# Protistor® size 22x58 gR

690VAC (IEC) / 700VAC (UL)

SEMICONDUCTOR PROTECTION FUSES

## IEC HIGH-SPEED CYLINDRICAL FUSE-LINKS AC PROTECTION



These Protistor® size 22x58 have been designed to protect power semiconductors, complying with standard IEC 60269-1 and -4.

They are extremely high interrupting rating fuses: 690 VAC, with large band of ratings (current rating 15 to 135 A).

Two models are existing: with or without trip-indicator

## TECHNICAL DATA OVERVIEW

| | |
|---|---|
| Ampere Range (A) | 12 ... 135 A |
| Size per Standard | 22x58 |
| Speed/Characteristic | gR |
| I.R. AC (IEC) | 160 kA |
| I.R. AC (UL) | 200 kA |
| I.R. DC (UL) | 50 kA |
| Rated voltage AC (IEC) | 690 V |
| Rated voltage AC (UL) | 700 V |
| Rated voltage DC (UL) | 500 V |

## FEATURES & BENEFITS

- IEC standard 60269-4 compliant
- UL 248-13 compliant
- gR class
- Clearing all overloads
- Improved safety and protection
- Enabling selective coordination among all
- Distribution circuit fuses
- With or without trip-indicator

## STANDARDS

- IEC 60269-4
- UL recognized
- UL 248-13
- CCC GB 1539.4
- RoHS compliant

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## PRODUCT RANGE

### CP 22x58 gR with striker

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated current $I_n$ | Pre-arcing $I^2t$ | Clearing $I^2t$ at Rated Voltage | Power dissipation at In | Weight | Package |
|---|---|---|---|---|---|---|---|---|
| FR22GR69V12T | W1018620 | 690 V | 12 A | 5.4 A²s | 60 A²s | 4.4 W | 60 g | 10 |
| FR22GR69V16T | X1018621 | 690 V | 16 A | 13.1 A²s | 125 A²s | 4.65 W | 60 g | 10 |
| FR22GR69V20T | Y1018622 | 690 V | 20 A | 17.1 A²s | 160 A²s | 7 W | 60 g | 10 |
| FR22GR69V25T | Z1018623 | 690 V | 25 A | 38.6 A²s | 315 A²s | 7.65 W | 60 g | 10 |
| FR22GR69V32T | A1018624 | 690 V | 32 A | 77.4 A²s | 670 A²s | 9.1 W | 60 g | 10 |
| FR22GR69V40T | B1018625 | 690 V | 40 A | 154 A²s | 1050 A²s | 9.5 W | 60 g | 10 |
| FR22GR69V50T | C1018626 | 690 V | 50 A | 292 A²s | 2050 A²s | 11.8 W | 60 g | 10 |
| FR22GR69V63T | D1018627 | 690 V | 63 A | 519 A²s | 3350 A²s | 13.6 W | 60 g | 10 |
| FR22GR69V80T | E1018628 | 690 V | 80 A | 1240 A²s | 7600 A²s | 13.8 W | 60 g | 10 |
| FR22GR69V100T | F1018629 | 690 V | 100 A | 2470 A²s | 14500 A²s | 16 W | 60 g | 10 |
| FR22GR69V125T | G1018630 | 690 V | 125 A | 3360 A²s | 16800 A²s | 22.8 W | 60 g | 10 |
| FR22GR69V135T | H1018631 | 690 V | 135 A | 4390 A²s | 19800 A²s | 25.5 W | 60 g | 10 |



