

H03V2V2-F BS EN 50525-2-11 MC XLPE PVC CABLE



Kanbery Cable Code - **H03V2V2-F-KAN**

APPLICATION

The RV-K cable is for power distribution and can be used for all types of low voltage industrial-type connections, building installations, in urban grids, etc. This cable is particularly suitable for use in challenging layouts because of its high flexibility, also making the installation process substantially easier. It can be buried or installed in ducts as well as outdoors without requiring additional protection. The RV-K cable is rated AD8 for water resistance, permitting permanent submersion to 5m depth.

CHARACTERISTICS

Voltage Rating

Nominal voltage (AC) U₀/U 0.6/1 kV
Max. operating voltage (DC) U₀/U 0.6/1 kV

Temperature Rating

-15°C to +90°C

Minimum Bending Radius

Fixed: 5 x overall diameter

Test Voltage

1500V AC (20±5)°C

CONSTRUCTION

Conductor

Class 5 flexible copper conductor As per IEC 60228

Insulation

XLPE (Cross-Linked Polyethylene) As per EN 50363-3

Sheath

PVC (Polyvinyl Chloride) As per EN 50363-4-1

Core identification

2 core: ● Blue ● Brown
3 core: ● Green/Yellow ● Blue ● Brown
4 core: ● Green/Yellow ● Brown ● Black ● Grey
5 core: ● Green/Yellow ● Blue ● Brown ● Black ● Grey
7 core and above: ● Black with ○ White numbers

Sheath Colour

● Black

STANDARDS

BS EN 50525-2-11 / IEC 60228

Flame retardant according to IEC/EN 60332-1-2

Water resistant to AD8

Chemical & Oil resistance: Good

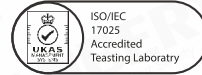
Impact resistance: AG2 (medium severity)

UV Resistant to UNE 211605

THE CABLE LAB

AN ISO/IEC 17025 AND IEC 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.kanberycable.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable is compliant with European regulation EN 50575 and Bureau of Indian Standards, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab as meeting the requirements of the BSI RoHS Trusted Kitemark™.



DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES IN CONDUCTOR mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm
1	1.5	24	0.7	5.7
1	2.5	40	0.7	6.2
1	4	48	0.7	6.7
1	6	72	0.7	7.3
1	10	68	0.7	8.3
1	16	116	0.7	9.2
1	25	182	0.9	11.0
1	35	224	0.9	12.0
1	50	324	1	13.6
1	70	304	1.1	15.3
1	95	416	1.1	17.0
1	120	544	1.2	19.2
1	150	640	1.4	21.0
1	185	800	1.6	22.9
1	240	1088	1.7	25.9
1	300	1344	1.8	28.8
1	400	1760	2.0	34.4
1	500	2376	2.2	37.4
2	1.5	24	0.7	8.7
2	2.5	40	0.7	9.5
2	4	48	0.7	10.6
2	6	72	0.7	11.7
2	10	68	0.7	13.6
2	16	116	0.7	15.7
2	25	182	0.9	18.9
2	35	224	0.9	21.4
2	50	324	1.0	23.0
2	70	304	1.1	24.9
2	95	414	1.1	27.9
2	120	544	1.2	31.5
2	150	640	1.4	34.7
2	185	800	1.6	43.6
2	240	1088	1.7	16.3
3	1.5	24	0.7	9.9
3	2.5	40	0.7	11.0
3	4	48	0.7	12.1
3	6	72	0.7	13.4
3	10	68	0.7	15.5
3	16	116	0.7	17.5
3	25	182	0.9	21.3
3	35	224	0.9	23.5
3	50	324	1.0	27.0
3	70	304	1.1	30.8
3	95	416	1.1	34.3
3	120	544	1.2	39.2
3	150	640	1.4	43.1
3	185	800	1.6	47.3
3	240	1088	1.7	53.8

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NUMBER WIRES IN CONDUCTOR mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL OVERALL DIAMETER mm
4	1.5	24	0.7	10.7
4	2.5	40	0.7	11.9
4	4	48	0.7	13.1
4	6	72	0.7	14.5
4	10	68	0.7	17.0
4	16	116	0.7	19.1
4	25	182	0.9	23.4
4	35	224	0.9	25.9
4	50	324	1	30.0
4	70	304	1.1	34.3
4	95	416	1.1	38.1
4	120	544	1.2	43.9
4	150	640	1.4	47.9
4	185	800	1.6	52.8
4	240	1088	1.7	60.1
5	1.5	24	0.7	11.5
5	2.5	40	0.7	12.8
5	4	48	0.7	14.2
5	6	72	0.7	15.8
5	10	68	0.7	18.5
5	16	116	0.7	20.9
5	25	182	0.9	25.7
5	35	224	0.9	28.5
5	50	324	1	33.2
5	70	304	1.1	38.0
5	95	416	1.1	42.5
5	120	544	1.2	48.6
5	150	640	1.4	53.3

