

H07Z-K / 07Z-K

halogen-free single core, finely stranded, bare wire



TECHNICAL DATA

Single core, H07Z-K acc. to DIN VDE 0285-525-3-41 / DIN EN 50525-3-41; 07Z-K in alignment with DIN VDE 0285-525-3-41 / DIN EN 50525-3-41

| | |
|---|---|
| Temperature range | flexible -5°C to +90°C fixed -40°C to +90°C |
| Permissible operating temperature of the conductor | +90°C |
| Nominal voltage | AC U ₀ /U 450/750 V |
| Test voltage | 2500 V |
| Minimum bending radius | fixed < 8 mm: 4x Outer-ø 8-12 mm: 5x Outer-ø > 12 mm: 6x Outer-ø |

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Foil wrapping around conductor permissible
- Core insulation: cross-linked polyolefin acc. to DIN VDE 0207-363-5 / DIN EN 50363-5 (compound type E15)
- Core identification: see table

PROPERTIES

- resistant to: ozone
- halogen-free

- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- halogen-free acc. to DIN VDE 0285-525-1 / DIN EN 50525-1 appendix B
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- smoke density acc. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2
- ozone-resistant acc. to DIN VDE 0473-811-403 / DIN EN 60811-403

APPLICATION

For applications that require a low development of smoke and corrosive gases in case of fire. Installation in pipes on and under plaster or in similar enclosed systems. Suitable for protected, permanent laying in lighting installations or switch and control devices up to 1000V AC or 750V DC against earth.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- Approved core colours: black, green-yellow, blue, brown, red, white, grey, violet, orange, pink


H07Z-K

| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. | black | green-yellow | blue | brown | red | white | grey | violet |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|----------|--------------|----------|----------|----------|----------|----------|--------|
| | | | | | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 51768 | 51769 | 51770 | 51771 | 51772 | 51773 | 51774 | 51775 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 51777 | 51778 | 51779 | 51780 | 51781 | 51782 | 51783 | 51784 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 51786 | 51787 | 51788 | 51789 | 51790 | 51791 | 51792 | 51793 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 51795 | 51796 | 51797 | 51798 | 51799 | 51800 | 51801 | 51802 |
| 10 | 5.7 - 7.1 | 8 | 96.0 | 118.0 | 51804 | 51805 | 51806 | 51807 | 51808 | 51809 | 51810 | 51811 |
| 16 | 6.7 - 8.4 | 6 | 154.0 | 180.0 | 51813 | 51814 | 51815 | 51816 | 51817 | 51818 | 51819 | 51820 |
| 25 | 8.4 - 10.6 | 4 | 240.0 | 278.0 | 51822 | 51823 | 51824 | 51825 | 51826 | 51827 | 51828 | 51829 |
| 35 | 9.7 - 12.1 | 2 | 336.0 | 375.0 | 51831 | 51832 | 51833 | 51834 | 51835 | 51836 | 51837 | 51838 |
| 50 | 11.5 - 14.4 | 1 | 480.0 | 560.0 | 51840 | 51841 | 51842 | 51843 | 51844 | 51845 | 51846 | 51847 |
| 70 | 13.2 - 16.6 | 2/0 | 672.0 | 780.0 | 51849 | 51850 | 51851 | 51852 | 51853 | 51854 | 51855 | 51856 |
| 95 | 15.1 - 18.8 | 3/0 | 912.0 | 952.0 | 51858 | 51859 | 51860 | 51861 | 51862 | 51863 | 51864 | 51865 |
| 120 | 16.7 - 20.9 | 4/0 | 1152.0 | 1200.0 | 51867 | 51868 | 51869 | 51870 | 51871 | 51872 | 51873 | 51874 |
| 150 | 18.6 - 23.3 | 300 kcmil | 1440.0 | 1505.0 | 51876 | 51877 | 51878 | 51879 | 51880 | 51881 | 51882 | 51883 |
| 185 | 20.6 - 25.8 | 350 kcmil | 1776.0 | 1845.0 | 51885 | 51886 | 51887 | 51888 | 51889 | 51890 | 51891 | 51892 |
| 240 | 23.5 - 29.4 | 500 kcmil | 2304.0 | 2400.0 | 51894 | 51895 | 51896 | 51897 | 51898 | 51899 | 51900 | 51901 |


