

# gF, gl-gG, aM

## CYLINDRICAL FUSE-LINKS



### DOMESTIC AND INDUSTRIAL CYLINDRICAL FUSE-LINKS

Ferraz Shawmut gF, gl-gG and aM fuse-links cover a wide range of physical sizes and ampere ratings for 250, 400, 500, and 690 volts AC. gF fuse-links are for domestic use. gl-gG and aM fuse-links are for industrial applications. Most ratings are available with an optional indicator. All industrial fuse-links have the option of a built-in striker. All cylindrical fuse-links have ceramic bodies and silver-plated ferrules.

### gF

#### FULL RANGE PROTECTION

- 7 physical sizes from 6.3 x 23mm to 10.3 x 38 mm
- 250 and 400 Volt ratings - 0.5A through 32A
- Most ratings available with indicator
- Meet IEC, NFC, UNE and British standards

### gl-gG

#### FULL RANGE PROTECTION

- 4 physical sizes from 8 x 31mm to 22 x 58 mm
- 400, 500 and 690 Volt ratings - 0.5A through 125A
- Most ratings available with indicator
- Meet IEC, NFC and UNE standards
- Approved by Lloyds Register of Shipping and Bureau Veritas

### gl-gG

#### FULL RANGE PROTECTION

##### Fuse-links with Striker

- 2 sizes - 14 x 51mm and 22 x 58mm
- 400, 500 and 690 Volt ratings - 4A through 125A
- All ratings include striker
- Meet IEC, NFC and UNE standards
- Approved by Lloyds Register of Shipping and Bureau Veritas

### aM

#### SHORT CIRCUIT PROTECTION

- 4 physical sizes from 8 x 31mm to 22 x 58mm
- 400, 500 and 690 Volt ratings - 16A through 125A
- Most ratings available with indicator
- Meet IEC, NFC and UNE standards
- Approved by Lloyds Register of Shipping and Bureau Veritas

### aM

#### SHORT CIRCUIT PROTECTION

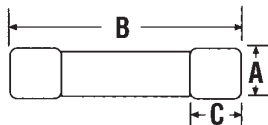
##### Fuse-links with Striker

- 2 sizes - 14 x 51mm and 22 x 58mm
- 400, 500 and 690 Volt ratings - 2A through 125A
- All ratings include striker
- Meet IEC, NFC and UNE standards
- Approved by Lloyds Register of Shipping and Bureau Veritas