FR22GR69V12

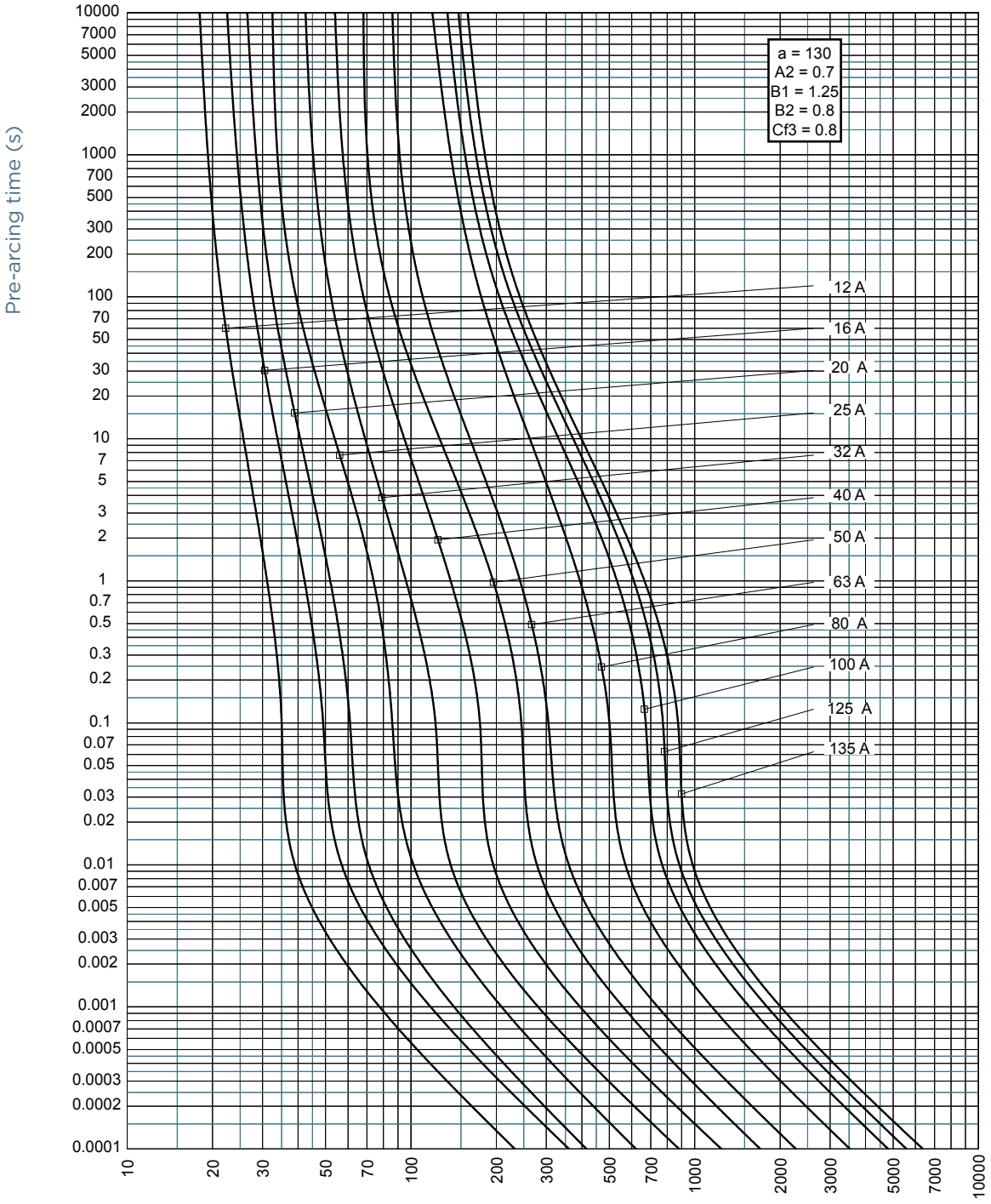
### CP 22x58 gR without striker

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated current $I_n$ | Pre-arcing $I^2t$ | Clearing $I^2t$ at Rated Voltage | Power dissipation at In | Weight | Package |
|---|---|---|---|---|---|---|---|---|
| FR22GR69V12 | W1018551 | 690 V | 12 A | 5.4 A²s | 60 A²s | 4.4 W | 60 g | 10 |
| FR22GR69V16 | X1018552 | 690 V | 16 A | 13.1 A²s | 125 A²s | 4.65 W | 60 g | 10 |
| FR22GR69V20 | Y1018553 | 690 V | 20 A | 17.1 A²s | 160 A²s | 7 W | 60 g | 10 |
| FR22GR69V25 | Z1018554 | 690 V | 25 A | 38.6 A²s | 315 A²s | 7.65 W | 60 g | 10 |
| FR22GR69V32 | A1018555 | 690 V | 32 A | 77.4 A²s | 670 A²s | 9.1 W | 60 g | 10 |
| FR22GR69V40 | B1018556 | 690 V | 40 A | 154 A²s | 1050 A²s | 9.5 W | 60 g | 10 |
| FR22GR69V50 | C1018557 | 690 V | 50 A | 292 A²s | 2050 A²s | 11.8 W | 60 g | 10 |
| FR22GR69V63 | D1018558 | 690 V | 63 A | 519 A²s | 3350 A²s | 13.6 W | 60 g | 10 |
| FR22GR69V80 | E1018559 | 690 V | 80 A | 1240 A²s | 7600 A²s | 13.8 W | 60 g | 10 |
| FR22GR69V100 | F1018560 | 690 V | 100 A | 2470 A²s | 14500 A²s | 16 W | 60 g | 10 |
| FR22GR69V125 | G1018561 | 690 V | 125 A | 3360 A²s | 16800 A²s | 22.8 W | 60 g | 10 |
| FR22GR69V135 | H1018562 | 690 V | 135 A | 4390 A²s | 19800 A²s | 25.5 W | 60 g | 10 |

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## TIME CURRENT CHARACTERISTIC CURVES

