

# POWER-FUSES

POWER-FUSES



# Power-Fuses – Übersicht

## Power-Fuses – Overview

| Artikel-Serie /<br>Article-Series | U <sub>N</sub> Spannung /<br>Voltage | I <sub>N</sub> Strom /<br>Current | I <sub>BC</sub> Ausschaltvermögen /<br>Breaking Capacity |
|-----------------------------------|--------------------------------------|-----------------------------------|----------------------------------------------------------|
| PF-WN10                           | 600 V                                | 200 mA – 20 A                     | 200 A – 1.000 A                                          |
| PF-WN20                           | 400 V – 600 V                        | 500 mA – 20 A                     | 200 A – 2.000 A                                          |
| PF-WN30                           | 400 V – 500 V                        | 200 mA – 20 A                     | 300 A – 2.000 A                                          |
| PF-WM10                           | 600 V                                | 200 mA – 12 A                     | 10.000 A                                                 |
| PF-WM20                           | 1.000 V                              | 200 mA – 3 A                      | 10.000 A                                                 |
| PF-WM30                           | 660 V                                | 200 mA – 30 A                     | 1.000 A                                                  |
| PF-WM40                           | 660 V                                | 15 A – 30 A                       | 1.000 A                                                  |
| PF-WM50                           | 250 V                                | 20 A – 50 A                       | 1.000 A                                                  |
| PF-WN70                           | 75 V                                 | 5 A – 50 A                        | 2.500 A                                                  |
| PF-LFC / -LFP                     | 125 V – 500 V                        | 31,5 A – 80 A                     | 1.500 A / 2.500 A                                        |
| PF-MHC / -MHP                     | 500 V                                | 10 A – 30 A                       | 20.000 A / 30.000 A                                      |
| PF-WL10                           | 200 V                                | 5 A – 60 A                        | 15.000 A                                                 |
| PF-WL18                           | 450 V                                | 30 A – 50 A                       | 10.000 A                                                 |
| PF-WL20                           | 500 V                                | 5 A – 50 A                        | 10.000 A / 20.000 A                                      |
| PF-WL25                           | 600 V                                | 2 A – 30 A                        | 50.000 A                                                 |
| PF-WL30                           | 700 V                                | 5 A – 32 A                        | 10.000 A                                                 |
| PF-WL40                           | 1.000 V                              | 440 mA – 15 A                     | 30.000 A                                                 |
| PF-WL50                           | 1.000 V                              | 1 A – 30 A                        | 30.000 A                                                 |
| PF-WL55                           | 1.500 V                              | 2,5 A – 6 A                       | 20.000 A                                                 |
| PF-WL60                           | 1.500 V                              | 2 A – 15 A                        | 30.000 A                                                 |
| PF-WL62                           | 1.500 V                              | 15 A – 30 A                       | 20.000 A                                                 |
| PF-MTPP                           | 250 V                                | 40 A                              | 1.000 A                                                  |
| PF-WJ30                           | 1.500 V                              | 4 A – 30 A                        | 10.000 A                                                 |
| PF-WJ45                           | 800 V                                | 5 A – 50 A                        | 10.000 A                                                 |
| PF-WJ50                           | 700 V                                | 5 A – 100 A                       | 10.000 A                                                 |
| PF-WJ60                           | 250 V – 500 V                        | 63 A / 125 A                      | 1.500 A / 2.500 A                                        |
| PF-WH25                           | 800 V                                | 50 A – 100 A                      | 10.000 A                                                 |
| PF-WH28                           | 1.000V                               | 40 A – 80 A                       | 50.000 A                                                 |
| PF-WH30-S                         | 500 V                                | 10 A – 150 A                      | 6.000 A - 10.000 A                                       |
| PF-WH30-T                         | 500 V                                | 150 A – 250 A                     | 10.000 A                                                 |
| PF-WH40                           | 700 V                                | 5 A – 150 A                       | 10.000 A                                                 |
| PF-WH60                           | 150 V                                | 20 A – 400 A                      | 10.000 A                                                 |
| PF-WE30                           | 700 V                                | 50 A – 600 A                      | 10.000 A                                                 |
| PF-WE35                           | 800 V                                | 60 A – 150 A                      | 10.000 A                                                 |
| PF-WE40                           | 800 V                                | 500 A – 600 A                     | 20.000 A                                                 |
| PF-WE50                           | 500 V                                | 60 A – 300 A                      | 10.000 A / 20.000 A                                      |
| PF-WE55                           | 500 V                                | 150 A – 400 A                     | 20.000 A                                                 |
| PF-WD22                           | 700 V                                | 125 A – 400 A                     | 50.000 A                                                 |
| PF-WD25                           | 750 V                                | 125 A – 300 A                     | 50.000 A                                                 |
| PF-WD35                           | 800 V                                | 150 A – 400 A                     | 20.000 A                                                 |
| PF-WD38                           | 1.000 V                              | 250 A – 600 A                     | 50.000 A                                                 |
| PF-WD50                           | 300 V                                | 200 A – 400 A                     | 10.000 A                                                 |
| PF-WD60                           | 500 V                                | 200 A – 600 A                     | 10.000 A                                                 |
| PF-WD60X                          | 500 V                                | 500 A                             | 10.000 A                                                 |

# Power-Fuses – Übersicht

## Power-Fuses – Overview

|          |         |               |                     |
|----------|---------|---------------|---------------------|
| PF-WD63  | 500 V   | 250 A – 400 A | 50.000 A            |
| PF-WD70  | 700 V   | 250 A – 600 A | 20.000 A            |
| PF-WD80  | 250 V   | 200 A – 500 A | 10.000 A            |
| PF-WS70  | 1.500 V | 160 A – 300 A | 30.000 A            |
| PF-RJ05E | 500 V   | 50 A – 100 A  | 50.000 A            |
| PF-RJ08E | 800 V   | 40 A – 80 A   | 50.000 A            |
| PF-RM05G | 500 V   | 10 A – 40 A   | 20.000 A – 30.000 A |

Die Auflistung entspricht der Reihenfolge im Katalog / The listing corresponds to the order in the catalog

5 x 20 mm



|                                   |              |                                |                      |                                                      |                            |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>600 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 mA - 20 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>200 A -<br/>1.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

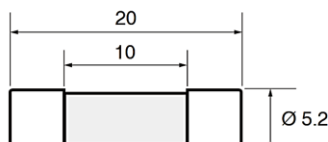
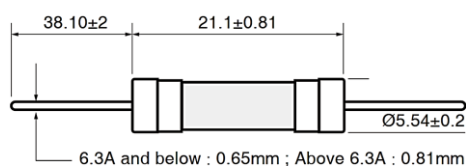
| Art. No.                 | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | R <sub>c_typ</sub><br>[mΩ] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|--------------------------|----------------|-----------------------|----------------------------|----------------------------|------------------------|----------------------------------------|
| PF-WN10-0,2              | 200 mA         | 600                   | 333                        | 1750                       | 1.000                  | 0,032                                  |
| PF-WN10-0,4              | 400 mA         | 600                   | 278                        | 663                        | 1.000                  | 0,172                                  |
| PF-WN10-0,5              | 500 mA         | 600                   | 190                        | 382                        | 1.000                  | 0,287                                  |
| PF-WN10-0,6              | 600 mA         | 600                   | 234                        | 360                        | 1.000                  | 0,396                                  |
| PF-WN10-1                | 1 A            | 600                   | 280                        | 230                        | 1.000                  | 0,28                                   |
| PF-WN10-1,6              | 1,6 A          | 600                   | 310                        | 148                        | 200                    | 2,56                                   |
| PF-WN10-2                | 2 A            | 600                   | 248                        | 100                        | 200                    | 1,68                                   |
| PF-WN10-2,5              | 2,5 A          | 600                   | 360                        | 90                         | 200                    | 1,48                                   |
| PF-WN10-3,15             | 3,15 A         | 600                   | 215                        | 49                         | 200                    | 4,91                                   |
| PF-WN10-4                | 4 A            | 600                   | 220                        | 38                         | 200                    | 8,00                                   |
| PF-WN10-5                | 5 A            | 600                   | 200                        | 29                         | 200                    | 16,0                                   |
| PF-WN10-6                | 6 A            | 600                   | 150                        | 24                         | 200                    | 30,0                                   |
| PF-WN10-6,3              | 6,3 A          | 600                   | 162                        | 19                         | 200                    | 48,0                                   |
| PF-WN10-8                | 8 A            | 600                   | 149                        | 14                         | 200                    | 64,0                                   |
| PF-WN10-10               | 10 A           | 600                   | 166                        | 12                         | 200                    | 90,0                                   |
| PF-WN10-12               | 12 A           | 600                   | 160                        | 9,5                        | 200                    | 130                                    |
| PF-WN10-15 <sup>1)</sup> | 15 A           | 600                   | 165                        | 7,3                        | 200                    | 225                                    |
| PF-WN10-20 <sup>1)</sup> | 20 A           | 600                   | 150                        | 5                          | 200                    | 520                                    |

Version mit 2 Aufsteckkappen z.B. / Version 2 with pigtails e.g.: PF-WN10-0,2-P

<sup>1)</sup> Nicht in der Norm / Not mentioned in the standardsI<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time: |                  |
|----------------------------------------------------------|--------------------------------|------------------|
|                                                          | 200 mA<br>-<br>600 mA          | 1 A<br>-<br>20 A |
| 1 · I <sub>N</sub>                                       | t <sub>min</sub>               | 4 h              |
|                                                          | t <sub>max</sub>               | -                |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub>               | -                |
|                                                          | t <sub>max</sub>               | 2 min            |
| 4 · I <sub>N</sub>                                       | t <sub>min</sub>               | -                |
|                                                          | t <sub>max</sub>               | 2 min            |

WN10-XXX

P-Version  
WN10-XXX-P

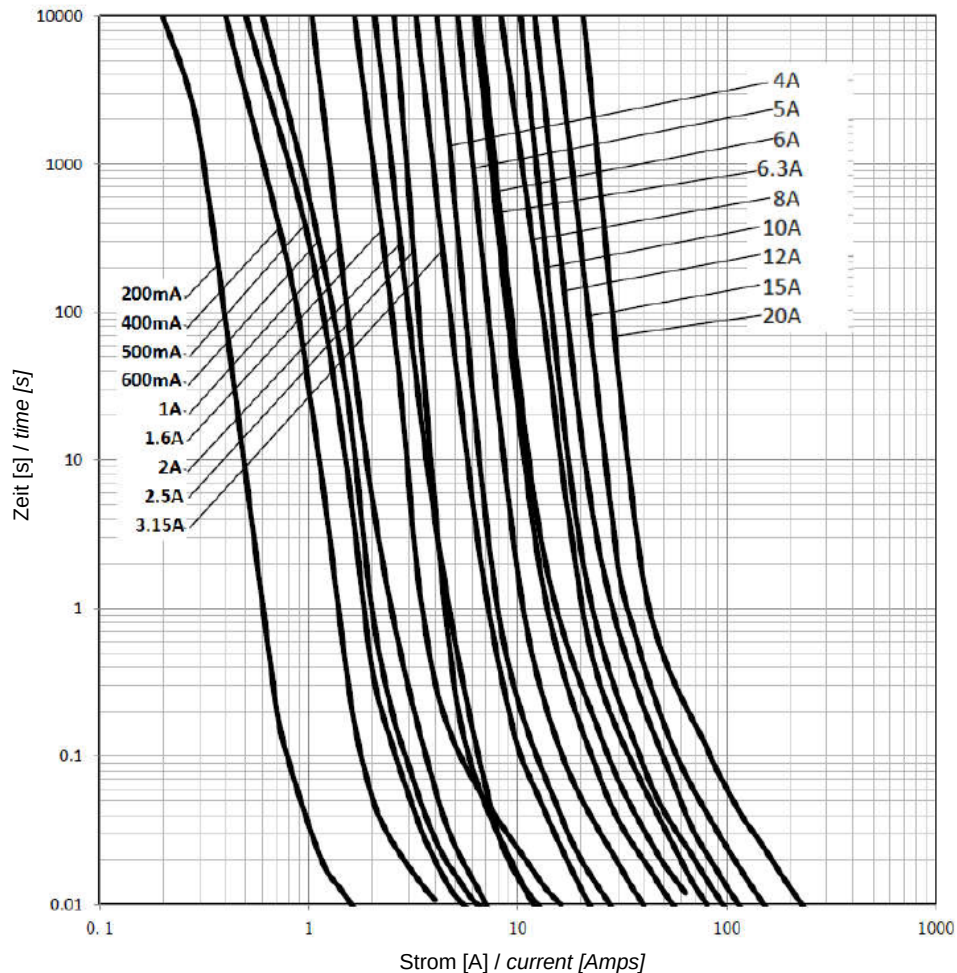


5 x 20 mm

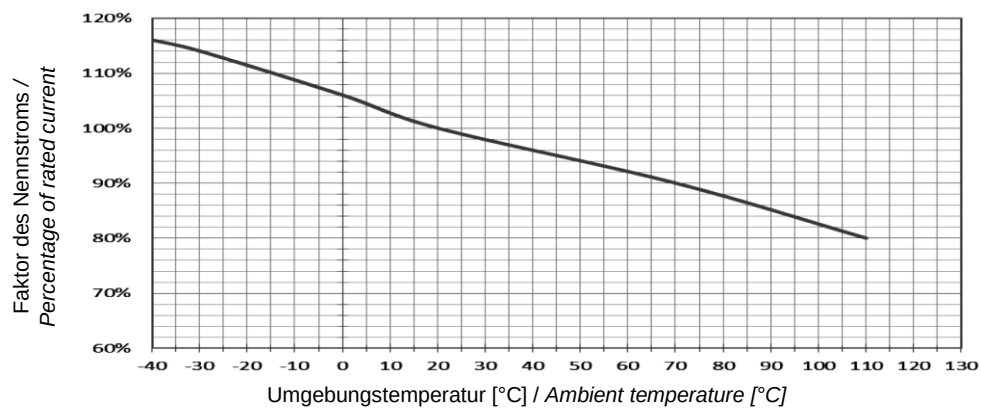


|          |       |         |               |                   |         |
|----------|-------|---------|---------------|-------------------|---------|
| Spannung | 600 V | Strom   | 200 mA - 20 A | Ausschaltvermögen | 200 A - |
| Voltage  |       | Current |               | Breaking capacity | 1.000 A |

Strom-Zeit-Kennlinie / Time-current Curve



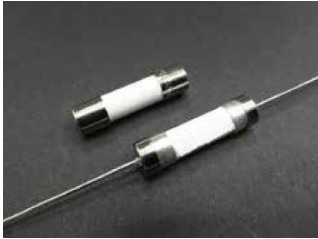
Temperatur-Derating / Temperature De-Rating Curve



5 x 20 mm



|                                   |                    |                                |                      |                                                      |                            |
|-----------------------------------|--------------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>400 - 600 V</b> | <b>Strom</b><br><i>Current</i> | <b>500 mA - 20 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>200 A -<br/>2.000 A</b> |
|-----------------------------------|--------------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|



|                                                    |                                                                                                                            |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                       |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                            |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                          |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose<br>geschüttet) / 100 pcs. = Industrial box (bulk)                                      |