## Catalog Numbers, Ratings – aM (Optional Blown-Fuse Indicator)

| SIZE<br>(mm x mm)                                                                                     | RATED In<br>CURRENT (A) | RATED<br>VOLTAGE | CATALOG NUMBER |             | INTERRUPTING<br>RATING (A) | STANDARD<br>PACK/CTN. |
|-------------------------------------------------------------------------------------------------------|-------------------------|------------------|----------------|-------------|----------------------------|-----------------------|
|                                                                                                       |                         |                  | w/o Indicator  | w/Indicator |                            |                       |
| <br><b>15519-G</b>   | 1                       | 400V             | 15511-G        | -           | 20,000                     | 10/100                |
|                                                                                                       | 2                       |                  | 15513-G        | -           |                            |                       |
|                                                                                                       | 4                       |                  | 15519-G        | -           |                            |                       |
|                                                                                                       | 6                       |                  | 15523-G        | -           |                            |                       |
|                                                                                                       | 8                       |                  | 15527-G        | -           |                            |                       |
|                                                                                                       | 10                      |                  | 15531-G        | -           |                            |                       |
| <br><b>16535-G</b>   | 0.16                    | 500V             | 16503-G        | -           | 120,000                    | 10/100                |
|                                                                                                       | 0.25                    |                  | 16507-G        | -           |                            |                       |
|                                                                                                       | 0.5                     |                  | 16509-G        | -           |                            |                       |
|                                                                                                       | 1                       |                  | 16511-G        | 16711-G     |                            |                       |
|                                                                                                       | 2                       |                  | 16513-G        | 16713-G     |                            |                       |
|                                                                                                       | 4                       |                  | 16519-G        | 16719-G     |                            |                       |
|                                                                                                       | 6                       |                  | 16523-G        | 16723-G     |                            |                       |
|                                                                                                       | 8                       |                  | 16527-G        | 16727-G     |                            |                       |
|                                                                                                       | 10                      |                  | 16531-G        | 16731-G     |                            |                       |
|                                                                                                       | 12                      |                  | 16533-G        | 16733-G     |                            |                       |
|                                                                                                       | 16                      |                  | 16535-G        | 16735-G     |                            |                       |
|                                                                                                       | 20                      |                  | 16537-G        | 16737-G     |                            |                       |
|                                                                                                       | 25                      |                  | 16539-G        | 16739-G     |                            |                       |
|                                                                                                       | 32                      |                  | 16543-G        | -           |                            |                       |
| <br><b>17535-G</b>  | 0.25                    | 690V             | 17507-G        | -           | 80,000                     | 10/50                 |
|                                                                                                       | 0.5                     |                  | 17509-G        | -           |                            |                       |
|                                                                                                       | 1                       |                  | 17511-G        | 17711-G     |                            |                       |
|                                                                                                       | 2                       |                  | 17513-G        | 17713-G     |                            |                       |
|                                                                                                       | 4                       |                  | 17519-G        | 17719-G     |                            |                       |
|                                                                                                       | 6                       |                  | 17523-G        | 17723-G     |                            |                       |
|                                                                                                       | 8                       |                  | 17527-G        | 17727-G     |                            |                       |
|                                                                                                       | 10                      |                  | 17531-G        | 17731-G     |                            |                       |
|                                                                                                       | 12                      |                  | 17533-G        | 17733-G     |                            |                       |
|                                                                                                       | 16                      |                  | 17535-G        | 17735-G     |                            |                       |
|                                                                                                       | 20                      |                  | 17537-G        | 17737-G     |                            |                       |
|                                                                                                       | 25                      |                  | 17539-G        | 17739-G     |                            |                       |
|                                                                                                       | 32                      |                  | 17543-G        | 17743-G     |                            |                       |
|                                                                                                       | 40                      |                  | 17547-G        | 17747-G     |                            |                       |
|                                                                                                       | 45                      |                  | 17549-G        | 17749-G     |                            |                       |
|                                                                                                       | 50                      |                  | 17551-G        | 17751-G     |                            |                       |
| <br><b>18555-G</b> | 4                       | 690V             | 18519-G        | 18719-G     | 80,000                     | 10/50                 |
|                                                                                                       | 6                       |                  | 18523-G        | 18723-G     |                            |                       |
|                                                                                                       | 8                       |                  | 18527-G        | 18727-G     |                            |                       |
|                                                                                                       | 10                      |                  | 18531-G        | 18731-G     |                            |                       |
|                                                                                                       | 12                      |                  | 18533-G        | 18733-G     |                            |                       |
|                                                                                                       | 16                      |                  | 18535-G        | 18735-G     |                            |                       |
|                                                                                                       | 20                      |                  | 18537-G        | 18737-G     |                            |                       |
|                                                                                                       | 25                      |                  | 18539-G        | 18739-G     |                            |                       |
|                                                                                                       | 32                      |                  | 18543-G        | 18743-G     |                            |                       |
|                                                                                                       | 40                      |                  | 18547-G        | 18747-G     |                            |                       |
|                                                                                                       | 50                      |                  | 18551-G        | 18751-G     |                            |                       |
|                                                                                                       | 63                      |                  | 18555-G        | 18755-G     |                            |                       |
|                                                                                                       | 80                      |                  | 18559-G        | 18759-G     |                            |                       |
|                                                                                                       | 100                     |                  | 18563-G        | 18763-G     |                            |                       |
|                                                                                                       | 125                     |                  | 18565-G        | 18765-G     |                            |                       |
|                                                                                                       |                         | 500V             |                |             | 120,000                    |                       |
|                                                                                                       |                         | 400V             |                |             |                            |                       |

## Blown-Fuse Indicator



## Dimensions

| FUSE SIZE | A    | B    | C    |
|-----------|------|------|------|
| 8 x 31    | 8.5  | 31.5 | 6.3  |
| 10 x 38   | 10.3 | 38   | 10.5 |
| 14 x 51   | 14.3 | 51   | 13.8 |
| 22 x 58   | 22.2 | 58   | 16.2 |