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| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. |  | | | |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|--|--------------|--------------|--------------|
| | | | | | Part no. | Part no. | Part no. | Part no. |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 52952 | 52951 | 52165 | 53074 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 52954 | 52953 | 52166 | 53075 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 52956 | 52955 | 52167 | 53076 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 52958 | 52957 | 52168 | 53077 |
| 10 | 5.7 - 7.1 | 8 | 96.0 | 118.0 | 52960 | 52959 | 52169 | 53078 |
| 16 | 6.7 - 8.4 | 6 | 154.0 | 180.0 | 52962 | 52961 | 52170 | 53079 |
| 25 | 8.4 - 10.6 | 4 | 240.0 | 278.0 | 52964 | 52963 | 52171 | 53080 |
| 35 | 9.7 - 12.1 | 2 | 336.0 | 375.0 | 52966 | 52965 | 52172 | 53081 |
| 50 | 11.5 - 14.4 | 1 | 480.0 | 560.0 | 52968 | 52967 | 52173 | 53082 |
| 70 | 13.2 - 16.6 | 2/0 | 672.0 | 780.0 | 52970 | 52969 | - | 53083 |
| 95 | 15.1 - 18.8 | 3/0 | 912.0 | 952.0 | 52972 | 52971 | - | 53084 |
| 120 | 16.7 - 20.9 | 4/0 | 1152.0 | 1200.0 | 52974 | 52973 | - | 53085 |
| 150 | 18.6 - 23.3 | 300 kcmil | 1440.0 | 1505.0 | 52976 | 52975 | - | 53086 |
| 185 | 20.6 - 25.8 | 350 kcmil | 1776.0 | 1845.0 | 52978 | 52977 | - | 53087 |
| 240 | 23.5 - 29.4 | 500 kcmil | 2304.0 | 2400.0 | 52980 | 52979 | - | 53088 |

07Z-K

| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. |  | | | | | |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|--|--------------|--------------|--------------|--------------|--------------|
| | | | | | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 51776 | 52648 | 51405 | 51406 | 51407 | 51404 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 51785 | 52649 | 51409 | 51410 | 51411 | 51408 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 51794 | 52650 | 51413 | 51414 | 51415 | 51412 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 51803 | 52651 | 51417 | 51418 | 50899 | 51416 |
| 10 | 5.7 - 7.1 | 8 | 96.0 | 118.0 | 51812 | 52652 | - | - | - | - |
| 16 | 6.7 - 8.4 | 6 | 154.0 | 180.0 | 51821 | 52653 | - | - | - | - |
| 25 | 8.4 - 10.6 | 4 | 240.0 | 278.0 | 51830 | 52654 | - | - | - | - |
| 35 | 9.7 - 12.1 | 2 | 336.0 | 375.0 | 51839 | 52655 | - | - | - | - |
| 50 | 11.5 - 14.4 | 1 | 480.0 | 560.0 | 51848 | 52656 | - | - | - | - |
| 70 | 13.2 - 16.6 | 2/0 | 672.0 | 780.0 | 51857 | - | - | - | - | - |
| 95 | 15.1 - 18.8 | 3/0 | 912.0 | 952.0 | 51866 | - | - | - | - | - |
| 120 | 16.7 - 20.9 | 4/0 | 1152.0 | 1200.0 | 51875 | - | - | - | - | - |
| 150 | 18.6 - 23.3 | 300 kcmil | 1440.0 | 1505.0 | 51884 | - | - | - | - | - |
| 185 | 20.6 - 25.8 | 350 kcmil | 1776.0 | 1845.0 | 51893 | - | - | - | - | - |
| 240 | 23.5 - 29.4 | 500 kcmil | 2304.0 | 2400.0 | 51902 | - | - | - | - | - |

H07Z-K Barrel

| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. |  | | | | | | | |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 52845 | 52846 | 52847 | 52848 | 52849 | 52850 | 52851 | 52852 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 52857 | 52858 | 52859 | 52860 | 52861 | 52862 | 52863 | 52864 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 52135 | 52136 | 52137 | 52138 | 52139 | 52140 | 52141 | 52142 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 52145 | 52146 | 52147 | 52148 | 52149 | 52150 | 52151 | 52152 |

| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. |  | |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|---|--------------|
| | | | | | Part no. | Part no. |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 52855 | 52853 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 52867 | 52865 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 52144 | 52143 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 52154 | 52153 |

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07Z-K Barrel

| Cross-sec. mm ² | Outer-ø min - max mm | AWG, approx. | Cu-weight kg/km | Weight kg/km, approx. | yellow | green | dark blue-white |
|-------------------------------|----------------------------|-----------------|--------------------|-----------------------------|--------------|--------------|--------------------|
| | | | | | Part no. | Part no. | Part no. |
| 1.5 | 2.8 - 3.5 | 16 | 14.4 | 24.0 | 52158 | 52660 | 11008910 |
| 2.5 | 3.4 - 4.3 | 14 | 24.0 | 35.0 | 52159 | 52661 | 11008911 |
| 4 | 3.9 - 4.9 | 12 | 38.0 | 51.0 | 52160 | 52662 | 11008912 |
| 6 | 4.4 - 5.5 | 10 | 58.0 | 71.0 | 52161 | 52663 | 11008913 |