



H07ZZ-F MULTI-CORE

LSOH FLEXIBLE POWER CABLE



DESCRIPTION

Conductor: Class 5, flexible, plain copper wire, **Insulation:** LSOH rubber compound, EI8 quality,
Sheath: LSOH crosslinked polymer, EM8 quality.

APPLICATION

For applications requiring low emissions of smoke and corrosive gases in the event of fire.

For mobile installation: Suitable for both indoor and outdoor environments, as well as in industrial and agricultural workshops. Ideal for supplying power to industrial and agricultural machinery and equipment subject to moderate mechanical stress, such as heating plates, inspection lamps, electric tools (e.g., drills, circular saws), and household power tools.

For fixed installation: Appropriate for use in temporary structures, such as construction site buildings or huts, and for connecting parts in lifting devices and machinery. Suitable for dry, humid, or damp areas (AD2).

When installed in protected systems, such as conduits or similar enclosed setups, it supports voltages up to 1000V AC or 750V DC to ground.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575: Given its properties of limiting the development of fire, heat emission and noxious fumes, the cable is suitable for the supply of electricity in buildings and other civil engineering works.

TECHNICAL DATA

Rated voltage U₀/U: 450/750 V a.c.
(for fixed and protected installation 0.6/1 kV a.c.)

Max. Operating Temp.: +90°C
Min. Operating Temp.: -20°C
(without mechanical shocks)

Max. S.C. Temp.: +250°C
Min. Install Temp.: -5°C

Recommended Max. Tensile Stress:
15 N/mm² of the cross-section of the copper for mobile use,
50 N/mm² for static use.

Min Bend Radius: 6 x OD (Mobile)
4 x OD (Static)

Standards: EN 50525-3-21
Fire propagation: EN 60332-3-24
Low Voltage Directive: 2014/35/EU
RoHS Directive: 2011/65/EU

Reaction to Fire: **Standard:** EN 50575:2014+A1:2016
CPR Compliant **Class:** Cca-s1b, d1, a1
REGULATION 305/2011/EU **Classification:** EN 13501-6

Heat and smoke emission and flame development: EN 50399

Flame propagation: EN 60332-1-2

Corrosive gases or halogens: EN 60754-2

Smoke density: EN 61034-2

Notified Body: 0051 - IMQ

CE 2019 (single-core), 2023 and 2024 (multi-poles)

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H07ZZ-F MULTI-CORE

LSOH FLEXIBLE POWER CABLE

| TWO-CORE | | | | | | | | |
|--------------|----------------|----------------------|---------------------------|-----------------------|-----------------------|------------------------------------|----------------|-------------------------------|
| No. of Cores | Conductor Size | Approx. Conductor OD | Avg. Insulation Thickness | Avg. Sheath Thickness | Max. Overall Diameter | Max. electrical resistance at 20°C | Approx. weight | Current rating in air at 30°C |
| | mm | mm | mm | mm | mm | Ω/Km | Kg/Km | A |
| 2 | 1 | 1.3 | 0.8 | 1.3 | 10.0 | 19.5 | 100 | 19 |
| 2 | 1.5 | 1.5 | 0.8 | 1.5 | 11.0 | 13.3 | 120 | 26 |
| 2 | 2.5 | 2.0 | 0.9 | 1.7 | 13.1 | 7.98 | 175 | 36 |
| 2 | 4 | 2.5 | 1.0 | 1.8 | 15.1 | 4.95 | 240 | 49 |
| 2 | 6 | 3.0 | 1.0 | 2.0 | 16.8 | 3.30 | 315 | 63 |
| 2 | 10 | 4.0 | 1.2 | 3.1 | 22.6 | 1.91 | 550 | 86 |
| 2 | 16 | 5.0 | 1.2 | 3.3 | 25.7 | 1.21 | 700 | 115 |
| 2 | 25 | 6.2 | 1.4 | 3.6 | 30.7 | 0.780 | 1005 | 149 |

