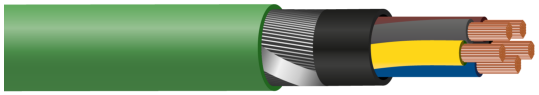
RZ1MZ1-K XLPE SWA LSZH Cable 1.5mm² to 240mm²



Description

RZ1MZ1-K is a power and general wiring cable with a voltage rating of 600/1000V, manufactured to Spanish standard UNE-21123-4. It is widely used within the Oil, Gas & Petrochemical, and Distribution and Power Network industries. RZ1MZ1 has a low smoke zero halogen thermoplastic polyolefin insulation and outer sheath. This makes the cable suitable for installations under CPR 2017 where protection of the general public and sensitive equipment is a priority in the event of fire.

It has a flattened galvanised steel wire armour for mechanical protection, making it suitable for both internal and external installations, including direct burial. The cable has class 5 stranded copper conductors making it considerably more flexible than other LSZH armoured mains cables.

Key Features

Voltage Rating
600/1000 Volts

Minimum Bending Radius
12 x Overall Diameter

Flame Retardancy
BS EN/IEC 60332-1
BS EN/IEC 60332-3

Temperature Limits
Temperature Range: -40°C to +90°C

Core Colours

2 core - Brown, Blue

3 core - Brown, Black, Grey

3 core with earth - Brown, Blue, Green Yellow

4 core - Brown, Black, Grey, Blue

4 core with earth - Brown, Black, Grey, Green Yellow

5 core with earth - Brown, Blue, Black, Grey, Green Yellow

Standards

- BS EN/IEC 60754-1/2
- BS EN/IEC 61034-1/2
- BS EN/IEC 60332-3
- BS EN/IEC 60332-1
- BS EN/IEC 60228
- HD 603
- UNE 21123-4

Construction

- **Conductor**: Class 5 flexible stranded copper conductor
- **Insulation**: Cross Linked polyethylene (XLPE)
- **Bedding**: LSZH (Low smoke Zero Halogen)
- **Bedding**: Low Smoke Zero Halogen (LSZH)
- **Armour**: Steel Wire Armour (SWA)
- **Outer Sheath**: Low Smoke Zero Halogen (LSZH)
- **Sheath Colour**: Green

QA Lab

Cleveland Cable Test & Training Lab
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.

CPR
Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.

Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.

ecovadis
Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

RZ1MZ1-K XLPE SWA LSZH Cable 1.5mm² to 240mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Minimum Bending Radius	Overall Diameter(mm)	Weight(Kg/Km)
RZ1MZ1K2X1/5	1.5	2	150	12.4	300
RZ1MZ1K3X1/5	1.5	3	156	13	140
RZ1MZ1K4X1/5	1.5	4	168	14	375
RZ1MZ1K5X1/5	1.5	5	180	15.0	160
RZ1MZ1K2X2/5	2.5	2	162	13.5	350
RZ1MZ1K3X2/5	2.5	3	168	14	150
RZ1MZ1K4X2/5	2.5	4	180	15	445
RZ1MZ1K5X2/5	2.5	5	204	17.0	180
RZ1MZ1K2X4	4	2	174	14.5	425
RZ1MZ1K3X4	4	3	180	15	160
RZ1MZ1K4X4	4	4	198	16.5	540
RZ1MZ1K5X4	4	5	222	18.5	195
RZ1MZ1K2X6	6	2	186	15.5	500
RZ1MZ1K3X6	6	3	198	16.5	175
RZ1MZ1K4X6	6	4	222	18.5	750
RZ1MZ1K5X6	6	5	240	20.0	210
RZ1MZ1K2X10	10	2	216	18.0	735
RZ1MZ1K3X10	10	3	228	19.0	200
RZ1MZ1K4X10	10	4	252	21.0	1005
RZ1MZ1K5X10	10	5	276	23.0	240
RZ1MZ1K2X16	16	2	240	20.0	940
RZ1MZ1K3X16	16	3	256	21.3	230
RZ1MZ1K4X16	16	4	288	24.0	1420
RZ1MZ1K5X16	16	5	312	26.0	275
RZ1MZ1K2X25	25	2	288	24.0	1390
RZ1MZ1K3X25	25	3	306	25.5	270
RZ1MZ1K4X25	25	4	336	28.0	1975
RZ1MZ1K5X25	25	5	372	31.0	325
RZ1MZ1K2X35	35	2	318	26.5	1700
RZ1MZ1K3X35	35	3	342	28.5	300
RZ1MZ1K4X35	35	4	372	31.0	2500
RZ1MZ1K5X35	35	5	408	34.0	355
RZ1MZ1K2X50	50	2	336	28.0	1850
RZ1MZ1K3X50	50	3	372	31.0	2600
RZ1MZ1K4X50	50	4	402	33.5	3795
RZ1MZ1K5X95	50	50	474	39.5	4200
RZ1MZ1K2X70	70	2	360	30.0	2450
RZ1MZ1K3X70	70	3	426	35.5	3385

