Fluoroplastic Equipment Wires

UL 1330

Technical data
- FEP single core according to UL Style 1330
- Temperature range
  -100 °C to +200 °C
  (up to +230 °C for short time)
- Nominal voltage 600 V
- Minimum bending radius
  flexing 10 x cable diameter
  fixed installation 4 x cable diameter
- Conductor temperature range
  plain copper + 130 °C
  tinned copper + 180 °C
  silver pl. copper + 200 °C

Properties
- Higher insulation resistance
- Low dielectric loss
- Not flammable
- Absolute ozone resistant
- Absolute weather resistant
- Self-extinguishing and flame retardant: IEC 60332-1

Cable structure
- Stranded copper wire, bare, tinned, silver
- FEP Insulation

Application
UL 1330 FEP wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

AWM = Appliance Wiring Material
UL = Underwriters Laboratories Inc. (USA)
UL File NO. E334907

<table>
<thead>
<tr>
<th>AWG-no.</th>
<th>Conductor Construction mm</th>
<th>Outer Diameter mm</th>
<th>Cable Weight kg/km</th>
<th>Max Cond. Resistance at 20 °C Ohm/km</th>
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</thead>
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</table>
Fluoroplastic Equipment Wires

UL 1332

Technical data
- FEP single core according to UL Style 1332
- Temperature range
  -100 °C to + 200 °C
  (up to + 230 °C for short time)
- Nominal voltage 300 V
- Minimum bending radius
  flexing 10 x cable diameter
  fixed installation 4 x cable diameter
- Conductor temperature range
  plain copper + 130 °C
  tinned copper + 180 °C
  silver pl. copper + 200 °C

Properties
- Higher insulation resistance
- Low dielectric loss
- Not flammable
- Absolute ozone resistant
- Absolute weather resistant
- Self-extinguishing and flame retardant: IEC 60332-1

Cable structure
- Stranded copper wire, bare, tinned, silver
- FEP Insulation

Application
UL 1332 FEP wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

AWM = Appliance Wiring Material
UL = Underwriters Laboratories Inc. (USA)
UL File NO. E334907

<table>
<thead>
<tr>
<th>AWG-no.</th>
<th>Conductor Construction mm</th>
<th>Outer Diameter mm</th>
<th>Cable Weight kg/km</th>
<th>Max Cond. Resistance at 20 °C Ohm/km</th>
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</table>
Fluoroplastic Equipment Wires

UL 1592

Technical data

• FEP single core according to UL Style 1592
• Temperature range
  -55 °C to + 200 °C
  (up to + 230 °C for short time)
• Nominal voltage 300 V
• Minimum bending radius
  flexing 10 x cable diameter
  fixed installation 4 x cable diameter
• Conductor temperature range
  plain copper + 130 °C
  tinned copper + 180 °C
  silver pl. copper + 200 °C

Properties

• Higher insulation resistance
• Low dielectric loss
• Not flammable
• Absolute ozone resistant
• Absolute weather resistant
• Self-extinguishing and flame retardant: IEC 60332-1

Cable structure

• Stranded copper wire, bare, tinned, silver
• FEP Insulation

Application

UL 1592 FEP wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

AWM = Appliance Wiring Material
UL = Underwriters Laboratories Inc. (USA)
UL File NO. E334907

<table>
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<tr>
<th>AWG-no.</th>
<th>Conductor Construction mm</th>
<th>Outer Diameter mm</th>
<th>Cable Weight kg/km</th>
<th>Max. Cond. Resistance at 20 °C Ohm/km</th>
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<td>7 x 0.32</td>
<td>1.80</td>
<td>9.32</td>
<td>35</td>
</tr>
</tbody>
</table>
Fluoroplastic Equipment Wires

UL 1671 🌿

Technical data

- ETFE single core according to UL Style 1671
- **Rated Temperature** 150 ℃
- **Nominal voltage** 300 V
- **Minimum bending radius**
  - flexing 10 x cable diameter
  - fixed installation 4 x cable diameter

Properties

- Low dielectric loss
- Absolute ozone resistant
- Absolute weather resistant
- Self-extinguishing and
- Flame retardant: IEC 60332-1

Cable structure

- 32 AWG - 10 AWG solid or stranded round, tinned or bare copper, silver plated or nickel plated copper, or silver plated copper alloy.
- ETFE compound

Application

UL 1671 ETFE wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

**AWM** = Appliance Wiring Material

**UL** = Underwriters Laboratories Inc. (USA)

<table>
<thead>
<tr>
<th>Cross section mm²</th>
<th>Conductor Construction No. x mm</th>
<th>Conductor Diameter mm</th>
<th>Outer Diameter mm</th>
<th>Cable Weight kg/km</th>
<th>Max Cond. Resistance at 20 ℃ Ohm/km</th>
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<td>16 X 0.254</td>
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## Technical data
- **Properties**
  - Higher insulation resistance
  - Low dielectric loss
  - Not flammable
  - Min. 20 kV dielectric strength
  - Absolute ozone resistant
  - Absolute weather resistant
  - Self-extinguishing and flame retardant: IEC 60332-1

- **Cable structure**
  - Stranded copper wire, bare, tinned, silver
  - FEP Insulation

- **Fluorinated polymeric insulation FEP**

- **Temperature range**
  - -100 °C to + 205 °C
    - (up to + 230 °C for short time)

- **Nominal voltage**
  - 600 V

- **Test voltage**
  - 2500 V

- **Insulation resistance**
  - min. 2 GΩm x km

- **Minimum bending radius**
  - flexing 10 x cable diameter
  - fixed installation 4 x cable diameter

- **Conductor temperature range**
  - plain copper + 130 °C
  - tinned copper + 180 °C
  - silver pl. copper + 200 °C

## Application
FEP wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

### Table: FEP Wire Specifications

<table>
<thead>
<tr>
<th>AWG-no.</th>
<th>NO. cores x cross-sec. mm²</th>
<th>Outer Diameter mm</th>
<th>Copper Weight kg/km</th>
<th>Cable Weight kg/km</th>
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</table>

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Fluoroplastic Equipment Wires

PTFE Wire

Technical data
- Fluorinated polymeric insulation PTFE
- Temperature range
  -190 °C to + 260 °C (up to + 300 °C for short time)
- Nominal voltage
  - type E = 600 V
  - type EE = 1000 V
- Test voltage
  - type E = 3.4 kV
  - type EE = 5 kV
- Insulation resistance
  - min. 1 GOhm x km
- Minimum bending radius
  - 10 x cable diameter
- Conductor temperature range
  - plain copper + 130 °C
  - tinned copper + 180 °C
  - silver pl. copper + 200 °C
  - nickel pl. copper + 300 °C

Properties
- Higher insulation resistance
- Low dielectric loss
- Not flammable
- Absolute weather resistant
- Water absorption <0.01 %
- Self-extinguishing and flame retardant: IEC 60332-1

Cable structure
- Stranded copper wire, bare, tinned, silver or nickel-plated
- PTFE Insulation

Application
PTFE wires are used for the wiring of the control cabinets where the heat-resistant, oil-resistant, and flame-resistant features are required.

### Cable Table

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<th>AWG-no.</th>
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<th>600V Outer Diameter</th>
<th>600V Cable Weight kg/km</th>
<th>1000V Cross-sec.</th>
<th>1000V Outer Diameter</th>
<th>1000V Cable Weight kg/km</th>
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