



DESCRIPTION

- Technical designation RZ1F3Z1-K(AS) for multipolar cables and RZ1FA3Z1-K(AS) for unipolar cables.
- Construction Standard: IEC 60502-1, UNE 21123-4, ET 03.354.019.6.
- Low Voltage Directive (LVD) compliant: 2014/35/UE
- Construction Products Regulation (CPR) - (EU) N° 305/2011:
 - ✓ **Reaction to fire Cca-s1b-d1-a1** brown jacket with two purple longitudinal stripes.
- DoP Number: **C017-ENG-RZ1F3Z1K**
- DoP Number: **C030-ENG-RZ1FA3Z1K**
- RoHS compliant.
- **Power railway indoor infrastructures.**

Low voltage power cables specially designed for outdoors railway infrastructure. These cables are armoured with special corrugated steel armour (F3) which provides the cable mechanical safety water-tightness and rodent-proofness, and better handleability.

Cca-s1b-d1-a1 CPR class used for the supply of energy in covered areas susceptible to accumulation of smoke and toxic products such as stations, underground areas and tunnels with a length not exceeding 1Km.

TECHNICAL CHARACTERISTICS

Conductor	Flexible copper conductor (Class V) according to UNE-EN 60288 and IEC 60228 Circular sections $\leq 35\text{mm}^2$ and sectorial for upper sections (except unipolar cables).
Insulation	Cross-linked Polyethylene (XLPE), type DIX 3 according to UNE 21123, UNE HD 603 and XLPE according to IEC 60502.
Inner sheath	Thermoplastic polyolefin sheath DMZ-E type according to UNE 21123 and ST8 according to IEC 60502-1
Armour	Corrugated tinned steel tape (F3 - multipolar) or aluminum (FA3 – unipolar).
Outer sheath	Thermoplastic polyolefin sheath DMZ-E type according to UNE 21123 and ST8 according to IEC 60502-1
Nominal Voltage	0,6/1 kV C.A
Voltage Test	3.500 V C.A.
Maximum conductor temperatures	Normal operation 90°C Short circuit (5sec) 250°C

OTHER CHARACTERISTICS

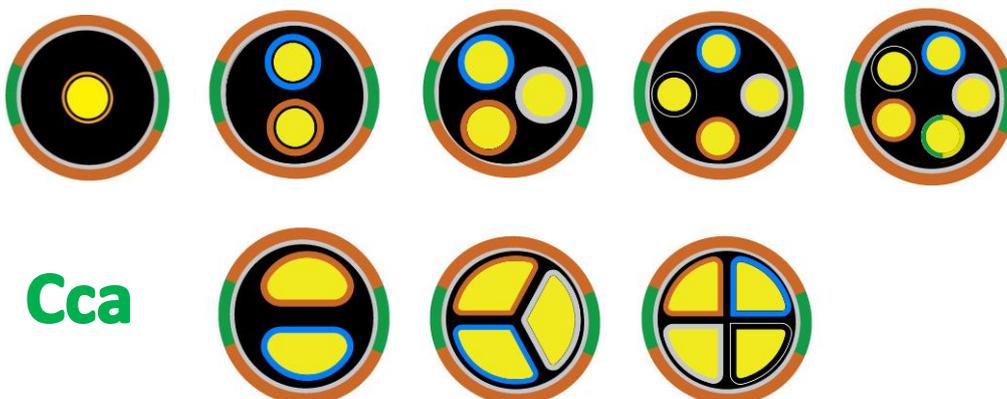
- Non-flame propagation according to EN 60332-1-2, IEC 60332-1-2.
- Non-fire propagation according to EN 60332-3-24, IEC 60332-3-24.
- Low halogen content according to EN 60754-2, EN 60754-1, IEC 60754-2, IEC 60754-1.
- Low corrosive gas emission according to EN 60754-2, IEC 60754-2.
- Low smoke emission according to EN 61034-2, IEC 61034-2.
- **Fire reaction (CPR) Cca-s1b, d1, a1.**
- UV resistance (1 cycle) according to UNE 211605.
- Water absorption resistance.
- High cold resistance.
- Impact and rodent resistance.
- **Flexible cable (F3).**



AVAILABLE ON REQUEST

- Hydrocarbons and oil resistance according to UIC-895 OR.

INSULATION COLORS					
Conductors	Black	Brown	Grey	Blue	G/Y
1		●			
2		●		●	
3	●	●	●		
3G		●		●	●
4	●	●	●	●	
4G	●	●	●		●
5G	●	●	●	●	●