Reference	Conductor Size (mm2)	No Of Cores	Minimum Bending Radius	Overall Diameter(mm)	Weight(Kg/Km)
RZ1MZ1K4X70	70	4	468	39.0	4255
RZ1MZ1K5X95	70	70	552	46.0	5600
RZ1MZ1K2X95	95	2	402	33.5	3200
RZ1MZ1K3X95	95	3	468	39.0	4195
RZ1MZ1K4X95	95	4	510	42.5	5270
RZ1MZ1K5X95	95	95	624	52.0	7410
RZ1MZ1K2X120	120	2	450	37.5	3950
RZ1MZ1K3X120	120	3	516	43.0	5095
RZ1MZ1K4X120	120	4	582	48.5	6925
RZ1MZ1K2X150	150	2	504	42.0	4700
RZ1MZ1K3X150	150	3	600	50.0	6550
RZ1MZ1K4X150	150	4	636	53.0	8320
RZ1MZ1K2X185	185	2	552	46.0	5925
RZ1MZ1K3X185	185	3	636	53.0	7755
RZ1MZ1K4X185	185	4	696	58.0	9875
RZ1MZ1K2X240	240	2	624	52.0	7510
RZ1MZ1K3X240	240	3	720	60.0	9800
RZ1MZ1K4X240	240	4	786	65..5	12585

Multicore armoured 90 °C thermosetting insulated cables. Reproduced from *BS7671:2018 Wiring Regulations*

TABLE 4E4A

CURRENT-CARRYING CAPACITY (amps)

Ambient temperature: 30°C
Ground ambient temperature: 20°C
Conductor operating temperature: 90°C

Conductor cross- sectional area	Reference Method C (clipped direct)		Reference Method E (in free air or on a perforated cable tray etc, horizontal or vertical)		Reference Method D (direct in ground or in ducting in ground, in or around buildings)	
	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC	1 two-core cable single-phase AC or DC	1 three- or 1 four- core cable, three- phase AC
mm2	(A)	(A)	(A)	(A)	(A)	(A)
1.5	27	23	29	25	25	21
2.5	36	31	39	33	33	28
4	49	42	52	44	43	36
6	62	53	66	56	53	44
10	85	73	90	78	71	58
16	110	94	115	99	91	75
25	146	124	152	131	116	96
35	180	154	188	162	139	115
50	219	187	228	197	164	135
70	279	238	291	251	203	167
95	338	289	354	304	239	197
120	392	335	410	353	271	223
150	451	386	472	406	306	251
185	515	441	539	463	343	281
240	607	520	636	546	395	324
300	698	599	732	628	446	365
400	787	673	847	728		

1.Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).
2.Where it is intended to group a cable in this tablewith other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).

TABLE 4E4B

VOLTAGE DROP (per ampere per metre)

Conductor operating temperature:90°C

Conductor cross sectional area	Two-core cable DC	Two-core cable, single-phase AC			Three- or four-core cable, three-phase AC		
(mm2)	(mV/Nm)	(mV/Nm)			(mV/Nm)		
1.5	31	31			27		
2.5	19	19			16		
4	12	12			10		
6	7.9	7.9			6.8		
10	4.7	4.7			4.0		
16	2.9	2.9			2.5		
		R	X	Z	R	X	Z
25	1.85	1.85	0.160	1.90	1.60	0.140	1.65
35	1.35	1.35	0.155	1.35	1.15	0.135	1.15
50	0.98	0.99	0.155	1.00	0.86	0.135	0.87
70	0.67	0.67	0.150	0.69	0.59	0.130	0.60
95	0.49	0.50	0.150	0.52	0.43	0.130	0.45
120	0.39	0.40	0.145	0.42	0.34	0.130	0.37
150	0.31	0.32	0.145	0.35	0.28	0.125	0.30
185	0.25	0.26	0.145	0.29	0.22	0.125	0.26
240	0.195	0.20	0.140	0.24	0.175	0.125	0.21
300	0.155	0.16	0.140	0.21	0.140	0.120	0.185
400	0.120	0.13	0.140	0.190	0.115	0.120	0.165