ALL FIGURES QUOTED ARE APPROXIMATE

| THREE-CORE | | | | | | | | |
|--------------|----------------|----------------------|---------------------------|-----------------------|-----------------------|------------------------------------|----------------|-------------------------------|
| No. of Cores | Conductor Size | Approx. Conductor OD | Avg. Insulation Thickness | Avg. Sheath Thickness | Max. Overall Diameter | Max. electrical resistance at 20°C | Approx. weight | Current rating in air at 30°C |
| | mm | mm | mm | mm | mm | Ω/Km | Kg/Km | A |
| 3 | 1 | 1.3 | 0.8 | 1.4 | 10.7 | 19.5 | 120 | 17 |
| 3 | 1.5 | 1.5 | 0.8 | 1.6 | 11.9 | 13.3 | 150 | 23 |
| 3 | 2.5 | 2.0 | 0.8 | 1.8 | 14.0 | 7.98 | 210 | 32 |
| 3 | 4 | 2.5 | 1.0 | 1.9 | 16.2 | 4.95 | 285 | 42 |
| 3 | 6 | 3.0 | 1.0 | 2.1 | 18.0 | 3.30 | 385 | 54 |
| 3 | 10 | 4.0 | 1.2 | 3.3 | 24.2 | 1.91 | 670 | 75 |
| 3 | 16 | 5.0 | 1.2 | 3.5 | 27.6 | 1.21 | 880 | 100 |
| 3 | 25 | 6.2 | 1.4 | 3.8 | 33.0 | 0.780 | 1280 | 127 |
| 3 | 35 | 7.4 | 1.4 | 4.1 | 37.1 | 0.554 | 1680 | 158 |
| 3 | 50 | 8.9 | 1.6 | 4.5 | 42.9 | 0.386 | 2310 | 192 |
| 3 | 70 | 10.5 | 1.6 | 4.8 | 48.3 | 0.272 | 3090 | 246 |
| 3 | 95 | 12.2 | 1.8 | 5.3 | 54.0 | 0.206 | 4000 | 298 |
| 3 | 120 | 13.8 | 1.8 | 5.6 | 60.0 | 0.161 | 4915 | 346 |
| 3 | 150 | 15.4 | 2.0 | 6.0 | 66.0 | 0.129 | 6075 | 399 |
| 3 | 185 | 16.9 | 2.2 | 6.4 | 72.0 | 0.106 | 7345 | 456 |

ALL FIGURES QUOTED ARE APPROXIMATE

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H07ZZ-F MULTI-CORE

LSOH FLEXIBLE POWER CABLE

| FOUR-CORE | | | | | | | | |
|--------------|----------------|----------------------|---------------------------|-----------------------|-----------------------|------------------------------------|----------------|-------------------------------|
| No. of Cores | Conductor Size | Approx. Conductor OD | Avg. Insulation Thickness | Avg. Sheath Thickness | Max. Overall Diameter | Max. electrical resistance at 20°C | Approx. weight | Current rating in air at 30°C |
| | mm | mm | mm | mm | mm | Ω/Km | Kg/Km | A |
| 4 | 1 | 1.3 | 0.8 | 1.5 | 11.9 | 19.5 | 140 | 17 |
| 4 | 1.5 | 1.5 | 0.8 | 1.7 | 13.1 | 13.3 | 175 | 23 |
| 4 | 2.5 | 2.0 | 0.8 | 1.9 | 15.5 | 7.98 | 255 | 32 |
| 4 | 4 | 2.5 | 0.9 | 2.0 | 17.9 | 4.95 | 350 | 42 |
| 4 | 6 | 3.0 | 1.0 | 2.3 | 20.0 | 3.30 | 480 | 54 |
| 4 | 10 | 4.0 | 1.2 | 3.4 | 26.5 | 1.91 | 815 | 75 |
| 4 | 16 | 5.0 | 1.2 | 3.6 | 30.1 | 1.21 | 1085 | 100 |
| 4 | 25 | 6.2 | 1.4 | 4.1 | 36.6 | 0.780 | 1620 | 127 |
| 4 | 35 | 7.4 | 1.4 | 4.4 | 41.1 | 0.554 | 2135 | 158 |
| 4 | 50 | 8.9 | 1.6 | 4.8 | 47.5 | 0.386 | 3015 | 192 |
| 4 | 70 | 10.5 | 1.6 | 5.2 | 54.0 | 0.272 | 3940 | 246 |
| 4 | 95 | 12.2 | 1.8 | 5.9 | 61.0 | 0.206 | 5100 | 298 |
| 4 | 120 | 13.8 | 1.8 | 6.0 | 66.0 | 0.161 | 6325 | 346 |
| 4 | 150 | 15.4 | 2.0 | 6.5 | 73.0 | 0.129 | 7735 | 399 |
| 4 | 185 | 16.9 | 2.2 | 7.0 | 80.0 | 0.106 | 9405 | 456 |
| 4 | 240 | 19.5 | 2.4 | 7.7 | 91.0 | 0.0801 | 12205 | 538 |
| 4 | 300 | 23.0 | 2.6 | 8.4 | 101.0 | 0.0641 | 15135 | 621 |

