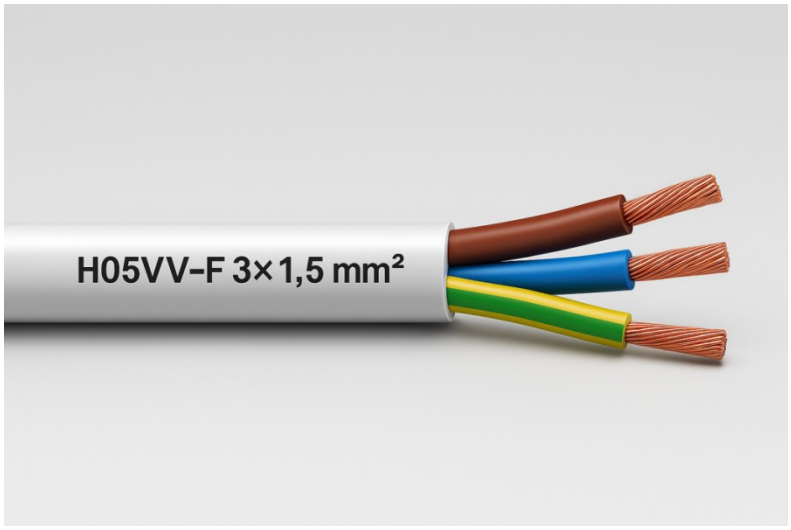
CABLE DATA for H05VV-F

General Information



Cable Standard(s)

- EN 50525–2–11, IEC 60227–5.

Construction Product Regulation (CPR) Classification

- Regulation: Compliant with the EU Regulation (EU) No. 305/2011 on construction products.
- Intended Use: Suitable for general applications in construction works with fire safety requirements.
- Harmonized Standard: EN 50575:2014
- Reaction to Fire Classification: Eca (according to EN 13501-6)
- Release of Dangerous Substances: N.P.D. (No Performance Determined)

Flame Retardant Properties

- The cable complies with the self–extinguishing requirements specified in EN 60332–1–2 (single vertical wire flame test).

Temperature Ratings

- Minimum installation and handling temperature: 0°C
- Maximum continuous conductor operating temperature: +70°C
- Maximum conductor temperature during short-circuit (≤ 5 seconds): +160°C
- Permissible ambient temperature range during operation: –30°C to +50°C

Minimum Bending Radius *(D = external diameter of the cable)*

- 6 × D for D < 8 mm;
- 8 × D for 8 mm ≤ D ≤ 12 mm;
- 10 × D for D > 12 mm.

Scope of Application

- Design Purpose: Flexible cable intended for use under moderate mechanical stress.
- Permissible Movements: Suitable for frequent bending and twisting during operation.
- Installation Conditions: Designed for use in domestic premises and office environments; Appropriate for light-duty applications and household appliances.
- Typical Applications: Connection of devices such as music equipment, table and floor lamps, office equipment, and similar appliances.
- Limitations of Use: Not suitable for connecting cooking or heating devices; Not intended for outdoor installations; Not permitted for use in commercial facilities.

Cable Construction and Electrical Properties

Conductor(s)

- Fine-stranded copper conductor, Class 5, in accordance with IEC 60228 Clause 5.

Insulation

- PVC compound type TI2 according to EN 50363-3.
- Insulation colors according to HD 308 S2.
- Cores are concentrically stranded, with or without a green-yellow protective conductor.

Sheath

- PVC compound type TM2 according to EN 50363-4-1.
- Sheath color options include gray, white and black.

Rated Voltage

- Uo/U = 300/500 V

Test Voltage

- 2 kV AC

Dimensional Specifications

№	Construction [n×mm²]	Metal index [kg/km]	Weight (appr.) [kg/km]	Diameter (range.) [mm]	Resistance at 20 °C [Ω/km]	Ampacity* at 30 °C (range) in air [A]	in conduit
1	2×0,75	14,4	50	5,7–7,2	26	6	6
2	2×1,0	19,2	65	5,9–7,5	19,5	10	10
3	2×1,5	28,8	90	6,8–8,6	13,3	16	14
4	2×2,5	48,0	115	8,4–10,6	7,98	20	18
5	2×4,0	77,0	195	10,5–12,5	4,95	25	22
6	2×6,0	116,0	280	11,0–12,0	3,3	32	28
7	3×0,75	21,6	60	6,0–7,6	26	6	6
8	3×1,0	28,8	80	6,3–8,0	19,5	10	9
9	3×1,5	43,2	115	7,4–9,4	13,3	16	13
10	3×2,5	72,0	175	9,2–11,4	7,98	20	17
11	3×4,0	115,0	235	10,5–13,1	4,95	25	21
12	3×6,0	173,0	358	13,0–14,0	3,3	32	27
13	4×0,75	29,0	73	6,6–8,3	26	6	5
14	4×1,0	38,4	92	7,1–9,0	19,5	10	8
15	4×1,5	57,6	145	8,4–10,5	13,3	16	12
16	4×2,5	96,0	210	10,1–12,5	7,98	20	16
17	4×4	154,0	300	11,5–14,3	4,95	25	20
18	4×6	230,0	424	12,9–15,9	3,3	32	26
19	4×10	384,0	701	16,5–17,6	1,91	47	38
20	5×0,75	36,0	88	7,4–9,3	26	6	5
21	5×1	48,0	113	7,8–9,8	19,5	10	8
22	5×1,5	72,0	175	9,3–11,6	13,3	16	12
23	5×2,5	120,0	260	11,2–13,9	7,98	20	16
24	5×4	192,0	361	13,0–16,1	4,95	25	20
25	5×6	297,0	483	13,5–17,5	3,3	32	26
26	5×10	480,0	858	17,0–21,0	1,91	47	38
27	5×16	768,0	1259	20,5–26,0	1,21	62	50

* For bundled cables, higher ambient temperatures, or longer runs, derating factors must be applied.