SECTIONS

Section (mm ²)	Resistance at 20 °C (Ohm/km)	Nominal outer diameter (mm)	Weight (kg/m)	CPR
1x16	1,21	15	0,328	B2ca-s1a-d1-a1
1x25	0,78	16,8	0,436	B2ca-s1a-d1-a1
1x35	0,554	17,9	0,537	B2ca-s1a-d1-a1
1x50	0,386	19,5	0,698	B2ca-s1a-d1-a1
1x70	0,272	21,4	0,917	B2ca-s1a-d1-a1
1x95	0,206	22,8	1,129	B2ca-s1a-d1-a1
1x120	0,161	25,1	1,384	B2ca-s1a-d1-a1
1x150	0,129	27,7	1,694	B2ca-s1a-d1-a1
1x185	0,106	30,3	2,048	B2ca-s1a-d1-a1
1x240	0,0801	32,8	2,605	B2ca-s1a-d1-a1
1x300	0,0641	35,7	3,211	B2ca-s1a-d1-a1
2x1,5	13,3	14,4	0,266	B2ca-s1a-d1-a1
2x2,5	7,98	15,4	0,315	B2ca-s1a-d1-a1
2x4	4,95	16,4	0,372	B2ca-s1a-d1-a1
2x6	3,3	17,6	0,439	B2ca-s1a-d1-a1
2x10	1,91	19,4	0,569	B2ca-s1a-d1-a1
2x16	1,21	21,6	0,748	B2ca-s1a-d1-a1
2x25	0,78	25,2	1,041	B2ca-s1a-d1-a1
2x35	0,554	27,4	1,300	B2ca-s1a-d1-a1
2x50	0,386	27	1,360	B2ca-s1a-d1-a1
2x70	0,272	30,4	1,924	B2ca-s1a-d1-a1
2x95	0,206	32,8	2,271	B2ca-s1a-d1-a1
2x120	0,161	36,8	2,870	B2ca-s1a-d1-a1
2x150	0,129	41,8	3,556	B2ca-s1a-d1-a1
2x185	0,106	46,2	4,290	B2ca-s1a-d1-a1
2x240	0,0801	50,3	5,442	B2ca-s1a-d1-a1
2x300	0,0641	55,2	6,717	B2ca-s1a-d1-a1
3x1,5	13,3	14,9	0,292	B2ca-s1a-d1-a1
3x2,5	7,98	15,9	0,344	B2ca-s1a-d1-a1
3x4	4,95	17	0,413	B2ca-s1a-d1-a1
3x6	3,3	18,3	0,503	B2ca-s1a-d1-a1
3x10	1,91	20,2	0,668	B2ca-s1a-d1-a1
3x16	1,21	22,6	0,893	B2ca-s1a-d1-a1
3x25	0,78	26,5	1,256	B2ca-s1a-d1-a1
3x35	0,554	29	1,609	B2ca-s1a-d1-a1
3x50	0,386	30,7	1,877	B2ca-s1a-d1-a1
3x70	0,272	34,9	2,589	B2ca-s1a-d1-a1
3x95	0,206	37,9	3,229	B2ca-s1a-d1-a1
3x120	0,161	43,1	4,145	B2ca-s1a-d1-a1
3x150	0,129	48,7	5,102	B2ca-s1a-d1-a1
3x185	0,106	54,1	6,192	B2ca-s1a-d1-a1
3x240	0,0801	59,3	7,543	B2ca-s1a-d1-a1

Section (mm ²)	Resistance at 20 °C (Ohm/km)	Nominal outer diameter (mm)	Weight (kg/m)	CPR
4x1,5	13,3	15,6	0,320	B2ca-s1a-d1-a1
4x2,5	7,98	16,8	0,390	B2ca-s1a-d1-a1
4x4	4,95	18	0,473	B2ca-s1a-d1-a1
4x6	3,3	19,5	0,583	B2ca-s1a-d1-a1
4x10	1,91	21,6	0,789	B2ca-s1a-d1-a1
4x16	1,21	24,3	1,066	B2ca-s1a-d1-a1
4x25	0,78	28,8	1,529	B2ca-s1a-d1-a1
4x35	0,554	31,7	1,980	B2ca-s1a-d1-a1
4x50	0,386	30,7	2,330	B2ca-s1a-d1-a1
4x70	0,272	34,9	3,218	B2ca-s1a-d1-a1
4x95	0,206	43,4	4,232	B2ca-s1a-d1-a1
4x120	0,161	49	5,383	B2ca-s1a-d1-a1
4x150	0,129	55,8	6,686	B2ca-s1a-d1-a1
5x1,5	13,3	16,5	0,365	B2ca-s1a-d1-a1
5x2,5	7,98	17,8	0,451	B2ca-s1a-d1-a1
5x4	4,95	19,2	0,547	B2ca-s1a-d1-a1
5x6	3,3	20,8	0,622	B2ca-s1a-d1-a1
5x10	1,91	23,2	0,946	B2ca-s1a-d1-a1
5x16	1,21	26,2	1,292	B2ca-s1a-d1-a1
5x25	0,78	31,4	1,895	B2ca-s1a-d1-a1
5x35	0,554	34,6	2,462	B2ca-s1a-d1-a1
5x50	0,386	39,1	3,334	B2ca-s1a-d1-a1
5x70	0,272	45,1	4,622	B2ca-s1a-d1-a1
5x95	0,206	49	5,805	B2ca-s1a-d1-a1
5x120	0,161	56,1	7,381	B2ca-s1a-d1-a1

**The values of the outer diameters are approximate, always within production tolerance. For more information, please contact us.*

HEADQUARTER AGONCILLO (LA RIOJA)
 Tel: +34 941 486 125

DELEGATION MADRID
 Tel: +34 629 673 359