BiSolar Evertec

Technical information

Steel pipes	Symbol	DN 12		DN 16		DN 20		DN 25		DN 32	DN 40
Insulation thickness [mm]	g_a	5	10	5	10	5	10	5	10	10	10
Inner diameter of pipe [mm]	d1	11.8		16.6		20.9		25.1		32.8	40.8
Outer diameter of pipe [mm]	d2	15.8		21.4		26.4		31.8		39.6	49.8
Tolerance [mm]	w	0.2		0.2		0.2		0.3		0.3	0.3
Min. bending radius [mm]	R_g	20		25		30		35		40	60
Nominal pressure according to DIN EN ISO 10380/SF4	p_{max}	16		10		10		6		4	2.5
Unit mass of pipe [kg/m]*	m_{jr}	0.53	0.73	0.673	0.906	0.787	1.115	0.908	1.262	2.133	2.604
Thermal resistance [mK/W]*	R_i	5.31	8.61	4.20	7.03	3.54	6.06	3.03	5.29	4.47	3.66
Axial spacing of pipes [mm]*	L2	51.8	61.8	57.4	67.4	62.4	72.4	67.8	77.8	85.6	96.7
Outer diameter of pipe [mm]*	d4	26.8	36.8	32.4	42.4	37.4	47.4	42.8	52.8	60.6	71.7

*the values relate to the whole finished product: double pipe with insulation, cable and PVC

Aerogel mat

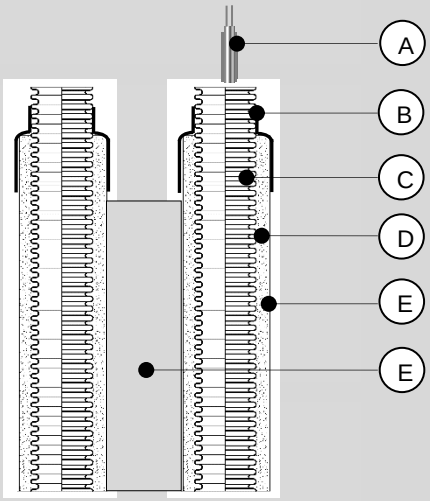
thermal conductivity coefficient (TCC) (according to EN 12667, t_{av} = 10˚C)	0.018 W/mK
maximum application temperature	675˚C
permissible stagnation temperature of the collector according to EN 12975-2	675°C
fire classification according to EN 13501	A2-s1, d0
water and moisture resistance	hydrophobic material

PVC

thickness	0.5 mm
tensile strength	1800 N/5 cm
weight	650 g/m^2
fire classification according to EN 13501	B1-s2, d0
UV resistance	very high

Electrical cable

type	SiHF 2x0.75
maximum application temperature	180°C
extra casing	silicone insulation



A Electrical cable to temperature sensor

B Heat shrink wrap

C INOX pipe

D Aerogel mat

E PCV protective coating