


| | | |
|-------------------|----------------------------|--|
| U.I. Lapp GmbH | PRODUCT INFORMATION |  |
| | H05V-K <HAR> | 05.11.2015 |

European <HAR> cable type certification

Cables' <HAR>marking also stands for the international endorsement of national certification institutes' testing marks and certificates, e. g. <VDE><HAR>. The <HAR>marking is of special importance in case of goods traffic between European countries.



Info

<HAR>

Application range

Internal wiring of devices
Protected installation in and on lighting equipments
Signal systems in and on plaster in tubes

Product Make-up

Fine-wired copper conductor of bare copper strands in line with conductor class 5 acc. IEC 60228
Core insulation: Based on PVC

Norm references / Approvals

<HAR> cable type certification acc. EN 50525-2-31

Product features

Flame-retardant according IEC 60332-1-2
Spool: d1 = 18 mm; d2 = 200 mm; b = 85 mm

Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Photographs are not to scale and do not represent detailed images of the respective products.

The outer diameters stated in the part number table are maximum values.

Technical Data

| | |
|-------------------------|--|
| Classification: | ETIM 5.0 Class-ID: EC000993 ETIM 5.0 Class-Description: Single core cable |
| Conductor stranding: | Fine wire according to VDE 0295 Class 5/ IEC 60228 Class 5 |
| Minimum bending radius: | According to EN 50565-1 4 x outer diameter (OD) for normal use 2 x OD for cautions bending |
| Nominal voltage: | U ₀ /U: 300/500 V |
| Test voltage: | 2000 V |
| Current rating: | VDE 0298 Part 4 EN 50565-1/ VDE 0298-565-1 |
| Temperature range: | Fixed installation: -40 °C to +80 °C Moved: +5 °C to +70 °C |

| | | |
|--------------------|-----------------------------|-------|
| Product Management | Document: LAPP_PRO168EN.pdf | 1 / 5 |
|--------------------|-----------------------------|-------|

| Part number | Conductor cross-section (mm ²) | Outer diameter (mm) | Core colour | m/ring | m/spool | Copper index (kg/km) | Weight (kg/km) |
|-------------|--|---------------------|-------------------|--------|---------|----------------------|----------------|
| 4510001 | 0,5 | 2.1 - 2.5 | green/yellow | 100 | | 4.8 | 9 |
| 4510011 | 0,5 | 2.1 - 2.5 | black | 100 | | 4.8 | 9 |
| 4510021 | 0,5 | 2.1 - 2.5 | blue | 100 | | 4.8 | 9 |
| 4510141 | 0,5 | 2.1 - 2.5 | dark blue | 100 | | 4.8 | 9 |
| 4510031 | 0,5 | 2.1 - 2.5 | brown | 100 | | 4.8 | 9 |
| 4510111 | 0,5 | 2.1 - 2.5 | yellow | 100 | | 4.8 | 9 |
| 4510121 | 0,5 | 2.1 - 2.5 | green | 100 | | 4.8 | 9 |
| 4510071 | 0,5 | 2.1 - 2.5 | violet | 100 | | 4.8 | 9 |
| 4510081 | 0,5 | 2.1 - 2.5 | pink | 100 | | 4.8 | 9 |
| 4510091 | 0,5 | 2.1 - 2.5 | orange | 100 | | 4.8 | 9 |
| 4510041 | 0,5 | 2.1 - 2.5 | red | 100 | | 4.8 | 9 |
| 4510051 | 0,5 | 2.1 - 2.5 | white | 100 | | 4.8 | 9 |
| 4510061 | 0,5 | 2.1 - 2.5 | grey | 100 | | 4.8 | 9 |
| 4510161 | 0,5 | 2.1 - 2.5 | ultra-marine blue | 100 | | 4.8 | 9 |
| 4510921 | 0,5 | 2.1 - 2.5 | Dark blue/white | 100 | | 4.8 | 9 |
| 4510002 | 0,75 | 2.2 - 2.7 | green/yellow | 100 | | 7.2 | 12 |
| 4510012 | 0,75 | 2.2 - 2.7 | black | 100 | | 7.2 | 12 |
| 4510022 | 0,75 | 2.2 - 2.7 | blue | 100 | | 7.2 | 12 |
| 4510142 | 0,75 | 2.2 - 2.7 | dark blue | 100 | | 7.2 | 12 |
| 4510032 | 0,75 | 2.2 - 2.7 | brown | 100 | | 7.2 | 12 |
| 4510112 | 0,75 | 2.2 - 2.7 | yellow | 100 | | 7.2 | 12 |
| 4510122 | 0,75 | 2.2 - 2.7 | green | 100 | | 7.2 | 12 |
| 4510072 | 0,75 | 2.2 - 2.7 | violet | 100 | | 7.2 | 12 |
| 4510082 | 0,75 | 2.2 - 2.7 | pink | 100 | | 7.2 | 12 |
| 4510092 | 0,75 | 2.2 - 2.7 | orange | 100 | | 7.2 | 12 |
| 4510042 | 0,75 | 2.2 - 2.7 | red | 100 | | 7.2 | 12 |
| 4510052 | 0,75 | 2.2 - 2.7 | white | 100 | | 7.2 | 12 |
| 4510062 | 0,75 | 2.2 - 2.7 | grey | 100 | | 7.2 | 12 |
| 4510922 | 0,75 | 2.2 - 2.7 | Dark blue/white | 100 | | 7.2 | 12 |
| 4510162 | 0,75 | 2.2 - 2.7 | ultra-marine blue | 100 | | 7.2 | 12 |
| 4510003 | 1 | 2.4 - 2.8 | green/yellow | 100 | | 9.6 | 15 |
| 4510013 | 1 | 2.4 - 2.8 | black | 100 | | 9.6 | 15 |
| 4510023 | 1 | 2.4 - 2.8 | blue | 100 | | 9.6 | 15 |
| 4510143 | 1 | 2.4 - 2.8 | dark blue | 100 | | 9.6 | 15 |