### Bemessungswerte / Ratings:

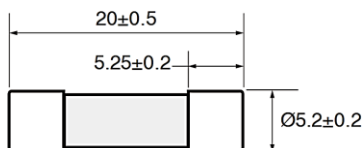
| Art. No.     | I <sub>N</sub> | U <sub>N</sub><br>[V]                                              | U <sub>d_max</sub><br>[mV] | R <sub>c_typ</sub><br>[Ω] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|--------------|----------------|--------------------------------------------------------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WN20-0,5  | 500 mA         | 400 V bis / to 600 V - siehe I <sub>BC</sub> / see I <sub>BC</sub> | 190                        | 382                       | 200 A @<br>600 V AC    | 0,287                                  |
| PF-WN20-0,63 | 630 mA         |                                                                    | 261                        | 359                       |                        | 0,34                                   |
| PF-WN20-0,8  | 800 mA         |                                                                    | 144                        | 175                       |                        | 1,18                                   |
| PF-WN20-1    | 1 A            |                                                                    | 250                        | 210                       |                        | 1,40                                   |
| PF-WN20-1,25 | 1,25 A         |                                                                    | 138                        | 134                       | 300 A @<br>500 V DC    | 2,34                                   |
| PF-WN20-1,6  | 1,6 A          |                                                                    | 180                        | 100                       |                        | 3,90                                   |
| PF-WN20-2    | 2 A            |                                                                    | 158                        | 65                        |                        | 9,40                                   |
| PF-WN20-2,5  | 2,5 A          |                                                                    | 93                         | 34                        |                        | 12,5                                   |
| PF-WN20-3,15 | 3,15 A         |                                                                    | 110                        | 28                        | 2.000 A @<br>400 V DC  | 17,8                                   |
| PF-WN20-4    | 4 A            |                                                                    | 118                        | 24                        |                        | 25                                     |
| PF-WN20-5    | 5 A            |                                                                    | 104                        | 17                        |                        | 50                                     |
| PF-WN20-6,3  | 6,3 A          |                                                                    | 100                        | 13                        |                        | 80                                     |
| PF-WN20-8    | 8 A            |                                                                    | 85                         | 9                         | 200 A @<br>600 V AC    | 179                                    |
| PF-WN20-10   | 10 A           |                                                                    | 90                         | 7,6                       |                        | 400                                    |
| PF-WN20-12   | 12 A           |                                                                    | 80                         | 6                         |                        | 576                                    |
| PF-WN20-15   | 15 A           |                                                                    | 5                          | 4,3                       |                        | 900                                    |
| PF-WN20-16   | 16 A           |                                                                    | 68                         | 3,7                       | 300 A @<br>500 V DC    | 1.024                                  |
| PF-WN20-20   | 20 A           |                                                                    | 75                         | 3,3                       |                        | 1.600                                  |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WN20-0,5-P**

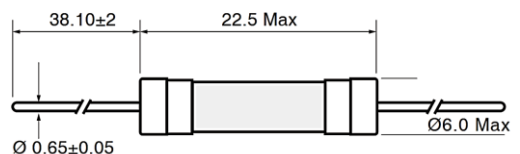
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                |                    |                   |                  |
|----------------------------------------------------------|-----------------------------------------------|--------------------|-------------------|------------------|
|                                                          | 500 mA<br>-<br>800 mA                         | 1 A<br>-<br>3,15 A | 4 A<br>-<br>6,3 A | 8 A<br>-<br>20 A |
| <b>1,5 · I<sub>N</sub></b>                               | t <sub>min</sub> 60 min<br>t <sub>max</sub> - | 60 min             | 60 min            | 30 min           |
| <b>2,1 · I<sub>N</sub></b>                               | t <sub>min</sub> -<br>t <sub>max</sub> -      | -                  | 30 min            | 30 min           |
| <b>2,75 · I<sub>N</sub></b>                              | t <sub>min</sub> -<br>t <sub>max</sub> -      | 750 ms<br>80 s     | 750 ms<br>80 s    | 750 ms<br>80 s   |
| <b>3 · I<sub>N</sub></b>                                 | t <sub>min</sub> -<br>t <sub>max</sub> 2 min  | -                  | -                 | -                |
| <b>4 · I<sub>N</sub></b>                                 | t <sub>min</sub> -<br>t <sub>max</sub> -      | 95 ms<br>5 s       | 150 ms<br>5 s     | 150 ms<br>8 s    |
| <b>10 · I<sub>N</sub></b>                                | t <sub>min</sub> -<br>t <sub>max</sub> -      | 10 ms<br>150 ms    | 10 ms<br>150 ms   | 10 ms<br>150 ms  |

WN20-XXX



P-Version  
WN20-XXX-P



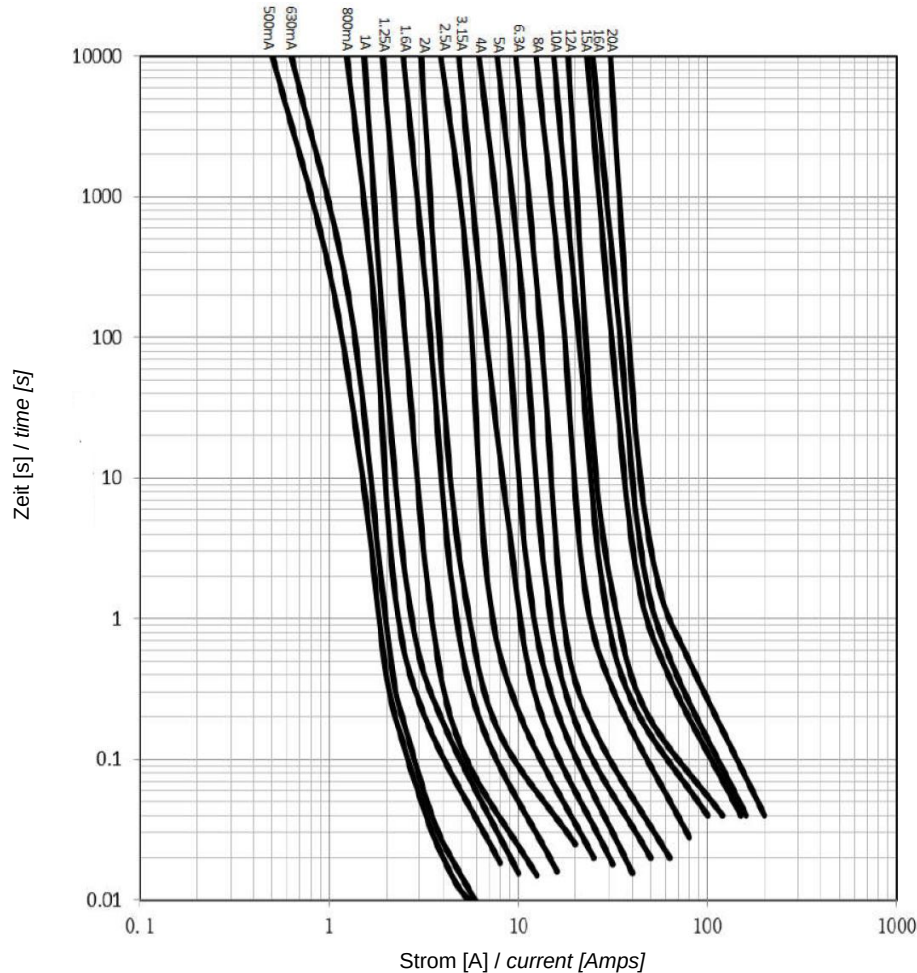
6.3A and below : 0.65mm ; Above 6.3A : 0.81mm

5 x 20 mm

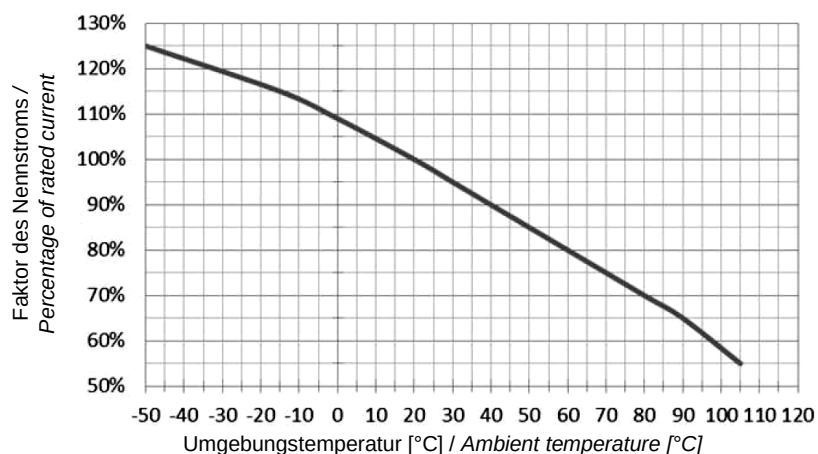


|                     |             |                  |               |                                        |                    |
|---------------------|-------------|------------------|---------------|----------------------------------------|--------------------|
| Spannung<br>Voltage | 400 - 600 V | Strom<br>Current | 500 mA - 20 A | Ausschaltvermögen<br>Breaking capacity | 200 A -<br>2.000 A |
|---------------------|-------------|------------------|---------------|----------------------------------------|--------------------|

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-De-rating / Temperature De-Rating Curve



### 5 x 20 mm



|                                   |                    |                                |                      |                                                      |                        |
|-----------------------------------|--------------------|--------------------------------|----------------------|------------------------------------------------------|------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>400 - 500 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 mA - 20 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>300 A - 2.000 A</b> |
|-----------------------------------|--------------------|--------------------------------|----------------------|------------------------------------------------------|------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
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De-Rating beachten ! / consider De-Rating !

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+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (Lötkolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

#### Bemessungswerte / Ratings:

| Art. No.     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|--------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WN30-0,2  | 200 mA         |                       | 190                        |                           |                        | 0,032                                  |
| PF-WN30-0,4  | 400 mA         |                       |                            |                           |                        | 0,172                                  |
| PF-WN30-0,5  | 500 mA         |                       |                            |                           |                        | 0,287                                  |
| PF-WN30-0,6  | 600 mA         |                       |                            |                           |                        | 0,396                                  |
| PF-WN30-1    | 1 A            |                       |                            |                           |                        | 0,28                                   |
| PF-WN30-1,25 | 1,25 A         |                       |                            | Auf                       | 300 A @                | 2,56                                   |
| PF-WN30-1,6  | 1,6 A          |                       |                            | Anfrage                   | 500 V DC               | 1,68                                   |
| PF-WN30-2    | 2 A            |                       |                            |                           |                        | 1,48                                   |
| PF-WN30-2,5  | 2,5 A          |                       |                            | /                         | 2.000 A @              | 4,91                                   |
| PF-WN30-3,15 | 3,15 A         |                       |                            |                           | 400 V DC               | 8,00                                   |
| PF-WN30-4    | 4 A            |                       |                            | On                        |                        | 16,0                                   |
| PF-WN30-5    | 5 A            |                       |                            | request                   |                        | 30,0                                   |
| PF-WN30-6,3  | 6,3 A          |                       |                            |                           |                        | 48,0                                   |
| PF-WN30-8    | 8 A            |                       |                            |                           |                        | 64,0                                   |
| PF-WN30-10   | 10 A           |                       |                            |                           |                        | 90,0                                   |
| PF-WN30-12   | 12 A           |                       |                            |                           |                        | 130                                    |
| PF-WN30-15   | 15 A           |                       |                            |                           | 300 A @                | 225                                    |
| PF-WN30-20   | 20 A           |                       |                            |                           | 500 V DC               | 250                                    |

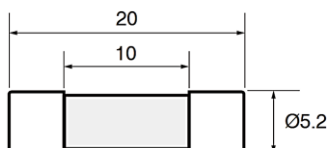
400 V bis / to 500 V - siehe I<sub>BC</sub> / see I<sub>BC</sub>

#### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

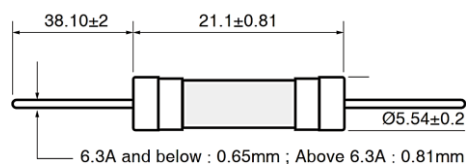
| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:    |                  |
|-------------------------------------------------------------|--------------------------------------|------------------|
|                                                             | 200 mA<br>-<br>600 mA                | 1 A<br>-<br>20 A |
| 1 · I <sub>N</sub>                                          | t <sub>min</sub><br>t <sub>max</sub> | 4 h<br>-         |
| 2 · I <sub>N</sub>                                          | t <sub>min</sub><br>t <sub>max</sub> | 0<br>2 min       |
| 4 · I <sub>N</sub>                                          | t <sub>min</sub><br>t <sub>max</sub> | 0<br>2 min       |

Version mit 2 Aufsteckkappen z.B. / Version 2 with pigtails e.g.: **PF-WN30-0,2-P**

WN30-XXX



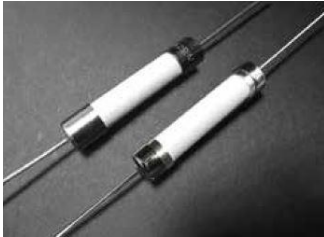
P-Version  
WN30-XXX-P



6,3 x 32 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>600 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 mA - 12 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                 |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramicrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                        |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                             |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                           |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5 s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)                                          |

### Bemessungswerte / Ratings:

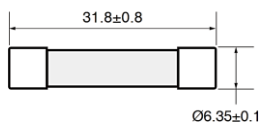
| Art. No.     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|--------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WM10-0,2  | 200 mA         | 600                   | 780                        |                           | 10.000                 | 0,0031                                 |
| PF-WM10-0,25 | 250 mA         | 600                   | 760                        |                           | 10.000                 | 0,009                                  |
| PF-WM10-0,4  | 400 mA         | 600                   | 700                        |                           | 10.000                 | 0,059                                  |
| PF-WM10-0,5  | 500 mA         | 600                   | 650                        |                           | 10.000                 | 0,081                                  |
| PF-WM10-0,6  | 600 mA         | 600                   | 600                        |                           | 10.000                 | 0,178                                  |
| PF-WM10-1    | 1 A            | 600                   | 560                        | Auf                       | 10.000                 | 0,210                                  |
| PF-WM10-1,25 | 1,25 A         | 600                   | 550                        | Anfrage                   | 10.000                 | 3,00                                   |
| PF-WM10-1,6  | 1,6 A          | 600                   | 350                        |                           | 10.000                 | 3,72                                   |
| PF-WM10-2    | 2 A            | 600                   | 360                        | /                         | 10.000                 | 1,50                                   |
| PF-WM10-2,5  | 2,5 A          | 600                   | 300                        |                           | 10.000                 | 4,50                                   |
| PF-WM10-3    | 3 A            | 600                   | 270                        | On                        | 10.000                 | 7,54                                   |
| PF-WM10-3,15 | 3,15 A         | 600                   | 250                        | Request                   | 10.000                 | 12,66                                  |
| PF-WM10-4    | 4 A            | 600                   | 230                        |                           | 10.000                 | 15,80                                  |
| PF-WM10-5    | 5 A            | 600                   | 200                        |                           | 10.000                 | 30,0                                   |
| PF-WM10-6    | 6 A            | 600                   | 186                        |                           | 10.000                 | 84,5                                   |
| PF-WM10-8    | 8 A            | 600                   | 175                        |                           | 10.000                 | 75,0                                   |
| PF-WM10-10   | 10 A           | 600                   | 170                        |                           | 10.000                 | 97,7                                   |
| PF-WM10-12   | 12 A           | 600                   | 160                        |                           | 10.000                 | 149                                    |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WM10-0,2-P**

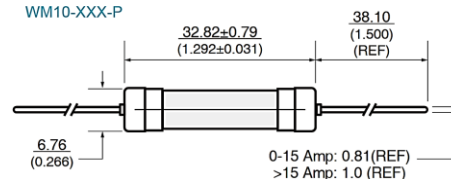
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:               |
|----------------------------------------------------------|----------------------------------------------|
|                                                          | 200 mA<br>-<br>12 A                          |
| 1 · I <sub>N</sub>                                       | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 2,5 · I <sub>N</sub>                                     | t <sub>min</sub> 0<br>t <sub>max</sub> 2 min |

WM10-XXX



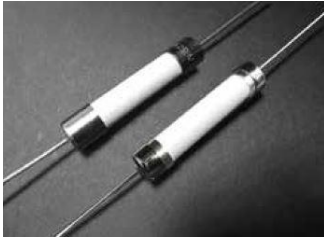
P-Version  
WM10-XXX-P



6,3 x 32 mm



|                                   |                |                                |                     |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.000 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 mA - 3 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|----------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                 |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                        |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                             |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                           |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5 s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)                                          |

