RZ1-K (AS) XLPE LSZH Flexible1.8/3kV Cable

APPLICATION

Single Core flame retardant LSZH flexible power cable suitable for fixed installations in public and high traffic areas.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
1.8/3 (3.6) kV

Voltage Test
Alternating Current: 6,5 kV
Direct Current: 15 kV

Temperature Rating
-30°C to +60°C (to -40°C fixed installation)
Maximum conductor temperatures: 90°C
Short circuit: 250° C (t≤ 5s)

Minimum Bending Radius
5 x overall diameter (25≤ D≤ 50)
6x overall diameter (D>50)

CONSTRUCTION

Conductor
Class 5 flexible copper conductor

Insulation
XLPE (Cross-Linked Polyethylene)

Sheath
LSZH (Low Smoke Zero Halogen) type ST8 (to IEC 60502-1) and type DMZ-E (to UNE 21123-4)

Sheath Colour
● Green ● Black

STANDARDS

IEC 60502-1, EN 60228, UNE 21123-4
Flame non-propagation IEC/EN 60332-1 / IEC/EN 60332-3
Low corrosive gases emission IEC/EN 60754-1/2
Low smoke emission (Light transmittance >60%) IEC/EN 61034
Chemical & Oil resistance: acceptable
UV resistant based on EN 50618 & UNE 211605
Water resistance: AD7 immersion (limited to 2 months)
Abrasion resistance: AD2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.

SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.

This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS

ELAND PART NUMBER	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL CONDUCTOR DIAMETER mm	NOMINAL INSULATION THICKNESS mm	NOMINAL DIAMETER OVER INSULATION mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OUTER SHEATH DIAMETER mm	NOMINAL WEIGHT kg/km	MINIMUM BENDING RADIUS mm	
									During installation	After installation
A9R01095/3KV**	1	95	11.8	2.0	15.8	1.6	19.0	993	190	152
A9R01120/3KV**	1	120	13.8	2.0	17.8	1.7	21.2	1216	212	170
A9R01150/3KV**	1	150	15.0	2.0	19.0	1.7	22.4	1485	224	179
A9R01185/3KV**	1	185	16.5	2.0	20.5	1.8	24.1	1796	241	193
A9R01240/3KV**	1	240	19.1	2.0	23.1	1.9	26.9	2315	269	215
A9R01300/3KV**	1	300	21.6	2.0	25.6	2.0	29.6	2859	294	235
A9R01400/3KV**	1	400	26.6	2.0	30.6	2.1	34.8	3643	348	278

** Designates the sheath colour. For each part number replace with the colour code reference - GN (Green) or BK (Black) eg: A9R01185/3KVGN = 185mm² Green

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT 90 °C Ω/Km	MAXIMUM CURRENT RATING A		VOLTAGE DROP COS Φ= 0,8 V/A.km
			Air 30°C	Buried 20°C	
95	0.206	0.263	328	270	0.438
120	0.161	0.205	383	306	0.358
150	0.129	0.164	404	343	0.313
185	0.0991	0.128	510	387	0.262
240	0.0801	0.1021	552	448	0.223
300	0.0641	0.0817	639	502	0.193
400	0.0486	0.0620	823	558	0.164

On the Air the current rating is in according to IEC 60364-5-52 table B.52.12, installation method F, (three loaded conductors for single-core cables)

Buried the current rating is in accordance to IEC 60364-5-52, table B.52.3 method of installation D2 (Two loaded conductors for single-core cables).

For different installation conditions, appropriate correction factors must be considered.

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