



DESCRIPTION

- Technical designation RZ1F3Z1-K(AS)-AL for multipolar cables and RZ1FA3Z1-K(AS)-AL 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: **C018-ENG-RZ1F3Z1KALUMINUM**
- DoP Number: **C029-ENG-RZ1FA3Z1KALUMINUM**
- 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 aluminium 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

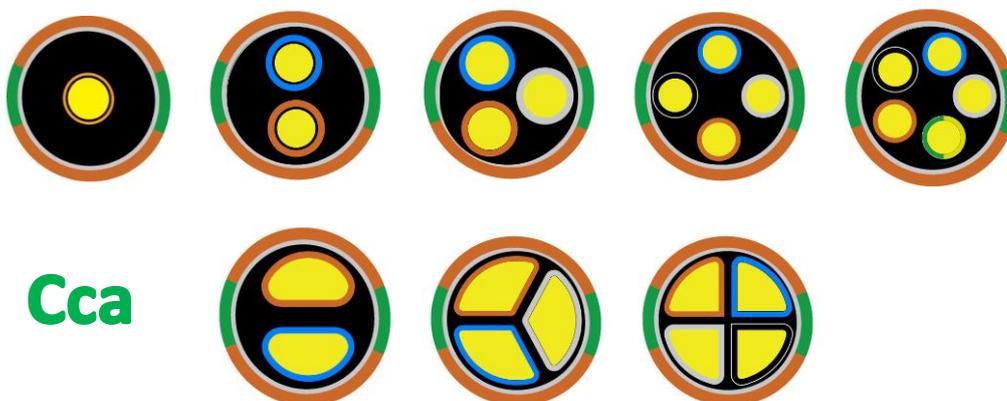
- Non-flame propagation according to EN 60332-1-2, IEC 60332-1-2.
- Non-fire propagation according to EN 60332-3-24, IEC 60332-3-24.
- Low halogen content according to EN 60754-2, EN 60754-1, IEC 60754-2, IEC 60754-1.
- Low corrosive gas emission according to EN 60754-2, IEC 60754-2.
- Low smoke emission according to EN 61034-2, IEC 61034-2.
- **Fire reaction (CPR) B2ca-s1a. 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	1,91	15,4	0,246	B2ca-s1a-d1-a1
1x25	1,2	17,2	0,307	B2ca-s1a-d1-a1
1x35	0,868	18,3	0,355	B2ca-s1a-d1-a1
1x50	0,641	20,2	0,434	B2ca-s1a-d1-a1
1x70	0,443	22,2	0,529	B2ca-s1a-d1-a1
1x95	0,320	24,7	0,651	B2ca-s1a-d1-a1
1x120	0,253	25,9	0,752	B2ca-s1a-d1-a1
1x150	0,206	28,5	0,938	B2ca-s1a-d1-a1
1x185	0,164	30,9	1,044	B2ca-s1a-d1-a1
1x240	0,125	33,8	1,296	B2ca-s1a-d1-a1
1x300	0,100	36,7	1,545	B2ca-s1a-d1-a1
2x16	1,91	22,4	0,600	B2ca-s1a-d1-a1
2x25	1,2	26	0,809	B2ca-s1a-d1-a1
2x35	0,868	28,4	0,972	B2ca-s1a-d1-a1
2x50	0,641	27,8	0,889	B2ca-s1a-d1-a1
2x70	0,443	31,8	1,165	B2ca-s1a-d1-a1
2x95	0,320	36,1	1,326	B2ca-s1a-d1-a1
2x120	0,253	38,3	1,560	B2ca-s1a-d1-a1
2x150	0,206	42,9	1,925	B2ca-s1a-d1-a1
2x185	0,164	47,3	2,323	B2ca-s1a-d1-a1
2x240	0,125	52	2,805	B2ca-s1a-d1-a1
2x300	0,100	57	3,390	B2ca-s1a-d1-a1
3x16	1,91	23,5	0,657	B2ca-s1a-d1-a1
3x25	1,2	27,3	0,889	B2ca-s1a-d1-a1
3x35	0,868	29,9	1,160	B2ca-s1a-d1-a1
3x50	0,641	31,9	1,090	B2ca-s1a-d1-a1
3x70	0,443	36,5	1,405	B2ca-s1a-d1-a1
3x95	0,320	42,3	1,836	B2ca-s1a-d1-a1
3x120	0,253	44,9	2,166	B2ca-s1a-d1-a1
3x150	0,206	50,1	2,646	B2ca-s1a-d1-a1
3x185	0,164	55,3	3,206	B2ca-s1a-d1-a1
4x16	1,91	25,3	0,745	B2ca-s1a-d1-a1
4x25	1,2	29,8	1,030	B2ca-s1a-d1-a1
4x35	0,868	32,6	1,257	B2ca-s1a-d1-a1
4x50	0,641	35,9	1,345	B2ca-s1a-d1-a1
4x70	0,443	41,6	1,789	B2ca-s1a-d1-a1
4x95	0,320	48	2,315	B2ca-s1a-d1-a1
4x120	0,253	51	2,739	B2ca-s1a-d1-a1
4x150	0,206	57,2	3,374	B2ca-s1a-d1-a1

Section (mm ²)	Resistance at 20 °C (Ohm/km)	Nominal outer diameter (mm)	Weight (kg/m)	CPR
5x16	1,91	27,3	0,892	B2ca-s1a-d1-a1
5x25	0,78	32,5	1,273	B2ca-s1a-d1-a1
5x35	0,554	35,7	1,553	B2ca-s1a-d1-a1
5x50	0,386	41,4	2,083	B2ca-s1a-d1-a1
5x70	0,272	47,4	2,749	B2ca-s1a-d1-a1
5x95	0,206	54,8	3,648	B2ca-s1a-d1-a1
5x120	0,161	58,2	4,260	B2ca-s1a-d1-a1

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

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