POWERFLEX® RV-K

Industrial flexible cable for power transmission.

ACCORDING TO: IEC 60502-1 / UNE 21123-2



E_{ca}

APPLICATION

Powerflex® RV-K cable is suitable for all types of low voltage industrial-type connections, in urban grids, building installations, etc.
Its high flexibility makes the installation process substantially easier and, as a result, is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection.
This cable can withstand damp conditions including total submersion in water (AD8).

CONSTRUCTION

Conductor
Electrolytic annealed copper, class 5 (flexible) according to EN 60228 and IEC 60228.

Insulation
Cross-linked polyethylene, type DIX-3 according to HD 603-1 and type XLPE according to IEC 60502-1.
The standard identification of insulated conductors according to HD 308 is the following:

1 x	Natural
2 x	Blue + Brown
3 G	Blue + Brown + Green/Yellow
3 x	Brown + Black + Grey
3 x + 1 x	Brown + Black + Grey + Blue (reduced cross-section)
4 G	Brown + Black + Grey + Green/Yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/Yellow
6 or more	Black numbered + Green/Yellow

Outer sheath
Flexible PVC, type DMV-18 according to HD 603-1 and type ST2 according to IEC 60502-1.
Black colour.

CHARACTERISTICS

Electrical performance
Low voltage: 0,6/1 kV.

Thermal performance
Maximum conductor temperature: 90°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).
Minimum installation and handling temperature: 0°C (on cable surface).

Fire performance
Flame non-propagation according to EN 60332-1 / IEC 60332-1.
Reaction to fire CPR: E_{ca} according to EN 50575.
Reduced halogen emission. Chlorine < 15%.

Mechanical performance
Minimum bending radius during installation: 5x cable diameter (diameter cable ≤ 50 mm).
Minimum bending radius during installation: 6x cable diameter (diameter cable > 50 mm).
Impact resistance: AG2 Medium severity.

Environmental performance
Chemical & Oil resistance: Good.
UV Resistant according to UNE 211605.
Water resistance: AD8 Submersion.

Installation conditions
Open Air.
Buried.
In conduit.
In tray.

STANDARDS / COMPLIANCE

According to
IEC 60502-1 / UNE 21123-2

Standards and approvals
AENOR / BUREAU VERITAS /RETIE / KEMA-KEUR /RoHS / CE

CPR (Construction Products Regulation)
E_{ca}

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POWERFLEX

RV-K

The universal flexible cable for power transmission.



DESIGN

Conductor

Electrolytic copper, class 5 (flexible), based on EN 60228

Insulation

XLPE.

The standard identification is the following:

1 x ..... Natural
2 x..... Blue + Brown
3 G..... Blue + Brown + Yellow/green
3 x..... Brown + Black + Grey
3 x + 1 x ..... Brown + Black + Grey + Blue (reduced cross-section)
4 G..... Brown + Black + Grey + Yellow/green
4 x..... Brown + Black + Grey + Blue
5 G..... Brown + Black + Grey + Yellow/green + Blue

Outer sheath

Flexible PVC outer sheath, black colour.

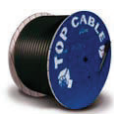
APPLICATIONS

This cable for power distribution is suitable for all types of low voltage industrial-type connections, in urban grids, building installations, etc. Its high flexibility makes the installation process substantially easier and, as a result, is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection. The Powerflex RV-K cable can withstand damp conditions including total immersion in water.

Packaging

Available in rolls (lengths of 50 and 100 m) and coils.





CHARACTERISTICS

- Flexible conductor class 5
- Minimum service temperature: -40ºC (Fixed and protected installation)
- Maximum service temperature 90ºC
- Maximum short-circuit temperature: 250ºC (max. 5 s)
- Minimum bending radius: 5 x cable diameter
- Meter by meter marking
- Flame non-propagation
- Impact resistance: AG2 medium impact
- Outdoor installation: permanent
- Water resistance AD7 immersion
- Chemical & oil resistance: good