### Bemessungswerte / Ratings:

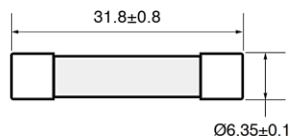
| Art. No.      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WM20-0,2   | 200 mA         | 1.000                 |                            |                           | 10.000                 | 0,0031                                 |
| PF-WM20-0,25  | 250 mA         | 1.000                 |                            |                           | 10.000                 | 0,009                                  |
| PF-WM20-0,315 | 315 mA         | 1.000                 |                            | Auf                       | 10.000                 | 0,050                                  |
| PF-WM20-0,4   | 400 mA         | 1.000                 |                            | Anfrage                   | 10.000                 | 0,081                                  |
| PF-WM20-0,5   | 500 mA         | 1.000                 |                            | /                         | 10.000                 | 0,178                                  |
| PF-WM20-0,6   | 600 mA         | 1.000                 |                            | /                         | 10.000                 | 0,210                                  |
| PF-WM20-1     | 1 A            | 1.000                 |                            |                           | 10.000                 | 3,00                                   |
| PF-WM20-1,25  | 1,25 A         | 1.000                 |                            | On                        | 10.000                 | 3,72                                   |
| PF-WM20-2     | 2 A            | 1.000                 |                            | Request                   | 10.000                 | 1,50                                   |
| PF-WM20-2,5   | 2,5 A          | 1.000                 |                            |                           | 10.000                 | 4,50                                   |
| PF-WM20-3     | 3 A            | 1.000                 |                            |                           | 10.000                 | 7,54                                   |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WM20-0,2-P**

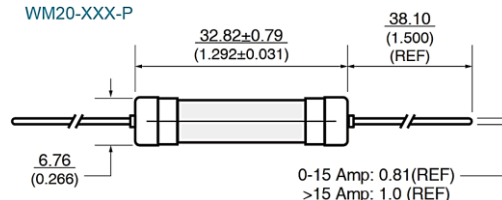
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:            |
|-------------------------------------------------------------|----------------------------------------------|
|                                                             | 200 mA<br>-<br>3 A                           |
| 1 · I <sub>N</sub>                                          | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 2,5 · I <sub>N</sub>                                        | t <sub>min</sub> 0<br>t <sub>max</sub> 2 min |

WM20-XXX



P-Version  
WM20-XXX-P

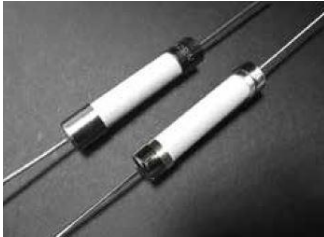




6,3 x 32 mm



|                                   |              |                                |                      |                                                      |                |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>660 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 mA - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>1.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)

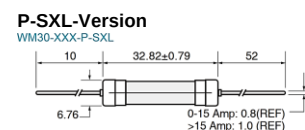
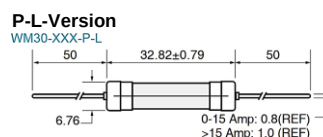
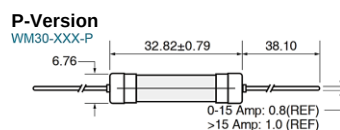
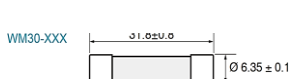
### Bemessungswerte / Ratings:

| Art. No.      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d,typ.</sub><br>[mV] | R <sub>c,typ.</sub><br>[mΩ] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>pre-arc</sub><br>[A <sup>2</sup> s] |
|---------------|----------------|-----------------------|-----------------------------|-----------------------------|------------------------|-----------------------------------------------------------|
| PF-WM30-0,2   | 200 mA         | 660                   | 780                         | 1830                        | 1.000                  | 0,0031                                                    |
| PF-WM30-0,25  | 250 mA         | 660                   | 760                         | 1760                        | 1.000                  | 0,009                                                     |
| PF-WM30-0,315 | 315 mA         | 660                   | 720                         | 1700                        | 1.000                  | 0,050                                                     |
| PF-WM30-0,4   | 400 mA         | 660                   | 700                         | 1650                        | 1.000                  | 0,059                                                     |
| PF-WM30-0,5   | 500 mA         | 660                   | 600                         | 1000                        | 1.000                  | 0,081                                                     |
| PF-WM30-0,6   | 600 mA         | 660                   | 530                         | 750                         | 1.000                  | 0,178                                                     |
| PF-WM30-0,8   | 800 mA         | 660                   | 500                         | 530                         | 1.000                  | 0,43                                                      |
| PF-WM30-1     | 1 A            | 660                   | 560                         | 450                         | 1.000                  | 0,21                                                      |
| PF-WM30-1,25  | 1,25 A         | 660                   | 400                         | 260                         | 1.000                  | 1,37                                                      |
| PF-WM30-1,6   | 1,6 A          | 660                   | 350                         | 180                         | 1.000                  | 3,72                                                      |
| PF-WM30-2     | 2 A            | 660                   | 360                         | 150                         | 1.000                  | 1,50                                                      |
| PF-WM30-2,5   | 2,5 A          | 660                   | 300                         | 80                          | 1.000                  | 4,50                                                      |
| PF-WM30-3     | 3 A            | 660                   | 270                         | 60                          | 1.000                  | 7,54                                                      |
| PF-WM30-3,15  | 3,15 A         | 660                   | 250                         | 50                          | 1.000                  | 12,66                                                     |
| PF-WM30-4     | 4 A            | 660                   | 230                         | 40                          | 1.000                  | 15,8                                                      |
| PF-WM30-5     | 5 A            | 660                   | 200                         | 30                          | 1.000                  | 30,0                                                      |
| PF-WM30-6     | 6 A            | 660                   | 186                         | 20                          | 1.000                  | 84,5                                                      |
| PF-WM30-8     | 8 A            | 660                   | 175                         | 17                          | 1.000                  | 75,0                                                      |
| PF-WM30-10    | 10 A           | 660                   | 170                         | 16                          | 1.000                  | 97,7                                                      |
| PF-WM30-12    | 12 A           | 660                   | 120                         | 8,8                         | 1.000                  | 148                                                       |
| PF-WM30-12,5  | 12,5 A         | 660                   | 115                         | 8                           | 1.000                  | 153                                                       |
| PF-WM30-15    | 15 A           | 660                   | 110                         | 7,5                         | 1.000                  | 158                                                       |
| PF-WM30-16    | 16 A           | 660                   | 107                         | 7                           | 1.000                  | 162                                                       |
| PF-WM30-20    | 20 A           | 660                   | 105                         | 5,2                         | 1.000                  | 500                                                       |
| PF-WM30-25    | 25 A           | 660                   | 100                         | 3,5                         | 1.000                  | 583                                                       |
| PF-WM30-30    | 30 A           | 660                   | 92                          | 3                           | 1.000                  | 1.016                                                     |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WM30-0,2-P-L**

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:               |
|----------------------------------------------------------|----------------------------------------------|
|                                                          | 200 mA<br>-<br>30 A                          |
| 1 · I <sub>N</sub>                                       | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 2,5 · I <sub>N</sub>                                     | t <sub>min</sub> -<br>t <sub>max</sub> 2 min |



6,3 x 32 mm

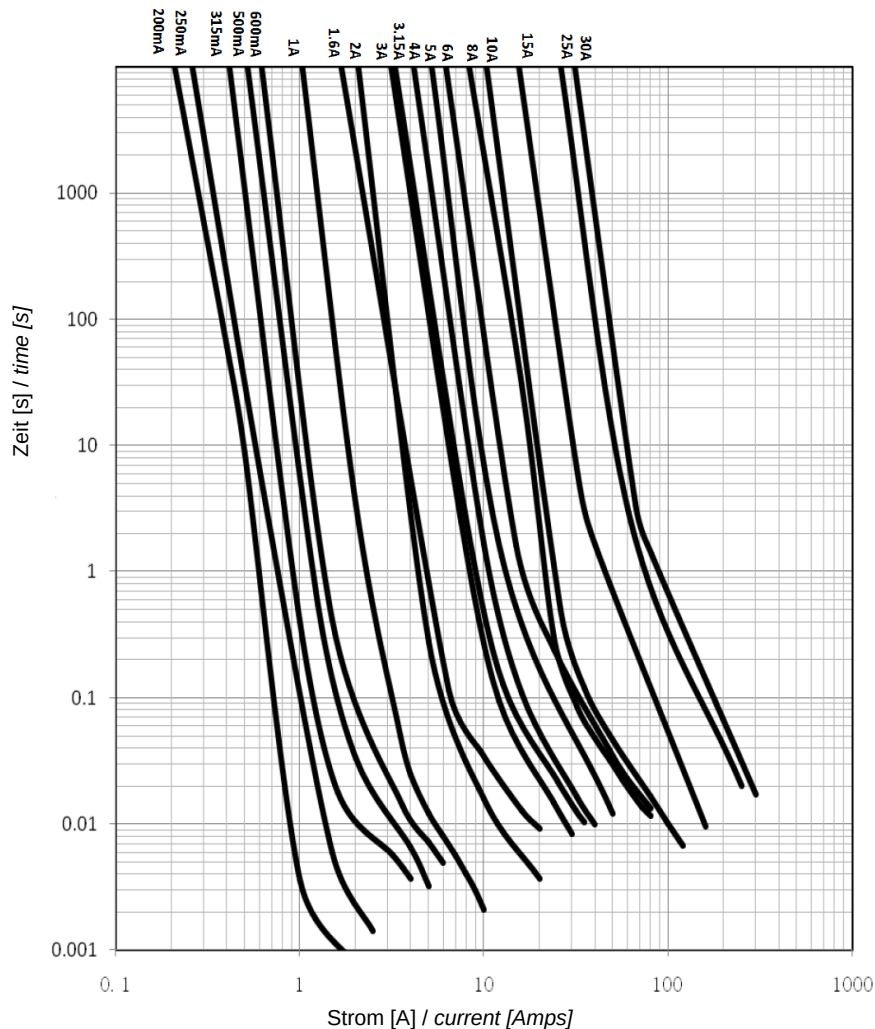


Spannung  
Voltage 660 V

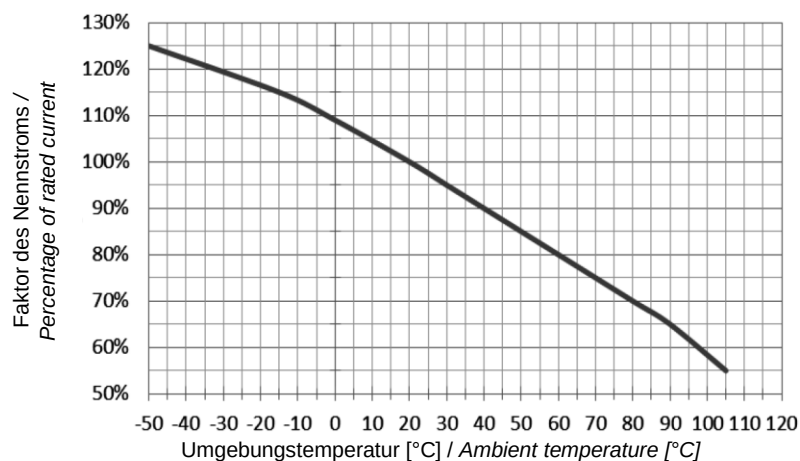
Strom  
Current 200 mA - 30 A

Ausschaltvermögen  
Breaking capacity 1.000 A

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-Derating / Temperature De-Rating Curve

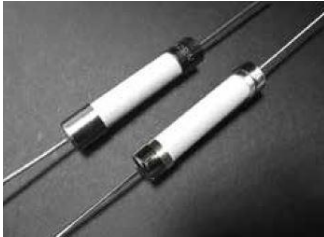




6,3 x 32 mm



|                                   |              |                                |                    |                                                      |                |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>660 V</b> | <b>Strom</b><br><i>Current</i> | <b>15 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>1.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

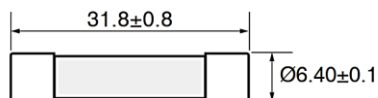
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | R <sub>c,typ.</sub><br>[mΩ] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>pre-arc</sub><br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|-----------------------------|------------------------|-----------------------------------------------------------|
| PF-WM40-15 | 15 A           | 660                   | Auf                        | 7,3                         | 1.000                  | 66                                                        |
| PF-WM40-16 | 16 A           | 660                   | Anfrage                    | 7,3                         | 1.000                  | 62                                                        |
| PF-WM40-20 | 20 A           | 660                   | /                          | 5,5                         | 1.000                  | 120                                                       |
| PF-WM40-25 | 25 A           | 660                   | On                         | 4,6                         | 1.000                  | 200                                                       |
| PF-WM40-30 | 30 A           | 660                   | Request                    | 3,7                         | 1.000                  | 270                                                       |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WM40-15-P-SXL**

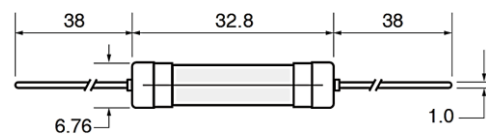
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>     |
|------------------------------------------------------------------|----------------------------------------------|
| 15 A                                                             | -                                            |
| 30 A                                                             | -                                            |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> -<br>t <sub>max</sub> 5 min |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub> -<br>t <sub>max</sub> 10 s  |

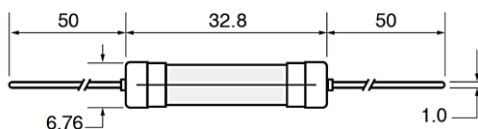
### WM40-XXX



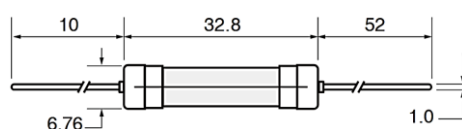
### P-Version WM40-XXX-P



### P-L-Version WM40-XXX-P-L



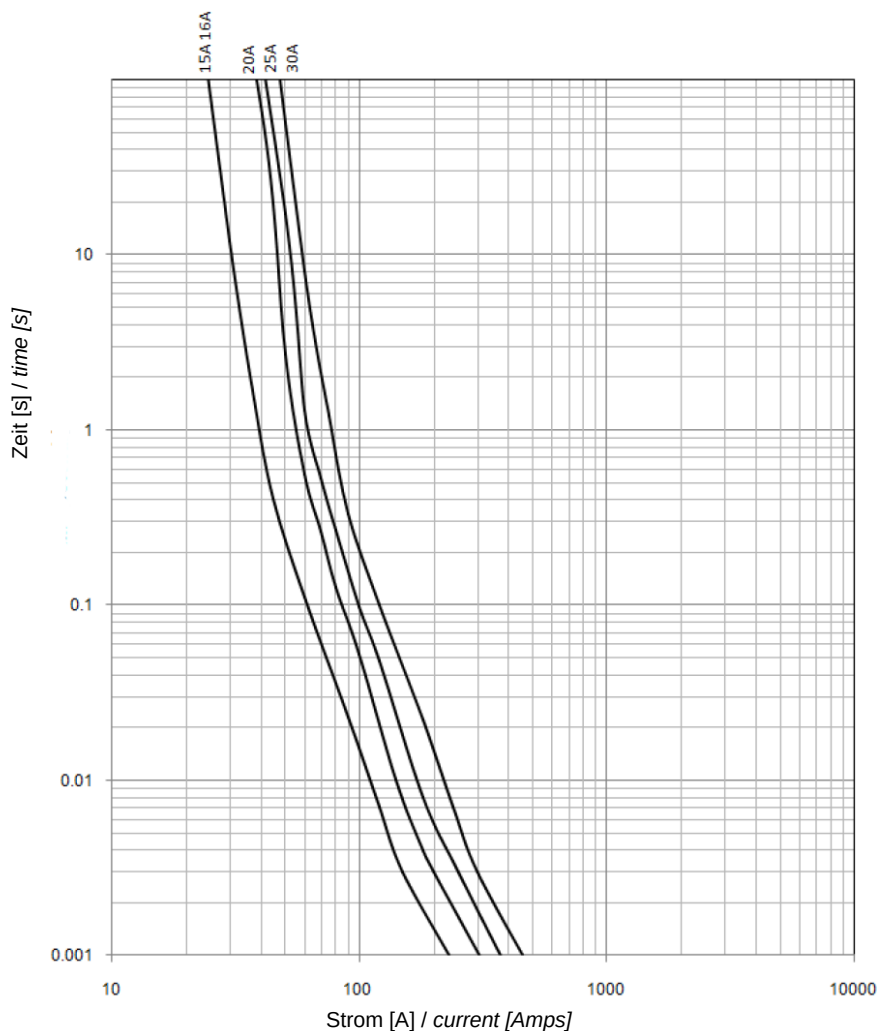
### P-SXL-Version WM40-XXX-P-SXL



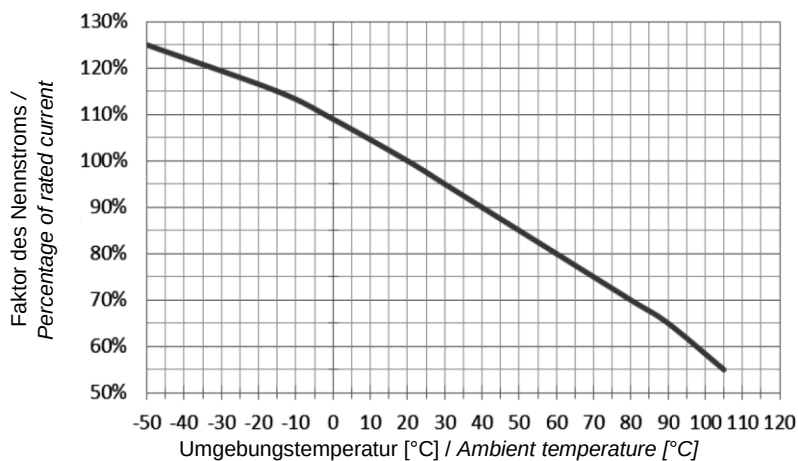
6,3 x 32 mm

Spannung  
Voltage 660 VStrom  
Current 15 A - 30 AAusschaltvermögen  
Breaking capacity 1.000 A

