

Triple Insulated Wires

Rubadue Wire was the first company to design and manufacture triple insulated wires.

Triple insulated wires can be used to meet several design requirements:

- Wind directly on top of magnet wire
- Wind bobbin wall to wall
- Use as primary or secondary winding
- Meet creepage and clearance requirements
- High voltage
- Applications requiring reinforced isolation
- Ground insulation in UL 1446 systems
- Leakage or loss reduction
- Transformer leadout between circuits
- Reduced space, volume, weight
- Increased safety
- High speed winding capable

Triple insulated wires can be manufactured in a variety of types, sizes, insulations, ratings, and colors.

| Insulation | Size Range | Avg. Wall / Layer | Ins. Layers | Temp. Rating | Voltage Rating | Page |
|--------------|------------|-------------------|-------------|--------------|----------------|------|
| Tefzel® ETFE | 20-40 AWG | .001" | 3 | 155°C | 1000 V | 7 |
| Tefzel® ETFE | 18-40 AWG | .0015" | 3 | 155°C | 1500 V | 8 |
| Tefzel® ETFE | 10-40 AWG | .002" | 3 | 155°C | 1500 V | 9 |
| Tefzel® ETFE | 10-32 AWG | .003" | 3 | 155°C | 1500 V | 10 |
| TCA | 18-40 AWG | .0015" | 3 | 155°C | 1500 V | 11 |
| FEP | 10-40 AWG | .002" | 3 | 155°C | 1000 V | 12 |
| FEP | 10-40 AWG | .003" | 3 | 155°C | 1000 V | 13 |
| FEP | 10-28 AWG | .005" | 3 | 155°C | 1000 V | 14 |
| PFA | 10-40 AWG | .0015" | 3 | 180°C | 1000 V | 15 |
| PFA | 10-40 AWG | .002" | 3 | 180°C | 1000 V | 16 |
| PFA | 10-40 AWG | .003" | 3 | 180°C | 1000 V | 17 |

| | |
|--|---|
| <p>DuPont™ Tefzel® ETFE - Fluoropolymer compound with excellent electrical properties, heat resistance, chemical resistance, and abrasion resistance.</p> | <p>TCA - Modified ETFE - designed for more economical/efficient manufacturing. Comes standard in one color, most sizes readily available.</p> |
| <p>DuPont™ Teflon® FEP - Fluoropolymer compound with exceptional dielectric properties, heat resistance, chemical resistance, and flexibility.</p> | <p>DuPont™ Teflon® PFA - Fluoropolymer compound with superior heat resistance, exceptional dielectric properties, and chemical resistance.</p> |

See the Technical Information section for additional information on insulation types and comparative properties.

Triple Insulated DuPont™ Tefzel® ETFE .001” / Layer



Product Construction:

Size Range:

20 AWG - 40 AWG

Conductor:

Tin plated copper

Solid or stranded (ASTM B-33/ASTM B-286)

Bare copper and other conductors available

Insulation:

DuPont™ Tefzel® ETFE

Rating:

Temperature: 155° C

Voltage: 1000 V

Applications:

Thinnest TIW on the market

Size/Safety critical reinforced isolation

Pulse and signal transformers

Compliances:

