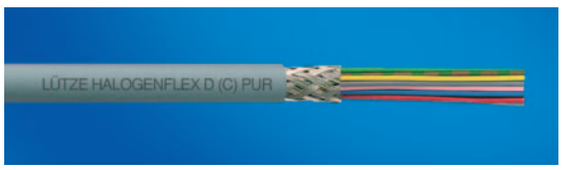
# Halogen-free data cables · shielded

## HALOGENFLEX D(C)PUR




**Application**
- Ideal for all application locations in which the release of halogens in the event of fire is to be avoided, above all in rooms and public buildings with high concentrations of people as well as machine and device construction, transport and conveyor technology, heating, climate technology
- For trouble-free transmission in all areas of electronics, measuring, control and regulation technology
- Connection and data cable for signal, measurement and data transmission for telephone and voice transmission
- In dry and moist rooms
- As control, measurement and regulation cable medium operating conditions
- For flexible application without compulsory guide

**Properties**
- Environmentally friendly halogen-free cable
- Halogen-free conductors prevent poisonous and corrosive fire gases from damaging property and causing injury to people
- Very good shielding attenuation
- Free from paint wetting disruptive substances (LABS-free), RoHS-compliant

**Technical data**

| | |
|---|---|
| Voltage | |
| $U_0$/U | 300 V |
| Test voltage | 1200 V |
| Isolation resistance | min. 20 MΩ × km |
| Temperature range | |
| moving | -25 °C to +70 °C |
| fixed | -40 °C to +70 °C |
| Minimum bending radius | |
| moving | Cable diameter × 12 |
| fixed | Cable diameter × 6 |
| Burning behaviour | Flame-retardant according to VDE 0482 T. 265-2-1;IEC 60332-1 |
| Halogen-free | according to VDE 0482 T. 267-2-1; EN 50267-2-1; IEC 60754-1 |
| Corrosiveness of smoke emissions | according to VDE 0482 T. 267-2-2; EN 50267-2-2; IEC 60754-2 |
| Smoke density | VDE 0482 section 268-2; EN 50268-2; |

**Design**
- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special-TPE conductor insulation
- Conductors colour-coded according to DIN 47100
- Conductors stranded layers
- Meshwork from tinned copper wire braid, optical covering ≥ 85 %
- Full polyurethane jacket, matt, adhesion-free surface
- Jacket colour grey RAL 7001 or 7032

| Part-No. | Number of strands/cross-section | Outer-∅ approx. mm | Weight kg/100 m | Cu-Index kg/100 m |
|---|---|---|---|---|
| **0.14 mm²** | | | | |
| 113780 | (2×0,14) | 3.9 | 2.0 | 0.7 |
| 113781 | (3×0,14) | 4.1 | 2.4 | 1.2 |
| 113782 | (4×0,14) | 4.6 | 2.7 | 1.4 |
| 113783 | (5×0,14) | 4.9 | 3.2 | 1.6 |
| 113784 | (7×0,14) | 5.2 | 3.9 | 2.0 |
| 113785 | (10×0,14) | 6.5 | 5.5 | 3.3 |
| 113786 | (12×0,14) | 6.7 | 6.0 | 3.0 |
| 113787 | (18×0,14) | 7.6 | 8.8 | 5.0 |
| 113788 | (25×0,14) | 9.1 | 11.3 | 6.3 |
| **0.25 mm²** | | | | |
| 113791 | (3×0,25) | 4.7 | 2.9 | 1.8 |
| 113792 | (4×0,25) | 4.8 | 3.4 | 2.2 |
| 113793 | (5×0,25) | 5.6 | 4.3 | 2.5 |
| 113794 | (7×0,25) | 6.0 | 5.1 | 3.0 |
| 113795 | (10×0,25) | 7.4 | 8.0 | 5.0 |
| 113796 | (12×0,25) | 7.6 | 9.4 | 5.0 |
| 113797 | (18×0,25) | 8.8 | 12.7 | 7.8 |
| 113798 | (25×0,25) | 10.2 | 16.5 | 9.2 |
| **0.34 mm²** | | | | |
| 113801 | (3×0,34) | 5.3 | 3.9 | 2.0 |
| 113802 | (4×0,34) | 5.3 | 4.7 | 2.4 |
| 113803 | (5×0,34) | 6.4 | 5.8 | 2.9 |
| 113804 | (7×0,34) | 6.9 | 7.7 | 4.4 |
| 113805 | (10×0,34) | 8.4 | 11.2 | 6.0 |
| 113806 | (12×0,34) | 8.7 | 11.8 | 6.5 |
| 113807 | (18×0,34) | 10.1 | 17.1 | 9.5 |
| 113808 | (25×0,34) | 12.3 | 22.7 | 14.2 |
| **0.5 mm²** | | | | |
| 113810 | (2×0,5) | 5.2 | 3.6 | 1.9 |
| 113811 | (3×0,5) | 5.5 | 4.6 | 2.5 |
| 113812 | (4×0,5) | 5.9 | 6.2 | 3.7 |
| 113813 | (5×0,5) | 6.3 | 7.6 | 4.4 |
| 113814 | (7×0,5) | 7.3 | 9.9 | 5.8 |
| 113815 | (10×0,5) | 8.8 | 12.2 | 7.6 |
| 113816 | (12×0,5) | 9.2 | 14.1 | 8.8 |
| 113817 | (18×0,5) | 10.5 | 21.0 | 12.1 |
| 113818 | (25×0,5) | 13.0 | 28.4 | 18.8 |
| **0.75 mm²** | | | | |
| 113820 | (2×0,75) | 5.8 | 4.7 | 2.5 |
| 113821 | (3×0,75) | 6.1 | 5.2 | 3.7 |
| 113822 | (4×0,75) | 6.8 | 7.8 | 4.9 |
| 113823 | (5×0,75) | 7.1 | 9.0 | 5.8 |
| 113824 | (7×0,75) | 8.0 | 12.0 | 7.8 |
| 113825 | (10×0,75) | 10.0 | 17.6 | 12.3 |
| 113826 | (12×0,75) | 10.2 | 19.7 | 11.9 |
| 113827 | (18×0,75) | 11.8 | 20.3 | 16.8 |