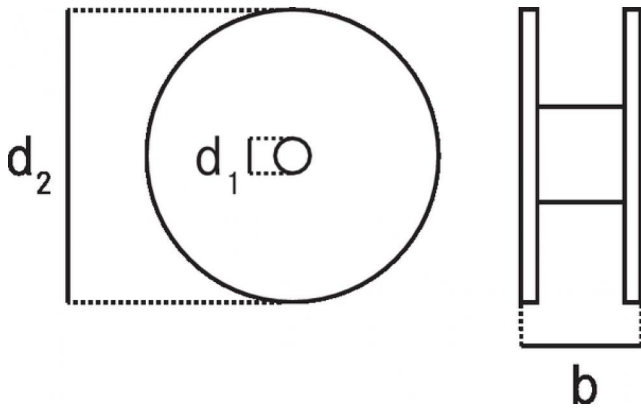
H05V-K <HAR>

05.11.2015

| Part number | Conductor cross-section (mm²) | Outer diameter (mm) | Core colour | m/ring | m/spool | Copper index (kg/km) | Weight (kg/km) |
|-------------|-------------------------------|---------------------|-------------------|--------|---------|----------------------|----------------|
| 4510033 | 1 | 2.4 - 2.8 | brown | 100 | | 9.6 | 15 |
| 4510113 | 1 | 2.4 - 2.8 | yellow | 100 | | 9.6 | 15 |
| 4510123 | 1 | 2.4 - 2.8 | green | 100 | | 9.6 | 15 |
| 4510073 | 1 | 2.4 - 2.8 | violet | 100 | | 9.6 | 15 |
| 4510083 | 1 | 2.4 - 2.8 | pink | 100 | | 9.6 | 15 |
| 4510093 | 1 | 2.4 - 2.8 | orange | 100 | | 9.6 | 15 |
| 4510043 | 1 | 2.4 - 2.8 | red | 100 | | 9.6 | 15 |
| 4510053 | 1 | 2.4 - 2.8 | white | 100 | | 9.6 | 15 |
| 4510063 | 1 | 2.4 - 2.8 | grey | 100 | | 9.6 | 15 |
| 4510163 | 1 | 2.4 - 2.8 | ultra-marine blue | 100 | | 9.6 | 15 |
| 4510923 | 1 | 2.4 - 2.8 | Dark blue/white | 100 | | 9.6 | 15 |
| 4510001S | 0,5 | 2.1 - 2.5 | green/yellow | | 250 | 4.8 | 9 |
| 4510011S | 0,5 | 2.1 - 2.5 | black | | 250 | 4.8 | 9 |
| 4510021S | 0,5 | 2.1 - 2.5 | blue | | 250 | 4.8 | 9 |
| 4510141S | 0,5 | 2.1 - 2.5 | dark blue | | 250 | 4.8 | 9 |
| 4510031S | 0,5 | 2.1 - 2.5 | brown | | 250 | 4.8 | 9 |
| 4510111S | 0,5 | 2.1 - 2.5 | yellow | | 250 | 4.8 | 9 |
| 4510121S | 0,5 | 2.1 - 2.5 | green | | 250 | 4.8 | 9 |
| 4510071S | 0,5 | 2.1 - 2.5 | violet | | 250 | 4.8 | 9 |
| 4510091S | 0,5 | 2.1 - 2.5 | orange | | 250 | 4.8 | 9 |
| 4510041S | 0,5 | 2.1 - 2.5 | red | | 250 | 4.8 | 9 |
| 4510051S | 0,5 | 2.1 - 2.5 | white | | 250 | 4.8 | 9 |
| 4510061S | 0,5 | 2.1 - 2.5 | grey | | 250 | 4.8 | 9 |
| 4510002S | 0,75 | 2.2 - 2.7 | green/yellow | | 250 | 7.2 | 12 |
| 4510012S | 0,75 | 2.2 - 2.7 | black | | 250 | 7.2 | 12 |
| 4510022S | 0,75 | 2.2 - 2.7 | blue | | 250 | 7.2 | 12 |
| 4510142S | 0,75 | 2.2 - 2.7 | dark blue | | 250 | 7.2 | 12 |
| 4510032S | 0,75 | 2.2 - 2.7 | brown | | 250 | 7.2 | 12 |
| 4510112S | 0,75 | 2.2 - 2.7 | yellow | | 250 | 7.2 | 12 |
| 4510122S | 0,75 | 2.2 - 2.7 | green | | 250 | 7.2 | 12 |
| 4510072S | 0,75 | 2.2 - 2.7 | violet | | 250 | 7.2 | 12 |
| 4510082S | 0,75 | 2.2 - 2.7 | pink | | 250 | 7.2 | 12 |
| 4510092S | 0,75 | 2.2 - 2.7 | orange | | 250 | 7.2 | 12 |
| 4510102S | 0,75 | 2.2 - 2.7 | transparent | | 250 | 7.2 | 12 |

