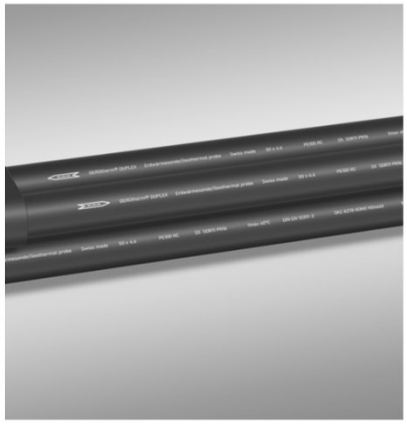
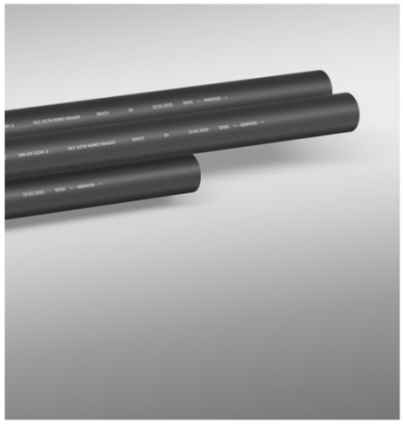
HakaGerodur





Technical data sheet

GEROtherm® DUPLEX

Geothermal probe

PN16

dn 50 × 4.6

GEROtherm® DUPLEX geothermal probe PN16

Material	Polyethylene PE100-RC (RC=resistance to cracking)
Geothermal probe design	▪ **Two geothermal probe feet PN25**, U-shaped with dirt trap and a minimal pressure drop and a fixture for securing weights as an aid to installation. ▪ **Four pipes for double-U probes from pipe series SDR11/S5/PN16** made of the material PE100-RC in the pipe outside diameter 50 × 4.6 mm with double metering and flow direction indication (forward/return flow)
Installation and operation	The part of the geothermal system down in the soil must withstand the pressures and temperatures that occur. The applicable standards must be observed.
Delivery form	Rolls on a pallet covered with protective film or on a rental reel
Regulations	SIA 384/6; SKZ HR3.26 A278; VDI 4640; KOMO® (K84660/02)
Geothermal probe signing	{Direction of flow} {GEROtherm DUPLEX} {Erdwärmesonde/Geothermal probe} {Swiss made} {50 × 4.6} {PE100 RC} {S5} {SDR11} {PN16} {Tmax 40°C} {DIN EN 12201-2} {SKZ A278}/{KOMO K84660} {Part No.} {Machine No.} {Date} {Production No.} {Double metering}
Certified and monitored by	South German Plastics Center; Süddeutsches Kunststoffzentrum (SKZ), Würzburg/Germany Kiwa Nederland B.V. (KOMO®)
Physical properties	
Density	0.95–0.97 g/cm³
Pipe roughness	0.03 mm
Minimum bending radius at 0°C	50 × dn
Minimum bending radius at 10°C	35 × dn
Minimum bending radius at 20°C	20 × dn
Mechanical properties	
Tensile modulus of elasticity (23°C, v = 1 mm/min, secant)	900 MPa
Yield stress (23°C, v = 50 mm/min)	23 MPa
Tensile deformation (23°C, v = 50 mm/min)	9%
FNCT (4.0 MPa, 2% Arkopal N100, 80°C)	>/= 8760 h
Failure strain	>/= 350%
Mean thermal coefficient of linear thermal expansion	0.18 mm/m K
Hardness	
Shore hardness (Shore D (3 sec))	63
Thermal properties	
Maximum temperature	+40°C
Minimum temperature	-20°C
Thermal conductivity	~0.4 W/mK
Specific thermal capacity	1.9 J/g K
Chemical properties	
The HakaGerodur GEROtherm® geothermal systems are resistant to the common heat transfer media. Refer to the Technical Manual for the suitable heat transfer media.	