

Telecom Products

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L17T Series Telecommunications Power Fuse

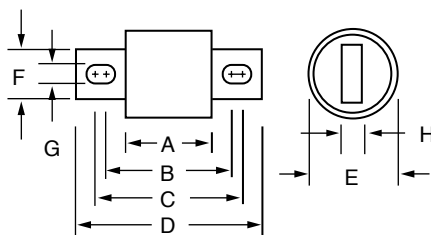
170 VDC • Current-Limiting • 70 – 1200 Amperes



Specifically designed for short-circuit protection of telecommunications circuits, the Littelfuse L17T series fuses provide reliable protection of sensitive DC power distribution systems. Constructed with silver plated elements for low I²t and peak let-through, these advanced fuses virtually eliminate equipment damage due to surges and spikes. The L17T series fuse unique element geometry also provides cooler running temperatures, helping to minimize heat within enclosures.

Ordering Information & Cross Reference

| Catalog Number | Ampere Rating | Competitor A Part Number | Competitor B Part Number |
|----------------|---------------|--------------------------|--------------------------|
| L17T 70 | 70 | TPL-BA | TGL-BA |
| L17T 90 | 90 | TPL-BC | TGL-BC |
| L17T 100 | 100 | TPL-BD | TGL-BD |
| L17T 125 | 125 | TPL-BE | TGL-BE |
| L17T 150 | 150 | TPL-BF | TGL-BF |
| L17T 175 | 175 | TPL-BG | TGL-BG |
| L17T 200 | 200 | TPL-BH | TGL-BH |
| L17T 225 | 225 | TPL-BK | TGL-BK |
| L17T 250 | 250 | TPL-BL | TGL-BL |
| L17T 300 | 300 | TPL-CN | TGL-CN |
| L17T 350 | 350 | TPL-CO | TGL-CO |
| L17T 400 | 400 | TPL-CR | TGL-CR |
| L17T 450 | 450 | TPL-CU | TGL-CU |
| L17T 500 | 500 | TPL-CV | TGL-CV |
| L17T 600 | 600 | TPL-CZ | TGL-CZ |
| L17T 800 | 800 | TPL-CZH | TGL-CZH |
| L17T 900 | 900 | — | — |
| L17T 1000 | 1000 | — | — |
| L17T 1100 | 1100 | — | — |
| L17T 1200 | 1200 | — | — |



Contact Littelfuse for characteristic curves.

| Ampere Rating | Dimensions in Inches (mm in parentheses) | | | | | | | |
|---------------|--|----------------|---------------|----------------|--------------|--------------|---------------|------------|
| | A | B | C | D | E | F | G | H |
| 70 – 250 | 1 5/32 (29.4) | 1 7/8 (47.6) | 2 3/16 (55.6) | 2 21/32 (67.5) | 1 (25.4) | 7/8 (22.2) | 5/16 (7.9) | 3/16 (4.8) |
| 300 – 800 | 1 1/4 (31.8) | 1 15/16 (49.2) | 2 9/16 (65.1) | 3 1/2 (88.9) | 1 1/2 (38.1) | 1 (25.4) | 1 3/32 (10.3) | 1/4 (6.35) |
| 1000–1200 | 1 11/32 (34.0) | — | — | 4 1/16 (103.1) | — | 1 1/2 (38.1) | — | 1/4 (6.35) |

Specifications

Voltage Rating: 170 VDC
Interrupting Rating: 100,000 amperes
Ampere Range: 70 – 1200 amperes
Approvals: UL Recognized under the Components Program (File No: E71611)
 CSA Recognized under the Component Acceptance Program (File No: LR29862)

Recommended Fuse Blocks

LTFD 6001 and LTFD 1200 series
 Refer to the LTFD series in this catalog section for additional information.