UL OBJT2 File No. E206198

UL 60950-1, Annex U

System approvals: UL 1446

RXT-2 Class F

TCA Class F

Other systems available upon request

RoHS Compliant

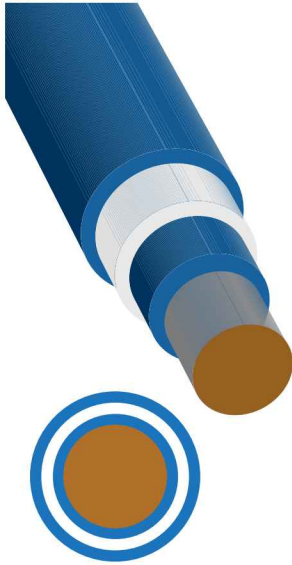
Tensile Strength: 6500 psi

Breakdown: Approx. 4500 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T20A01TXXX-1 | 20 | 0.0320 | 0.813 | 0.0380 | 0.965 | 3.33 |
| T21A01TXXX-1 | 21 | 0.0285 | 0.724 | 0.0345 | 0.876 | 2.68 |
| T22A01TXXX-1 | 22 | 0.0253 | 0.643 | 0.0313 | 0.795 | 2.14 |
| T23A01TXXX-1 | 23 | 0.0226 | 0.574 | 0.0286 | 0.726 | 1.73 |
| T24A01TXXX-1 | 24 | 0.0201 | 0.511 | 0.0261 | 0.663 | 1.38 |
| T25A01TXXX-1 | 25 | 0.0179 | 0.455 | 0.0239 | 0.607 | 1.12 |
| T26A01TXXX-1 | 26 | 0.0159 | 0.404 | 0.0219 | 0.556 | 0.90 |
| T27A01TXXX-1 | 27 | 0.0142 | 0.361 | 0.0202 | 0.513 | 0.73 |
| T28A01TXXX-1 | 28 | 0.0126 | 0.320 | 0.0186 | 0.472 | 0.59 |
| T29A01TXXX-1 | 29 | 0.0113 | 0.287 | 0.0173 | 0.439 | 0.49 |
| T30A01TXXX-1 | 30 | 0.0100 | 0.254 | 0.0160 | 0.406 | 0.39 |
| T31A01TXXX-1 | 31 | 0.0089 | 0.226 | 0.0149 | 0.378 | 0.32 |
| T32A01TXXX-1 | 32 | 0.0080 | 0.203 | 0.0140 | 0.356 | 0.27 |
| T33A01TXXX-1 | 33 | 0.0071 | 0.180 | 0.0131 | 0.333 | 0.22 |
| T34A01TXXX-1 | 34 | 0.0063 | 0.160 | 0.0123 | 0.312 | 0.18 |
| T35A01TXXX-1 | 35 | 0.0056 | 0.142 | 0.0116 | 0.295 | 0.15 |
| T36A01TXXX-1 | 36 | 0.0050 | 0.127 | 0.0110 | 0.279 | 0.13 |
| T37A01TXXX-1 | 37 | 0.0045 | 0.114 | 0.0105 | 0.267 | 0.11 |
| T38A01TXXX-1 | 38 | 0.0040 | 0.102 | 0.0100 | 0.254 | 0.10 |
| T39A01TXXX-1 | 39 | 0.0035 | 0.089 | 0.0095 | 0.241 | 0.08 |
| T40A01TXXX-1 | 40 | 0.0031 | 0.079 | 0.0091 | 0.231 | 0.07 |

Triple Insulated DuPont™ Tefzel® ETFE .0015" / Layer

Triple Insulated Wires



Product Construction:

Size Range:

UL: 18 AWG - 40 AWG
 VDE: 14 AWG - 40 AWG
 Not all sizes listed in chart

Conductor:

Tin plated copper
 Solid or stranded (ASTM B-33/
 ASTM B-286B are copper and
 other conductors available

Insulation:

DuPont™ Tefzel® ETFE

Rating:

Temperature: 155° C
 Voltage:
 UL: 1500 V for electronic equipment
 UL: 707 V for medical equipment
 VDE: 1000 V

Applications:

High power flyback converter for LED
 PDA's/Lighting
 Medical/Dental/Electronic

Compliances:

UL OBJT2 File No. E206198
 UL/IEC 60950-1 (Ed. 2), Annex U.
 UL 60601-1 (Ed. 3)
 IEC 61558-2-16, 60601-1(Ed. 3),
 61010-1(Ed. 3)
 VDE License Nr. 136743: Class F
 System approvals: UL 1446
 RXT-2 Class F
 TCA Class F
 Other systems available upon request
 RoHS Compliant
 Tensile Strength: 6500 psi
 Breakdown: Approx. 7000 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|----------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T18A01TXXX-1.5 | 18 | 0.0403 | 1.024 | 0.0493 | 1.252 | 5.39 |
| T20A01TXXX-1.5 | 20 | 0.0320 | 0.813 | 0.0410 | 1.041 | 3.47 |
| T21A01TXXX-1.5 | 21 | 0.0285 | 0.724 | 0.0375 | 0.953 | 2.80 |
| T22A01TXXX-1.5 | 22 | 0.0253 | 0.643 | 0.0343 | 0.871 | 2.25 |
| T23A01TXXX-1.5 | 23 | 0.0226 | 0.574 | 0.0316 | 0.803 | 1.83 |
| T24A01TXXX-1.5 | 24 | 0.0201 | 0.511 | 0.0291 | 0.739 | 1.48 |
| T25A01TXXX-1.5 | 25 | 0.0179 | 0.455 | 0.0269 | 0.683 | 1.20 |
| T26A01TXXX-1.5 | 26 | 0.0159 | 0.404 | 0.0249 | 0.632 | 0.98 |
| T27A01TXXX-1.5 | 27 | 0.0142 | 0.361 | 0.0232 | 0.589 | 0.80 |
| T28A01TXXX-1.5 | 28 | 0.0126 | 0.320 | 0.0216 | 0.549 | 0.66 |
| T29A01TXXX-1.5 | 29 | 0.0113 | 0.287 | 0.0203 | 0.516 | 0.55 |
| T30A01TXXX-1.5 | 30 | 0.0100 | 0.254 | 0.0190 | 0.483 | 0.45 |
| T31A01TXXX-1.5 | 31 | 0.0089 | 0.226 | 0.0179 | 0.455 | 0.38 |
| T32A01TXXX-1.5 | 32 | 0.0080 | 0.203 | 0.0170 | 0.432 | 0.32 |
| T33A01TXXX-1.5 | 33 | 0.0071 | 0.180 | 0.0161 | 0.409 | 0.27 |
| T34A01TXXX-1.5 | 34 | 0.0063 | 0.160 | 0.0153 | 0.389 | 0.23 |
| T35A01TXXX-1.5 | 35 | 0.0056 | 0.142 | 0.0146 | 0.371 | 0.20 |
| T36A01TXXX-1.5 | 36 | 0.0050 | 0.127 | 0.0140 | 0.356 | 0.17 |
| T37A01TXXX-1.5 | 37 | 0.0045 | 0.114 | 0.0135 | 0.343 | 0.16 |
| T38A01TXXX-1.5 | 38 | 0.0040 | 0.102 | 0.0130 | 0.330 | 0.14 |
| T39A01TXXX-1.5 | 39 | 0.0035 | 0.089 | 0.0125 | 0.318 | 0.12 |
| T40A01TXXX-1.5 | 40 | 0.0031 | 0.079 | 0.0121 | 0.307 | 0.11 |