Strom-Zeit-Kennlinie / Time-current Curve



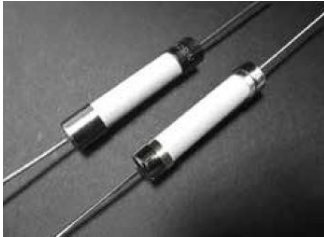
Temperatur-De-rating / Temperature De-Rating Curve



6,3 x 32 mm



|                                   |              |                                |                    |                                                      |                |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>250 V</b> | <b>Strom</b><br><i>Current</i> | <b>20 A - 50 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>1.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

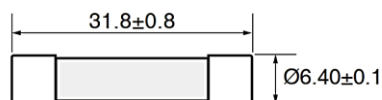
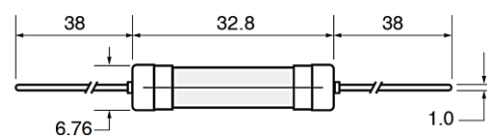
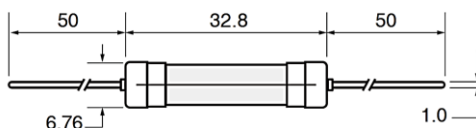
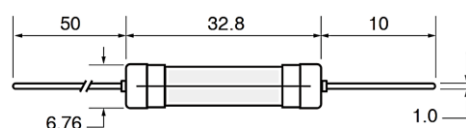
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WM50-20 | 20 A           | 250                   | Auf                        |                           | 1.000                  | 1.200                                  |
| PF-WM50-25 | 25 A           | 250                   | Anfrage                    |                           | 1.000                  | 2.100                                  |
| PF-WM50-30 | 30 A           | 250                   | /                          |                           | 1.000                  | 3.000                                  |
| PF-WM50-40 | 40 A           | 250                   | On                         |                           | 1.000                  | 12.500                                 |
| PF-WM50-50 | 50 A           | 250                   | Request                    |                           | 1.000                  | 14.400                                 |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: PF-WM50-20-P-SML

I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:            |
|-------------------------------------------------------------|----------------------------------------------|
| 1 · I <sub>N</sub>                                          | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 2,5 · I <sub>N</sub>                                        | t <sub>min</sub> 0<br>t <sub>max</sub> 2 min |

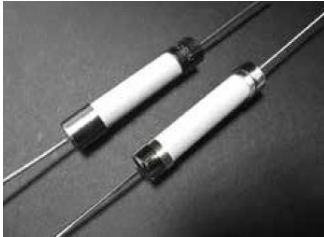
## WM50-XXX

P-Version  
WM50-XXX-PP-L-Version  
WM50-XXX-P-LP-SML-Version  
WM50-XXX-P-SML

6,3 x 25 mm



|                                   |             |                                |                   |                                                      |                |
|-----------------------------------|-------------|--------------------------------|-------------------|------------------------------------------------------|----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>75 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 50 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>2.500 A</b> |
|-----------------------------------|-------------|--------------------------------|-------------------|------------------------------------------------------|----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

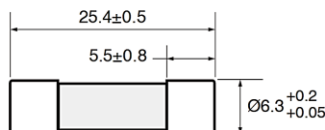
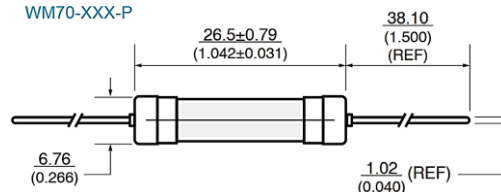
## Bemessungswerte / Ratings:

| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WM70-5  | 5 A            | 75                    |                            |                           | 2.500                  | 50                                     |
| PF-WM70-6  | 6 A            | 75                    | Auf                        |                           | 2.500                  | 48                                     |
| PF-WM70-10 | 10 A           | 75                    | Anfrage                    |                           | 2.500                  | 160                                    |
| PF-WM70-15 | 15 A           | 75                    |                            |                           | 2.500                  | 460                                    |
| PF-WM70-20 | 20 A           | 75                    | /                          |                           | 2.500                  | 1.050                                  |
| PF-WM70-25 | 25 A           | 75                    |                            |                           | 2.500                  | 2.200                                  |
| PF-WM70-30 | 30 A           | 75                    | On                         |                           | 2.500                  | 4.400                                  |
| PF-WM70-40 | 40 A           | 75                    | Request                    |                           | 2.500                  | 4.200                                  |
| PF-WM70-50 | 50 A           | 75                    |                            |                           | 2.500                  | 5.300                                  |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-WM70-5-P**I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>     |
|------------------------------------------------------------------|----------------------------------------------|
|                                                                  | 5 A<br>-<br>50 A                             |
| 1 · I <sub>N</sub>                                               | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 1,5 · I <sub>N</sub>                                             | t <sub>min</sub> 0<br>t <sub>max</sub> 1 h   |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 0<br>t <sub>max</sub> 2 min |

WM70-XXX

P-Version  
WM70-XXX-P

10,3 x 38 mm



|                                   |                      |                                |                      |                                                      |                            |
|-----------------------------------|----------------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>125 V - 500 V</b> | <b>Strom</b><br><i>Current</i> | <b>31,5 A - 80 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>1.500 /<br/>2.500 A</b> |
|-----------------------------------|----------------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (Lötkolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

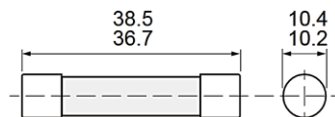
| Art. No.    | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A²s] |
|-------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|---------------------------|
| PF-XXX-31,5 | 31,5 A         | 500 AC<br>125 DC      | 115                        | 5,2                       | 1.500                  | 1.500                     |
| PF-XXX-32   | 32 A           | 500 AC<br>125 DC      | 115                        | 5,2                       | 1.500                  | 1.500                     |
| PF-XXX-40   | 40 A           | 500 AC<br>125 DC      | 105                        | 5,7                       | 1.500                  | 4.600                     |
| PF-XXX-50   | 50 A           | 500 AC<br>125 DC      | 105                        | 9,0                       | 1.500                  | 2.600                     |
| PF-XXX-63   | 63 A           | 250 AC<br>125 DC      | 90                         | 9,8                       | 1.500                  | 7.500                     |
| PF-XXX-80   | 80 A           | 250 AC<br>125 DC      | 80                         | 10,4                      | 2.500<br>1.500         | 24.000                    |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time: |
|----------------------------------------------------------|--------------------------------|
| 2 · I <sub>N</sub>                                       | 31,5 A<br>-<br>80 A            |
| t <sub>min</sub>                                         | 0                              |
| t <sub>max</sub>                                         | 2 min                          |

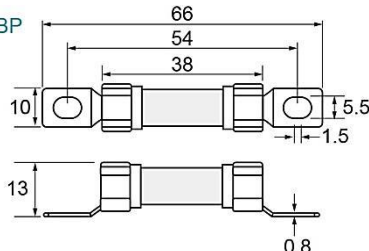
Schraubflaschenversion z.B. / screw version e.g.: **PF-LFP-32-P**

LFC-XXX



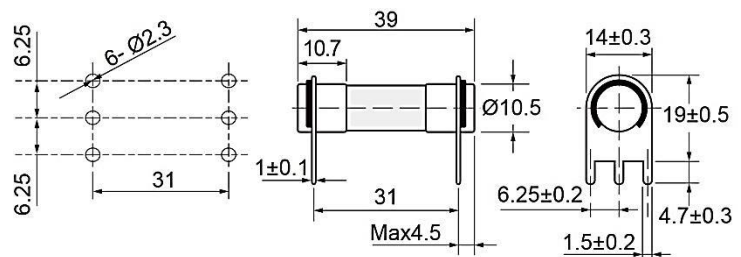
LFP-XXX-BP-Version

LFP-XXX-BP



LFP-XXX-P-Version

LFP-XXX-P

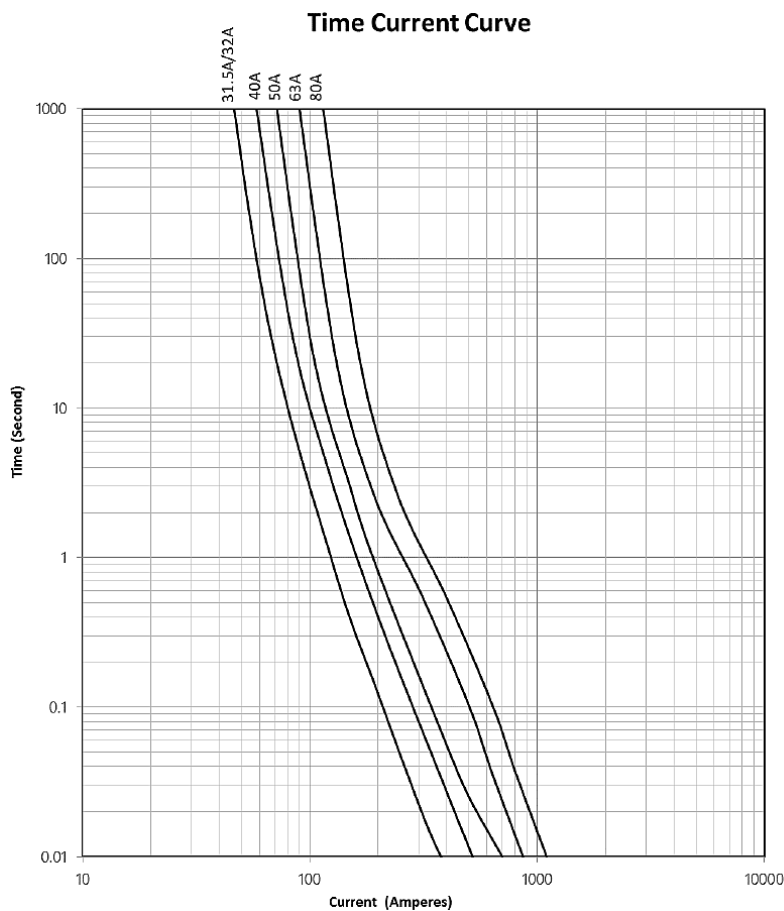


10,3 x 38 mm

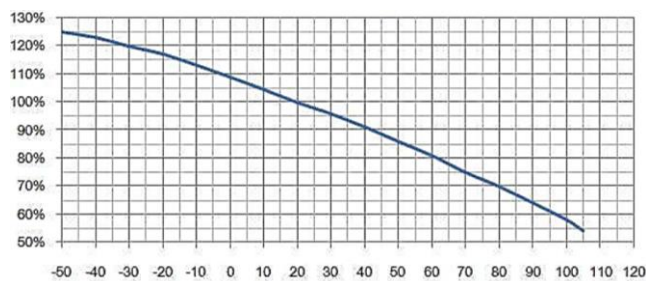


|          |               |         |               |                   |         |
|----------|---------------|---------|---------------|-------------------|---------|
| Spannung | 125 V - 500 V | Strom   | 31,5 A - 80 A | Ausschaltvermögen | 1.500 / |
| Voltage  |               | Current |               | Breaking capacity | 2.500 A |

Strom-Zeit Kennlinie / Time current curve:



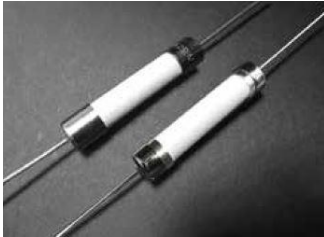
De-rating:



6,3 x 32 mm



|                                   |              |                                |                    |                                                      |                                |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|--------------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>10 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A /<br/>30.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|--------------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

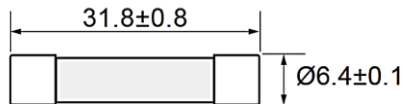
| Art. No.  | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|-----------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-XXX-10 | 10 A           | 500                   | Auf                        |                           | 30.000 A               | 100                                    |
| PF-XXX-12 | 12 A           | 500                   | Anfrage                    |                           | @                      | 175                                    |
| PF-XXX-15 | 15 A           | 500                   |                            |                           | 500 V AC               | 66                                     |
| PF-XXX-16 | 16 A           | 500                   | /                          |                           |                        | 62                                     |
| PF-XXX-20 | 20 A           | 500                   |                            |                           | 20.000 A               | 120                                    |
| PF-XXX-25 | 25 A           | 500                   | On                         |                           | @                      | 200                                    |
| PF-XXX-30 | 30 A           | 500                   | Request                    |                           | 500 V DC               | 270                                    |

Version mit 2 Aufsteckkappen z.B. / Version with 2 pigtails e.g.: **PF-MHP-10-L**

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>      |
|------------------------------------------------------------------|-----------------------------------------------|
|                                                                  | 10 A<br>-<br>30 A                             |
| 1,5 · I <sub>N</sub>                                             | t <sub>min</sub> 0<br>t <sub>max</sub> 30 min |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 0<br>t <sub>max</sub> 30 min |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub> 0<br>t <sub>max</sub> 10 s   |

### MHC-XXX



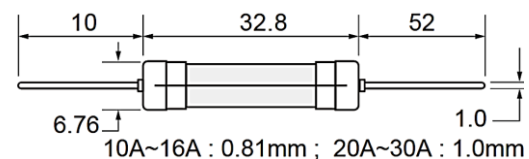
### MHP-Version MHP-XXX



### MHP-L-Version MHP-XXX-L



### MHP-SXL-Version MHP-XXX-SXL





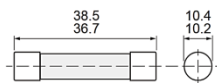
10,3 x 38 mm



|                                   |              |                                |                   |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>200 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 60 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>15.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