Ampere Ratings

| | | | | | | |
|----|-----|-----|-----|-----|-----|------|
| 70 | 100 | 175 | 250 | 400 | 600 | 1000 |
| 80 | 125 | 200 | 300 | 450 | 800 | 1100 |
| 90 | 150 | 225 | 350 | 500 | 900 | 1200 |

Example part number (series & amperage): L17T 200

Features

- Low I²t
- Extremely current-limiting
- Low operating temperature
- 170 VDC rating

TLN Series Telecommunications Power Fuse

170 VDC • Current-Limiting • 1 – 600 Amperes



Specifications

Voltage Rating: 170 VDC
Interrupting Rating: 100,000 amperes
Ampere Range: 1 – 600 amperes
Approvals: UL Recognized under the components program (File No: E71611)

Ampere Ratings

| | | | | | | |
|----|----|----|-----|-----|-----|-----|
| 1 | 15 | 40 | 80 | 150 | 300 | 600 |
| 3 | 20 | 45 | 90 | 175 | 350 | |
| 5 | 25 | 50 | 100 | 200 | 400 | |
| 6 | 30 | 60 | 110 | 225 | 450 | |
| 10 | 35 | 70 | 125 | 250 | 500 | |

Example part number (series & amperage): TLN450

Recommended Fuse Blocks

LR250 Series
 Refer to the Blocks & Holders section of this catalog for additional information.

Features

- 170 VDC
- Fast acting and current-limiting
- 1 to 600 amperes
- Dimensionally similar to 250V Class R fuses

Replaces competitors' TPN and TGN Series.

The TLN Series fuses are specifically designed for the protection of telecommunications DC power distribution circuits.

| Ampere Rating | Dimensions in Inches (mm in parentheses) | | | | | | | | | |
|-----------------|--|--------------|----------------|----------------|------------|--------------|----------------|-------------|---------------|--------------|
| | A | B | C | D | E | F | G | H | J | K |
| Figure 1 | | | | | | | | | | |
| 1 – 30 | 2 (50.8) | ½ (12.7) | ½ (12.7) | 9/16 (14.3) | 5/64 (2.0) | 5/32 (4.0) | 3/8 (9.5) | — | — | — |
| 35 – 60 | 3 (76.2) | ¾ (19.1) | 5/8 (15.9) | 13/16 (20.6) | 3/32 (2.4) | 3/16 (4.8) | 5/8 (15.9) | — | — | — |
| Figure 2 | | | | | | | | | | |
| 70 – 100 | 5 7/8 (149.2) | 1 (25.4) | 1 1/16 (27.0) | 1 1/16 (27.0) | 1/8 (3.2) | 3/4 (19.1) | 1 1/4 (31.6) | 1/4 (6.4) | 9/32 (7.1) | 1/2 (12.7) |
| 110 – 200 | 7 1/8 (181.0) | 1 1/2 (38.1) | 1 15/32 (37.3) | 1 19/32 (40.5) | 3/16 (4.8) | 1 1/8 (28.6) | 1 27/32 (46.8) | 7/16 (11.1) | 9/32 (7.1) | 11/16 (17.5) |
| 225 – 400 | 8 5/8 (219.1) | 2 (50.8) | 1 15/16 (49.2) | 2 3/32 (53.2) | 1/4 (6.4) | 1 5/8 (41.3) | 2 11/32 (59.5) | 5/8 (15.9) | 13/32 (10.3) | 15/16 (23.8) |
| 450 – 600 | 10 3/8 (263.5) | 2 1/2 (63.5) | 2 3/8 (60.3) | 2 19/32 (65.9) | 1/4 (6.4) | 2 (50.8) | 2 27/32 (72.2) | 3/4 (19.1) | 1 7/32 (13.5) | 1 1/8 (28.6) |