CE These products are in conformity to the EC Low Voltage Directive73/23/EWG or 93/68/EWG respectively

# Halogen-free data cable · stranded pairs, shielded

## HALOGENFLEX D (C)PUR TP


**Application**
- Ideal for all application locations in which the release of halogens in the event of fire is to be avoided, above all in rooms and public buildings with high concentrations of people as well as machine and device construction, transport and conveyor technology, heating, climate technology
- In dry and moist rooms
- For trouble-free transmission in all areas of electronics, measuring, control and regulation technology
- As control, measurement and control cable for medium operating conditions
- For flexible use without compulsory guide

**Properties**
- Environmentally friendly, halogen-free data cable
- High active and passive interference resistance
- High crosstalk attenuation through paired stranding
- Low capacitance, very good electrical properties
- Very good cold flexibility
- Halogen-free, no corrosive gases
- Low adhesion, abrasion-proof, nick-resistant, tear-propagation-resistant, hydrolisis-resistant, microbe-resistant, and rot-resistant
- Widely resistant to acids and bases (see tech. information)
- Free from paint wetting disruptive substances (LABS-free), RoHS-compliant

**Technical data**

| | |
|---|---|
| Voltage | |
| < 0.5 mm² | 250 V |
| ≥ 0.5 mm² | 300 V |
| Test voltage | 3000 V |
| Isolation resistance | min. 20 MΩ × km |
| Temperature range | |
| moving | -15 °C to +80 °C |
| fixed | -40 °C to +80 °C |
| Minimum bending radius | |
| moving | Cable diameter × 15 |
| fixed | Cable diameter × 6 |
| Burning behaviour | Flame-retardant according to UL 94 V2 |
| Halogen-free | Halogen-free according to VDE 0482 T. 267-2-1; EN 50267-2-1; IEC 60754-1 |

**Design**
- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special-TPE conductor insulation
- Conductors colour-coded according to DIN 47100
- Conductors stranded pairs
- Meshwork from tinned copper wire braid, optical covering ≥ 85 %
- Full polyurethane jacket, matt, adhesion-free surface
- Jacket colour grey RAL 7001