WL10-XXX



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

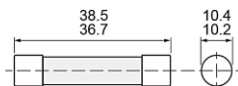
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL10-5  | 5 A            | 200                   | 200                        | 1,00                      | 15.000                 | 37                                     |
| PF-WL10-6  | 6 A            | 200                   | 200                        | 1,20                      | 15.000                 | 42                                     |
| PF-WL10-8  | 8 A            | 200                   | 185                        | 1,50                      | 15.000                 | 95                                     |
| PF-WL10-10 | 10 A           | 200                   | 160                        | 1,60                      | 15.000                 | 150                                    |
| PF-WL10-15 | 15 A           | 200                   | 125                        | 1,85                      | 15.000                 | 320                                    |
| PF-WL10-20 | 20 A           | 200                   | 170                        | 3,40                      | 15.000                 | 600                                    |
| PF-WL10-25 | 25 A           | 200                   | 120                        | 3,00                      | 15.000                 | 920                                    |
| PF-WL10-30 | 30 A           | 200                   | 125                        | 3,75                      | 15.000                 | 1.300                                  |
| PF-WL10-35 | 35 A           | 200                   | 135                        | 4,73                      | 15.000                 | 1.800                                  |
| PF-WL10-40 | 40 A           | 200                   | 129                        | 5,20                      | 15.000                 | 2.400                                  |
| PF-WL10-50 | 50 A           | 200                   | 116                        | 5,80                      | 15.000                 | 3.000                                  |
| PF-WL10-60 | 60 A           | 200                   | 105                        | 6,30                      | 15.000                 | 4.300                                  |

In verschiedenen Versionen z.B. / In different versions e.g.: **PF-WL10-5-AP**

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

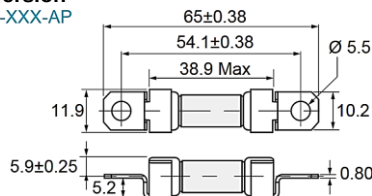
| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>         |
|------------------------------------------------------------------|--------------------------------------------------|
|                                                                  | 5 A<br>-<br>60 A                                 |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

WL10-XXX



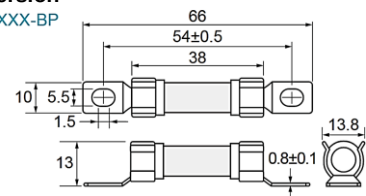
### AP-Version

WL10-XXX-AP



### BP-Version

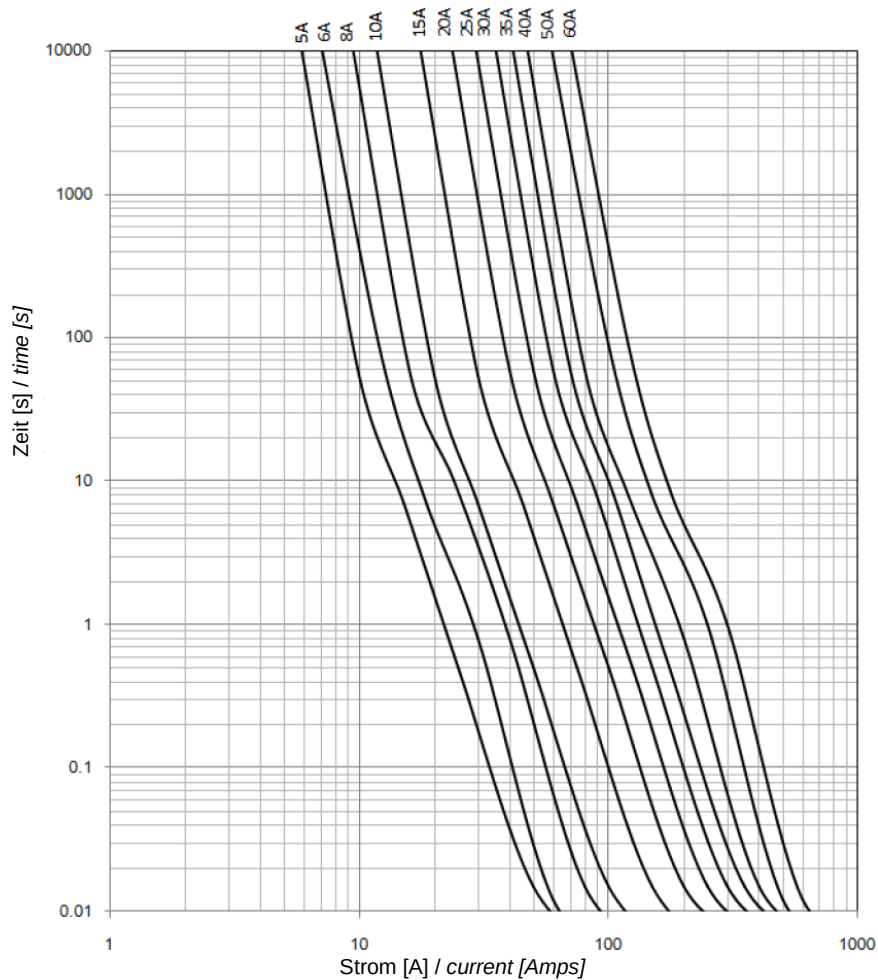
WL10-XXX-BP



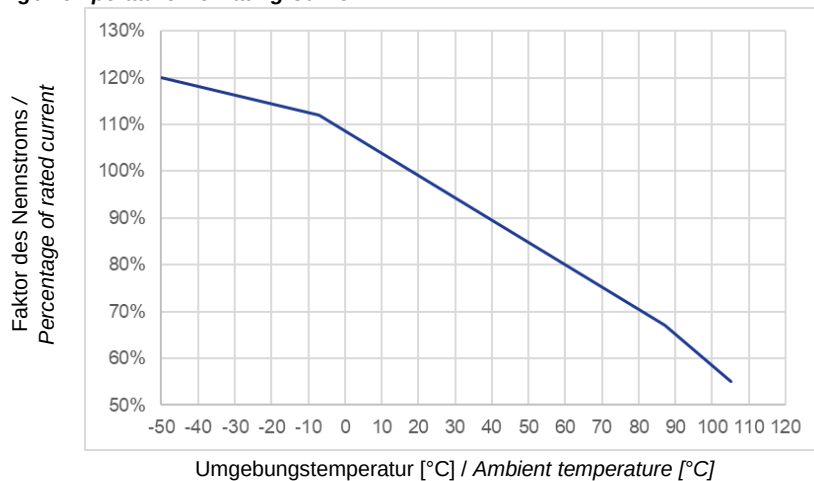
10,3 x 38 mm

Spannung  
Voltage 200 VStrom  
Current 5 A - 60 AAusschaltvermögen  
Breaking capacity 15.000 A

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-Derating / Temperature De-Rating Curve



10,3 x 38 mm



**Spannung**  
*Voltage* **450 V**

**Strom**  
*Current* **30 A – 50 A**

**Ausschaltvermögen**  
*Breaking capacity* **10.000 A**



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-40 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 260 °C ± 3°C; t < 10 s  
Manuell (Lötcolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d, max</sub><br>[mV] | R <sub>c</sub><br>[mΩ] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>Pre_arc</sub><br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|-----------------------------|------------------------|------------------------|-----------------------------------------------------------|
| PF-WL18-30 | 30 A           | 450                   | 200                         | 2,7                    | 10.000                 | 1.200                                                     |
| PF-WL18-40 | 40 A           | 450                   | 200                         | 2,0                    | 10.000                 | 2.000                                                     |
| PF-WL18-50 | 50 A           | 450                   | 200                         | 1,2                    | 10.000                 | 5.500                                                     |

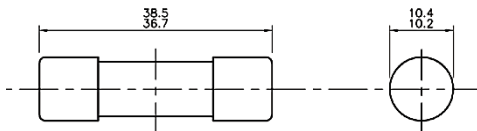
In verschiedenen Versionen z.B. / In different versions e.g.: **PF-WL18-30-CP**

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

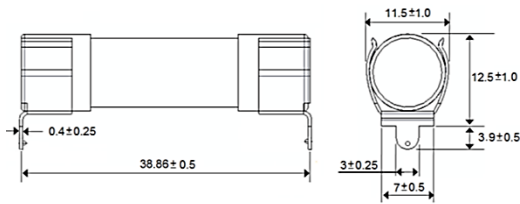
| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:<br><br>30 A<br>-<br>50 A |
|----------------------------------------------------------|---------------------------------------------------------|
|----------------------------------------------------------|---------------------------------------------------------|

2 · I<sub>N</sub>      t<sub>min</sub>      Siehe Kennlinie unten /  
t<sub>max</sub>      See curve below

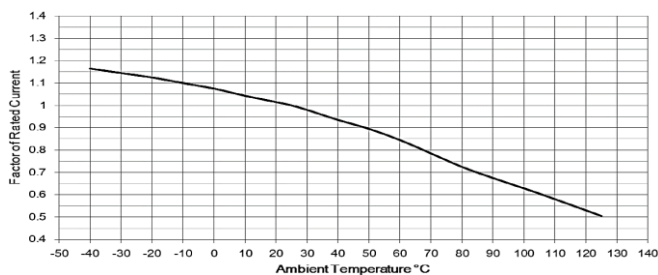
### Maße / Dimensions:



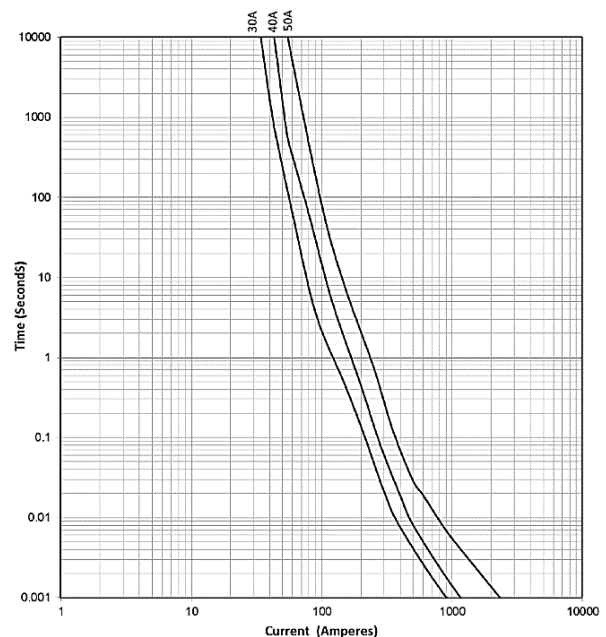
### CP-Version:



### De-rating:



### Strom-Zeit Kennlinie / Current-time curve:



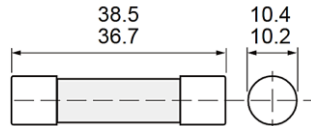
10,3 x 38 mm



|                                   |              |                                |                   |                                                      |                                |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|--------------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 50 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A /<br/>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|--------------------------------|



WL20-XXX



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5 °C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Karton / 100 pcs. = Carton

AP-Version 20 St. = Karton / 20 pcs. = Carton  
BP-Version: 16 St. = Karton / 16 pcs. = Carton  
P1-Version: 20 St. = Karton / 20 pcs. = Carton

### Bemessungswerte / Ratings:

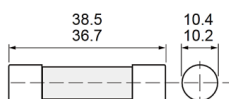
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d,max</sub><br>[mV] | P <sub>d,max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>pre</sub><br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|-------------------------------------------------------|
| PF-WL20-5  | 5 A            | 500                   | 180                        | 0,9                       |                        | 62                                                    |
| PF-WL20-6  | 6 A            | 500                   | 160                        | 1,0                       |                        | 85                                                    |
| PF-WL20-8  | 8 A            | 500                   | 140                        | 1,2                       |                        | 90                                                    |
| PF-WL20-10 | 10 A           | 500                   | 150                        | 1,5                       |                        | 130                                                   |
| PF-WL20-15 | 15 A           | 500                   | 140                        | 2,1                       | 10.000 A<br>@ AC 500 V | 330                                                   |
| PF-WL20-16 | 16 A           | 500                   | 145                        | 2,3                       |                        | 410                                                   |
| PF-WL20-20 | 20 A           | 500                   | 130                        | 2,6                       | 20.000 A<br>@ DC 500 V | 1.000                                                 |
| PF-WL20-25 | 25 A           | 500                   | 135                        | 3,4                       |                        | 1.350                                                 |
| PF-WL20-30 | 30 A           | 500                   | 130                        | 3,9                       |                        | 1.400                                                 |
| PF-WL20-35 | 35 A           | 500                   | 140                        | 4,2                       |                        | 2.500                                                 |
| PF-WL20-40 | 40 A           | 500                   | 122                        | 5,1                       |                        | 2.000                                                 |
| PF-WL20-50 | 50 A           | 500                   | 110                        | 6,2                       |                        | 2.500                                                 |

Schraubflaschenversion z.B. / screw version e.g.: PF-WL20-15-AP

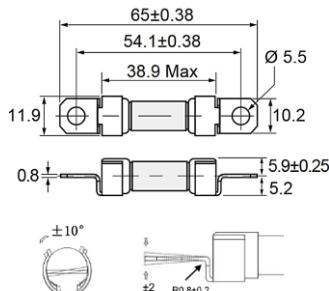
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:                |
|-------------------------------------------------------------|--------------------------------------------------|
|                                                             | 5 A<br>-<br>50 A                                 |
| 2 · I <sub>N</sub>                                          | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                          | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                          | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

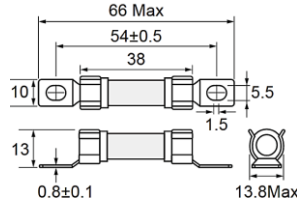
WL20-XXX



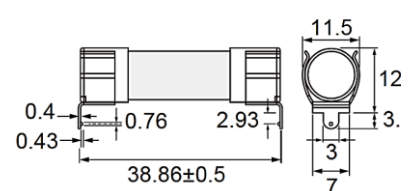
AP-Version  
WL20-XXX-AP



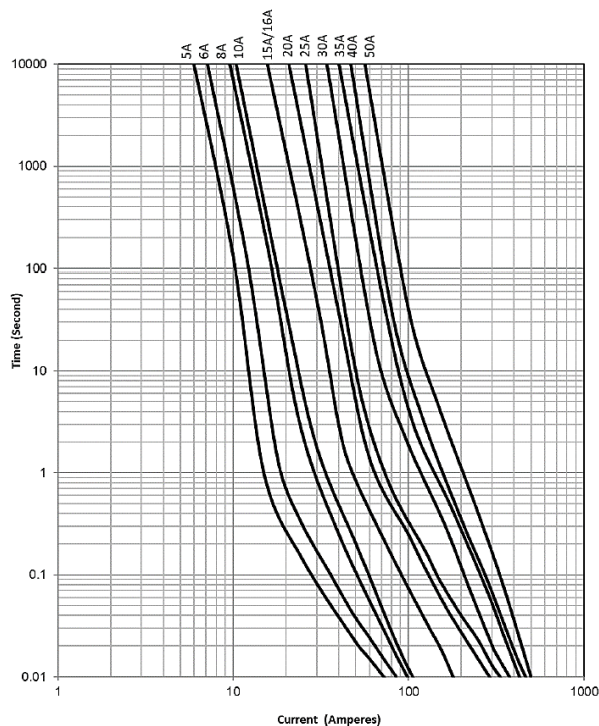
BP-Version  
WL20-XXX-BP



P1-Version  
WL20-XXX-P1



10,3 x 38 mm

**Spannung**  
Voltage **500 V****Strom**  
Current **5 A - 50 A****Ausschaltvermögen**  
Breaking capacity **10.000 A / 20.000 A****Strom-Zeit Kennlinie / Current-time Curve:**

### 10,3 x 38 mm



|                                   |              |                                |                   |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>600 V</b> | <b>Strom</b><br><i>Current</i> | <b>2 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>50.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                 |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                        |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                             |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                           |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (Lötkolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5 s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)                                          |