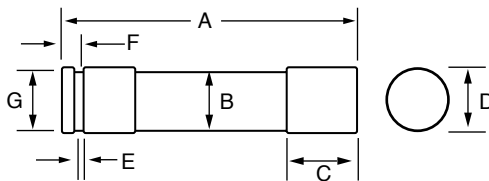


FIG. 1

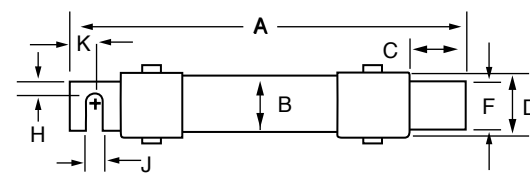


FIG. 2

TLS Series Telecommunications Power Fuse



170 VDC • Current-Limiting • 1 – 125 Amperes



Specifications

Voltage Rating: 170 VDC
 Interrupting Rating: 100,000 amperes
 Ampere Range: 1 – 125 amperes
 Approvals: UL Recognized under the components program (File No: E71611)
 Construction: Caps: Silver-plated brass
 Body: Glass melamine

Ampere Ratings

| | | | | |
|---|----|----|----|-----|
| 1 | 6 | 25 | 50 | 90 |
| 2 | 10 | 30 | 60 | 100 |
| 3 | 15 | 35 | 70 | 110 |
| 5 | 20 | 40 | 80 | 125 |

Example part number (series & amperage): TLS050

Note: To order leaded versions of TLS fuses, add suffix V, L, LB, or LS to part number.

Recommended Fuse Blocks

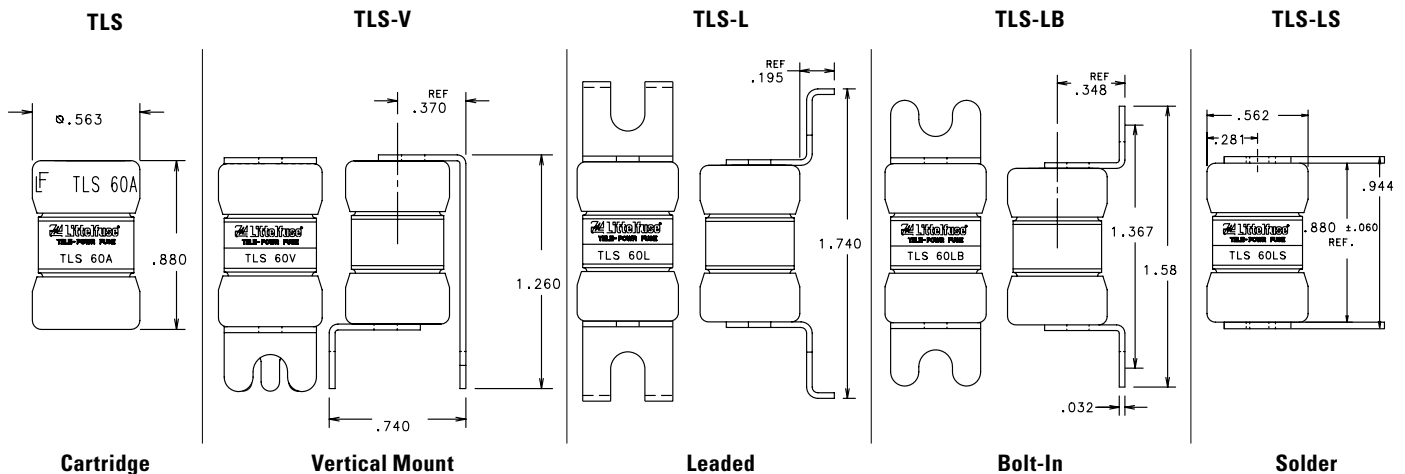
LTFD series disconnect switches
 LT30060 for TLS series cartridge style fuse
 Contact factory for more information.

Contact Littelfuse for characteristic curves. Dimensions for reference only. Replaces competitors' TPS and TGS Series.

Littelfuse TLS Series fuses are designed specifically for the protection of telecommunications equipment. TLS fuses have been engineered to operate up to 170 VDC to provide current-limiting short-circuit protection for cables and components found in the DC power distribution circuits of telecommunications systems. The compact design and multiple mounting configurations of the TLS series allow it to be used in a variety of applications.