Triple Insulated DuPont™ Tefzel® ETFE .002" / Layer



Product Construction:

Size Range:

UL: 10 AWG - 40 AWG
 VDE: 14 AWG - 40 AWG
 Not all sizes listed in chart

Conductor:

Tin plated copper
 Solid or stranded (ASTM B-33/ASTM B-286)
 Bare copper and other conductors available

Insulation:

DuPont™ Tefzel® ETFE

Rating:

Temperature: 155° C
 Voltage:
 UL: 1500 V for electronic equipment
 UL: 707 V for medical equipment
 VDE: 1000 V

Applications:

Patient connected devices
 Renewable energy applications
 High frequency

Compliances:

UL OBJT2 File No. E206198
 UL/IEC 60950-1 (Ed. 2), Annex U.
 IEC 61558-2-16, 60601-1 (Ed. 3),
 61010-1 (Ed. 3)
 VDE License Nr. 136743: Class F
 System approvals: UL 1446
 RXT-2 Class F
 TCA Class F
 Other systems available upon request
 RoHS Compliant
 Tensile Strength: 6500 psi
 Breakdown: Approx. 9000 V

Triple Insulated Wires

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T16A01TXXX-2 | 16 | 0.0508 | 1.290 | 0.0628 | 1.595 | 8.60 |
| T17A01TXXX-2 | 17 | 0.0453 | 1.151 | 0.0573 | 1.455 | 6.92 |
| T18A01TXXX-2 | 18 | 0.0403 | 1.024 | 0.0523 | 1.328 | 5.56 |
| T19A01TXXX-2 | 19 | 0.0359 | 0.912 | 0.0479 | 1.217 | 4.48 |
| T20A01TXXX-2 | 20 | 0.0320 | 0.813 | 0.0440 | 1.118 | 3.62 |
| T21A01TXXX-2 | 21 | 0.0285 | 0.724 | 0.0405 | 1.029 | 2.94 |
| T22A01TXXX-2 | 22 | 0.0253 | 0.643 | 0.0373 | 0.947 | 2.37 |
| T23A01TXXX-2 | 23 | 0.0226 | 0.574 | 0.0346 | 0.879 | 1.95 |
| T24A01TXXX-2 | 24 | 0.0201 | 0.511 | 0.0321 | 0.815 | 1.58 |
| T25A01TXXX-2 | 25 | 0.0179 | 0.455 | 0.0299 | 0.759 | 1.30 |
| T26A01TXXX-2 | 26 | 0.0159 | 0.404 | 0.0279 | 0.709 | 1.07 |
| T27A01TXXX-2 | 27 | 0.0142 | 0.361 | 0.0262 | 0.665 | 0.89 |
| T28A01TXXX-2 | 28 | 0.0126 | 0.320 | 0.0246 | 0.625 | 0.74 |
| T29A01TXXX-2 | 29 | 0.0113 | 0.287 | 0.0233 | 0.592 | 0.63 |
| T30A01TXXX-2 | 30 | 0.0100 | 0.254 | 0.0220 | 0.559 | 0.53 |
| T31A01TXXX-2 | 31 | 0.0089 | 0.226 | 0.0209 | 0.531 | 0.45 |
| T32A01TXXX-2 | 32 | 0.0080 | 0.203 | 0.0200 | 0.508 | 0.39 |
| T33A01TXXX-2 | 33 | 0.0071 | 0.180 | 0.0191 | 0.485 | 0.33 |
| T34A01TXXX-2 | 34 | 0.0063 | 0.160 | 0.0183 | 0.465 | 0.29 |
| T35A01TXXX-2 | 35 | 0.0056 | 0.142 | 0.0176 | 0.447 | 0.26 |
| T36A01TXXX-2 | 36 | 0.0050 | 0.127 | 0.0170 | 0.432 | 0.23 |
| T37A01TXXX-2 | 37 | 0.0045 | 0.114 | 0.0165 | 0.419 | 0.21 |
| T38A01TXXX-2 | 38 | 0.0040 | 0.102 | 0.0160 | 0.406 | 0.19 |
| T39A01TXXX-2 | 39 | 0.0035 | 0.089 | 0.0155 | 0.394 | 0.17 |
| T40A01TXXX-2 | 40 | 0.0031 | 0.079 | 0.0151 | 0.384 | 0.16 |

Triple Insulated DuPont™ Tefzel® ETFE .003” / Layer

Triple Insulated Wires



Product Construction:

Size Range:
 UL: 10 AWG - 32 AWG
 VDE: 14 AWG - 32 AWG
 Not all sizes listed in chart

Applications:

Xenon arc lamps
 Lighting (CCFL)
 Medical/Power supply

Conductor:

Tin plated copper
 Solid or stranded (ASTM B-33/ASTM B-286)
 Bare copper and other conductors available

Compliances:

UL OBJT2 File No. E206198
 UL/IEC 60950-1 (Ed. 2), Annex U.
 IEC 61558-2-16, UL/IEC 60601-1 (Ed. 3), 61010-1(Ed. 3)
 VDE License Nr. 136743: Class F
 System approvals: UL 1446
 RXT-2 Class F
 TCA Class F
 Other systems available upon request
 RoHS Compliant