ELECTRICAL CHARACTERISTICS - SINGLE CORE

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DC RESISTANCE CONDUCTOR 20°C ohms/km	CURRENT CARRYING CAPACITY - TREFOIL (Amps)			CURRENT CARRYING CAPACITY - 2 LOADED CORES (Amps)			VOLTAGE DROP SINGLE CORE mV/A/m
		In Air at 30°C	In Ducts in Earth at 20°C	Direct Buried at 20°C	In Air at 30°C	In Ducts in Earth at 30°C	Direct Buried at 20°C	
1.5	13.3	23	21	23	23	25	27	27.263
2.5	7.98	32	28	30	32	33	35	16.403
4	4.95	42	36	39	42	43	46	10.210
6	3.30	54	44	49	54	53	58	6.835
10	1.91	75	58	65	75	71	77	3.993
16	1.21	100	75	84	100	91	100	2.561
25	0.78	135	96	107	161	116	129	1.458
35	0.554	169	115	129	200	139	155	1.057
50	0.386	207	135	153	242	164	183	0.759
70	0.272	268	167	188	310	203	225	0.556
95	0.206	328	197	226	377	239	270	0.438
120	0.161	383	197	257	437	271	306	0.358
150	0.129	444	223	287	504	306	343	0.302
185	0.106	510	251	324	575	343	387	0.262
240	0.0801	607	324	375	679	395	448	0.215
300	0.0641	703	365	419	783	446	502	0.193
400	0.0486	823	-	-	940	-	-	0.164
500	0.0384	946	-	-	1083	-	-	0.146

- In Air current ratings in accordance with IEC 60364-5-52 table B.52.12 installation method F.
- In Ducts in Ground the maximum current rating is in accordance to IEC 60364-5-52, table B.525 / B52.3 installation method D1.
- In Ground the maximum current rating is in accordance to IEC 60364-5-52, table B.52.5 / B52.3 installation method D2.

ELECTRICAL CHARACTERISTICS - MULTICORES

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM DC RESISTANCE CONDUCTOR 20°C ohms/km	CURRENT CARRYING CAPACITY (Amps)			VOLTAGE DROP MULTICORE mV/A/m
		In Air at 30°C	In Ducts in Earth at 20°C	In Earth at 20°C	
1.5	13.3	26	21	23	23.605
2.5	7.98	36	28	30	14.197
4	4.95	49	36	39	8.838
6	3.30	63	44	49	5.918
10	1.91	86	58	65	3.456
16	1.21	115	75	84	2.216
25	0.78	149	96	107	1.457
35	0.554	185	115	129	1.055
50	0.386	225	135	153	0.758
70	0.272	289	167	188	0.556
95	0.206	352	197	226	0.438
120	0.161	410	197	257	0.358
150	0.129	473	223	287	0.302
185	0.106	542	251	324	0.262
240	0.0801	641	324	375	0.215
300	0.0641	-	365	419	-
400	0.0486	-	-	-	-
500	0.0384	-	-	-	-

- In Air current ratings in accordance with IEC 60364-5-52 table B.52.12 installation method F.
- In Ducts in Ground the maximum current rating is in accordance to IEC 60364-5-52, table B.525 / B52.3 installation method D1.
- In Ground the maximum current rating is in accordance to IEC 60364-5-52, table B.52.5 / B52.3 installation method D2.

DE-RATING FACTORS

For air temperature other than 30°C

AIR TEMPERATURE	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
DE-RATING FACTOR	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

For ground temperature other than 20°C

GROUND TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
DE-RATING FACTOR	1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76

For soil thermal resistivity, which depends on damp other than 2.5°K.m/W

MOISTURE DEGREE OF SOIL	Very Damp	Slightly Damp	Slightly Dry	Dry	Very Dry
THERMAL RESISTIVITY (°K.m/W)	1.0	1.5	2.0	2.5	3.0
CABLES IN DUCTS	1.18	1.10	1.05	1.00	0.96

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.