#### Bemessungswerte / Ratings:

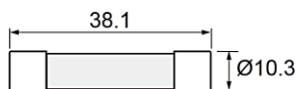
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL25-2  | 2 A            | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-3  | 3 A            | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-4  | 4 A            | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-5  | 5 A            | 600                   | Auf                        |                           | 50.000                 | Auf                                    |
| PF-WL25-6  | 6 A            | 600                   | Anfrage                    |                           | 50.000                 | Anfrage                                |
| PF-WL25-8  | 8 A            | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-10 | 10 A           | 600                   | /                          |                           | 50.000                 | /                                      |
| PF-WL25-12 | 12 A           | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-15 | 15 A           | 600                   | On                         |                           | 50.000                 | On                                     |
| PF-WL25-20 | 20 A           | 600                   | Request                    |                           | 50.000                 | Request                                |
| PF-WL25-25 | 25 A           | 600                   |                            |                           | 50.000                 |                                        |
| PF-WL25-30 | 30 A           | 600                   |                            |                           | 50.000                 |                                        |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WL25-2-BP**

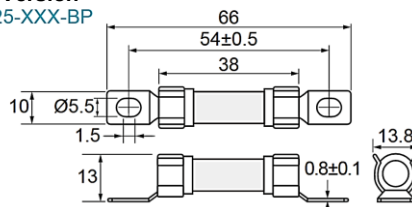
#### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>     |
|------------------------------------------------------------------|----------------------------------------------|
|                                                                  | 2 A<br>-<br>30 A                             |
| 1 · I <sub>N</sub>                                               | t <sub>min</sub> 4 h<br>t <sub>max</sub> -   |
| 1,35 · I <sub>N</sub>                                            | t <sub>min</sub> 0<br>t <sub>max</sub> 1 h   |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 0<br>t <sub>max</sub> 2 min |

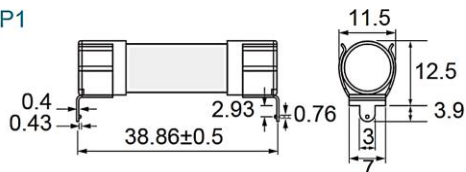
#### WL25-XXX



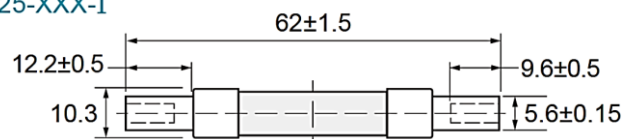
#### BP-Version WL25-XXX-BP



#### P1-Version WL25-XXX-P1



#### I-Version WL25-XXX-I



### 10,3 x 38 mm



|                                   |              |                                |                   |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>700 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 32 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

#### Bemessungswerte / Ratings:

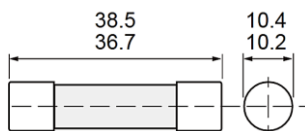
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL30-5  | 5 A            | 700                   |                            |                           | 10.000                 |                                        |
| PF-WL30-6  | 6 A            | 700                   |                            |                           | 10.000                 |                                        |
| PF-WL30-8  | 8 A            | 700                   |                            |                           | 10.000                 |                                        |
| PF-WL30-10 | 10 A           | 700                   | Auf                        |                           | 10.000                 | Auf                                    |
| PF-WL30-15 | 15 A           | 700                   | Anfrage                    |                           | 10.000                 | Anfrage                                |
| PF-WL30-20 | 20 A           | 700                   | /                          |                           | 10.000                 | /                                      |
| PF-WL30-25 | 25 A           | 700                   | On                         |                           | 10.000                 | On                                     |
| PF-WL30-30 | 30 A           | 700                   | Request                    |                           | 10.000                 | Request                                |
| PF-WL30-32 | 32 A           | 700                   |                            |                           | 10.000                 |                                        |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WL30-5-AP**

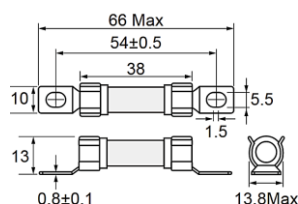
#### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                   |
|----------------------------------------------------------|--------------------------------------------------|
|                                                          | 5 A<br>-<br>32 A                                 |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                       | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                       | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

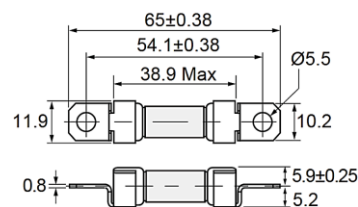
#### WL30-XXX



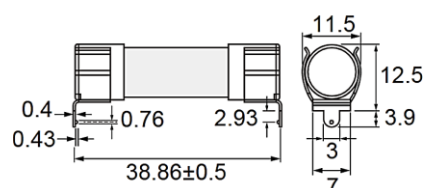
#### BP-Version WL30-XXX-BP



#### AP-Version WL30-XXX-AP



#### P1-Version WL30-XXX-P1





10,3 x 38 mm



|                                   |                |                                |                      |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.000 V</b> | <b>Strom</b><br><i>Current</i> | <b>440 mA - 15 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>30.000 A</b> |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                             |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                 |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                        |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                             |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                           |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5 s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose<br>geschüttet) / 100 pcs. = Industrial box (bulk)                                       |

### Bemessungswerte / Ratings:

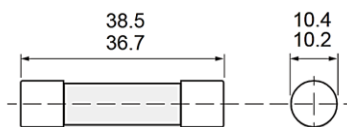
| Art. No.     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d max</sub><br>[mV] | P <sub>d max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|--------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL40-0,44 | 440 mA         | 1.000                 |                            |                           | 30.000                 |                                        |
| PF-WL40-0,5  | 500 mA         | 1.000                 | Auf                        |                           | 30.000                 | Auf                                    |
| PF-WL40-1    | 1 A            | 1.000                 | Anfrage                    |                           | 30.000                 | Anfrage                                |
| PF-WL40-2    | 2 A            | 1.000                 |                            |                           | 30.000                 |                                        |
| PF-WL40-4    | 4 A            | 1.000                 | /                          |                           | 30.000                 | /                                      |
| PF-WL40-10   | 10 A           | 1.000                 |                            |                           | 30.000                 |                                        |
| PF-WL40-11   | 11 A           | 1.000                 | On                         |                           | 30.000                 | On                                     |
| PF-WL40-12   | 12 A           | 1.000                 | Request                    |                           | 30.000                 | Request                                |
| PF-WL40-15   | 15 A           | 1.000                 |                            |                           | 30.000                 |                                        |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WL40-1-AP**

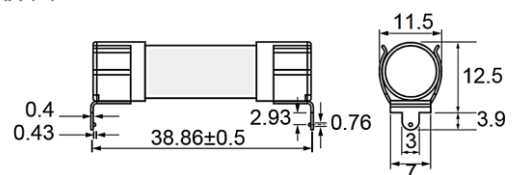
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>                 |
|------------------------------------------------------------------|----------------------------------------------------------|
|                                                                  | 440 mA<br>-<br>15 A                                      |
| 1,35 · I <sub>N</sub>                                            | t <sub>min</sub><br>t <sub>max</sub><br>Auf Anfrage<br>/ |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>On request       |

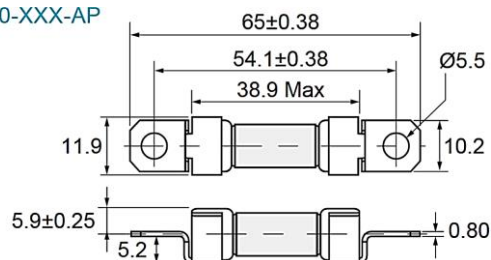
WL40-XXX



P1-Version  
WL40-XXX-P1



AP-Version  
WL40-XXX-AP



10,3 x 38 mm



|                                   |                |                                |                   |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.000 V</b> | <b>Strom</b><br><i>Current</i> | <b>1 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>30.000 A</b> |
|-----------------------------------|----------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

| Art. No.    | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W]           | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>pre</sub><br>[A <sup>2</sup> s] |
|-------------|----------------|-----------------------|----------------------------|-------------------------------------|------------------------|-------------------------------------------------------|
| PF-WL50-1   | 1 A            | 1.000                 | 1.500                      | 0,8 <sup>1)</sup> 1,5 <sup>2)</sup> | 30.000                 | 0,15                                                  |
| PF-WL50-2   | 2 A            | 1.000                 | 550                        | 0,7 <sup>1)</sup> 1,1 <sup>2)</sup> | 30.000                 | 1,3                                                   |
| PF-WL50-3   | 3 A            | 1.000                 | 435                        | 0,8 <sup>1)</sup> 1,3 <sup>2)</sup> | 30.000                 | 4,0                                                   |
| PF-WL50-3,5 | 3,5 A          | 1.000                 | 400                        | 0,9 <sup>1)</sup> 1,4 <sup>2)</sup> | 30.000                 | 6,5                                                   |
| PF-WL50-4   | 4 A            | 1.000                 | 350                        | 1,1 <sup>1)</sup> 1,4 <sup>2)</sup> | 30.000                 | 10                                                    |
| PF-WL50-5   | 5 A            | 1.000                 | 280                        | 1,1 <sup>1)</sup> 1,4 <sup>2)</sup> | 30.000                 | 19                                                    |
| PF-WL50-6   | 6 A            | 1.000                 | 300                        | 1,2 <sup>1)</sup> 1,8 <sup>2)</sup> | 30.000                 | 32                                                    |
| PF-WL50-8   | 8 A            | 1.000                 | 275                        | 1,2 <sup>1)</sup> 2,2 <sup>2)</sup> | 30.000                 | 85                                                    |
| PF-WL50-10  | 10 A           | 1.000                 | 230                        | 1,3 <sup>1)</sup> 2,3 <sup>2)</sup> | 30.000                 | 30                                                    |
| PF-WL50-12  | 12 A           | 1.000                 | 235                        | 1,5 <sup>1)</sup> 2,8 <sup>2)</sup> | 30.000                 | 98                                                    |
| PF-WL50-15  | 15 A           | 1.000                 | 200                        | 1,8 <sup>1)</sup> 3,0 <sup>2)</sup> | 30.000                 | 149                                                   |
| PF-WL50-16  | 16 A           | 1.000                 | 195                        | 1,9 <sup>1)</sup> 3,0 <sup>2)</sup> | 30.000                 | 300                                                   |
| PF-WL50-20  | 20 A           | 1.000                 | 180                        | 2,4 <sup>1)</sup> 3,6 <sup>2)</sup> | 30.000                 | 229                                                   |
| PF-WL50-25  | 25 A           | 1.000                 | 164                        | 2,6 <sup>1)</sup> 4,1 <sup>2)</sup> | 30.000                 | 411                                                   |
| PF-WL50-30  | 30 A           | 1.000                 | 190                        | 4,3 <sup>1)</sup> 5,7 <sup>2)</sup> | 30.000                 | 1.200                                                 |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WL50-1-AP**

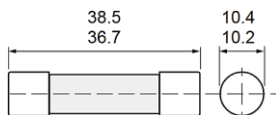
<sup>1)</sup> 0,8 x I<sub>N</sub>

<sup>2)</sup> 1,0 x I<sub>N</sub>

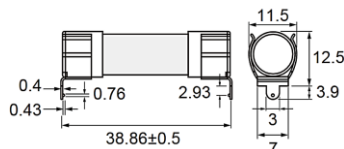
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                           |
|----------------------------------------------------------|----------------------------------------------------------|
| 1 A<br>-<br>30 A                                         |                                                          |
| 1,35 · I <sub>N</sub>                                    | t <sub>min</sub><br>t <sub>max</sub><br>Siehe unten<br>/ |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub><br>t <sub>max</sub><br>See below        |

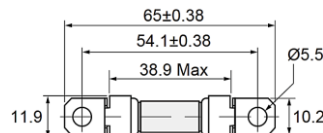
WL50-XXX



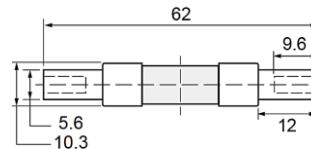
P1-Version  
WL50-XXX-P1



AP-Version  
WL50-XXX-AP



I-Version  
WL50-XXX-I



10,3 x 38 mm

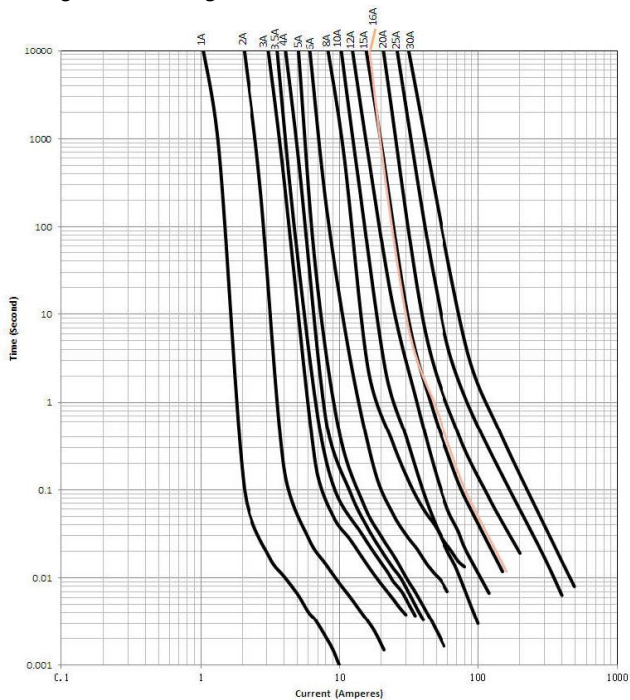


**Spannung**  
**Voltage** 1.000 V

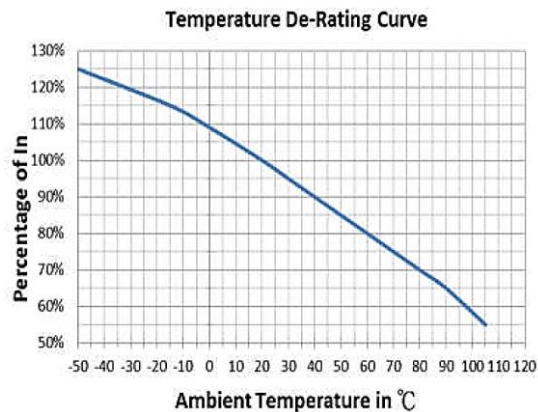
**Strom**  
**Current** 1 A - 30 A

**Ausschaltvermögen**  
**Breaking capacity** 30.000 A

I-t Diagramm / I-t diagram:



De-Rating:



**10,3 x 57 mm**



|                                   |                |                                |                    |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.500 V</b> | <b>Strom</b><br><i>Current</i> | <b>2,5 A - 6 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|----------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                            |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                       |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                            |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                          |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)                                         |

### Bemessungswerte / Ratings:

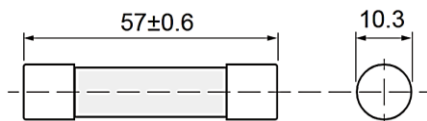
| Art. No.    | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|-------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL55-2,5 | 2,5 A          | 1.500                 | Auf                        |                           | 20.000                 | 3                                      |
| PF-WL55-3   | 3 A            | 1.500                 | Anfrage                    |                           | 20.000                 | 5                                      |
| PF-WL55-3,5 | 3,5 A          | 1.500                 | /                          |                           | 20.000                 | 15                                     |
| PF-WL55-4   | 4 A            | 1.500                 | On                         |                           | 20.000                 | 18                                     |
| PF-WL55-6   | 6 A            | 1.500                 | Request                    |                           | 20.000                 | 60                                     |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WL55P-2,5-AP**

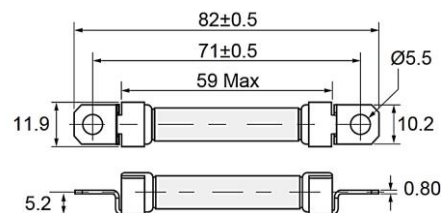
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>                 |
|------------------------------------------------------------------|----------------------------------------------------------|
| 2,5 A<br>-<br>6 A                                                |                                                          |
| 1,35 · I <sub>N</sub>                                            | t <sub>min</sub><br>t <sub>max</sub><br>Auf Anfrage<br>/ |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>On request       |