Insulation:

DuPont™ Tefzel® ETFE

Rating:

Temperature: 155° C
 Voltage:
 UL: 1500 V for electronic equipment
 UL: 707 V for medical equipment
 VDE: 1000 V

Tensile Strength: 6500 psi
 Breakdown: Approx. 13000 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/ KFT |
|--------------|-----------|-----------|-------|--------------|-------|-------------------|
| | | INCHES | MM | INCHES | MM | |
| T10A01TXXX-3 | 10 | 0.1019 | 2.588 | 0.1199 | 3.045 | 33.74 |
| T10A37TXXX-3 | 10(37/26) | 0.1070 | 2.718 | 0.1250 | 3.175 | 31.30 |
| T12A01TXXX-3 | 12 | 0.0808 | 2.052 | 0.0988 | 2.510 | 21.67 |
| T12A19TXXX-3 | 12(19/25) | 0.0862 | 2.189 | 0.1042 | 2.647 | 20.78 |
| T14A01TXXX-3 | 14 | 0.0641 | 1.628 | 0.0821 | 2.085 | 13.92 |
| T14A19TXXX-3 | 14(19/27) | 0.0679 | 1.725 | 0.0859 | 2.182 | 13.40 |
| T16A01TXXX-3 | 16 | 0.0508 | 1.290 | 0.0688 | 1.748 | 9.06 |
| T16A19TXXX-3 | 16(19/29) | 0.0539 | 1.369 | 0.0719 | 1.826 | 8.77 |
| T18A01TXXX-3 | 18 | 0.0403 | 1.024 | 0.0583 | 1.481 | 5.95 |
| T18A19TXXX-3 | 18(19/30) | 0.0476 | 1.209 | 0.0656 | 1.666 | 7.05 |
| T20A01TXXX-3 | 20 | 0.0320 | 0.813 | 0.0500 | 1.270 | 3.94 |
| T20A19TXXX-3 | 20(19/32) | 0.0385 | 0.978 | 0.0565 | 1.435 | 4.74 |
| T22A01TXXX-3 | 22 | 0.0253 | 0.643 | 0.0433 | 1.100 | 2.65 |
| T22A19TXXX-3 | 22(19/34) | 0.0295 | 0.749 | 0.0475 | 1.207 | 3.13 |
| T24A01TXXX-3 | 24 | 0.0201 | 0.511 | 0.0381 | 0.968 | 1.83 |
| T24A19TXXX-3 | 24(19/36) | 0.0242 | 0.615 | 0.0422 | 1.072 | 2.16 |
| T26A01TXXX-3 | 26 | 0.0159 | 0.404 | 0.0339 | 0.861 | 1.28 |
| T28A01TXXX-3 | 28 | 0.0126 | 0.320 | 0.0306 | 0.777 | 0.93 |
| T30A01TXXX-3 | 30 | 0.0100 | 0.254 | 0.0280 | 0.711 | 0.70 |
| T32A01TXXX-3 | 32 | 0.0080 | 0.203 | 0.0260 | 0.660 | 0.55 |



Triple Insulated FEP .002" / Layer

Triple Insulated Wires



Product Construction:

Size Range:
10 AWG - 40 AWG
Not all sizes listed in chart

Conductor:
Tin plated copper
Solid or stranded (ASTM B-33/ASTM B-286)
Bare copper and other conductors available

Insulation:
FEP

Rating:
Temperature: 155° C
Voltage: 1000 V

Applications:
AC/DC adaptors
Electronic/Medical/Dental

Compliances:
UL OBJT2 File No. E206198
UL/IEC 60950-1 (Ed. 2), Annex U
IEC 61010-1 (Ed. 3)
VDE License Nr. 6715: Class F
System approvals: UL 1446
RXT-2 Class F
TCA Class F
Other systems available upon request
RoHS Compliant

