kJ/m²	Without Break	DIN EN ISO 179
Notched impact strength Charpy	kJ/m²	30	DIN EN ISO 179
Shore hardness	Shore D (15 s)	63	DIN EN ISO 868
Thermal expansion	K^{-1}	1.8×10^{-4}	ISO 11359-2
Thermal conductivity	W/m*K	0.38	DIN EN 12667
Temperature range	°C	-50 to +80	9 Volt

MGS Europe GmbH
www.mgs-europe.de **e** info@mgs-europe.de
t +49(0)2431 945762

01/2022 V1.0