| Part-No. | Number of strands/cross-section | Outer-∅ approx. mm | Weight kg/100 m | Cu-Index kg/100 m |
|---|---|---|---|---|
| **0.14 mm²** | | | | |
| 113860 | (2×2×0,14) | 5.5 | 3.8 | 2.2 |
| 113861 | (3×2×0,14) | 5.8 | 4.8 | 2.5 |
| 113862 | (4×2×0,14) | 6.2 | 5.4 | 2.4 |
| 113863 | (6×2×0,14) | 7.3 | 5.6 | 3.8 |
| 113864 | (7×2×0,14) | 7.5 | 9.5 | 5.3 |
| 113865 | (12×2×0,14) | 9.3 | 13.7 | 7.8 |
| **0.25 mm²** | | | | |
| 113868 | (2×2×0,25) | 6.0 | 4.5 | 2.6 |
| 113869 | (3×2×0,25) | 6.8 | 6.9 | 4.1 |
| 113870 | (4×2×0,25) | 7.0 | 8.3 | 5.0 |
| 113871 | (6×2×0,25) | 8.0 | 11.5 | 6.5 |
| 113872 | (7×2×0,25) | 8.5 | 11.9 | 7.1 |
| 113873 | (12×2×0,25) | 10.6 | 17.6 | 10.7 |
| 113874 | (15×2×0,25) | 11.8 | 21.3 | 12.3 |
| **0.34 mm²** | | | | |
| 113876 | (2×2×0,34) | 6.9 | 6.9 | 4.2 |
| 113877 | (3×2×0,34) | 7.4 | 8.4 | 4.0 |
| 113878 | (4×2×0,34) | 8.0 | 9.4 | 5.2 |
| 113879 | (6×2×0,34) | 9.4 | 14.9 | 8.4 |
| 113880 | (7×2×0,34) | 10.0 | 15.4 | 9.1 |
| 113881 | (12×2×0,34) | 12.5 | 24.5 | 13.9 |
| **0.5 mm²** | | | | |
| 113884 | (2×2×0,5) | 7.3 | 7.1 | 4.1 |
| 113885 | (3×2×0,5) | 7.9 | 9.2 | 5.3 |
| 113886 | (4×2×0,5) | 9.0 | 12.5 | 6.6 |
| 113887 | (6×2×0,5) | 10.5 | 17.8 | 10.7 |
| 113888 | (7×2×0,5) | 11.2 | 18.6 | 11.7 |
| 113889 | (12×2×0,5) | 14.5 | 33.2 | 20.3 |
| **0.75 mm²** | | | | |
| 113892 | (2×2×0,75) | 8.0 | 10.5 | 6.4 |
| 113893 | (3×2×0,75) | 8.6 | 13.8 | 7.0 |
| 113894 | (4×2×0,75) | 10.0 | 16.8 | 10.6 |
| 113895 | (6×2×0,75) | 12.0 | 23.7 | 13.8 |
| 113896 | (7×2×0,75) | 12.5 | 25.4 | 16.0 |
| 113897 | (12×2×0,75) | 15.8 | 43.3 | 24.2 |

CE These products are in conformity to the EC Low Voltage Directive73/23/EWG or 93/68/EWG respectively

# Halogen-free data cables · shielded

## HALOGENFLEX LIH (C) H-D


**Application**
- Ideal for all application locations in which the release of halogens in the event of fire is to be avoided, above all in rooms and public buildings with high concentrations of people
- For trouble-free transmission in all areas of electronics, measuring, control and regulation technology
- Connection and data cable for signal, measurement and data transmission for telephone and voice transmission.
- In dry and moist rooms
- As control, measurement and regulation cable medium operating conditions
- For flexible application without compulsory guide

**Properties**
- Environmentally friendly halogen-free cable
- Halogen-free conductors prevent poisonous and corrosive fire gases from damaging property and causing injury to people
- Very good shielding attenuation
- Free from paint wetting disruptive substances (LABS-free), RoHS-compliant

**Technical data**

| | |
|---|---|
| Voltage | |
| $U_0$/U | 300 V |
| Test voltage | 1200 V |
| Isolation resistance | min. 20 MΩ × km |
| Temperature range | |
| moving | -25 °C to +70 °C |
| fixed | -40 °C to +70 °C |
| Minimum bending radius | |
| moving | Cable diameter × 15 |
| fixed | Cable diameter × 6 |
| Burning behaviour | Flame-retardant according to VDE 0482 T. 265-2-1;IEC 60332-1 |
| Halogen-free | according to VDE 0482 T. 267-2-1; EN 50267-2-1; IEC 60754-1 |
| Corrosiveness of smoke emissions | according to VDE 0482 T. 267-2-2; EN 50267-2-2; IEC 60754-2 |
| Smoke density | VDE 0482 section 268-2; EN 50268-2; |