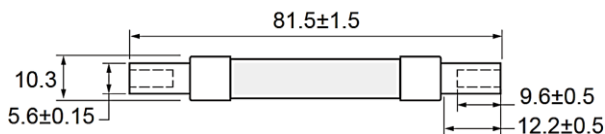
### WL55-XXX



### AP-Version WL55P-XXX-AP



### I-Version WL55P-XXX-I



10,3 x 85 mm


**Spannung**  
*Voltage*

1.500 V

**Strom**  
*Current*

2 A - 15 A

**Ausschaltvermögen**  
*Breaking capacity*

30.000 A



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

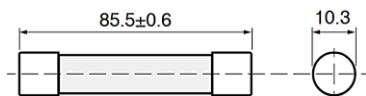
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WL60-2  | 2 A            | 1.500                 | Auf                        |                           | 30.000                 | 3,15                                   |
| PF-WL60-4  | 4 A            | 1.500                 | Anfrage                    |                           | 30.000                 | 15                                     |
| PF-WL60-5  | 5 A            | 1.500                 | /                          |                           | 30.000                 |                                        |
| PF-WL60-10 | 10 A           | 1.500                 | On                         |                           | 30.000                 | 300                                    |
| PF-WL60-12 | 12 A           | 1.500                 | Request                    |                           | 30.000                 | 20                                     |
| PF-WL60-15 | 15 A           | 1.500                 |                            |                           | 30.000                 | 25                                     |

Schraubflaschenversion z.B. / screw version e.g.: PF-WL60P-2-I

I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

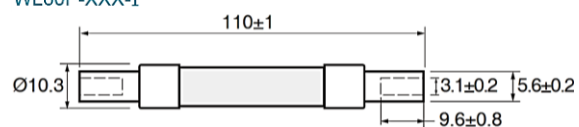
| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:       |
|----------------------------------------------------------|--------------------------------------|
| 1,35 · I <sub>N</sub>                                    | t <sub>min</sub><br>t <sub>max</sub> |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub><br>t <sub>max</sub> |
|                                                          | Auf Anfrage<br>/ On<br>Request       |

WL60-XXX



I-Version

WL60P-XXX-I



10,3 x 85 mm



|                                   |                |                                |                    |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.500 V</b> | <b>Strom</b><br><i>Current</i> | <b>15 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|----------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

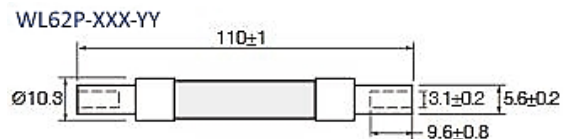
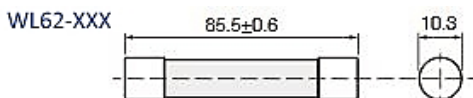
| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d, max</sub><br>[mV] | P <sub>d, max</sub><br>[W] |                    | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|-----------------------------|----------------------------|--------------------|------------------------|----------------------------------------|
| PF-WL62-15 | 15 A           | 1.500                 | Auf                         | 3,12 <sup>1)</sup>         | 5,62 <sup>2)</sup> | 20.000                 | 130                                    |
| PF-WL62-20 | 20 A           | 1.500                 | Anfrage /                   | 4,40 <sup>1)</sup>         | 6,80 <sup>2)</sup> | 20.000                 | 230                                    |
| PF-WL62-25 | 25 A           | 1.500                 | On                          | 4,95 <sup>1)</sup>         | 8,07 <sup>2)</sup> | 20.000                 | 320                                    |
| PF-WL62-30 | 30 A           | 1.500                 | Request                     | 4,10 <sup>1)</sup>         | 7,00 <sup>2)</sup> | 20.000                 | 760                                    |

Schraubflaschenversion z.B. / screw version e.g.: PF-WL62P-15

<sup>1)</sup> 0,7 x I<sub>N</sub><sup>2)</sup> 1,0 x I<sub>N</sub>I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>   |
|------------------------------------------------------------------|--------------------------------------------|
|                                                                  | 15 A<br>-<br>30 A                          |
| 1,13 · I <sub>N</sub>                                            | t <sub>min</sub> 1 h<br>t <sub>max</sub> - |
| 1,35 · I <sub>N</sub>                                            | t <sub>min</sub> 0<br>t <sub>max</sub> 1 h |

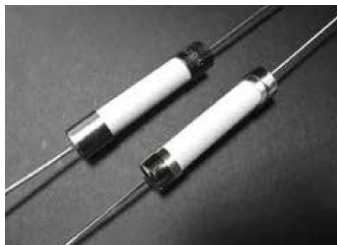
## P-Version (YY: AP / I)



6,76 x 93 mm



|                                   |              |                                |             |                                                      |                |
|-----------------------------------|--------------|--------------------------------|-------------|------------------------------------------------------|----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>250 V</b> | <b>Strom</b><br><i>Current</i> | <b>40 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>1.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------|------------------------------------------------------|----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (Lötkolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

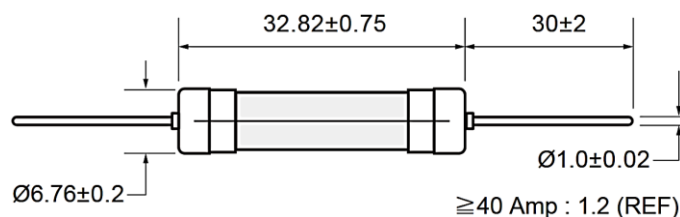
## Bemessungswerte / Ratings:

| Art. No.   | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV]     | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|------------|-------|--------------|--------------------------|---------------------|-----------------|-----------------|
| PF-MTPP-40 | 40 A  | 250          | Auf Anfrage / On Request |                     | 1.000           |                 |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 40 A                                     |
| $1 \cdot I_N$                                                    | $t_{min}$ 4 h<br>$t_{max}$ -             |
| $2 \cdot I_N$                                                    | $t_{min}$ 0<br>$t_{max}$ 2 min           |

## MTPP-XXX





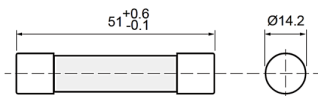
14,3 x 50,8 mm



|                                   |                |                                |                   |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.500 V</b> | <b>Strom</b><br><i>Current</i> | <b>4 A - 30 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|----------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



WJ30-XXX



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

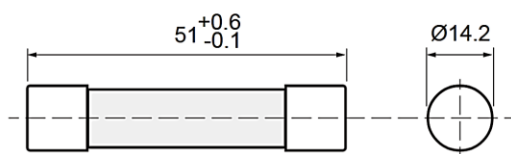
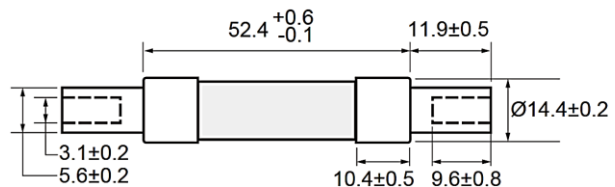
## Bemessungswerte / Ratings:

| Art. No.   | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WJ30-4  | 4 A            | 1.500                 | Auf                        |                           | 10.000                 | 8                                      |
| PF-WJ30-15 | 15 A           | 1.500                 | Anfrage                    |                           | 10.000                 | 310                                    |
| PF-WJ30-20 | 20 A           | 1.500                 | /                          |                           | 10.000                 | 200                                    |
| PF-WJ30-25 | 25 A           | 1.500                 | On                         |                           | 10.000                 | 295                                    |
| PF-WJ30-30 | 30 A           | 1.500                 | Request                    |                           | 10.000                 | 380                                    |

Schraubflaschenversion z.B. / screw version e.g.: **PF-WJ30-4-I**I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>                 |
|------------------------------------------------------------------|----------------------------------------------------------|
| 1,1 · I <sub>N</sub>                                             | t <sub>min</sub><br>t <sub>max</sub><br>Auf Anfrage<br>/ |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>On<br>request    |

WJ30-XXX

I-Version  
WJ30P-XXX-I

14,3 x 50,8 mm



|                                   |              |                                |                   |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 50 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|-------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

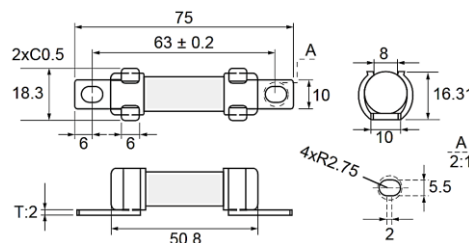
## Bemessungswerte / Ratings:

| Art. No.      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WJ45-5-BT  | 5 A            | 800                   |                            |                           | 10.000                 | 37,5                                   |
| PF-WJ45-8-BT  | 8 A            | 800                   | Auf                        |                           | 10.000                 | 96,0                                   |
| PF-WJ45-10-BT | 10 A           | 800                   | Anfrage                    |                           | 10.000                 | 150                                    |
| PF-WJ45-15-BT | 15 A           | 800                   |                            |                           | 10.000                 | 225                                    |
| PF-WJ45-20-BT | 20 A           | 800                   | /                          |                           | 10.000                 | 600                                    |
| PF-WJ45-25-BT | 25 A           | 800                   |                            |                           | 10.000                 | 850                                    |
| PF-WJ45-32-BT | 32 A           | 800                   | On                         |                           | 10.000                 | 1.350                                  |
| PF-WJ45-40-BT | 40 A           | 800                   | Request                    |                           | 10.000                 | 1.600                                  |
| PF-WJ45-50-BT | 50 A           | 800                   |                            |                           | 10.000                 | 3.500                                  |

I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:                |
|-------------------------------------------------------------|--------------------------------------------------|
|                                                             | 5 A<br>-<br>50 A                                 |
| 1,1 · I <sub>N</sub>                                        | t <sub>min</sub> 4 h<br>t <sub>max</sub> -       |
| 2 · I <sub>N</sub>                                          | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                          | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                          | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

WJ45-XXX-BT



### 14,3 x 50,8 mm



|                                   |              |                                |                    |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>700 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 100 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

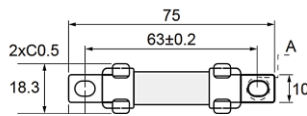
Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

WJ50-XXX-BT



#### Bemessungswerte / Ratings:

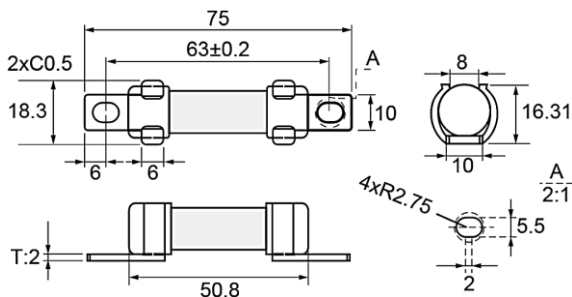
| Art. No.                     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------------------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WJ50-5-BT                 | 5 A            | 700                   | Auf Anfrage /              |                           | 10.000                 | 37,5                                   |
| PF-WJ50-8-BT                 | 8 A            | 700                   | On Request                 |                           | 10.000                 | 96,0                                   |
| PF-WJ50-10-BT                | 10 A           | 700                   | 230                        | 2,3                       | 10.000                 | 150                                    |
| PF-WJ50-15-BT                | 15 A           | 700                   | 160                        | 2,4                       | 10.000                 | 330                                    |
| PF-WJ50-20-BT                | 20 A           | 700                   | 175                        | 3,5                       | 10.000                 | 400                                    |
| PF-WJ50-25-BT                | 25 A           | 700                   | 200                        | 5                         | 10.000                 | 625                                    |
| PF-WJ50-32-BT                | 32 A           | 700                   | 155                        | 5                         | 10.000                 | 1.000                                  |
| PF-WJ50-40-BT                | 40 A           | 700                   | 145                        | 5,8                       | 10.000                 | 1.600                                  |
| PF-WJ50-50-BT                | 50 A           | 700                   | 150                        | 7,5                       | 10.000                 | 2.500                                  |
| PF-WJ50-60-VT <sup>1)</sup>  | 60 A           | 700                   | Auf Anfrage                |                           | 10.000                 | 4.000                                  |
| PF-WJ50-80-VT <sup>1)</sup>  | 80 A           | 700                   | /                          |                           | 10.000                 | 8.900                                  |
| PF-WJ50-100-VT <sup>1)</sup> | 100 A          | 700                   | On Request                 |                           | 10.000                 | 12.000                                 |

<sup>1)</sup> Twins-Version

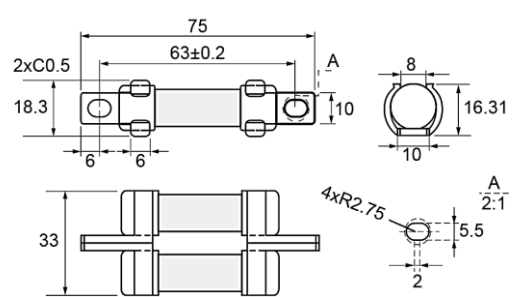
#### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                   |
|----------------------------------------------------------|--------------------------------------------------|
|                                                          | 5 A<br>-<br>100 A                                |
| 1,1 · I <sub>N</sub>                                     | t <sub>min</sub> 4 h<br>t <sub>max</sub> -       |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                       | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                       | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

Single-Version  
WJ50-XXX-BT



Twins-Version  
WJ50-XXX-VT



39,5 x 14,3 mm



|                 |                      |                |                     |                          |                  |
|-----------------|----------------------|----------------|---------------------|--------------------------|------------------|
| <b>Spannung</b> | <b>250 V - 500 V</b> | <b>Strom</b>   | <b>63 A / 125 A</b> | <b>Ausschaltvermögen</b> | <b>1.500 A /</b> |
| <b>Voltage</b>  |                      | <b>Current</b> |                     | <b>Breaking capacity</b> | <b>2.500 A</b>   |



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

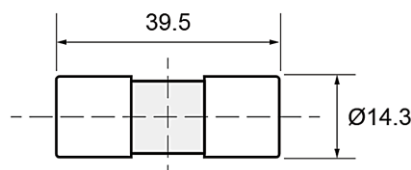
## Bemessungswerte / Ratings:

| Art. No.    | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A <sup>2</sup> s] |
|-------------|-------|--------------|----------------------|---------------------|-----------------|------------------------------|
| PF-WJ60-63  | 63 A  | 500          | Auf Anfrage /        |                     | 1.500           | 5.150                        |
| PF-WJ60-125 | 125 A | 250          | On request           |                     | 2.500           | 31.250                       |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time: |
|-------------------------------------------------------------|-----------------------------------|
|                                                             | 63 A<br>-<br>125 A                |
| $2 \cdot I_N$                                               | 0<br>2 min                        |
| $t_{min}$<br>$t_{max}$                                      |                                   |

WJ60-XXX



18 x 68 mm



|                                   |              |                                |                     |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>50 A - 100 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

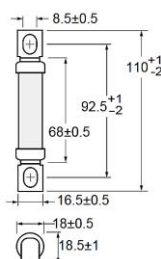
## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A <sup>2</sup> s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|------------------------------|
| PF-WH25-50-M8  | 50 A  | 800          | Auf                  |                     | 10.000          | 8.800                        |
| PF-WH25-60-M8  | 60 A  | 800          | Anfrage /            |                     | 10.000          | 12.500                       |
| PF-WH25-80-M8  | 80 A  | 800          | On                   |                     | 10.000          | 30.000                       |
| PF-WH25-100-M8 | 100 A | 800          | Request              |                     | 10.000          | 54.000                       |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:  |
|-------------------------------------------------------------|------------------------------------|
|                                                             | 50 A<br>-<br>100 A                 |
| $1,1 \cdot I_N$                                             | $t_{min}$ 4 h<br>$t_{max}$ -       |
| $2 \cdot I_N$                                               | $t_{min}$ 1 s<br>$t_{max}$ 5 min   |
| $3 \cdot I_N$                                               | $t_{min}$ 200 ms<br>$t_{max}$ 30 s |
| $5 \cdot I_N$                                               | $t_{min}$ 100 ms<br>$t_{max}$ 10 s |