| Part number | Conductor cross-section (mm²) | Outer diameter (mm) | Core colour | m/ring | m/spool | Copper index (kg/km) | Weight (kg/km) |
|-------------|-------------------------------|---------------------|-------------------|--------|---------|----------------------|----------------|
| 4510042S | 0,75 | 2.2 - 2.7 | red | | 250 | 7.2 | 12 |
| 4510052S | 0,75 | 2.2 - 2.7 | white | | 250 | 7.2 | 12 |
| 4510062S | 0,75 | 2.2 - 2.7 | grey | | 250 | 7.2 | 12 |
| 4510162S | 0,75 | 2.2 - 2.7 | ultra-marine blue | | 250 | 7.2 | 12 |
| 4510003S | 1 | 2.4 - 2.8 | green/yellow | | 250 | 9.6 | 15 |
| 4510013S | 1 | 2.4 - 2.8 | black | | 250 | 9.6 | 15 |
| 4510023S | 1 | 2.4 - 2.8 | blue | | 250 | 9.6 | 15 |
| 4510143S | 1 | 2.4 - 2.8 | dark blue | | 250 | 9.6 | 15 |
| 4510033S | 1 | 2.4 - 2.8 | brown | | 250 | 9.6 | 15 |
| 4510123S | 1 | 2.4 - 2.8 | green | | 250 | 9.6 | 15 |
| 4510073S | 1 | 2.4 - 2.8 | violet | | 250 | 9.6 | 15 |
| 4510093S | 1 | 2.4 - 2.8 | orange | | 250 | 9.6 | 15 |
| 4510103S | 1 | 2.4 - 2.8 | transparent | | 250 | 9.6 | 15 |
| 4510043S | 1 | 2.4 - 2.8 | red | | 250 | 9.6 | 15 |
| 4510053S | 1 | 2.4 - 2.8 | white | | 250 | 9.6 | 15 |
| 4510063S | 1 | 2.4 - 2.8 | grey | | 250 | 9.6 | 15 |
| 4510163S | 1 | 2.4 - 2.8 | ultra-marine blue | | 250 | 9.6 | 15 |

| | | |
|-------------------|----------------------------|--|
| U.I. Lapp GmbH | PRODUCT INFORMATION |  LAPP GROUP |
| | H05V-K <HAR> | 05.11.2015 |



| | | |
|--------------------|-----------------------------|-------|
| Product Management | Document: LAPP_PRO168EN.pdf | 5 / 5 |
|--------------------|-----------------------------|-------|