**Size 22x58 gR**

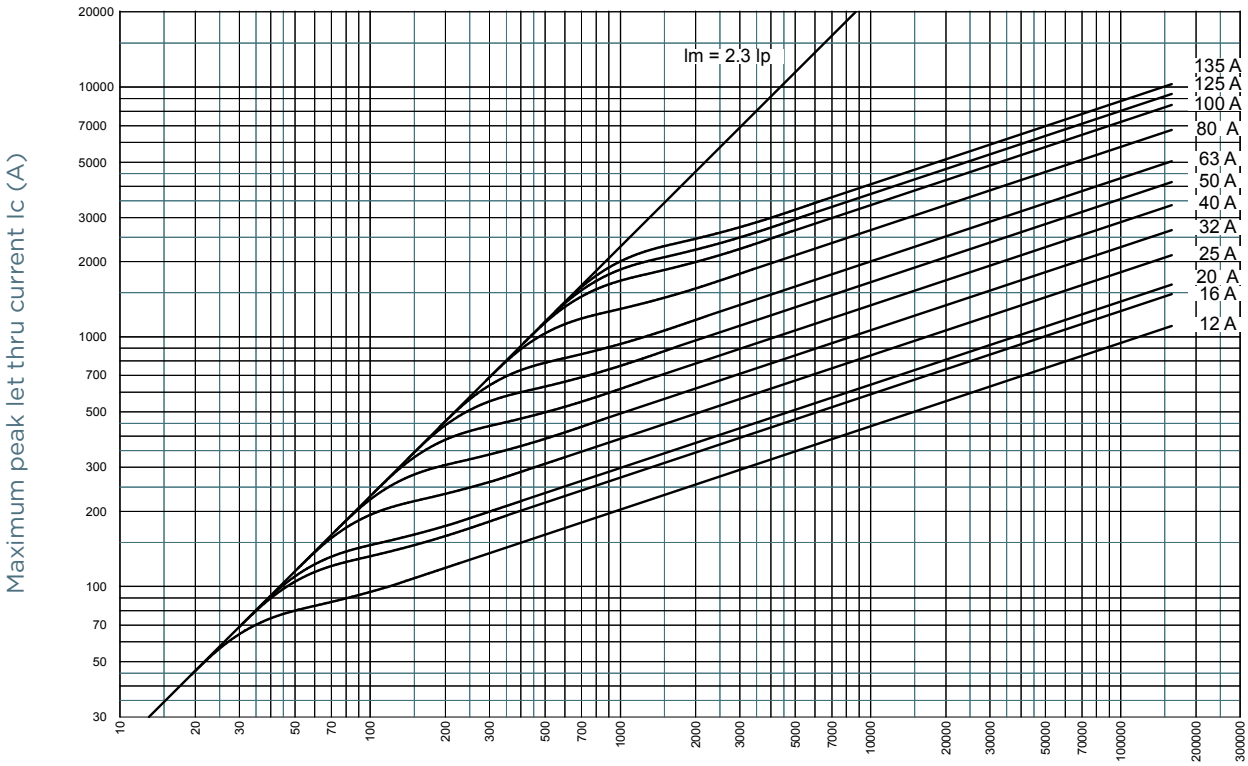



RMS value of prospective current (A) +/- 8%

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## CUT-OFF CURRENT CHARACTERISTIC

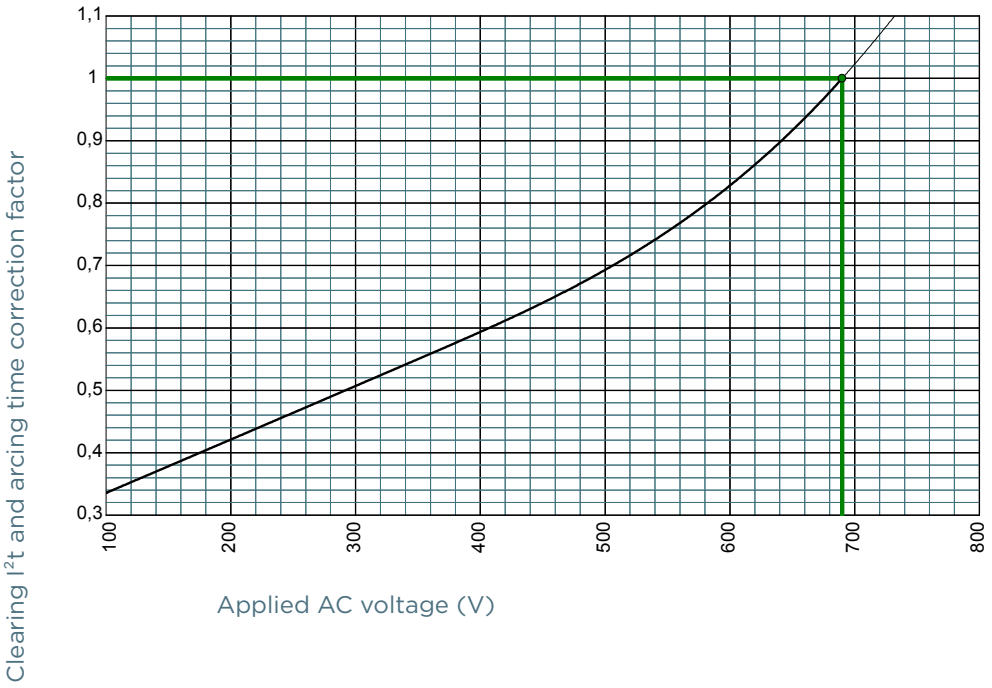
**Size 22x58 gR**




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## $I^2T$ MULTIPLIER COEFFICIENT

