

European Standardized Cables

05V-K

PVC hook-up wire tri-rated, 300/500 V

H07V-K/MTW/TEW

Harmonized PVC hook-up wire tri-rated, 450/750 V

07V-K/MTW/TEW

PVC hook-up wire tri-rated, 450/750 V



00V AWM Style 1015/10519 105°C 600V VW-1 CSA Type TEW 105°C 600V FT1 CE



Marking for H07V-K/MTW/TEW 31670182:

SAB BRÖCKSKES · D-VIERSEN · H07V-K 1.5mm² 16 AWG (UL) Type MTW 600V AWM Style 1015/10519 105°C 600V VW-1 CSA Type TEW 105°C 600V FT1 CE

Construction:

| | |
|--------------------|---|
| Conductor: | tinned copper strands acc. to IEC 60228, VDE 0295, class 5 |
| Insulation: | PVC, T12 acc. to EN 50363-3 + VDE 0207-363-3 |
| Color code: | see color code chart below |

Outstanding features:

- flexing single conductor
- harmonized acc. to European standards
- MTW (Machine Tool Wire)
- TEW (Thermoplastic Equipment Wire)
- 05V-K, H07V-K & 07V-K:
with reference to BS 6231 type BK
- NFPA 79 for industrial machinery
- 20, 19, 18, 6 to 4/0 AWG insulation
thickness is larger than HAR
specification. (now marked 07V-K)

Technical data:

| | | |
|---------------------------------------|---|--|
| Nominal voltage: | 05V-K U _o /U 300/500 V | H07V-K & 07V-K U _o /U 450/750 V |
| Voltage UL/CSA: | 600 V | |
| Testing voltage: | 05V-K 2000 V | H07V-K & 07V-K 2500 V |
| Min. bending radius: | 4 x O.D. | |
| Temperature range: | DIN VDE static: flexible: | UL-AWM/CSA up to +105°C up to +105°C |
| | | (UL) MTW up to +90°C up to +90°C |
| Burning characteristics: | flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL VW-1, CSA FT1 | |
| Approvals: | 05V-K/MTW/TEW: 05V-K/MTW/TEW: H07V-K/MTW/TEW: 07V-K/MTW/TEW: | |
| | 26 - 24 AWG: | UR AWM, CSA, CE, RoHS |
| | 22 - 18 AWG: | UL MTW, UR AWM, CSA, CE, RoHS |
| | 16 - 8 AWG: | HAR, UL MTW, UR AWM, CSA, CE, RoHS |
| | 6 - 4/0 AWG: | UL MTW, UR AWM, CSA, CE, RoHS |
| Absence of harmful substances: | acc. to RoHS directive of the European Union see page O/30 | |

300/500V

05V-K/AWM/TEW - UR AWM/CSA/CE

| item no. | mm ² | AWG | outer-ø | | cable weight ≈lbs/mft |
|--------------|-----------------|--------------|---------|-----|--------------------------|
| | | | inch | mm | |
| ▶ 3166 .. 14 | 0.14 | 26 (≈ 18/38) | 0.079 | 2.0 | 4 |
| ▶ 3166 .. 25 | 0.25 | 24 (≈ 14/34) | 0.087 | 2.2 | 5 |

Other colors are available on request

05V-K/MTW/TEW - UL MTW/UR AWM/CSA/CE

| item no. | mm ² | AWG | outer-ø | | cable weight ≈lbs/mft |
|--------------|-----------------|--------------|---------|-----|--------------------------|
| | | | inch | mm | |
| ▶ 3166 .. 34 | 0.34 | 22 (≈ 7/30) | 0.091 | 2.3 | 5 |
| ▶ 3166 .. 50 | 0.50 | 20 (≈ 16/32) | 0.098 | 2.5 | 7 |
| ▶ 3166 .. 75 | 0.75 | 19 (≈ 23/32) | 0.106 | 2.7 | 9 |
| ▶ 3166 .. 80 | 1.00 | 18 (≈ 30/32) | 0.110 | 2.8 | 10 |

Other colors are available on request

Color code for single conductors:

| | | |
|--------------------------|-------------------------|------------------------------|
| 01 = black | 06 = green ¹ | 16 = dark blue |
| 02 = blue | 07 = violet | 17 = pink |
| 03 = brown | 08 = white | 27 = green/yellow |
| 04 = gray | 09 = orange | 32 = blue/white ¹ |
| 05 = yellow ¹ | 11 = red | 63 = white/blue ¹ |

¹ Not <HAR> approved for all sizes for these colors

450/750V

H07V-K/MTW/TEW - HAR/UL MTW/UR AWM/CSA/CE

| item no. | mm ² | AWG | outer-ø | | cable weight ≈lbs/mft |
|--------------|-----------------|--------------|---------|-----|--------------------------|
| | | | inch | mm | |
| ▶ 3167 .. 82 | 1.50 | 16 (≈ 27/30) | 0.122 | 3.1 | 13 |
| ▶ 3167 .. 84 | 2.50 | 14 (≈ 46/30) | 0.142 | 3.6 | 20 |
| ▶ 3167 .. 86 | 4.00 | 12 (≈ 52/28) | 0.165 | 4.2 | 30 |
| ▶ 3167 .. 87 | 6.00 | 10 (≈ 78/28) | 0.185 | 4.7 | 42 |
| ▶ 3167 .. 88 | 10.00 | 8 (≈ 77/26) | 0.260 | 6.6 | 76 |

Other colors are available on request

07V-K/MTW/TEW - UL MTW/UR AWM/CSA/CE

| item no. | mm ² | AWG | outer-ø | | cable weight ≈lbs/mft |
|--------------|-----------------|----------------|---------|------|--------------------------|
| | | | inch | mm | |
| ▶ 3167 .. 89 | 16.00 | 6 (≈ 122/26) | 0.331 | 8.4 | 126 |
| ▶ 3167 .. 90 | 25.00 | 4 (≈ 190/26) | 0.398 | 10.1 | 181 |
| ▶ 3167 .. 91 | 35.00 | 2 (≈ 272/26) | 0.453 | 11.5 | 251 |
| ▶ 3167 .. 92 | 50.00 | 1 (≈ 400/26) | 0.543 | 13.8 | 371 |
| ▶ 3167 .. 93 | 70.00 | 2/0 (≈ 543/26) | 0.634 | 16.1 | 494 |
| ▶ 3167 .. 94 | 95.00 | 3/0 (≈ 484/24) | 0.717 | 18.2 | 659 |
| ▶ 3167 .. 95 | 120.00 | 4/0 (≈ 589/24) | 0.791 | 20.1 | 808 |

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