Tensile Strength: 3000 psi
Breakdown: Approx. 9000 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----------|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T18A01FXXX-2 | 18 | 0.0403 | 1.024 | 0.0523 | 1.328 | 5.75 |
| T18A19FXXX-2 | 18(19/30) | 0.0476 | 1.209 | 0.0596 | 1.514 | 6.83 |
| T20A01FXXX-2 | 20 | 0.0320 | 0.813 | 0.0440 | 1.118 | 3.77 |
| T20A19FXXX-2 | 20(19/32) | 0.0385 | 0.978 | 0.0505 | 1.283 | 4.55 |
| T22A01FXXX-2 | 22 | 0.0253 | 0.643 | 0.0373 | 0.947 | 2.50 |
| T22A19FXXX-2 | 22(19/34) | 0.0295 | 0.749 | 0.0415 | 1.054 | 2.97 |
| T24A01FXXX-2 | 24 | 0.0201 | 0.511 | 0.0321 | 0.815 | 1.69 |
| T24A19FXXX-2 | 24(19/36) | 0.0242 | 0.615 | 0.0362 | 0.919 | 2.01 |
| T25A01FXXX-2 | 25 | 0.0179 | 0.455 | 0.0299 | 0.759 | 1.40 |
| T26A01FXXX-2 | 26 | 0.0159 | 0.404 | 0.0279 | 0.709 | 1.16 |
| T27A01FXXX-2 | 27 | 0.0142 | 0.361 | 0.0262 | 0.665 | 0.97 |
| T28A01FXXX-2 | 28 | 0.0126 | 0.320 | 0.0246 | 0.625 | 0.82 |
| T29A01FXXX-2 | 29 | 0.0113 | 0.287 | 0.0233 | 0.592 | 0.70 |
| T30A01FXXX-2 | 30 | 0.0100 | 0.254 | 0.0220 | 0.559 | 0.59 |
| T31A01FXXX-2 | 31 | 0.0089 | 0.226 | 0.0209 | 0.531 | 0.51 |
| T32A01FXXX-2 | 32 | 0.0080 | 0.203 | 0.0200 | 0.508 | 0.45 |
| T33A01FXXX-2 | 33 | 0.0071 | 0.180 | 0.0191 | 0.485 | 0.39 |
| T34A01FXXX-2 | 34 | 0.0063 | 0.160 | 0.0183 | 0.465 | 0.34 |
| T35A01FXXX-2 | 35 | 0.0056 | 0.142 | 0.0176 | 0.447 | 0.30 |
| T36A01FXXX-2 | 36 | 0.0050 | 0.127 | 0.0170 | 0.432 | 0.27 |
| T37A01FXXX-2 | 37 | 0.0045 | 0.114 | 0.0165 | 0.419 | 0.25 |
| T38A01FXXX-2 | 38 | 0.0040 | 0.102 | 0.0160 | 0.406 | 0.23 |
| T39A01FXXX-2 | 39 | 0.0035 | 0.089 | 0.0155 | 0.394 | 0.21 |
| T40A01FXXX-2 | 40 | 0.0031 | 0.079 | 0.0151 | 0.384 | 0.19 |



Triple Insulated FEP .003" / Layer



Product Construction:

Size Range:

10 AWG - 40 AWG
Not all sizes listed in chart

Conductor:

Tin plated copper
Solid or stranded (ASTM B-33/ASTM B-286)
Bare copper and other conductors available

Insulation:

FEP

Rating:

Temperature: 155° C
Voltage: 1000 V

Applications:

Power Supply/Transformer

Compliances:

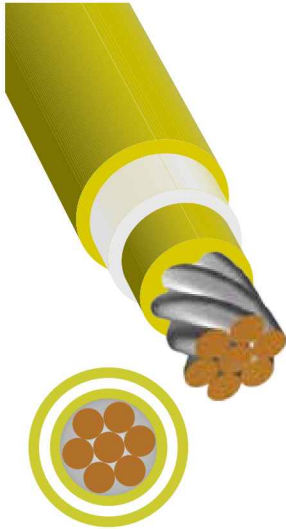
UL OBJT2 File No. E206198
UL/IEC 60950-1 (Ed. 2), Annex U
IEC 61010-1 (Ed. 3)
VDE License Nr. 6715: Class F
System approvals: UL 1446
RXT-2 Class F
TCA Class F
Other systems available upon request
RoHS Compliant

Tensile Strength: 3000 psi

Breakdown: Approx. 12000 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----------|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T10A37FXXX-3 | 10(37/26) | 0.1070 | 2.718 | 0.1250 | 3.175 | 32.01 |
| T12A19FXXX-3 | 12(19/25) | 0.0862 | 2.189 | 0.1042 | 2.647 | 21.37 |
| T14A19FXXX-3 | 14(19/27) | 0.0679 | 1.725 | 0.0859 | 2.182 | 13.88 |
| T16A01FXXX-3 | 16 | 0.0508 | 1.290 | 0.0688 | 1.748 | 9.42 |
| T16A19FXXX-3 | 16(19/29) | 0.0539 | 1.369 | 0.0719 | 1.826 | 9.19 |
| T18A01FXXX-3 | 18 | 0.0403 | 1.024 | 0.0583 | 1.481 | 6.25 |
| T18A19FXXX-3 | 18(19/30) | 0.0476 | 1.209 | 0.0656 | 1.666 | 7.40 |
| T20A01FXXX-3 | 20 | 0.0320 | 0.813 | 0.0500 | 1.270 | 4.20 |
| T20A19FXXX-3 | 20(19/32) | 0.0385 | 0.978 | 0.0565 | 1.435 | 5.03 |
| T22A01FXXX-3 | 22 | 0.0253 | 0.643 | 0.0433 | 1.100 | 2.87 |
| T22A19FXXX-3 | 22(19/34) | 0.0295 | 0.749 | 0.0475 | 1.207 | 3.37 |
| T24A01FXXX-3 | 24 | 0.0201 | 0.511 | 0.0381 | 0.968 | 2.01 |
| T24A19FXXX-3 | 24(19/36) | 0.0242 | 0.615 | 0.0422 | 1.072 | 2.37 |
| T26A01FXXX-3 | 26 | 0.0159 | 0.404 | 0.0339 | 0.861 | 1.44 |
| T26A19FXXX-3 | 26(19/38) | 0.0190 | 0.483 | 0.0370 | 0.940 | 1.65 |
| T28A01FXXX-3 | 28 | 0.0126 | 0.320 | 0.0306 | 0.777 | 1.06 |
| T28A19FXXX-3 | 28(19/40) | 0.0152 | 0.386 | 0.0332 | 0.843 | 1.22 |
| T30A01FXXX-3 | 30 | 0.0100 | 0.254 | 0.0280 | 0.711 | 0.82 |
| T32A01FXXX-3 | 32 | 0.0080 | 0.203 | 0.0260 | 0.660 | 0.65 |

