FLEXTEL 200

VV-K 0,6/1 kV

The 0,6/1kV control cable

a Applications

The Flextel 200 VV-K cable is suitable for fixed installations with complex layouts where flexible cables are required. It is also used 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.

b Characteristics

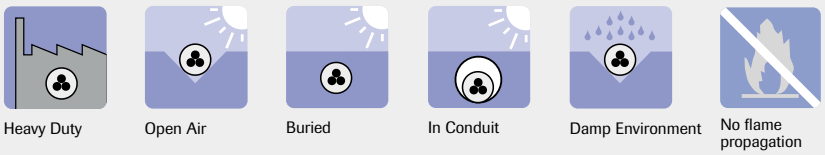
1.- Excellent flexibility: The use of flexible copper conductors and special PVC compounds makes this cable highly flexible.

2.- Versatility: The protection provided by the PVC outer sheath makes it possible to install this cable in almost all types of environments, outdoors, underground, in damp conditions or even submerged in water.

3.- Fire proof properties: The no flame propagation properties of the Flextel 200 VV-K cable contribute towards the overall safety of the installation.

4.- Easy identification: The markings on the cores, separated by only 30 mm, guarantee easy and fast identification.

Applications



d Design

- Conductor: Flexible electrolytic annealed copper conductor, class 5 according to IEC 60228.

- Insulation: PVC insulation, type PVC/A according to IEC 60502. The standard identification according to HD 308 or EN 50334, is the following:

- Up to 5 conductors: by colours.
- 6 or more conductors: black numbered + green/yellow.

- Outer sheath: Flexible PVC compound, black color, type ST1 according to IEC 60502. The special PVC compound used offer an excellent resistance to chemical attack and water absorption.

Characteristics

According to IEC 60502 UNE 21123


Flexible conductor class 5


Rated Voltage: 0,6/1 kV


Maximum service temperature: 70ºC


Minimum bending radius: 5 x ϕ cable

Meter by meter marking

Top Cable

Dimensions

Cross-section mm^2	Diameter ϕ mm	Weight kg/km	Open air at 30ºC A	Buried at 20 ºC A	Voltage drop V/A km
1 x 10	8,8	151	60	52	3,97
1 x 16	9,8	208	82	67	2,51
1 x 25	11,5	305	110	86	1,62
1 x 35	12,7	401	137	103	1,15
1 x 50	14,6	557	167	122	0,802
1 x 70	16,3	749	216	151	0,565
1 x 95	18,6	970	264	179	0,428
1 x 120	20,5	1.221	308	203	0,335
1 x 150	22,7	1.527	356	230	0,268
1 x 185	25,1	1.847	409	258	0,220
1 x 240	28,3	2.416	485	297	0,166
6 x 1,5	12,1	211	22	22	31,9
6 x 2,5	14,1	300	30	29	19,2
7 x 1,5	12,1	226	22	22	31,9
7 x 2,5	14,1	324	30	29	19,2
7 x 4	15,7	441	40	38	11,9
7 x 6	17,4	588	51	47	7,92
8 x 1,5	13,1	255	22	22	31,9
8 x 2,5	15,1	364	30	29	19,2
10 x 1,5	14,1	301	22	22	31,9
10 x 2,5	16,5	437	30	29	19,2
12 x 1,5	15,0	347	22	22	31,9
12 x 2,5	18,0	511	30	29	19,2
14 x 1,5	15,9	392	22	22	31,9
14 x 2,5	19,1	580	30	29	19,2
16 x 1,5	16,9	443	22	22	31,9
16 x 2,5	20,1	656	30	29	19,2
19 x 1,5	17,6	502	22	22	31,9
19 x 2,5	21,1	747	30	29	19,2
24 x 1,5	19,6	609	22	22	31,9
24 x 2,5	23,4	907	30	29	19,2
27 x 1,5	20,8	668	22	22	31,9
30 x 1,5	21,5	721	22	22	31,9
37 x 1,5	23,1	867	22	22	31,9
44 x 1,5	25,4	1.027	22	22	31,9
52 x 1,5	27,3	1.195	22	22	31,9
61 x 1,5	29,1	1.392	22	22	31,9

*Top Cable reserves the right to carry out any modification whatsoever without giving previous notice.

C Technical data

The table shows diameter, weight, current-carrying capacity and voltage drop detailed for each cable.

Current-carrying capacities shown in the table are calculated according to IEC 60364 and for the following conditions:

- Open air installation: it is supposed an installation which allows effective air renewal with ambient temperature of 30 °C (reference method F for single core and E for multi core cables).

- Buried installation: cable in a duct buried at 70 cm depth, with ground thermal resistivity of 2,5 °K·m/W and ground temperature of 20 °C (reference method D).

- For single core cables it is supposed a three-phase circuit.

- For cables with 6 or more conductors it is supposed a single-phase circuit where not all conductors are fully loaded simultaneously.

Voltage drop, is the maximum that may occur. It is calculated to the maximum conductor temperature and for cos ϕ= 1.

Environmental conditions

No flame propagation
IEC 60332-1
EN 50265

Impact resistance: AG 2
Medium impact

Outdoor installation: permanent

Water resistance: AD 6
Temporal immersion

Chemical & oil attack resistance: good