

European Standardized Cables

05V-K/H05V-K/MTW/TEW Harmonized PVC hook-up wire tri-rated, 300/500 V

H07V-K/MTW/TEW Harmonized 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 H05V-K/MTW/TEW 3166D180:

SAB BRÖCKSKES · D-VIERSEN · <VDE> <HAR> H05V-K 1.0mm² 18 AWG (U) 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)
- H05V-K & H07V-K: with reference to BS 6231 type BK

Technical data:

| | | |
|---------------------------------------|--|---|
| Nominal voltage: | 05V-K & H05V-K U ₀ /U 300/500 V | H07V-K U ₀ /U 450/750 V |
| Voltage UL/CSA: | 600 V | |
| Testing voltage: | 05V-K & H05V-K 2000 V | H07V-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: | | |
| <i>05V-K/MTW/TEW:</i> | <u>26 - 24 AWG:</u> UR AWM, CSA, CE, RoHS <u>22 AWG:</u> UL MTW, UR AWM, CSA, CE, RoHS | |
| <i>H05V-K/MTW/TEW:</i> | HAR, UL MTW, UR AWM, CSA, CE, RoHS | |
| <i>H07V-K/MTW/TEW:</i> | <u>16 - 2 AWG:</u> HAR, UL MTW, UR AWM, CSA, CE, RoHS <u>1 - 4/0 AWG:</u> UL MTW, UR AWM, CSA, CE, RoHS | |
| Absence of harmful substances: | acc. to RoHS directive of the European Union see page O/30 | |

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

| item no. | mm ² | AWG | nominal outer-ø | | cable weight |
|---------------|-----------------|--------------|-----------------|-----|--------------|
| | | | inch | mm | ≈lbs/mft |
| ▶ 3166 .. 14* | 0.14 | 26 (≈ 18/38) | 0.079 | 2.0 | 4 |
| ▶ 3166 .. 25* | 0.25 | 24 (≈ 14/34) | 0.087 | 2.2 | 5 |
| ▶ 3166 .. 34 | 0.34 | 22 (≈ 7/30) | 0.091 | 2.3 | 6 |

* without MTW

Other colors are available on request

H05V-K/MTW/TEW - HAR/UL/CSA/CE

| item no. | mm ² | AWG | nominal outer-ø | | cable weight |
|--------------|-----------------|--------------|-----------------|-----|--------------|
| | | | inch | mm | ≈lbs/mft |
| ▶ 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 | 11 |

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 |

¹Non <HAR> approved

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

| item no. | mm ² | AWG | nominal outer-ø | | cable weight |
|--------------|-----------------|--------------|-----------------|------|--------------|
| | | | inch | mm | ≈lbs/mft |
| ▶ 3167 .. 82 | 1.50 | 16 (≈ 27/30) | 0.122 | 3.1 | 13 |
| ▶ 3167 .. 84 | 2.50 | 14 (≈ 46/30) | 0.146 | 3.7 | 22 |
| ▶ 3167 .. 86 | 4.00 | 12 (≈ 52/28) | 0.169 | 4.3 | 34 |
| ▶ 3167 .. 87 | 6.00 | 10 (≈ 78/28) | 0.189 | 4.8 | 44 |
| ▶ 3167 .. 88 | 10.00 | 8 (≈ 77/26) | 0.268 | 6.8 | 81 |
| ▶ 3167 .. 89 | 16.00 | 6 (≈ 122/26) | 0.358 | 9.1 | 142 |
| ▶ 3167 .. 90 | 25.00 | 4 (≈ 190/26) | 0.417 | 10.6 | 204 |
| ▶ 3167 .. 91 | 35.00 | 2 (≈ 272/26) | 0.465 | 11.8 | 273 |

Other colors are available on request

H07V-K/MTW/TEW - UL/CSA/CE

| item no. | mm ² | AWG | nominal outer-ø | | cable weight |
|--------------|-----------------|----------------|-----------------|------|--------------|
| | | | inch | mm | ≈lbs/mft |
| ▶ 3167 .. 92 | 50.00 | 1 (≈ 400/26) | 0.598 | 15.2 | 403 |
| ▶ 3167 .. 93 | 70.00 | 2/0 (≈ 543/26) | 0.638 | 16.2 | 531 |
| ▶ 3167 .. 94 | 95.00 | 3/0 (≈ 484/24) | 0.760 | 19.3 | 717 |
| ▶ 3167 .. 95 | 120.00 | 4/0 (≈ 589/24) | 0.819 | 20.8 | 858 |

Other colors are available on request