

Flexible multi-conductor control cable for mobile use.

ACCORDING TO: UNE 21031-5-1 C



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

Insulation

Flexible PVC insulation, 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 outer sheath, 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 service temperature: 60°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: Acceptable.

UV Resistant according to UNE 211605.

Water resistance: AD5 Jets.

🔦 Installation conditions

Open Air.

Buried.

In conduit.

STANDARDS / COMPLIANCE



According to:

UNE 21031-5-1 C



Standards and approvals

RoHS / CE

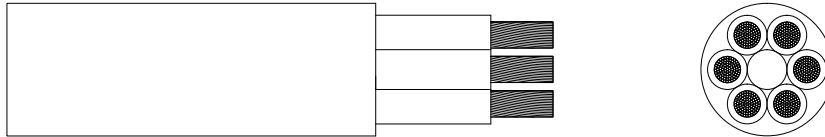


CPR (Construction Products Regulation)

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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	45,2
7 x 1	7,9	115	10	45,2
8 x 1	8,6	135	10	45,2
10 x 1	9,7	165	10	45,2
12 x 1	10,3	190	10	45,2
14 x 1	10,7	215	10	45,2
16 x 1	11,4	245	10	45,2
19 x 1	12,1	280	10	45,2
24 x 1	13,7	345	10	45,2
27 x 1	14,4	380	10	45,2
30 x 1	14,7	410	10	45,2
33 x 1	15,7	460	10	45,2
37 x 1	17,2	535	10	45,2
44 x 1	18,9	635	10	45,2
52 x 1	20,1	740	10	45,2
61 x 1	21,7	870	10	45,2

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

² At 60°C conductor temperature and $\cos \varphi = 1$.

For all cables it is supposed a single-phase circuit where not all conductors are fully charged.