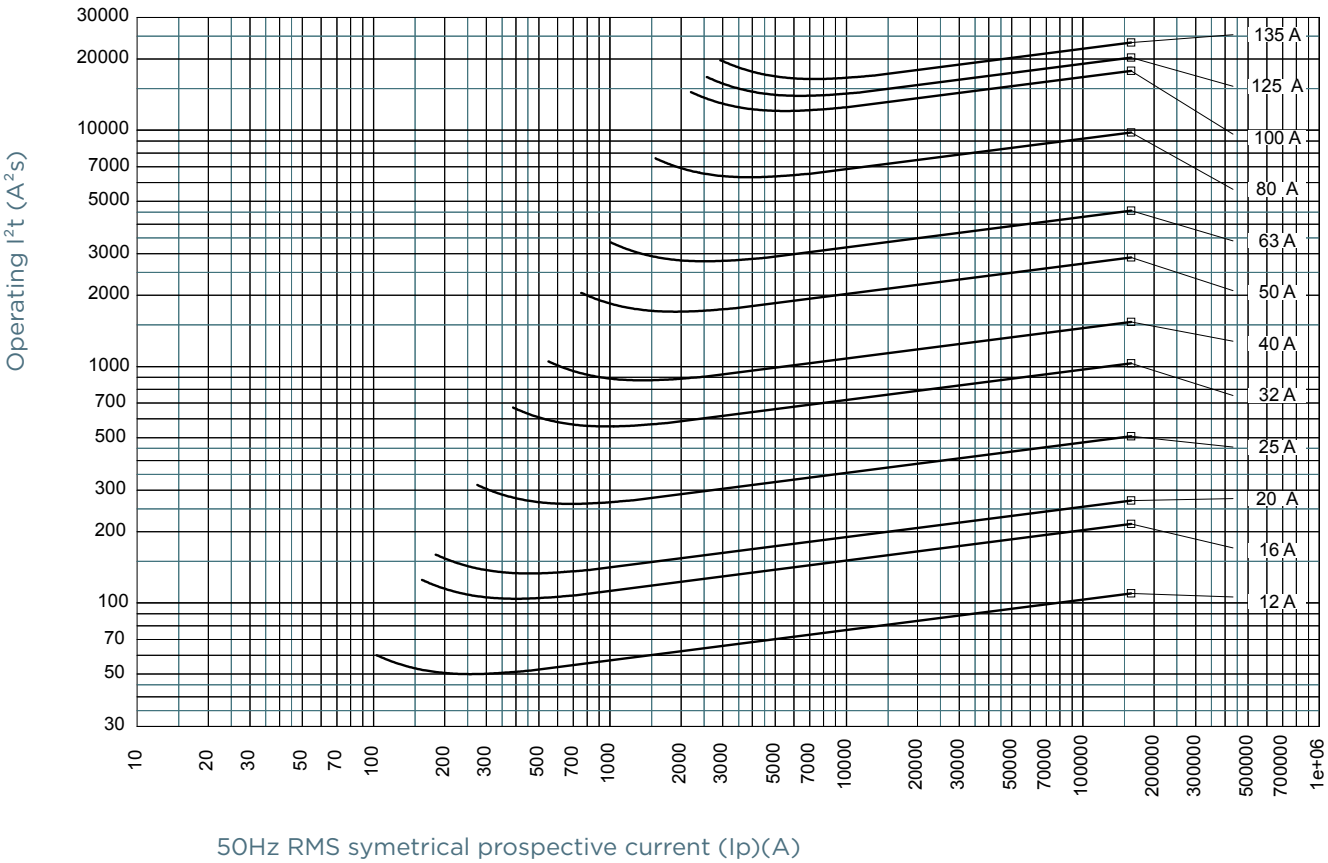
**Size 22x58 gR**




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## CHARACTERISTICS TOTAL $I^2T$ CURVE

