

# ETFE, FEP, PFA Cables

## ETFE, FEP, and PFA insulated stranded hook-up wire

Li7Ybl, Li6Ybl, Li6Yvz, and LiPFAvn with extended temperature range

900V



### Construction:

<b>Conductor:</b>	bare, tinned, or nickel-plated copper strands acc. to ASTM B 286
<b>Insulation:</b>	ETFE, 7Y11 acc. to VDE 0207-6 or FEP, 6Y11 acc. to VDE 0207-6 or PFA, 51Y11 acc. to VDE 0207-6

### Outstanding features:

- ETFE:**
  - high resistance against chemicals and solvents
  - low and high temperature resistance
  - good electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- FEP + PFA:**
  - excellent resistance against chemicals and solvents
  - excellent temperature resistance and flexibility at low temperatures
  - excellent electrical insulating characteristics with low, nearly frequency-independent dielectric characteristics
- FEP + PFA:**  
UL recognized

### Technical data:

<b>Peak operating voltage:</b>	max. 900 V		
<b>Voltage UL:</b>	<b>FEP/PFA:</b> 600 V		
<b>Testing voltage:</b>	2500 V		
<b>Installation:</b>	for one single bend the inner bending radius must not be smaller than 0.5 x outer diameter of the insulated strands		
<b>Radiation resistance:</b>	<b>ETFE:</b> 2 x 10 <sup>8</sup> cJ/kg	<b>FEP:</b> 1 x 10 <sup>7</sup> cJ/kg	<b>PFA:</b> 1 x 10 <sup>6</sup> cJ/kg
<b>Temperature range:</b>	<b>ETFE:</b> <i>static:</i> -90/+135°C <i>flexible:</i> -55/+135°C <i>limited time of use:</i> +150°C	<b>FEP:</b> -90/+180°C -55/+180°C +200°C	<b>PFA:</b> -90/+250°C -55/+250°C +260°C up to 250°C
<b>Burning characteristics:</b>	UL: flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2, UL FT2 (FEP and PFA version)		
<b>Oil resistance:</b>	very good acc. to UL standard 758, at 80°C after 80 days		
<b>Chemical resistance:</b>	very good against acids, halogens, bases, chlorinated solvents as well as organic and inorganic compounds		
<b>Approvals:</b>	<b>FEP/PFA:</b> UR AWM, CE, EAC, RoHS	<b>ETFE:</b> CE, EAC, RoHS	
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union see page O/30		

### Li7Ybl bare copper / ETFE insulation

item no.	AWG	nominal outer-ø inch	mm	cable weight ≈lbs/mft
▶ 3345 .. 28	28 AWG /7	0.037	0.93	1
▶ 3345 .. 26	26 AWG/7	0.041	1.03	2
▶ 3345 .. 24	24 AWG/7	0.046	1.16	2
▶ 3345 .. 22	22 AWG/7	0.052	1.31	3
▶ 3345 .. 20	20 AWG/7	0.059	1.51	5
▶ 3345 .. 18	18 AWG/7	0.070	1.78	7
▶ 3345 .. 16	16 AWG/7	0.076	1.94	9
▶ 3345 .. 14	14 AWG/7	0.091	2.30	14
▶ 3345 .. 12	12 AWG/7	0.109	2.76	22

### Li6Yvz tinned copper / FEP insulation

item no.	AWG	nominal outer-ø inch	mm	cable weight ≈lbs/mft
▶ 3349 .. 28	28 AWG /7	0.037	0.93	1
▶ 3349 .. 26	26 AWG/7	0.041	1.03	2
▶ 3349 .. 24	24 AWG/7	0.046	1.16	2
▶ 3349 .. 22	22 AWG/7	0.052	1.31	3
▶ 3349 .. 20	20 AWG/7	0.059	1.51	5
▶ 3349 .. 18	18 AWG/7	0.070	1.78	8
▶ 3349 .. 16	16 AWG/7	0.076	1.94	9
▶ 3349 .. 14	14 AWG/7	0.091	2.30	15
▶ 3349 .. 12	12 AWG/7	0.109	2.76	22

### Li6Ybl bare copper / FEP insulation

item no.	AWG	nominal outer-ø inch	mm	cable weight ≈lbs/mft
▶ 3348 .. 26	26 AWG/7	0.041	1.03	2
▶ 3348 .. 24	24 AWG/7	0.046	1.16	2
▶ 3348 .. 22	22 AWG/7	0.052	1.31	3
▶ 3348 .. 20	20 AWG/7	0.059	1.51	5
▶ 3348 .. 18	18 AWG/7	0.070	1.78	8
▶ 3348 .. 16	16 AWG/7	0.076	1.94	9
▶ 3348 .. 14	14 AWG/7	0.091	2.30	15
▶ 3348 .. 12	12 AWG/7	0.109	2.76	22

### LiPFAvn nickel-plated copper / PFA insulation

item no.	AWG	nominal outer-ø inch	mm	cable weight ≈lbs/mft
▶ 3353 .. 28	28 AWG /7	0.038	0.96	1
▶ 3353 .. 26	26 AWG/7	0.042	1.06	2
▶ 3353 .. 24	24 AWG/7	0.046	1.17	2
▶ 3353 .. 22	22 AWG/7	0.053	1.34	3
▶ 3353 .. 20	20 AWG/7	0.061	1.54	5
▶ 3353 .. 18	18 AWG/7	0.071	1.81	7
▶ 3353 .. 16	16 AWG/7	0.078	1.97	9

Other dimensions and colors are available on request

#### Color code for single conductors:

01 = black	05 = yellow	09 = orange
02 = blue	06 = green	11 = red
03 = brown	07 = violet	15 = nature
04 = gray	08 = white	

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