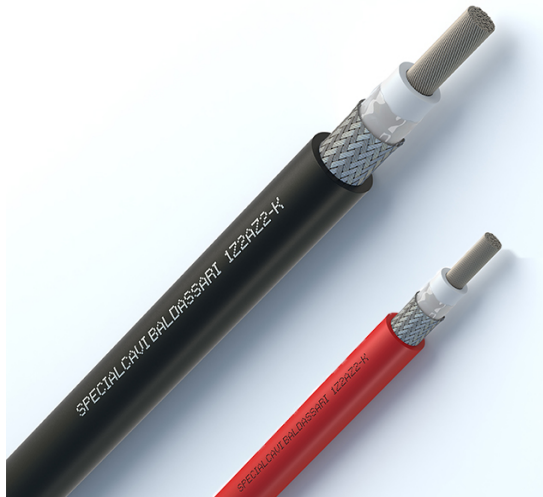


# 1Z2AZ2-K



Marking: CE 0987 SPECIALCAVI BALDASSARI 1Z2AZ2-K &lt;formation&gt; &lt;lot&gt; &lt;year&gt; ECA



## MANUFACTURING CHARACTERISTICS

**Conductor:**

Flexible bare copper, class 5

**Insulation:**

Special LSZH cross-linked elastometric compound

**Wrapping and protection:**

Polyester tape

**Armour:**

Galvanized steel braid

**Outer sheath:**

Special LSZH cross-linked elastometric compound, UV resistant

**Colours:**
*Cores identification:*

White

*Outer sheath colour:*

Black or Red (based on RAL 9005 or 3000)

## ELECTRICAL CHARACTERISTICS

**Operating voltage:**

- *Nominal operating voltage:* 1.5kV DC (also to earth)
- *Maximum operating voltage:* 1.8kV DC (also to earth)

**Outer sheath operating voltage:**

- *Nominal operating voltage:* 1.5kV DC (also to earth)
- *Maximum operating voltage:* 1.8kV DC (also to earth)

**Testing voltage:** 15 kV DC

## ON REQUEST

- Galvanized steel wires armour
- Aluminium conductor

## APPLICATIONS

Cable for fixed laying conforms to the requirements in the Construction Products Regulations (CPR EU 305/11), aimed at limiting the production and diffusion of fire and smoke.

Single-core, halogen free and armoured cable suitable for interconnecting various components in solar and photovoltaic systems, only to be used in DC.

1Z2AZ2-K cable has an excellent resistance to UV rays and weather conditions; furthermore it's highly recommended for underground laying, also direct, because the armour offers excellent protection against rodents attack.

The cable is estimated to operate about 25 years (EN 50618). The period expected for its use at 120°C maximum core temperature and at 90°C maximum ambient temperature is limited to 20.000 hours.\*\*



## STANDARDS

EN 50618 as far as applied  
 EN 60228 EN 50395  
 EN 50618 a.f.a.a.  
 EN 50618 a.f.a.a. EN 50395 EN 62230  
 EN 50618 a.f.a.a. EN 50396 EN 60228  
 EN 60811-401 EN 50618 a.f.a.a.  
 EN 60811-504 EN 60811-505 EN 60811-506 EN 50618 a.f.a.a.  
 EN 60811-403 EN 50396 EN 50618 a.f.a.a.  
 EN 50618 a.f.a.a. EN 50289-4-17 type A  
 EN 50618 a.f.a.a.  
 EN 60068-2-78  
 EN 60811-503  
 EN 60332-1-2  
 EN 61034-2 (LT≥60%)  
 EN 50525-1  
 EN 50618 a.f.a.a. EN 60216-1 EN 60216-2

## REACTION TO FIRE CLASS

**EN 50575:2016 E<sub>ca</sub>**

## TEMPERATURES

**Minimum working temperature:** -40°C  
**Maximum working temperature:** +90°C  
**Maximum short circuit temperature:** +250°C

## LAYING CONDITIONS



Minimum installation temperature: -25°C



Min. bending radius d14


 Max tensile stress: 15 N/mm<sup>2</sup> of the copper cross-section fixed laying; installation 50N/mm<sup>2</sup>


Fixed laying



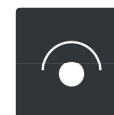
In open air



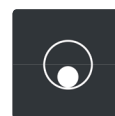
In duct or cable tray



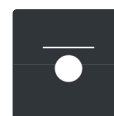
In buried trough



Buried with protection



In buried duct



Directly buried



# 1Z2AZ2-K

## \*\*APPLICATIONS

Suitable for fixed laying outdoors and inside buildings, without protection or inside visible or embedded pipes. Suitable for applications not covered by CPR Regulations and for installations in a closed environment, excluding cases with specific initiation/propagation fire hazards where is recommended the use of cables with higher fire response performance (at least Cca-s3,d1,a3).

**Direct or indirect underground and outside laying is permitted. Presence of water: condition AD8 (adapted to EN 50525-2-21).**

PART NUMBER [n°]	FORMATION [n° x mm <sup>2</sup> ]	OUTER DIAMETER <sup>1</sup> [mm]	WEIGHT <sup>1</sup> [kg/km]	MAX. ELECTRICAL RESISTANCE AT 20°C [Ohm/km]
*SO25001NEAR	1 X 2.50	6.7	75	8.21
*SO25001ROAR	1 X 2.50	6.7	75	8.21
SO40001NEAR	1 X 4.00	7.3	100	5.09
SO40001ROAR	1 X 4.00	7.3	100	5.09
SO60001NEAR	1 X 6.00	8.0	125	3.39
SO60001ROAR	1 X 6.00	8.0	125	3.39
SO100001NEAR	1 X 10.00	9.4	180	1.95
SO100001ROAR	1 X 10.00	9.4	180	1.95
SO160001NEAR	1 X 16.00	10.6	245	1.24
*SO160001ROAR	1 X 16.00	10.6	245	1.24
*SO250001NEAR	1 X 25.00	12.1	345	0.795
*SO250001ROAR	1 X 25.00	12.1	345	0.795
*SO350001NEAR	1 X 35.00	13.4	445	0.565
*SO350001ROAR	1 X 35.00	13.4	445	0.565
*SO500001NEAR	1 X 50.00	16.4	640	0.393
*SO500001ROAR	1 X 50.00	16.4	640	0.393
*SO700001NEAR	1 X 70.00	18.4	850	0.277
*SO700001ROAR	1 X 70.00	18.4	850	0.277
*SO950001NEAR	1 X 95.00	20.1	1100	0.210
*SO950001ROAR	1 X 95.00	20.1	1100	0.210
*SO1200001NEAR	1 X 120.00	22.2	1360	0.164
*SO1200001ROAR	1 X 120.00	22.2	1360	0.164

<sup>1</sup> According to in-stock availability, cable which must be produced on request and minimum quantity

<sup>1</sup> Unless otherwise specified, the values for weight and diameter are indicative.

Note: other values, if available and released for publication, are available on request.