FLEXTEL® 200 VV-K

Flexible 0,6/1 kV control cable.

ACCORDING TO: IEC 60502-1

100% Green Energy Cable Production

E_{ca}

APPLICATION

Flextel® 200 VV-K cable is suitable for fixed installations with complex layouts where flexible cables are required. It is also ideal for connecting motors or frequency converters. The characteristics of the outer sheath material make this cable extremely versatile as it provides a high level of protection in all types of environments.

- Industrial use

CONSTRUCTION

Conductor

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

Insulation

Flexible insulation type PVC/A according to IEC 60502-1.

The standard identification of insulated conductors, according to HD 308 and HD 186 is the following:

1 x	Natural
2 x	Brown + Blue
3 G	Blue + Brown + Green/Yellow
3 x	Brown + Black +Blue
4 G	Brown + Black + Blue + Green/Yellow
4 x	Brown + Black + Grey + Blue
5 G	Brown + Black + Grey + Blue + Green/Yellow
6 or more	Black numbered+ Green/Yellow

* Other identifications are possible on request.

Outer sheath

Flexible PVC outer sheath, type ST1 according to IEC 60502-1. Black colour. Other colours available on request.

CHARACTERISTICS

Electrical performance

Low voltage: 0,6/1 kV.

Thermal performance

Maximum service temperature: 70°C.

Maximum short-circuit temperature: 160°C (max. 5 s).

Minimum service temperature: -40°C (fixed and protected installation).

Fire performance

Flame non-propagation based on EN 60332-1 / IEC 60332-1.

Low halogen emission. Chlorine <15%.

Reaction to fire CPR: E_{ca} according to EN 50575.

Mechanical performance

Minimum bending radius: 5x cable diameter.

Impact resistance: AG2 Medium severity.

Environmental performance

Chemical & Oil resistance: Good.

UV Resistant according to UNE 211605, Annex A.2

Water resistance: AD5 Jets.

Installation conditions

Open Air.

Buried.

In conduit.

STANDARDS / COMPLIANCE

According to:

IEC 60502-1

Standards and approvals

RoHS / CE

CPR (Construction Products Regulation)

E_{ca}

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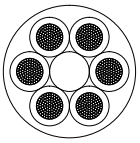
DIMENSIONS & ADMISSIBLE INTENSITIES



Cross-section (mm^2)	Diameter (mm)	Weight (kg/km)	Open Air (A) [1]	Buried (A) [2]	Voltage drop (V/A · km) [3]
1 x 10	8,8	155	60	50	3,97
1 x 16	9,8	215	82	64	2,51
1 x 25	11,6	315	110	82	1,62
1 x 35	12,7	415	137	98	1,15
1 x 50	14,6	570	167	116	0,802
1 x 70	16,0	755	216	143	0,565
1 x 95	18,2	990	264	169	0,428
1 x 120	20,1	1.245	308	192	0,335
1 x 150	22,4	1.545	356	217	0,268
1 x 185	24,7	1.870	409	243	0,220
1 x 240	27,5	2.425	485	280	0,166
2 x 1,5	8,4	100	22	22	31,9
2 x 2,5	9,7	140	30	29	19,2
2 x 4	11,6	210	40	37	11,9
2 x 6	12,7	265	51	46	7,92
2 x 10	14,6	380	70	60	4,58
2 x 16	16,5	530	94	64	2,9
3 x 1,5	8,9	120	22	22	31,9
3 x 2,5	10,3	170	30	29	19,2
3 x 4	12,4	255	40	37	11,9
3 x 6	13,6	325	51	46	7,92
3 x 10	15,8	485	70	60	4,58
3 x 16	18,0	680	80	64	2,51
3 x 25	21,5	1.050	101	82	1,62
3 x 35	24,7	1.415	126	98	1,15
4 x 1,5	9,7	145	18,5	18	27,6
4 x 2,5	11,3	210	25	24	16,6
4 x 4	13,5	310	34	30	10,3
4 x 6	14,9	405	43	38	6,86
4 x 10	17,4	605	60	50	3,97
4 x 16	20,2	895	80	64	2,51
5 x 1,5	10,5	175	18,5	18	27,6
5 x 2,5	12,3	250	25	24	16,6
5 x 4	14,9	370	34	30	10,3
5 x 6	16,5	490	43	38	6,86
5 x 10	19,3	745	60	50	3,97
5 x 16	22,3	1.080	80	64	2,51
6 x 1,5	9,5	155	22	22	31,9
6 x 2,5	11,4	235	30	29	19,2
7 x 1,5	9,5	170	22	22	31,9
7 x 2,5	11,4	260	30	29	19,2
7 x 4	14,9	430	40	37	11,9
7 x 6	16,6	585	51	46	7,92
7 x 10	20,7	960	70	60	4,88
8 x 1,5	10,3	195	22	22	31,9
8 x 2,5	12,5	300	30	29	19,2
10 x 1,5	11,5	235	22	22	31,9
10 x 2,5	14,1	365	30	29	19,2
12 x 1,5	11,9	270	22	22	31,9
12 x 2,5	14,3	415	30	29	19,2
12 x 6	21,3	940	51	46	7,92
12 x 10	27,3	1.585	70	60	4,88

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Cross-section (mm^2)	Diameter (mm)	Weight (kg/km)	Open Air (A) [1]	Buried (A) [2]	Voltage drop (V/A · km) [3]
14 x 1,5	13,0	315	22	22	31,9
14 x 2,5	16,0	490	30	29	19,2
16 x 1,5	13,8	355	22	22	31,9
16 x 2,5	17,2	555	30	29	19,2
19 x 1,5	14,5	405	22	22	31,9
19 x 2,5	17,9	635	30	29	19,2
24 x 1,5	16,7	505	22	22	31,9
24 x 2,5	20,6	790	30	29	19,2
27 x 1,5	17,4	550	22	22	31,9
30 x 1,5	18,2	605	22	22	31,9
37 x 1,5	19,8	740	22	22	31,9
44 x 1,5	21,9	870	22	22	31,9
52 x 1,5	23,4	1.020	22	22	31,9
61 x 1,5	25,4	1.210	22	22	31,9

[1] Reference method F for single-core and method E for multicore cables according to IEC 60364-5-52 in open air at 30°C ambient temperature.

[2] Reference method D1 according to IEC 60364-5-52. In a duct buried at 0,7 m depth with soil thermal resistivity of 2,5 K·m/W and 20°C of ground temperature.

[3] At maximum service temperature and $\cos\varphi=1$.

For cables having 2 conductors or 3 cores up to 10 mm^2, it is supposed a single-phase circuit. For the rest of the cables it is supposed a three-phase circuit.

For cables having 6 or more conductors, it is supposed a single-phase circuit that not all conductors are fully charged.