Triple Insulated FEP .005" / Layer



Product Construction:

Size Range:

10 AWG - 28 AWG
Not all sizes listed in chart

Applications:

Battery charger
Power supply lead outs

Conductor:

Tin plated copper
Solid or stranded (ASTM B-33/ASTM B-286)
Bare copper and other conductors available

Compliances:

UL OBJT2 File No. E206198
UL/IEC 60950-1 (Ed. 2), Annex U
IEC 61010-1 (Ed. 3)
VDE License Nr. 6715: Class F
System approvals: UL 1446
RXT-2 Class F
TCA Class F
Other systems available upon request
RoHS Compliant

Insulation:

FEP

Rating:

Temperature: 155° C
Voltage: 1000 V

Tensile Strength: 3000 psi
Breakdown: Approx. 15000 V

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D | | WEIGHT LB/KFT |
|--------------|-----------|-----------|-------|-------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T10A37FXXX-5 | 10(37/26) | 0.1070 | 2.718 | 0.1370 | 3.480 | 34.37 |
| T12A19FXXX-5 | 12(19/25) | 0.0862 | 2.189 | 0.1162 | 2.951 | 23.35 |
| T14A19FXXX-5 | 14(19/27) | 0.0679 | 1.725 | 0.0979 | 2.487 | 15.53 |
| T16A01FXXX-5 | 16 | 0.0508 | 1.290 | 0.0808 | 2.052 | 10.77 |
| T16A19FXXX-5 | 16(19/29) | 0.0539 | 1.369 | 0.0839 | 2.131 | 10.59 |
| T18A01FXXX-5 | 18 | 0.0403 | 1.024 | 0.0703 | 1.786 | 7.41 |
| T18A19FXXX-5 | 18(19/30) | 0.0476 | 1.209 | 0.0776 | 1.971 | 8.69 |
| T20A01FXXX-5 | 20 | 0.0320 | 0.813 | 0.0620 | 1.575 | 5.21 |
| T20A19FXXX-5 | 20(19/32) | 0.0385 | 0.978 | 0.0685 | 1.740 | 6.16 |
| T22A01FXXX-5 | 22 | 0.0253 | 0.643 | 0.0553 | 1.405 | 3.75 |
| T22A19FXXX-5 | 22(19/34) | 0.0295 | 0.749 | 0.0595 | 1.511 | 4.33 |
| T24A01FXXX-5 | 24 | 0.0201 | 0.511 | 0.0501 | 1.273 | 2.80 |
| T24A19FXXX-5 | 24(19/36) | 0.0242 | 0.615 | 0.0542 | 1.377 | 3.23 |
| T26A01FXXX-5 | 26 | 0.0159 | 0.404 | 0.0459 | 1.166 | 2.16 |
| T26A19FXXX-5 | 26(19/38) | 0.0190 | 0.483 | 0.0490 | 1.245 | 2.42 |
| T28A01FXXX-5 | 28 | 0.0126 | 0.320 | 0.0426 | 1.082 | 1.72 |
| T28A19FXXX-5 | 28(19/40) | 0.0152 | 0.386 | 0.0452 | 1.148 | 1.93 |



Triple Insulated PFA .0015" / Layer



Product Construction:

Size Range:

10 AWG - 40 AWG
 VDE: 14 AWG - 40 AWG
 Not all sizes listed in chart

Conductor:

Tin plated copper
 Solid or stranded (ASTM B-33/ASTM B-286)
 Bare copper and other conductors available

Insulation:

PFA

Rating:

Temperature: 180°C
 Voltage: 1000 V

Applications:

High temp power supplies
 Medical equipment
 Transformers

Compliances:

UL OBJT2 File No. E206198
 UL/IEC 60950-1, Annex U
 VDE License Nr. 6716: Class H
 IEC 61010-1 (Ed. 3), 61558-2-16,
 60601-1 (Ed. 3)

