

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

AWG-no.	Conductor Construction mm	Outer Diameter mm	Cable Weight kg/km	Max. Cond. Resistance at 20 °C Ohm/km
30	7 x 0.10	1.40	3.19	354.00
28	7 x 0.13	1.48	3.70	223.00
26	7 x 0.16	1.58	4.97	139.00
24	7 x 0.20	1.70	6.30	86.00
22	7 x 0.26	1.88	8.02	55.00
20	7 x 0.32	2.06	9.95	35.00
18	7 x 0.39	2.11	13.61	21.80
16	7 x 0.50	2.45	19.10	13.70
14	19 x 0.37	2.86	27.41	8.62
12	19 x 0.46	3.32	38.41	4.53
10	37 x 0.43	4.02	62.90	3.41

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

AWG-no.	Conductor Construction mm	Outer Diameter mm	Cable Weight kg/km	Max. Cond. Resistance at 20 °C Ohm/km
30	7 x 0.10	1.02	1.85	354.00
28	7 x 0.13	1.10	2.28	223.00
26	7 x 0.16	1.20	3.33	139.00
24	7 x 0.20	1.32	4.23	86.00
22	7 x 0.26	1.50	5.63	55.00
20	7 x 0.32	1.64	7.91	35.00
18	7 x 0.39	1.79	11.03	21.80
16	7 x 0.50	2.13	16.23	13.70
14	19 x 0.37	2.56	24.07	8.62
12	19 x 0.46	3.02	34.82	4.53
10	37 x 0.43	3.72	58.23	3.41

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

AWG-no.	Conductor Construction mm	Outer Diameter mm	Cable Weight kg/km	Max. Cond. Resistance at 20 °C Ohm/km
32	7 x 0.08	1.08	2.32	567
30	7 x 0.10	1.14	2.69	354
28	7 x 0.13	1.22	3.24	223
26	7 x 0.16	1.32	4.01	139
24	7 x 0.20	1.44	5.16	86
22	7 x 0.26	1.62	7.03	55
20	7 x 0.32	1.80	9.32	35

UL 1671



Technical data

- ETFE single core according to UL Style 1671
- **Rated Temperature** 150 °C
- **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)

Cross section mm ²	Conductor Construction No. x mm	Conductor Diameter mm	Outer Diameter mm	Cable Weight kg/km	Max. Cond. Resistance at 20 °C Ohm/km
0.35	7 X 0.254	0.75	1.25	4.5	54.79
0.82	16 X 0.254	1.20	1.70	10.0	25.20
2.10	41 X 0.254	1.80	2.30	22.0	9.65
5.30	105 X 0.254	3.00	3.50	54.0	3.77
8.20	168 X 0.254	3.80	4.30	83.0	2.37

FEP Wire



Technical data

- 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 GOhm 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

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

Application

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

AWG-no.	NO.cores x cross-sec. mm ²	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
26	1 x 0.14	1.00	1.4	2.6
24	1 x 0.25	1.16	2.4	4.1
20	1 x 0.50	1.42	4.8	8.0
18	1 x 0.75	1.62	7.2	9.7
17	1 x 1.00	1.90	9.6	12.7
16	1 x 1.50	2.20	14.4	17.9
14	1 x 2.50	2.65	24.0	26.4
12	1 x 4.00	3.20	38.0	43.1
10	1 x 6.00	4.40	58.0	65.9
8	1 x 10.00	5.30	96.0	115.0
6	1 x 16.00	8.00	154.0	175.0

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.

600V

AWG-no.	Cross-sec. mm ²	Outer Diameter mm	Cable Weight kg/km
32	0.03	0.7	0.4
30	0.06	0.8	0.6
28	0.09	0.9	0.9
26	0.14	1.0	1.6
24	0.21	1.1	2.3
22	0.35	1.3	3.7
21	0.38	1.3	4.0
20	0.57	1.5	6.0
18	0.90	1.7	9.4
16	1.23	2.0	12.9
14	1.94	2.4	20.3

1000V

AWG-no.	Cross-sec. mm ²	Outer Diameter mm	Cable Weight kg/km
32	0.03	1.0	0.4
30	0.06	1.1	0.6
28	0.09	1.1	1.0
26	0.14	1.2	1.6
24	0.21	1.4	2.4
22	0.35	1.5	3.8
21	0.38	1.5	4.2
20	0.57	1.7	6.3
18	0.90	2.0	10.6
16	1.23	2.3	21.4
14	1.94	2.7	34.0