

**DESIGN STANDARDS**

EN 50525-3-41

APPLICATION

Solen H07Z-K is a flexible cable for fixed installation to usage as earthing wire and for wiring of lamps, appliances, switchgear cabinets, panels and distribution boxes, especially when a low fume and corrosive gas emission (such as hotels, public and government buildings) is required.

CONSTRUCTION

Conductor	Tinned annealed flexible copper-Class 5 according to EN 60228
Insulation	Halogen free Cross-linked compound, "Type EI 5" according to EN 50363-5
Colour	Green/Yellow, Black and all other colors are available upon request

KEY FEATURES

- REACH and RoHS Complaint
- CE conformity
- UV & Ozone Resistant
- General requirements acc. to EN 50525-1
- Guide to use acc. to EN 50565-1

TECHNICAL CHARACTERISTICS

Rated Voltage (U0/U)	AC 450 / 750 V
Test Voltage	AC 2,5 kV
Operating Temperature	-40°C / +90°C
Insulation Temperature	-5°C / +60°C
Short Circuit Temperature	+250°C (Max. 5 sec.)
Min. Bending Radius	4 x D for cable D ≤ 8 mm
(As per EN50525-1 Table.3)	5 x D for cable 8 mm < D ≤ 12 mm
	6 x D for cable D > 12 MM
Electrical Test	EN 50395
Non-electrical Tests	EN 50396
Insulation Resistance	EN 50525-3-41 Table B.2
Ozone Resistance	IEC 60811-403, EN 50396 Clause 8.1.2
UV Resistance	IEC 62930:2017 (Annex E), EN 50618 (Annex E)
Halogen Free Properties	EN 50525-1 (Annex B), IEC 60764-1, EN 50363-5
Low Smoke Emission	EN 61034-1 / 2 (Light transmittance > 80%)
Flame Retardancy	EN 60332-1-2



Customer:

Date:

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**DIMENSIONAL PARAMETERS**

Number Of Cores	Cross Sections mm ²	Conductor Diameter mm	Overall Diameter mm	Bending Radius (min.) mm	Weight kg/km
1	1,5	1,6	3,10 -0,2 /+0,3	12,4	20
1	2,5	2,0	3,70 -0,2 /+0,3	14,8	31
1	4	2,5	4,20 -0,2 /+0,3	16,8	45
1	6	3,0	4,50 -0,2 /+0,3	18,0	61
1	10	4,0	5,90 -0,2 /+0,3	23,6	103
1	16	5,0	6,90 -0,2 /+0,3	27,6	155
1	25	6,1	8,50 -0,3 /+0,5	42,5	238
1	35	7,4	10,00 -0,3 /+0,5	37,0	335
1	50	8,8	11,90 -0,3 /+0,5	59,5	480
1	70	10,5	13,70 -0,3 /+0,5	82,2	674
1	95	11,9	15,40 -0,3 /+0,5	92,4	871

ELECTRICAL PARAMETERS

Number Of Cores	Cross Sections mm ²	Conductor Resistance 20 Oc Ohm/Km	Current Carrying Capacity (*)	Short Circuit Current
			Free In Air	(5s. From 90 Oc To 2500c) Ka
1	1,5	13,7	24	0,09
1	2,5	8,21	32	0,15
1	4	5,09	42	0,25
1	6	3,39	54	0,37
1	10	1,95	73	0,63
1	16	1,24	98	1,00
1	25	0,795	129	1,60
1	35	0,565	158	2,20
1	50	0,393	198	3,20
1	70	0,277	245	4,40
1	95	0,21	292	6,00

(*) Conductor temperature: 90°C and ambient temperature: 30°C

Installation fixed in Free Air

Based on VDE 0298-4 Table.11

CURRENT RATING CONVERSION FACTORS FOR DIFFERENT AMBIENT TEMPERATURES

Ambient temperature	25	30	35	40	45	50	55	60	65
Conversion factor	1,04	1,00	0,96	0,91	0,84	0,82	0,76	0,71	0,65

CABLE MARKING**SOLEN CABLE EN 50525-3-41 H07Z-K 1xN mm² 450/750V SCXXXX (yyyy) XX MT**

*N: Cross Section *SCXXXX: Traceability Code *(yyyy): Year marking *XX MT: Meter Marking



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