Features

- 170 VDC
- Current-limiting
- 1 to 125 amperes
- Multiple mounting configurations
- RoHS Compliant



Telecommunications Power Fuses

Alarm Indicating Fuses



70 Series Alarm Indicating Fuses

The 70 Series alarm indicating fuses are designed for use in telecommunications equipment. A color coded tip provides visual identification of the ampere rating and the fuse status.

Features

- Color coded tip
- Rated 125 VAC, 300 VDC

Specifications

Voltage Rating: 125 VAC, 300 VDC
Interrupting Rating: 1,000 amperes @ 125 VAC
 1,000 amperes @ 300 VDC

Ampere Ratings

| | | | | |
|-------|-------|-------|-----|----|
| 100mA | 200mA | 500mA | 2 | 5 |
| 150mA | 250mA | 750mA | 3 | 8 |
| 180mA | 350mA | 1.33 | 3.5 | 10 |

Ordering Information

| 10 Minute Rating | Catalog Number | System Number | Color Code |
|------------------|----------------|---------------|---------------|
| 100mA | 70P | 70P00000Z | Grey/White |
| 150mA | 70R | 70R00000Z | Red/White |
| 180mA | 70E | 70E00000Z | Yellow |
| 200mA | 70X | 70X00000Z | Black |
| 250mA | 70F | 70F00000Z | Violet |
| 250mA | 70K | 70K00000Z | Violet/White |
| 350mA | 70S | 70S00000Z | Gray |
| 500mA | 70G | 70G00000Z | Red |
| 750mA | 70H | 70H00000Z | Brown |
| 1.33A | 70A | 70A00000Z | White |
| 2A | 70B | 70B00000Z | Orange |
| 3A | 70C | 70C00000Z | Blue |
| 3.5A | 70J | 70J00000Z | Black/White |
| 5A | 70D | 70D00000Z | Green/Black |
| 8A | 70M | 70M00000Z | Tan/White |
| 10A | 70N | 70N00000Z | Yellow/Purple |



481 Series Alarm Indicating Fuses

For telecommunications equipment and similar applications. Color coded indicator flags indicate ampere rating. Body is constructed of black polyphenylene sulfide with UL 94V0 flammability rating, contacts are of bright alloy-plated beryllium copper. Available with or without protective lens.

Specifications

Voltage Rating: 125V AC, DC
Approvals: UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program.

Ampere Ratings

| | | | | | | |
|------------------|------------------|----------------|----------------|----------------|----------------|----|
| $\frac{18}{100}$ | $\frac{3}{8}$ | $\frac{3}{4}$ | $1\frac{1}{2}$ | 3 | 5 | 12 |
| $\frac{1}{5}$ | $\frac{1}{2}$ | 1 | 2 | $3\frac{1}{2}$ | $7\frac{1}{2}$ | 15 |
| $\frac{1}{4}$ | $\frac{65}{100}$ | $1\frac{1}{3}$ | $2\frac{1}{2}$ | 4 | 10 | 20 |

Example part number (series & amperage): 481005

Recommended Fuse Blocks

482 Series
 Available 1-20 pole with PCB or panel mounting
 To order with protective lens add suffix XL

NOTE: For 481 Dummy fuse order 481000.

