

# 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 31660180:

SAB BRÖCKSKES · D-VIERSEN · <VDE> <HAR> H05V-K 1.0mm<sup>2</sup> 18 AWG (UL)

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

## Construction:

|                    |                                                               |
|--------------------|---------------------------------------------------------------|
| <b>Conductor:</b>  | tinned copper strands<br>acc. to IEC 60228, VDE 0295, class 5 |
| <b>Insulation:</b> | PVC, T12<br>acc. to EN 50363-3 + VDE 0207-363-3               |
| <b>Color code:</b> | 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:

|                                       |                                                                                                                                                                                                                                                                                                                            |                                                   |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>Nominal voltage:</b>               | <b>05V-K &amp; H05V-K</b><br>U <sub>o</sub> /U 300/500 V                                                                                                                                                                                                                                                                   | <b>H07V-K</b><br>U <sub>o</sub> /U 450/750 V      |
| <b>Voltage UL/CSA:</b>                | 600 V                                                                                                                                                                                                                                                                                                                      |                                                   |
| <b>Testing voltage:</b>               | <b>05V-K &amp; H05V-K</b><br>2000 V                                                                                                                                                                                                                                                                                        | <b>H07V-K</b><br>2500 V                           |
| <b>Min. bending radius:</b>           | 4 x O.D.                                                                                                                                                                                                                                                                                                                   |                                                   |
| <b>Temperature range:</b>             | <b>DIN VDE</b><br>static:<br>flexible:                                                                                                                                                                                                                                                                                     | <b>UL-AWM/CSA</b><br>up to +105°C<br>up to +105°C |
| <b>Burning characteristics:</b>       | flame retardant and self-extinguishing<br>acc. to IEC 60332-1-2 + VDE 0482-332-1-2,<br>UL VW-1, CSA FT1                                                                                                                                                                                                                    |                                                   |
| <b>Approvals:</b>                     | <b>05V-K/MTW/TEW:</b><br><u>26 - 24 AWG:</u> UR AWM, CSA, CE, RoHS<br><u>22 AWG:</u> UL MTW, UR AWM, CSA, CE, RoHS<br><b>H05V-K/MTW/TEW:</b><br>HAR, UL MTW, UR AWM, CSA, CE, RoHS<br><b>H07V-K/MTW/TEW:</b><br><u>16 - 2 AWG:</u> HAR, UL MTW, UR AWM, CSA, CE, RoHS<br><u>1 - 4/0 AWG:</u> UL MTW, UR AWM, CSA, CE, RoHS |                                                   |
| <b>Absence of harmful substances:</b> | acc. to RoHS directive of the European Union<br>see page O/30                                                                                                                                                                                                                                                              |                                                   |

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

| item no.      | mm <sup>2</sup> | AWG          | nominal outer-ø<br>inch | mm  | cable weight<br>≈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 <sup>2</sup> | AWG          | nominal outer-ø<br>inch | mm  | cable weight<br>≈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

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

| item no.     | mm <sup>2</sup> | AWG          | nominal outer-ø<br>inch | mm   | cable weight<br>≈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 <sup>2</sup> | AWG            | nominal outer-ø<br>inch | mm   | cable weight<br>≈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

#### Color code for single conductors:

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

<sup>1</sup>Non <HAR> approved