H05VV-F & H07VV-F

Flexible cable for connecting small electrical appliances.

ACCORDING TO: EN 50525-2-11 / IEC 60227-5

APPLICATION

H05VV-F & H07VV-F cable has been specially designed for connecting small home appliances such as vacuum cleaners, washing machines, refrigerators, etc.
It is recommended for household installations and can also be used for light mobile services.
These cables are also suitable for fixed applications in furniture, wall partitions, and in hollow spaces of prefabricated building parts.

- Mobile use.
- Domestic use.
- Domestic appliances.
- Temporary appliances.

CONSTRUCTION

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

Insulation
Flexible PVC, type TI2 according to EN 50363-3 and type PVC/D according to IEC 60227-1.
The standard identification of insulated conductors, according to UNE 21089-1 and HD 308 is the following:

2 x	Blue + Brown
3 G	Blue + Brown + Green/Yellow
4 G	Brown + Black + Grey + Green/Yellow
5 G	Brown + Black + Grey + Blue + Green/Yellow

Outer sheath
Flexible PVC, type TM2 according to EN 50363-4-1 and type PVC/ST5 according to IEC 60227-1.
Grey, white or black are the standard outer sheath colours.
Other colours available on request.

CHARACTERISTICS

Electrical performance
Low voltage: 300/500 V. 450/750V
Rated Voltage: H05VV-F(up to 1mm²) 300/500V
H07VV-F(from 1.5mm² onwards) 450/750V

Thermal performance
Maximum conductor temperature: 70°C.
Maximum short-circuit temperature: 160°C (max. 5 s).
Minimum service temperature: 5°C

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:
3 x cable diameter < 12 mm.
4 x cable diameter ≥ 12 mm.
Impact resistance: AG2 Medium severity.

Environmental performance
Chemical & Oil resistance: Good.
Water resistance: AD5 Jets.

Installation conditions
Open Air.
Buried.
In conduit.

STANDARDS / COMPLIANCE

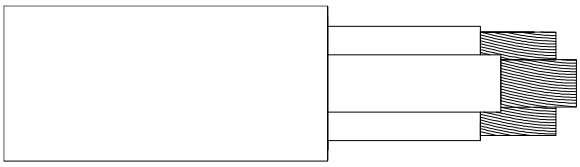
According to:
EN 50525-2-11 / IEC 60227-5

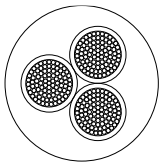
Standards and approvals
HAR / AENOR / SEC / RoHS / CE

CPR (Construction Products Regulation)
E_{ca}

H05VV-F & H07VV-F

DIMENSIONS & ADMISSIBLE INTENSITIES





Cross-section (mm^2)	Diameter (mm)	Weight (kg/km)	Open air (A) [1]	Voltage drop (V/A · km) [2]
2 x 0,75	6,2	55	6	62,2
2 x 1	6,3	60	10	46,6
2 x 1,5	7,1	80	16	31,8
2 x 2,5	9,1	125	25	19,1
2 x 4	10,6	175	32	11,8
3 G 0,75	6,6	65	6	62,2
3 G 1	6,8	75	10	46,6
3 G 1,5	8,0	100	16	31,8
3 G 2,5	9,8	155	25	19,1
3 G 4	11,2	215	32	11,8
4 G 0,75	7,0	75	6	53,8
4 G 1	7,7	90	10	40,4
4 G 1,5	8,9	125	16	27,5
4 G 2,5	10,8	190	20	16,5
4 G 4	12,3	265	25	10,2
5 G 0,75	8,0	100	6	53,8
5 G 1	8,3	110	10	40,4
5 G 1,5	10	150	16	27,5
5 G 2,5	11,9	240	20	16,5
5 G 4	13,9	335	25	10,2

[1] Reference method E for one cable with adequate ventilation according to IEC60364-5-52 in open air at 30°C ambient temperature.
[2] At 70°C conductor temperature and cos φ= 1.
For cables with 2 or 3 conductors are supposed a single-phase circuit, for cables with 4 or 5 conductors are supposed a three-phase circuit.

SHORT-CIRCUIT CURRENT-CARRYING CAPACITIES

Time (s)	0,1	0,2	0,3	0,5	1	1,5	2	2,5	3
A/mm²	364	257	210	163	115	94	81	73	66

CORRECTION FACTORS 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