

NPE SUN H1Z2Z2-K

cable for photovoltaic systems

Structure and electrical, physical, EN 50618
mechanical requirements:

Flame propagation:	EN 60332-1-2
Corrosive gases or halogens:	EN 50525-1
Smoke density:	EN 61034-2
UV resistance:	EN 50289-4-17 (A)
Ozone resistance:	EN 50396
Resistance to heat stress:	EN 60216-1 EN 60216-2
Low Voltage Directive:	2014/35/EU
RoHS Directive:	2011/65/EU

REACTION TO FIRE



CPR COMPLIANT
REGULATION 305/2011/EU

Standard:	EN 50575:2014+A1:2016
Class:	E _{ca}
Classification:	EN 13501-6
Flame propagation:	EN 60332-1-2
Notified Body:	0051 - IMQ
CE	2020



Description

- Conductor: class 5, flexible, tinned copper
- Insulation: compound cross-linked (LSOH)
- Sheath: compound cross-linked (LSOH)
- Colour: black, red

LSOH = Low Smoke Zero Halogen

Functional characteristics

- Rated voltage U_0/U : 1000/1000 V a.c.
1500/1500 V d.c.
- Max. voltage U_m (also to ground): 1800 V d.c.
- Max. conductor operating temperature: 90°C
- Max. conductor temperature at a max. ambient temperature of 90°C: 120°C (max. 20,000 hours)
- Min. operating temperature: -40°C (without mechanical shocks)
- Max. short circuit temperature: 250°C referring to a period of 5 sec.

Marking

[company] NPE SUN H1Z2Z2-K [form.] mm² IEMMEQU ◀HAR▶ [year] (CE logo) [traceability] [metric]
[company] NPE SUN H1Z2Z2-K [form.] mm² [year] (CE logo) [traceability] [metric]

Special features

The cable is tested to work for at least 25 years.
Thermal endurance properties (temperature index TI): 120°C referring to 20.000 h (EN 60216-1)

Installation conditions

- Minimum installation temperature: -25°C
- Recommended minimum bending radius: 4 times the cable diameter
- Recommended maximum tensile stress: 50 N/mm² of the cross-section of the copper

Use and installation method

Intended for use in photovoltaic installations acc. to HD 60364-7-712.

They are intended for permanent use outdoor and indoor, for free movable, free hanging and fixed installation. Installation also in conduits and trunkings on, in or under plaster as well as in appliances. Suitable for the application in/at equipment with protective insulation (protection class II).

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Formation	Approx. conductor Ø	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Current rating at ambient temperature of 60°C and conductor temperature of 120°C		
					1 cable in free air	1 cable on surface	2 cables in contact on surface
n° x mm²	mm	mm	Ω/km	kg/km	A	A	A
1 x 1,5	1,5	5,4	13,7	32	30	29	24
1 x 2,5	1,9	5,9	8,21	43	41	39	33
1 x 4	2,4	6,6	5,09	60	55	52	44
1 x 6	3,0	7,4	3,39	82	70	67	57
1 x 10	3,9	8,8	1,95	125	98	93	79
1 x 16	5,0	10,1	1,24	185	132	125	107
1 x 25	6,1	12,5	0,795	280	176	167	142
1 x 35	7,3	14,0	0,565	370	218	207	176
1 x 50	8,7	16,3	0,393	520	276	262	221
1 x 70	10,5	18,7	0,277	715	347	330	278
1 x 95	11,9	20,8	0,210	925	416	395	333
1 x 120	13,8	22,8	0,164	1165	488	464	390
1 x 150	15,3	25,5	0,132	1480	566	538	453
1 x 185	16,9	28,5	0,108	1825	644	612	515
1 x 240	19,4	32,1	0,0817	2345	775	736	620

Correction coefficients for ambient temperature other than 60°C	
Ambient temperature (°C)	Correction factor
Up to 60	1,0
70	0,92
80	0,84
90	0,75

As for group installations, the correction coefficients of carrying capacity are included in document HD 60364-5-52:2011, table B.52.17.