ALL FIGURES QUOTED ARE APPROXIMATE

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H07ZZ-F MULTI-CORE

LSOH FLEXIBLE POWER CABLE

| FIVE-CORE | | | | | | | | |
|--------------|----------------|----------------------|---------------------------|-----------------------|-----------------------|------------------------------------|----------------|-------------------------------|
| No. of Cores | Conductor Size | Approx. Conductor OD | Avg. Insulation Thickness | Avg. Sheath Thickness | Max. Overall Diameter | Max. electrical resistance at 20°C | Approx. weight | Current rating in air at 30°C |
| | mm | mm | mm | mm | mm | Ω/Km | Kg/Km | A |
| 5 | 1.5 | 1.5 | 0.8 | 1.8 | 14.4 | 13.3 | 240 | 23 |
| 5 | 2.5 | 2.0 | 0.9 | 2.0 | 17.0 | 7.98 | 305 | 32 |
| 5 | 4 | 2.5 | 1.0 | 2.2 | 19.9 | 4.95 | 435 | 42 |
| 5 | 6 | 3.0 | 1.0 | 2.5 | 22.2 | 3.30 | 575 | 54 |
| 5 | 10 | 4.0 | 1.2 | 3.6 | 29.1 | 1.91 | 965 | 75 |
| 5 | 16 | 5.0 | 1.2 | 3.9 | 33.3 | 1.21 | 1335 | 100 |
| 5 | 25 | 6.2 | 1.4 | 4.4 | 40.4 | 0.780 | 1980 | 127 |
| 5 | 35 * | 7.4 | 1.4 | 4.6 | / | 0.554 | 2555 | 158 |
| 5 | 50 * | 8.9 | 1.6 | 5.2 | / | 0.386 | 3560 | 192 |
| 5 | 70 * | 10.5 | 1.6 | 5.7 | / | 0.272 | 4815 | 246 |
| 5 | 95 * | 12.2 | 1.8 | 5.6 | / | 0.206 | 6265 | 298 |
| 5 | 120 * | 13.8 | 2.0 | 6.2 | / | 0.161 | 7600 | 346 |
| 5 | 150 * | 15.4 | 2.2 | 6.7 | / | 0.129 | 9710 | 399 |
| 5 | 185 * | 16.9 | 2.4 | 7.4 | / | 0.106 | 11790 | 456 |
| 5 | 240 * | 19.5 | 2.6 | 8.1 | / | 0.0801 | 15300 | 538 |

ALL FIGURES QUOTED ARE APPROXIMATE

* FORMATION WITHOUT CERTIFICATION ◀HAR▶

N.B. Permissible current rating values are according to:
- three conductors charged

| COLOUR CODE | |
|--------------|---------|
| No. of Cores | COLOURS |
| TWO-CORE | |
| THREE-CORE | OR |
| FOUR-CORE | OR |
| FIVE-CORE | OR |

Special Features

Good flexibility and mechanical resistance to abrasion, shocks, crushing and lacerations.
Good resistance to atmospheric agents, grease and mineral oils. UV-resistant.

E&OE. Manufacturers reserve the right to amend the specification without prior notice.

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