LTFD 101 Series Telecommunications Disconnect Switch

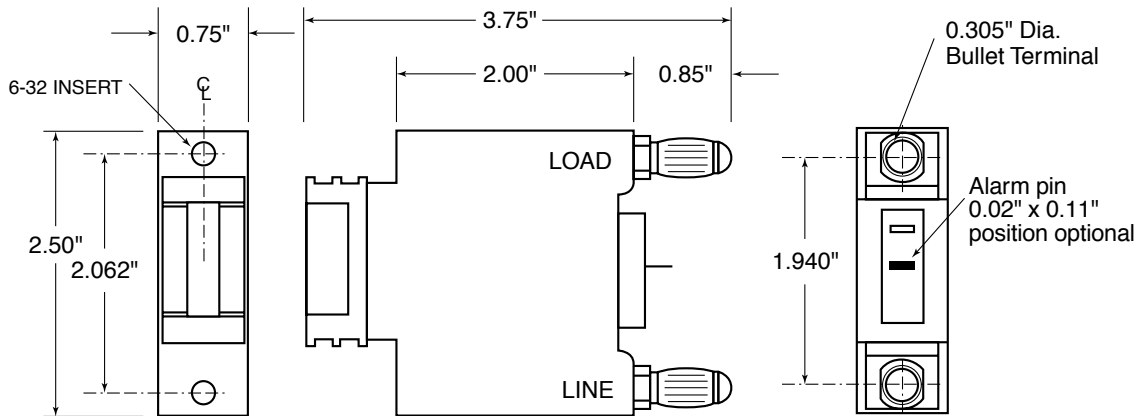
80 VDC • 1 – 125 Amperes



Littelfuse compact LTFD 101 fuseholders for TLS fuses are designed for quick installation into telecom equipment panels. Their modular design fits into spaces originally designed for circuit breakers and they can be front panel mounted or rear mounted using bullet connectors. The innovative new pull-out design eliminates the need for tools to replace fuses and includes an alarm signaling circuit to identify the blown fuse.

Features

- Extremely compact
- Quick mounting
- Replaces circuit breakers
- Includes alarm signaling circuit



Dimensions for reference only. For additional options and dimensions, contact the factory.

Specifications

Voltage Rating: 80 VDC
Ampere Range: 1 – 125 A
Approvals: UL Recognized (File No. E122874)

Recommended Fuses

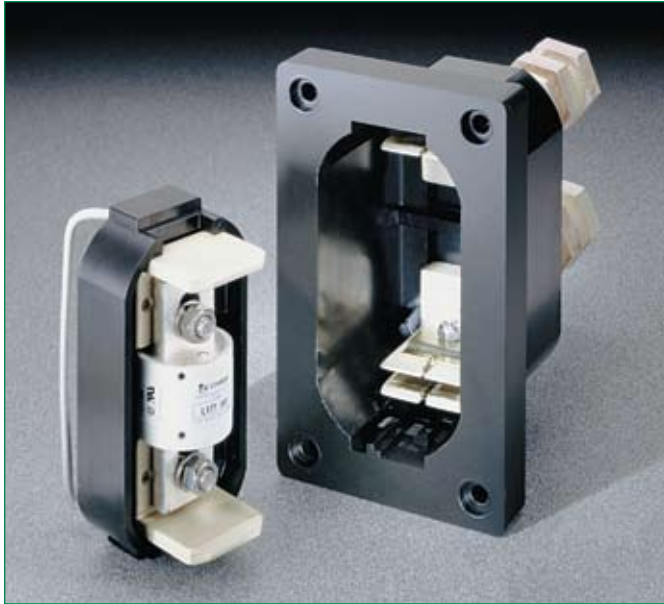
Littelfuse TLS Series fuses
 Littelfuse 481 Series Alarm fuses

Ordering Information

| Catalog Number | System Number | Terminal Type |
|----------------|---------------|---------------|
| LTFD101-1 | LTFD0101ZX1 | Bullet |
| LTFD101-2 | LTFD0101ZX2 | Screw |
| LTFD101-3 | LTFD0101ZX3 | Stud |
| LTFD101-4 | LTFD0101ZX4 | Clip |

LTFD Series Telecommunications Disconnect Switch

145 VDC, 60 VDC • 70 – 1200 Amperes



Littelfuse compact LTFD Series holders are designed for use as a combination fuseholder and disconnect switch for telecommunications equipment. The rugged unit utilizes a pull-out fuse carrier to safely disconnect power and provide easy fuse replacement.