RoHS Compliant

Tensile Strength: 3600 psi

Breakdown: Approx. 8000 V

Insulation Temperature Capacity: 260° C

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|----------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T16A01PXXX-1.5 | 16 | 0.0508 | 1.290 | 0.0598 | 1.519 | 8.56 |
| T17A01PXXX-1.5 | 17 | 0.0453 | 1.151 | 0.0543 | 1.379 | 6.88 |
| T18A01PXXX-1.5 | 18 | 0.0403 | 1.024 | 0.0493 | 1.252 | 5.52 |
| T19A01PXXX-1.5 | 19 | 0.0359 | 0.912 | 0.0449 | 1.140 | 4.45 |
| T20A01PXXX-1.5 | 20 | 0.0320 | 0.813 | 0.0410 | 1.041 | 3.58 |
| T21A01PXXX-1.5 | 21 | 0.0285 | 0.724 | 0.0375 | 0.953 | 2.91 |
| T22A01PXXX-1.5 | 22 | 0.0253 | 0.643 | 0.0343 | 0.871 | 2.34 |
| T23A01PXXX-1.5 | 23 | 0.0226 | 0.574 | 0.0316 | 0.803 | 1.92 |
| T24A01PXXX-1.5 | 24 | 0.0201 | 0.511 | 0.0291 | 0.739 | 1.55 |
| T25A01PXXX-1.5 | 25 | 0.0179 | 0.455 | 0.0269 | 0.683 | 1.27 |
| T26A01PXXX-1.5 | 26 | 0.0159 | 0.404 | 0.0249 | 0.632 | 1.04 |
| T27A01PXXX-1.5 | 27 | 0.0142 | 0.361 | 0.0232 | 0.589 | 0.86 |
| T28A01PXXX-1.5 | 28 | 0.0126 | 0.320 | 0.0216 | 0.549 | 0.71 |
| T29A01PXXX-1.5 | 29 | 0.0113 | 0.287 | 0.0203 | 0.516 | 0.60 |
| T30A01PXXX-1.5 | 30 | 0.0100 | 0.254 | 0.0190 | 0.483 | 0.50 |
| T31A01PXXX-1.5 | 31 | 0.0089 | 0.226 | 0.0179 | 0.455 | 0.42 |
| T32A01PXXX-1.5 | 32 | 0.0080 | 0.203 | 0.0170 | 0.432 | 0.36 |
| T33A01PXXX-1.5 | 33 | 0.0071 | 0.180 | 0.0161 | 0.409 | 0.31 |
| T34A01PXXX-1.5 | 34 | 0.0063 | 0.160 | 0.0153 | 0.389 | 0.27 |
| T35A01PXXX-1.5 | 35 | 0.0056 | 0.142 | 0.0146 | 0.371 | 0.23 |
| T36A01PXXX-1.5 | 36 | 0.0050 | 0.127 | 0.0140 | 0.356 | 0.20 |
| T37A01PXXX-1.5 | 37 | 0.0045 | 0.114 | 0.0135 | 0.343 | 0.18 |
| T38A01PXXX-1.5 | 38 | 0.0040 | 0.102 | 0.0130 | 0.330 | 0.16 |
| T39A01PXXX-1.5 | 39 | 0.0035 | 0.089 | 0.0125 | 0.318 | 0.15 |
| T40A01PXXX-1.5 | 40 | 0.0031 | 0.079 | 0.0121 | 0.307 | 0.13 |

Triple Insulated PFA .002" / Layer

Triple Insulated Wires



Product Construction:

Size Range:

10 AWG - 40 AWG
 VDE: 14 AWG - 40 AWG
 Not all sizes listed in chart

Conductor:

Tin plated copper
 Solid or stranded
 (ASTM B-33/ASTM B-286)
 Bare copper and other conductors available

Insulation:

PFA

Rating:

Temperature: 180°C
 Voltage: 1000 V

Applications:

Lower partial discharge
 High temp power supplies
 Medical equipment

Compliances:

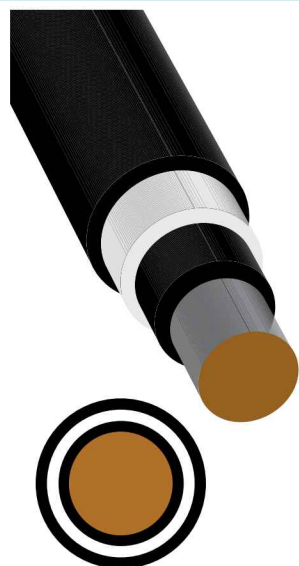
UL OBJT2 File No. E206198
 UL/IEC 60950-1 (Ed. 2), Annex U
 IEC 61558-2-16, 60601-1 (Ed.3)
 61010-1 (Ed. 3)
 VDE License Nr. 6716: Class H
 RoHS Compliant

Tensile Strength: 3600 psi
 Breakdown: Approx. 10000 V
 Insulation Temperature Capacity: 260° C

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T18A01PXXX-2 | 18 | 0.0403 | 1.024 | 0.0523 | 1.328 | 5.75 |
| T19A01PXXX-2 | 19 | 0.0359 | 0.912 | 0.0479 | 1.217 | 4.65 |
| T20A01PXXX-2 | 20 | 0.0320 | 0.813 | 0.0440 | 1.118 | 3.77 |
| T21A01PXXX-2 | 21 | 0.0285 | 0.724 | 0.0405 | 1.029 | 3.08 |
| T22A01PXXX-2 | 22 | 0.0253 | 0.643 | 0.0373 | 0.947 | 2.50 |
| T23A01PXXX-2 | 23 | 0.0226 | 0.574 | 0.0346 | 0.879 | 2.06 |
| T24A01PXXX-2 | 24 | 0.0201 | 0.511 | 0.0321 | 0.815 | 1.69 |
| T25A01PXXX-2 | 25 | 0.0179 | 0.455 | 0.0299 | 0.759 | 1.40 |
| T26A01PXXX-2 | 26 | 0.0159 | 0.404 | 0.0279 | 0.709 | 1.16 |
| T27A01PXXX-2 | 27 | 0.0142 | 0.361 | 0.0262 | 0.665 | 0.97 |
| T28A01PXXX-2 | 28 | 0.0126 | 0.320 | 0.0246 | 0.625 | 0.82 |
| T29A01PXXX-2 | 29 | 0.0113 | 0.287 | 0.0233 | 0.592 | 0.70 |
| T30A01PXXX-2 | 30 | 0.0100 | 0.254 | 0.0220 | 0.559 | 0.59 |
| T31A01PXXX-2 | 31 | 0.0089 | 0.226 | 0.0209 | 0.531 | 0.51 |
| T32A01PXXX-2 | 32 | 0.0080 | 0.203 | 0.0200 | 0.508 | 0.45 |
| T33A01PXXX-2 | 33 | 0.0071 | 0.180 | 0.0191 | 0.485 | 0.39 |
| T34A01PXXX-2 | 34 | 0.0063 | 0.160 | 0.0183 | 0.465 | 0.34 |
| T35A01PXXX-2 | 35 | 0.0056 | 0.142 | 0.0176 | 0.447 | 0.30 |
| T36A01PXXX-2 | 36 | 0.0050 | 0.127 | 0.0170 | 0.432 | 0.27 |
| T37A01PXXX-2 | 37 | 0.0045 | 0.114 | 0.0165 | 0.419 | 0.25 |
| T38A01PXXX-2 | 38 | 0.0040 | 0.102 | 0.0160 | 0.406 | 0.23 |
| T39A01PXXX-2 | 39 | 0.0035 | 0.089 | 0.0155 | 0.394 | 0.21 |
| T40A01PXXX-2 | 40 | 0.0031 | 0.079 | 0.0151 | 0.384 | 0.19 |