**Design**
- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special conductor insulation HI2 according to VDE 0207 T. 23
- Conductors colour-coded according to DIN 47100
- Conductors stranded layers
- Meshwork from tinned copper wire braid, optical covering ≥ 85 %
- Outer jacket Flame-retardant, halogen-free special thermoplast HM2 according to VDE 0207T. 24
- Jacket colour grey RAL 7001 or 7032

| Part-No. | Number of strands/cross-section | Outer-∅ approx. mm | Weight kg/100 m | Cu-Index kg/100 m |
|---|---|---|---|---|
| **0.14 mm²** | | | | |
| 103681 | (3×0,14) | 4.0 | 2.4 | 1.2 |
| 103682 | (4×0,14) | 4.2 | 2.8 | 1.4 |
| 103683 | (5×0,14) | 4.9 | 3.3 | 1.7 |
| 103684 | (7×0,14) | 4.9 | 3.9 | 2.0 |
| 103685 | (10×0,14) | 5.8 | 5.3 | 3.4 |
| 103686 | (12×0,14) | 6.6 | 7.1 | 3.7 |
| 103687 | (18×0,14) | 7.6 | 9.4 | 4.9 |
| 103688 | (25×0,14) | 9.1 | 12.7 | 6.3 |
| **0.25 mm²** | | | | |
| 103690 | (3×0,25) | 4.7 | 3.3 | 1.7 |
| 103691 | (4×0,25) | 5.0 | 3.9 | 2.0 |
| 103692 | (5×0,25) | 5.5 | 4.6 | 2.4 |
| 103693 | (7×0,25) | 6.1 | 6.4 | 3.7 |
| 103694 | (10×0,25) | 6.8 | 8.4 | 5.1 |
| 103695 | (12×0,25) | 8.0 | 10.2 | 5.7 |
| 103696 | (18×0,25) | 8.4 | 13.8 | 8.6 |
| 103697 | (25×0,25) | 11.3 | 20.1 | 11.1 |
| **0.34 mm²** | | | | |
| 103699 | (3×0,34) | 4.9 | 3.7 | 2.0 |
| 103700 | (4×0,34) | 5.3 | 4.4 | 2.5 |
| 103701 | (5×0,34) | 6.0 | 6.1 | 3.6 |
| 103702 | (7×0,34) | 6.4 | 7.3 | 4.4 |
| 103703 | (10×0,34) | 8.3 | 10.8 | 6.1 |
| 103704 | (12×0,34) | 8.4 | 11.7 | 6.7 |
| 103705 | (18×0,34) | 10.0 | 17.4 | 10.7 |
| 103706 | (25×0,34) | 11.9 | 23.7 | 13.6 |
| **0.5 mm²** | | | | |
| 103707 | (2×0,5) | 5.6 | 4.1 | 2.2 |
| 103708 | (3×0,5) | 6.4 | 6.4 | 3.4 |
| 103709 | (4×0,5) | 6.8 | 7.6 | 4.1 |
| 103710 | (5×0,5) | 7.5 | 8.8 | 4.8 |
| 103711 | (7×0,5) | 8.0 | 11.2 | 6.1 |
| 103712 | (10×0,5) | 9.6 | 16.5 | 9.7 |
| 103713 | (12×0,5) | 10.2 | 18.3 | 10.7 |
| 103714 | (18×0,5) | 12.3 | 26.2 | 14.6 |
| 103715 | (25×0,5) | 14.3 | 34.1 | 18.9 |
| **0.75 mm²** | | | | |
| 103717 | (3×0,75) | 7.0 | 7.7 | 4.4 |
| 103718 | (4×0,75) | 7.6 | 10.0 | 5.4 |
| 103719 | (5×0,75) | 8.3 | 11.1 | 6.4 |
| 103720 | (7×0,75) | 9.1 | 14.8 | 9.1 |
| 103721 | (10×0,75) | 11.7 | 21.6 | 12.6 |
| 103722 | (12×0,75) | 11.8 | 23.8 | 14.1 |
| 103723 | (18×0,75) | 13.8 | 32.9 | 19.9 |
| 103724 | (25×0,75) | 16.5 | 44.5 | 25.9 |

CE These products are in conformity to the EC Low Voltage Directive73/23/EWG or 93/68/EWG respectively

# Halogen-free data cable · stranded pairs, shielded

## HALOGENFLEX LIH (C) H-D TP


**Application**
- Ideal for all application locations in which the release of halogens in the event of fire is to be avoided, above all in rooms and public buildings with high concentrations of people
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- Connection and data cable for signal, measurement and data transmission for telephone and voice transmission.
- In dry and moist rooms
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**Properties**
- Environmentally friendly halogen-free cable
- Halogen-free conductors prevent poisonous and corrosive fire gases from damaging property and causing injury to people
- Very good shielding attenuation
- High crosstalk attenuation through paired stranding
- Free from paint wetting disruptive substances (LABS-free), RoHS-compliant