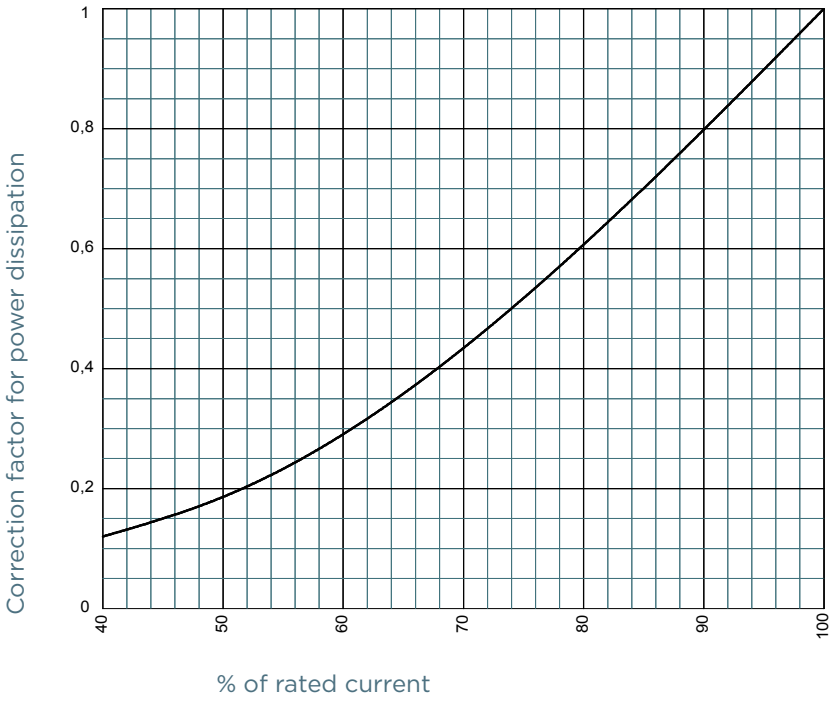
**Size 22x58 gR**




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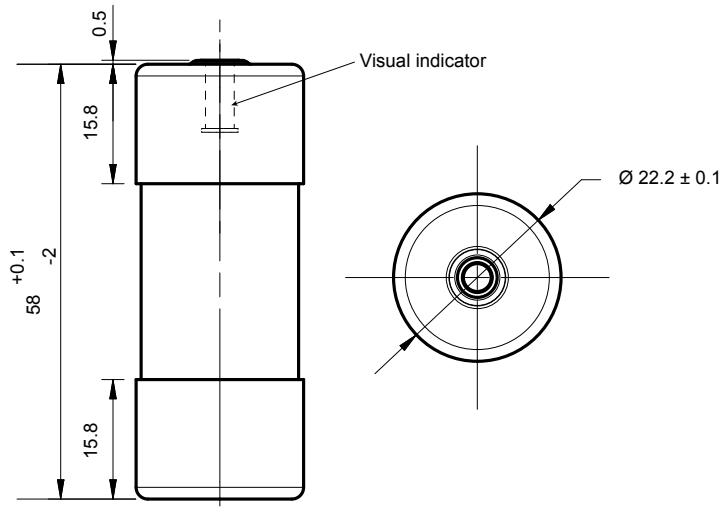
## POWER DISSIPATION

**Size 22x58 gR**




## DIMENSIONS

**CP 22x58 gR with striker** (100213)

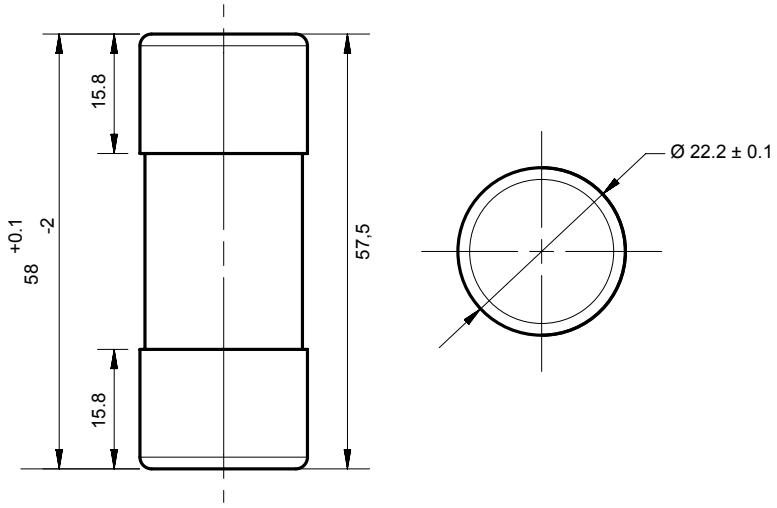



Dimensions in mm

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## DIMENSIONS

**CP 22x58 gR without striker** (100214)




Dimensions in mm

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