aM

## CYLINDRICAL FUSE-LINKS

## Catalog Numbers, Ratings – aM with Striker



17947-G



18951-G

## Striker



BEFORE

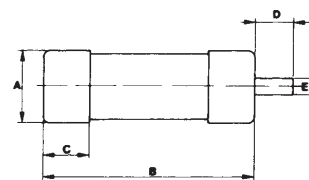
AFTER

| SIZE<br>(mm x mm) | RATED In<br>CURRENT (A) | RATED<br>VOLTAGE | CATALOG<br>NUMBER | INTERRUPTING<br>RATING (A) | STANDARD<br>PACK/CTN. |
|-------------------|-------------------------|------------------|-------------------|----------------------------|-----------------------|
| 14 X 51           | 1                       | 500V             | 17911-G           | 120,000                    | 10/50                 |
|                   | 2                       |                  | 17913-G           |                            |                       |
|                   | 4                       |                  | 17919-G           |                            |                       |
|                   | 6                       |                  | 17923-G           |                            |                       |
|                   | 8                       |                  | 17927-G           |                            |                       |
|                   | 10                      |                  | 17931-G           |                            |                       |
|                   | 12                      |                  | 17933-G           |                            |                       |
|                   | 16                      |                  | 17935-G           |                            |                       |
|                   | 20                      |                  | 17937-G           |                            |                       |
|                   | 25                      |                  | 17939-G           |                            |                       |
|                   | 32                      |                  | 17943-G           |                            |                       |
|                   | 40                      |                  | 17947-G           |                            |                       |
|                   | 45                      |                  | 17949-G           |                            |                       |
|                   | 50                      |                  | 17951-G           |                            |                       |
| 22 X 58           | 4                       | 690V             | 18919-G           | 80,000                     | 10/50                 |
|                   | 6                       |                  | 18923-G           |                            |                       |
|                   | 8                       |                  | 18927-G           |                            |                       |
|                   | 10                      |                  | 18931-G           |                            |                       |
|                   | 12                      |                  | 18933-G           |                            |                       |
|                   | 16                      |                  | 18935-G           |                            |                       |
|                   | 20                      |                  | 18937-G           |                            |                       |
|                   | 25                      |                  | 18939-G           |                            |                       |
|                   | 32                      |                  | 18943-G           |                            |                       |
|                   | 40                      |                  | 18947-G           |                            |                       |
|                   | 50                      | 500V<br>400V     | 18951-G           | 120,000                    |                       |
|                   | 63                      |                  | 18955-G           |                            |                       |
|                   | 80                      |                  | 18959-G           |                            |                       |
|                   | 100                     |                  | 18963-G           |                            |                       |
|                   | 125                     |                  | 18965-G           |                            |                       |

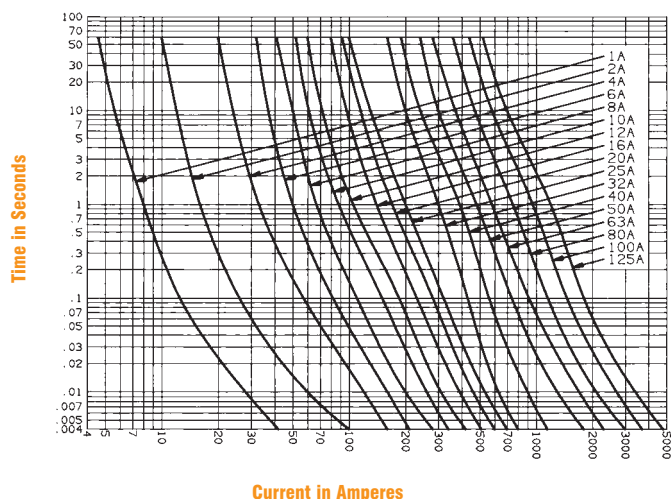
F

## Dimensions

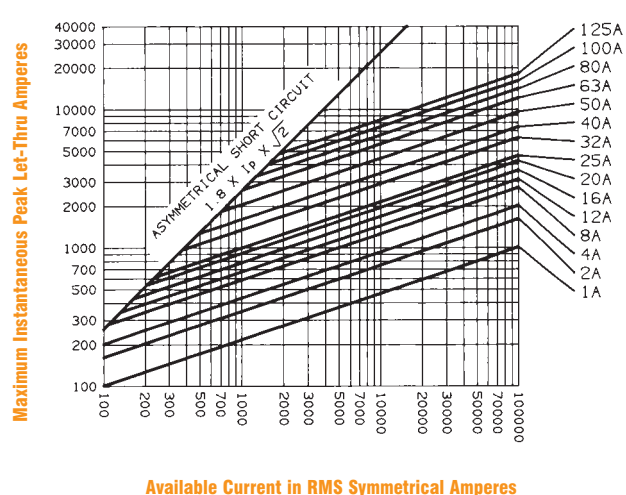
| FUSE SIZE | A    | B  | C    | D   | E   |
|-----------|------|----|------|-----|-----|
| 14 x 51   | 14.3 | 51 | 13.8 | 7.5 | 3.8 |
| 22 x 58   | 22.2 | 58 | 16.2 | 7.5 | 3.8 |

