

FLEXTEL® 110 ES05VV-F

Flexible multi-conductor control cable for mobile use.

ACCORDING TO: UNE 21031

E_{ca}



APPLICATION

Flexitel® 110 ES05VV-F is a flexible cable for mobile service. Suitable for the connection of machinery parts used in manufacturing, including machine tools.

Suitable for indoor use.

Its installation is recommended in fixed ducts.

- Mobile use.
- Domestic use.

CONSTRUCTION

Conductor

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

Insulation

Flexible PVC, type T12 according to EN 50363-3

The standard identification of insulated conductors according to EN 50334 is the following:

6 or more Black numbered + Green/Yellow

Outer sheath

Flexible PVC, type TM2 according to EN 50363-4-1.

Grey or black colour.

CHARACTERISTICS



Electrical performance

Low voltage: 300/500 V.

Test voltage: 2000 V / 5 min.



Thermal performance

Maximum conductor temperature: 70°C.

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

Minimum service temperature: 0°C (mobile service) and -30°C (fixed installation).



Fire performance

Flame non-propagation according to EN 60332-1 / IEC 60332-1.

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

Low halogen emission. Chlorine < 15%.



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.

Water resistance: AD5 Jets.



Installation conditions

Open Air.

Buried.

In conduit.

STANDARDS / COMPLIANCE



According to:
UNE 21031



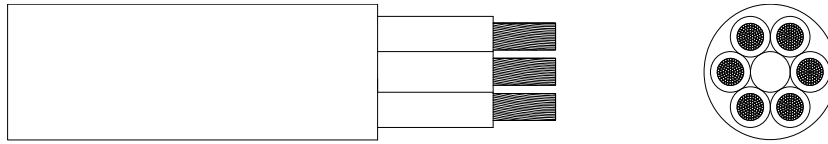
Standards and approvals
RoHS / CE



CPR (Construction Products Regulation)
E_{ca}



DIMENSIONS & ADMISSIBLE INTENSITIES



Cross-section (mm ²)	Diameter (mm)	Weight (kg/km)	Open air (A) ¹	Voltage drop (V/A · km) ²
6 x 1	7,9	110	10	46,6
7 x 1	7,9	115	10	46,6
8 x 1	8,6	135	10	46,6
10 x 1	9,7	165	10	46,6
12 x 1	10,3	190	10	46,6
14 x 1	10,7	215	10	46,6
16 x 1	11,4	245	10	46,6
19 x 1	12,1	280	10	46,6
24 x 1	13,7	345	10	46,6
27 x 1	14,4	380	10	46,6
30 x 1	14,7	410	10	46,6
33 x 1	15,7	460	10	46,6
37 x 1	17,2	535	10	46,6
44 x 1	18,9	635	10	46,6
52 x 1	20,1	740	10	46,6
61 x 1	21,7	870	10	46,6

¹Reference for one cable with adequate ventilation according to EN 50565-1 in open air at 30°C ambient temperature.

² At 70°C conductor temperature and cos φ= 1.

In all cases are supposed a single-phase circuit where not all conductors are fully charged.

SHORT-CIRCUIT CURRENT-CARRYING CAPACITIES

Time (s)	0,1	0,2	0,3	0,5	1	1,5	2	2,5	3
A/mm ²	364	257	210	163	115	94	81	73	66

CORRECTION FACTORS FOR AIR TEMPERATURE

Air T. (°C)	20	25	30	35	40	45	50	55
Factor	1,15	1,08	1	0,91	0,82	0,71	0,58	0,41