Features

- Innovative pullout design of the 1200A switch eliminates the need for tools to replace the fuse
- Thermoplastic housing material
- Alarm signaling circuit

Specifications

Voltage Rating: 145 VDC for 70 – 600 amperes
60 VDC for 800 – 1200 amperes
Ampere Range: 70 – 1200 amperes
Approvals: UL Recognized (E122674)

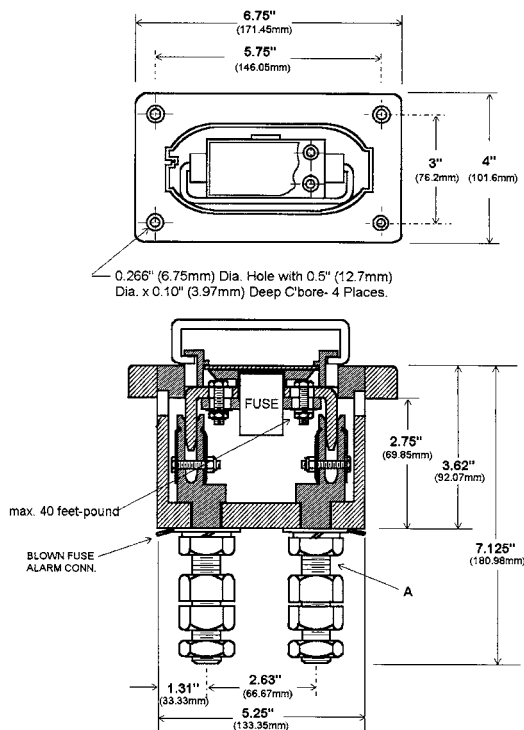
Recommended fuses

L17T Series fuses

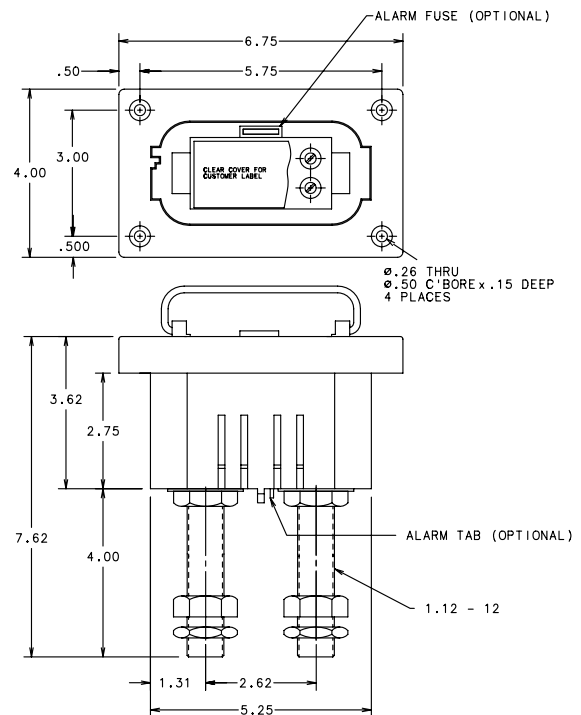
Ordering Information

| Catalog Number | Stud Size (A) | Amperes | Contact Nut Max. Torque |
|----------------|--------------------|------------|-------------------------|
| LTFD6001-00 | 3/4 – 16 x 3.5 in. | 70 – 600 | 100 foot-pound |
| LTFD6001-01 | 7/8 – 14 x 3.5 in. | 70 – 800 | 120 foot-pound |
| LTFD1200-01 | 1.12 – 12 x 4 in | 900 – 1200 | 120 foot-pound |
| LTFD1200-01A | 1.12 – 12 x 4 in | 900 – 1200 | 120 foot-pound |

LTFD 6001 Series (70–800 Amperes)



LTFD 1200A (900–1200 Amperes)



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