INSTALLATION CONDITIONS

- Industrial use
- Damp environment
- Open air
- Buried
- In conduit

National norm / European: EN 60332-1 International norm: IEC 60332-1

POWERFLEX RV-K

DIMENSIONS

Cross section (mm²)	Diameter (mm)	Weight (Kg/km)	Open Air 30ºC (A)	Buried 20ºC (A)	Voltage drop (V/A · km)
1 x 1,5	5,7	42	23	22	29,5
1 x 2,5	6,2	54	29	29	17,7
1 x 4	6,7	70	40	37	11,0
1 x 6	7,3	90	53	46	7,32
1 x 10	8,2	133	74	61	4,23
1 x 16	9,2	189	101	79	2,68
1 x 25	11,0	284	135	101	1,73
1 x 35	12,1	381	169	122	1,23
1 x 50	13,8	517	207	144	0,860
1 x 70	15,7	712	268	178	0,603
1 x 95	17,6	923	328	211	0,457
1 x 120	19,2	1.165	383	240	0,357
1 x 150	21,5	1.446	444	271	0,286
1 x 185	23,9	1.748	510	304	0,235
1 x 240	26,9	2.280	607	351	0,178
1 x 300	29,6	2.829	703	396	0,142
1 x 400	33,8	3.731	823	464	0,108
1 x 500	37,4	4.776	946	525	0,085
1 x 630	42,7	6.276	1088	596	0,064
2 x 1,5	8,2	90	26	26	34,0
2 x 2,5	9,2	120	36	34	20,4
2 x 4	10,3	161	49	44	12,7
2 x 6	11,3	211	63	56	8,45
2 x 10	13,2	316	86	73	4,89
2 x 16	14,9	450	115	95	3,10
3 G 1,5	8,9	108	26	26	34,0
3 G 2,5	9,8	144	36	34	20,4
3 G 4	11,0	198	49	44	12,7
3 G 6	12,1	263	63	56	8,45
3 G 10	14,3	405	86	73	4,89
3 x 16	16,4	593	100	79	2,68
3 x 25	21,3	975	127	101	1,73
3 x 35	24,1	1.319	158	122	1,23
3 x 50	27,8	1.812	192	144	0,860
3 x 70	30,8	2.463	246	178	0,603
3 x 16 + 1 x 10	17,6	696	100	79	2,68
3 x 25 + 1 x 16	22,7	1.136	127	101	1,73
3 x 35 + 1 x 16	25,0	1.461	158	122	1,23
3 x 50 + 1 x 25	29,1	2.033	192	144	0,860
3 x 70 + 1 x 35	33,8	2.834	246	178	0,603
3 x 95 + 1 x 50	38,2	3.702	298	211	0,457
3 x 120 + 1 x 70	42,1	4.723	346	240	0,357
3 x 150 + 1 x 70	46,8	5.779	399	271	0,286
3 x 185 + 1 x 95	53,5	7.202	456	304	0,235
3 x 240 + 1 x 120	60,4	9.306	538	351	0,178
4 G 1,5	9,7	129	23	22	29,5
4 G 2,5	10,7	175	32	29	17,7
4 G 4	12,0	243	42	37	11,0
4 G 6	13,4	328	54	46	7,32
4 G 10	15,7	505	75	61	4,23
4 x 16	18,2	749	100	79	2,68
4 x 25	24,1	1.245	127	101	1,73
4 x 35	26,3	1.671	158	122	1,23
4 x 50	31,3	2.313	192	144	0,860

For further technical data please request this cable's technical datasheet.

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POWERFLEX **RV-K**



DIMENSIONS

Cross section (mm²)	Diameter (mm)	Weight (Kg/km)	Open Air 30ºC (A)	Buried 30ºC (A)	Voltage drop (V/A · km)
4 x 70	36,1	3.204	246	178	0,603
4 x 95	40,2	4.126	298	211	0,457
4 x 120	44,6	5.245	346	240	0,357
4 x 150	49,8	6.573	399	271	0,286
4 x 185	56,1	8.050	456	304	0,235
4 x 240	64,5	10.695	538	351	0,178
5 G 1,5	10,4	153	23	22	29,5
5 G 2,5	11,6	213	32	29	17,7
5 G 4	13,2	298	42	37	11,0
5 G 6	14,7	403	54	46	7,32
5 G 10	17,2	624	75	61	4,23
5 G 16	20,2	931	100	79	2,68
5 G 25	26,6	1.555	127	101	1,73
5 G 35	29,3	2.076	158	122	1,23
5 G 50	34,5	2.878	192	144	0,860
5 G 70	38,7	3.929	246	178	0,603
5 G 95	44,6	5.189	298	211	0,457
5 G 120	49,7	6.560	346	240	0,357
5 G 150	55,6	8.144	399	271	0,286
5 G 185	62,5	9.971	456	304	0,235
5 G 240	71,8	13.206	538	351	0,178

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