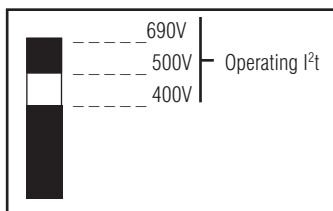
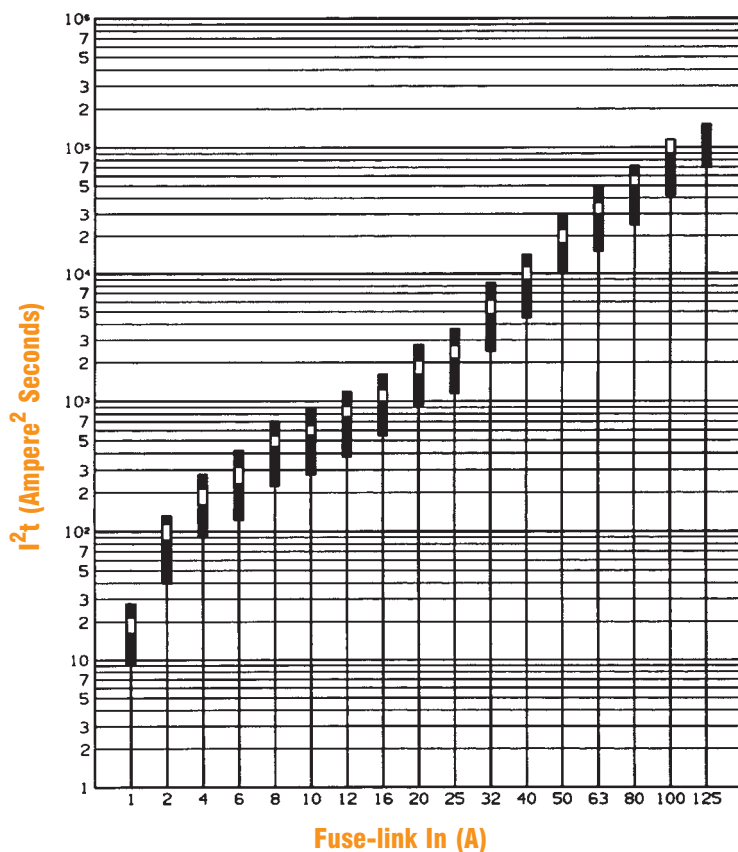


Melting Time - Current Data – 1-125 Amperes



Peak Let-Thru Current Data – 1-125 Amperes



**$I^2t$  Characteristics – Discrimination****Power Loss (Watts) at Rated Current  $I_n$** 

| RATED $I_n$<br>CURRENT<br>(A) | SIZE    |         |         |
|-------------------------------|---------|---------|---------|
|                               | 10 x 38 | 14 x 51 | 22 x 58 |
| 1                             | 0.1 W   |         |         |
| 2                             | 0.2 W   | 0.3 W   |         |
| 4                             | 0.3 W   | 0.4 W   | 0.5 W   |
| 6                             | 0.4 W   | 0.5 W   | 0.6 W   |
| 8                             | 0.5 W   | 0.6 W   | 0.8 W   |
| 10                            | 0.6 W   | 0.8 W   | 1.0 W   |
| 12                            | 0.7 W   | 1.0 W   | 1.2 W   |
| 16                            | 0.8 W   | 1.2 W   | 1.5 W   |
| 20                            | 1.2 W   | 1.5 W   | 1.8 W   |
| 25                            | 1.6 W   | 1.9 W   | 2.0 W   |
| 32                            | 2.0 W   | 2.3 W   | 2.6 W   |
| 40                            |         | 2.6 W   | 3.2 W   |
| 50                            |         | 2.9 W   | 3.9 W   |
| 63                            |         |         | 4.7 W   |
| 80                            |         |         | 5.9 W   |
| 100                           |         |         | 6.5 W   |
| 125                           |         |         | 9.5 W   |

|           |         |         |         |
|-----------|---------|---------|---------|
| IEC 269-2 | 10 x 38 | 14 x 51 | 22 x 58 |
| NFC 63210 | 16 A    | 50 A    | 100 A   |
| UNE 21103 | 1.2 W   | 3 W     | 7 W     |

These values are much lower than those allowed by the standards.

**Temperature**

Temperature rise reached by aM fuse-links at  $I_n$ , measured on their upper contact.