**Technical data**

| | |
|---|---|
| Nominal voltage | 300 V |
| Test voltage | 1200 V |
| Isolation resistance | min. 20 MΩ × km |
| Temperature range | |
| moving | -25 °C to +70 °C |
| fixed | -40 °C to +70 °C |
| Minimum bending radius | |
| moving | Cable diameter × 15 |
| fixed | Cable diameter × 6 |
| Burning behaviour | Flame-retardant according to VDE 0482 T. 265-2-1;IEC 60332-1 |
| Halogen-free | according to VDE 0482 T. 267-2-1; EN 50267-2-1; IEC 60754-1 |
| Corrosiveness of smoke emissions | according to VDE 0482 T. 267-2-2; EN 50267-2-2; IEC 60754-2 |
| Smoke density | VDE 0482 section 268-2; EN 50268-2; |

**Design**
- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special conductor insulation HI2 according to VDE 0207 T. 23
- Conductors colour-coded according to DIN 47100
- Conductors stranded pairs, foil banding
- Meshwork from tinned copper wire braid, optical covering ≥ 85 %
- Outer jacket Flame-retardant, halogen-free special thermoplast HM2 according to VDE 0207T. 24
- Jacket colour grey RAL 7001 or 7032

| Part-No. | Number of strands/cross-section | Outer-∅ approx. mm | Weight kg/100 m | Cu-Index kg/100 m |
|---|---|---|---|---|
| **0.14 mm²** | | | | |
| 103780 | (2×2×0,14) | 5.2 | 3.5 | 1.9 |
| 103781 | (3×2×0,14) | 5.4 | 3.8 | 2.2 |
| 103782 | (4×2×0,14) | 5.5 | 4.3 | 3.2 |
| 103783 | (5×2×0,14) | 6.2 | 4.9 | 3.5 |
| 103784 | (8×2×0,14) | 7.5 | 9.5 | 5.1 |
| 103785 | (10×2×0,14) | 8.3 | 11.2 | 6.0 |
| **0.25 mm²** | | | | |
| 103786 | (2×2×0,25) | 6.7 | 4.5 | 3.1 |
| 103787 | (3×2×0,25) | 7.1 | 6.7 | 3.7 |
| 103788 | (4×2×0,25) | 7.9 | 8.3 | 4.5 |
| 103789 | (5×2×0,25) | 8.6 | 8.6 | 5.3 |
| 103790 | (8×2×0,25) | 9.9 | 12.3 | 8.4 |
| 103791 | (10×2×0,25) | 11.2 | 13.0 | 10.1 |
| **0.34 mm²** | | | | |
| 103792 | (2×2×0,34) | 7.0 | 6.9 | 3.5 |
| 103793 | (3×2×0,34) | 7.4 | 9.4 | 4.4 |
| 103794 | (4×2×0,34) | 8.3 | 11.1 | 5.5 |
| 103795 | (5×2×0,34) | 9.3 | 12.3 | 7.5 |
| 103796 | (8×2×0,34) | 10.5 | 15.9 | 10.1 |
| 103797 | (10×2×0,34) | 12.2 | 20.9 | 12.2 |
| **0.5 mm²** | | | | |
| 103798 | (2×2×0,5) | 8.7 | 7.8 | 4.7 |
| 103799 | (3×2×0,5) | 9.2 | 10.9 | 5.9 |
| 103800 | (4×2×0,5) | 10.8 | 13.5 | 7.3 |
| 103801 | (5×2×0,5) | 11.9 | 16.1 | 10.1 |
| 103802 | (8×2×0,5) | 13.4 | 19.4 | 13.8 |
| 103803 | (10×2×0,5) | 15.1 | 24.4 | 16.7 |
| **0.75 mm²** | | | | |
| 103804 | (2×2×0,75) | 9.8 | 10.5 | 7.1 |
| 103805 | (3×2×0,75) | 10.4 | 13.8 | 8.9 |
| 103806 | (4×2×0,75) | 10.7 | 15.8 | 11.1 |
| 103807 | (5×2×0,75) | 13.3 | 19.9 | 13.3 |
| 103808 | (8×2×0,75) | 15.0 | 27.1 | 18.6 |
| 103809 | (10×2×0,75) | 17.5 | 34.3 | 22.6 |

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