Triple Insulated PFA .003" / Layer



Product Construction:

Size Range:

UL: 10 AWG - 40 AWG
 VDE: 14 AWG - 40 AWG
 Not all sizes listed in chart

Conductor:

Tin plated copper
 Solid or stranded (ASTM B-33/ASTM B-286)
 Bare copper and other conductors available

Insulation:

PFA

Rating:

Temperature: 180°C
 Voltage: 1000 V

Applications:

Microwaves
 Other high temp/high dielectric applications

Compliances:

UL OBJT2 File No. E206198
 UL/IEC 60950-1 (Ed. 2), Annex U
 IEC 61558-2-16, 60601-1 (Ed.3)
 61010-1 (Ed. 3)
 VDE License Nr. 6716: Class H
 RoHS Compliant
 System approvals: UL 1446
 Information provided upon request

Tensile Strength: 3600 psi
 Breakdown: Approx. 13000 V
 Insulation Temperature Capacity: 260° C

| PART NUMBER | AWG | CONDUCTOR | | NOMINAL O.D. | | WEIGHT LB/KFT |
|--------------|-----|-----------|-------|--------------|-------|---------------|
| | | INCHES | MM | INCHES | MM | |
| T10A01PXXX-3 | 10 | 0.1019 | 2.588 | 0.1199 | 3.045 | 34.42 |
| T11A01PXXX-3 | 11 | 0.0907 | 2.304 | 0.1087 | 2.761 | 27.59 |
| T12A01PXXX-3 | 12 | 0.0808 | 2.052 | 0.0988 | 2.510 | 22.22 |
| T13A01PXXX-3 | 13 | 0.0720 | 1.829 | 0.0900 | 2.286 | 17.89 |
| T14A01PXXX-3 | 14 | 0.0641 | 1.628 | 0.0821 | 2.085 | 14.37 |
| T15A01PXXX-3 | 15 | 0.0571 | 1.450 | 0.0751 | 1.908 | 11.65 |
| T16A01PXXX-3 | 16 | 0.0508 | 1.290 | 0.0688 | 1.748 | 9.42 |
| T17A01PXXX-3 | 17 | 0.0453 | 1.151 | 0.0633 | 1.608 | 7.68 |
| T18A01PXXX-3 | 18 | 0.0403 | 1.024 | 0.0583 | 1.481 | 6.25 |
| T19A01PXXX-3 | 19 | 0.0359 | 0.912 | 0.0539 | 1.369 | 5.11 |
| T20A01PXXX-3 | 20 | 0.0320 | 0.813 | 0.0500 | 1.270 | 4.20 |
| T21A01PXXX-3 | 21 | 0.0285 | 0.724 | 0.0465 | 1.181 | 3.47 |
| T22A01PXXX-3 | 22 | 0.0253 | 0.643 | 0.0433 | 1.100 | 2.87 |
| T23A01PXXX-3 | 23 | 0.0226 | 0.574 | 0.0406 | 1.031 | 2.40 |
| T24A01PXXX-3 | 24 | 0.0201 | 0.511 | 0.0381 | 0.968 | 2.01 |
| T25A01PXXX-3 | 25 | 0.0179 | 0.455 | 0.0359 | 0.912 | 1.70 |
| T26A01PXXX-3 | 26 | 0.0159 | 0.404 | 0.0339 | 0.861 | 1.44 |
| T27A01PXXX-3 | 27 | 0.0142 | 0.361 | 0.0322 | 0.818 | 1.24 |
| T28A01PXXX-3 | 28 | 0.0126 | 0.320 | 0.0306 | 0.777 | 1.06 |
| T29A01PXXX-3 | 29 | 0.0113 | 0.287 | 0.0293 | 0.744 | 0.94 |
| T30A01PXXX-3 | 30 | 0.0100 | 0.254 | 0.0280 | 0.711 | 0.82 |
| T31A01PXXX-3 | 31 | 0.0089 | 0.226 | 0.0269 | 0.683 | 0.72 |
| T32A01PXXX-3 | 32 | 0.0080 | 0.203 | 0.0260 | 0.660 | 0.65 |