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| 0028650 | DATA SHEET |  |
| valid from: 01.01.2019 | UNITRONIC® FD P plus | |

Application

UNITRONIC® FD P plus is a high flexible data cable with an outer sheath of PUR.
The cable with low capacitance is designed especially for use in power chains, automatic manipulators, in permanently moved machine parts.
The cable is increased oil-, abrasion-, tear and notch resistant, in addition microbe- and hydrolysis resistant.
It is cold-resistant and for harsh environmental conditions.

Design

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| Design | based on UL AWM Style 11117 and 21576, UL 758, CSA C22.2 No. 210 and according to VDE 0812 |
| Certification | UL AWM Style 21576 (File No. E63634), UL 758 RU AWM I/II A/B (File No. E63634) cRU AWM I/II A/B (File No. E63634) |
| Conductor | superfine wire strands of bare copper wires |
| Insulation | special Polyolefin-based compound |
| Core identification code | according to DIN 47100 |
| Stranding | cores stranded in layers, wrapping with fleece on the outer layer |
| Outer sheath | special PUR-based compound, flame retardant, halogen free colour: grey (similar RAL 7001) |

Electrical properties at 20°C

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| Specific volume resistivity | > 5 G Ω x km |
| Mutual capacitance | C/C approx. 60 nF/km |
| Inductance | approx. 0.65 mH/km |
| Peak operating voltage | VDE: 0.14 mm ² : 350 V (not for power applications) ≥ 0.25 mm ² : 500 V (not for power applications) UL: 1000 V |
| Test voltage | C/C: 1500 V |

Mechanical and thermal properties

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| Minimum bending radius | Flexing: 5 x cable \emptyset Fixed installation: 3 x cable \emptyset |
| Temperature range | VDE: Flexing: - 40 °C up to +80 °C Fixed installation: - 40 °C up to +80 °C UL AWM: max. +80 °C |
| Flammability | flame retardant acc. to IEC 60332-1-2 and acc. to UL: FT2 |
| Halogen free | acc. to VDE 0472-815 |
| UV resistance | according to ISO 4892-2, method A (change of colour allowed) |
| Ozone resistance | according to EN 50396 resp. VDE 0473-396, method B |
| Oil resistance | EN 50363-10-2 resp. VDE 0207-363-10-2 |
| General requirements | This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances). |

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