WH25-XXX-M8 (Single)



110 x 16,5 mm



**Spannung**  
*Voltage* **1.000 V**

**Strom**  
*Current* **40 A - 80 A**

**Ausschaltvermögen**  
*Breaking capacity* **50.000 A**



*Norm / Standard:*

Werknorm / Factory standard

*Aufbau / Construction:*

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

*Betriebstemperatur / Operating temperature:*

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

*Lagerung / Storage:*

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

*Verpackungsmöglichkeiten / Packing options:*

Auf Anfrage / On request

### Bemessungswerte / Ratings:

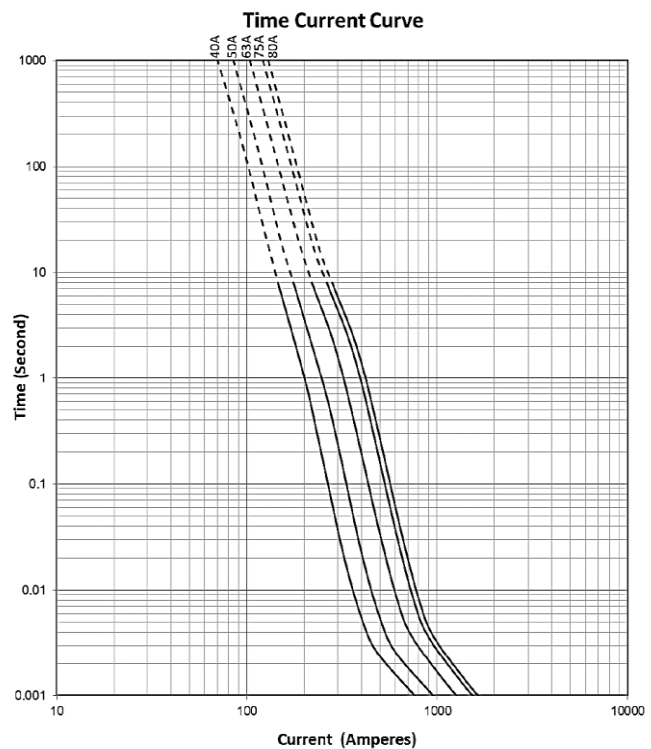
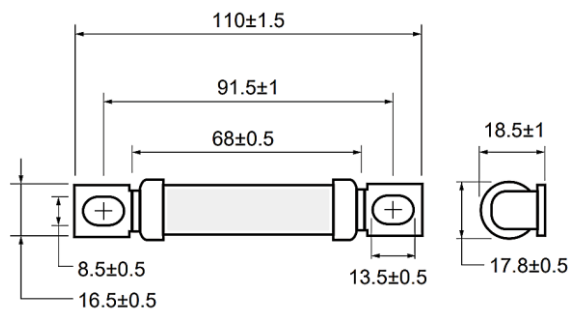
| Art. No.      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_IN</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------|----------------|-----------------------|----------------------------|--------------------------|------------------------|----------------------------------------|
| PF-WH28-40-M8 | 40 A           | 1.000                 | Auf                        | 8                        | 50.000                 | Auf                                    |
| PF-WH28-50-M8 | 50 A           | 1.000                 | Anfrage                    | 12                       | 50.000                 | Anfrage                                |
| PF-WH28-63-M8 | 63 A           | 1.000                 | /                          | 15                       | 50.000                 | /                                      |
| PF-WH28-75-M8 | 75 A           | 1.000                 | On                         | 16                       | 50.000                 | On                                     |
| PF-WH28-80-M8 | 80 A           | 1.000                 | Request                    | 17                       | 50.000                 | Request                                |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:<br><br>40 A<br>-<br>80 A |
|-------------------------------------------------------------|------------------------------------------------------------|
|-------------------------------------------------------------|------------------------------------------------------------|

Siehe Grafik unterhalb  
See graph below

### Maße / Dimensions:



17,8 x 46,2 mm



|                                   |              |                                |                     |                                                      |                               |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-------------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>10 A - 150 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>6.000 A -<br/>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-------------------------------|

Norm / *Standard*:Werknorm / *Factory standard*Aufbau / *Construction*:
 zylindrisch / *cylindrical*  
 Keramikrohr / *Ceramic tube*  
 mit Löschmittel / *with extinguishing agent*
Betriebstemperatur / *Operating temperature*:
 -55 °C - +125 °C  
 De-Rating beachten ! / *consider De-Rating !*
Lagerung / *Storage*:
 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years
Lötbarkeit / *Solderability*:
 Wellenlöten / *wave soldering*:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / *hand-soldering*:  
 T = 350 °C ± 5°C; t < 5s
Verpackungsmöglichkeiten / *Packing options*:
 100 St. = Industrieverpackung (lose geschüttet) /  
 100 pcs. = Industrial box (bulk)
Bemessungswerte / *Ratings*:

| Art. No.                      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d,max</sub><br>[mV] | P <sub>d,max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|-------------------------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WH30-S-10-M6 (-M8 / -M8L)  | 10 A           | 500                   |                            |                           | 10.000                 | 195                                    |
| PF-WH30-S-15-M6 (-M8 / -M8L)  | 15 A           | 500                   |                            |                           | 10.000                 | 340                                    |
| PF-WH30-S-20-M6 (-M8 / -M8L)  | 20 A           | 500                   |                            |                           | 10.000                 | 800                                    |
| PF-WH30-S-25-M6 (-M8 / -M8L)  | 25 A           | 500                   | Auf                        |                           | 10.000                 | 1.250                                  |
| PF-WH30-S-32-M6 (-M8 / -M8L)  | 32 A           | 500                   | Anfrage                    |                           | 10.000                 | 1.500                                  |
| PF-WH30-S-35-M6 (-M8 / -M8L)  | 35 A           | 500                   |                            |                           | 10.000                 | 1.800                                  |
| PF-WH30-S-40-M6 (-M8 / -M8L)  | 40 A           | 500                   | /                          |                           | 10.000                 | 3.200                                  |
| PF-WH30-S-50-M6 (-M8 / -M8L)  | 50 A           | 500                   |                            |                           | 10.000                 | 6.250                                  |
| PF-WH30-S-60-M6 (-M8 / -M8L)  | 60 A           | 500                   | On                         |                           | 10.000                 | 9.000                                  |
| PF-WH30-S-70-M6 (-M8 / -M8L)  | 70 A           | 500                   | Request                    |                           | 10.000                 | 12.250                                 |
| PF-WH30-S-80-M6 (-M8 / -M8L)  | 80 A           | 500                   |                            |                           | 10.000                 | 16.000                                 |
| PF-WH30-S-100-M6 (-M8 / -M8L) | 100 A          | 500                   |                            |                           | 10.000                 | 25.000                                 |
| PF-WH30-S-125-M6 (-M8 / -M8L) | 125 A          | 500                   |                            |                           | 6.000                  | 39.000                                 |
| PF-WH30-S-150-M6 (-M8 / -M8L) | 150 A          | 500                   |                            |                           | 6.000                  | 56.250                                 |

In verschiedenen Versionen z.B. / *In different versions e.g.:* PF-WH30-S-10-M6I<sub>N</sub> - t Verhalten / *I<sub>N</sub> - t characteristics*:

| Bemessungs-<br>strom-Faktor<br>/<br><i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time</i> : |                  |
|---------------------------------------------------------------------|-------------------------------------------|------------------|
|                                                                     | t <sub>min</sub>                          | t <sub>max</sub> |
| 2 · I <sub>N</sub>                                                  | 1 s                                       | 5 min            |
| 3 · I <sub>N</sub>                                                  | 200 ms                                    | 30 s             |
| 5 · I <sub>N</sub>                                                  | 100 ms                                    | 10 s             |



**17,8 x 46,2 mm**



**Spannung**

**500 V**

**Strom**

**10 A - 150 A**

**Ausschaltvermögen**

**6.000 A -**

*Voltage*

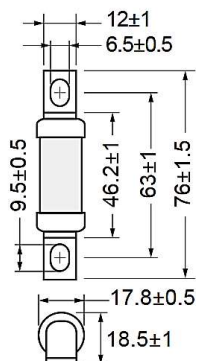
*Current*

*Breaking capacity*

**10.000 A**

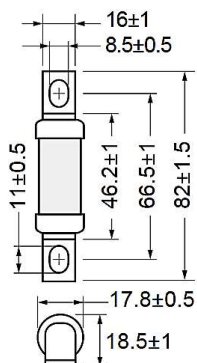
**M6-Version**

*PF-WH30-XXX-M6*



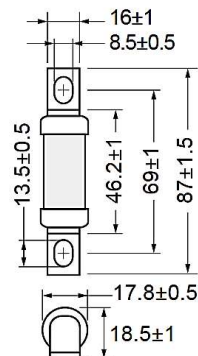
**M8-Version**

*PF-WH30-XXX-M8*



**M8L-Version**

*PF-WH30-XXX-M8L*



**17,8 x 46,2 mm**



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>150 A - 250 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

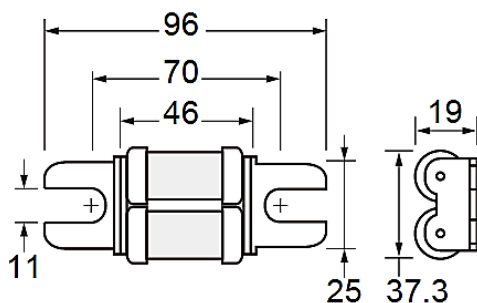
| Art. No.      | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WH30-T-150 | 150 A          | 500                   | Auf                        |                           | 10.000                 | 59.500                                 |
| PF-WH30-T-175 | 175 A          | 500                   | Anfrage                    |                           | 10.000                 | 89.000                                 |
| PF-WH30-T-200 | 200 A          | 500                   | /                          |                           | 10.000                 | 120.000                                |
| PF-WH30-T-225 | 225 A          | 500                   | On                         |                           | 10.000                 | 150.000                                |
| PF-WH30-T-250 | 250 A          | 500                   | Request                    |                           | 10.000                 | 187.500                                |

In verschiedenen Versionen z.B. / In different versions e.g.: **PF-WH30-T-150-HT**

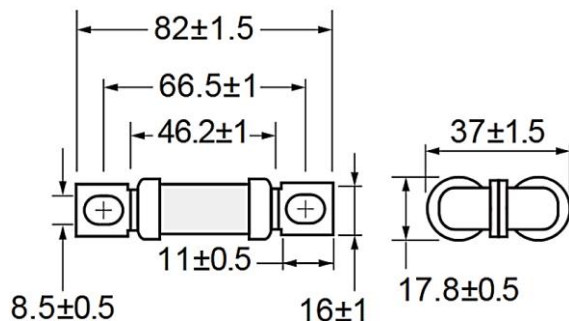
## I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:                |
|-------------------------------------------------------------|--------------------------------------------------|
|                                                             | 150 A<br>-<br>250 A                              |
| 2 · I <sub>N</sub>                                          | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                          | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                          | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

### HT-Version WH30-XXX-HT



### VT-Version WH30-XXX-VT



17,8 x 46,2 mm



|                                   |              |                                |                    |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>700 V</b> | <b>Strom</b><br><i>Current</i> | <b>5 A - 150 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

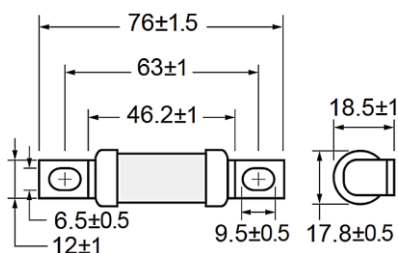
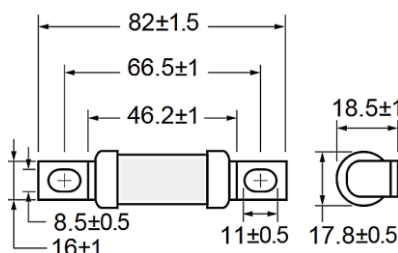
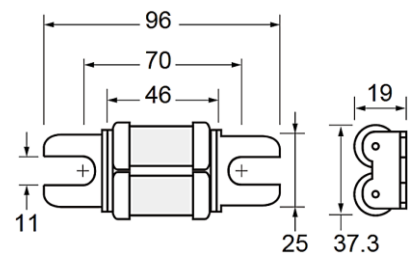
## Bemessungswerte / Ratings:

| Art. No.                  | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d</sub><br>[mV] | P <sub>d</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------------------|----------------|-----------------------|------------------------|-----------------------|------------------------|----------------------------------------|
| PF-WH40-5                 | 5 A            | 700                   | Auf                    |                       | 10.000                 | 37,5                                   |
| PF-WH40-8                 | 8 A            | 700                   | Anfrage                |                       | 10.000                 | 96,0                                   |
| PF-WH40-10                | 10 A           | 700                   | 180                    | 1,80                  | 10.000                 | 150                                    |
| PF-WH40-15                | 15 A           | 700                   | 250                    | 3,75                  | 10.000                 | 330                                    |
| PF-WH40-20                | 20 A           | 700                   | 155                    | 3,50                  | 10.000                 | 400                                    |
| PF-WH40-25                | 25 A           | 700                   | 165                    | 4,20                  | 10.000                 | 625                                    |
| PF-WH40-32                | 32 A           | 700                   | 140                    | 4,50                  | 10.000                 | 1.000                                  |
| PF-WH40-40                | 40 A           | 700                   | 175                    | 6,30                  | 10.000                 | 1.600                                  |
| PF-WH40-50                | 50 A           | 700                   | 125                    | 5,00                  | 10.000                 | 2.500                                  |
| PF-WH40-60                | 60 A           | 700                   | 145                    | 7,30                  | 10.000                 | 3.500                                  |
| PF-WH40-80                | 80 A           | 700                   | 150                    | 12,0                  | 10.000                 | 6.500                                  |
| PF-WH40-100               | 100 A          | 700                   | 155                    | 15,5                  | 10.000                 | 10.000                                 |
| PF-WH40-125 <sup>1)</sup> | 125 A          | 700                   | On                     |                       | 10.000                 | 14.500                                 |
| PF-WH40-150 <sup>1)</sup> | 150 A          | 700                   | Request                |                       | 10.000                 | 20.000                                 |

In verschiedenen Versionen (siehe unten) / In different versions (see below): PF-WH40-5-M8

<sup>1)</sup> Twins-VersionI<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/ <i>Melting time:</i> |                   |                     |
|------------------------------------------------------------------|---------------------------------------|-------------------|---------------------|
|                                                                  | 5 A<br>-<br>80 A                      | 5 A<br>-<br>100 A | 125 A<br>-<br>150 A |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub>                      | 1 s               | 1 s                 |
|                                                                  | t <sub>max</sub>                      | 5 min             | 5 min               |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub>                      | 200 ms            | 200 ms              |
|                                                                  | t <sub>max</sub>                      | 30 s              | 30 s                |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub>                      | 100 ms            | 100 ms              |
|                                                                  | t <sub>max</sub>                      | 10 s              | 10 s                |

M6 Version  
WH40-XXX-M6M8 Version  
WH40-XXX-M8Twins Version  
WH40-XXX-HT

16,5 x 26,2 mm



|                                   |              |                                |                     |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>150 V</b> | <b>Strom</b><br><i>Current</i> | <b>20 A - 400 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

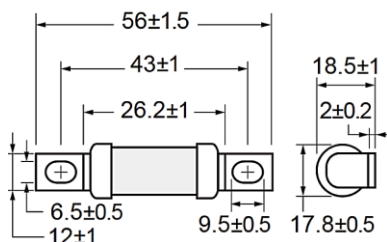
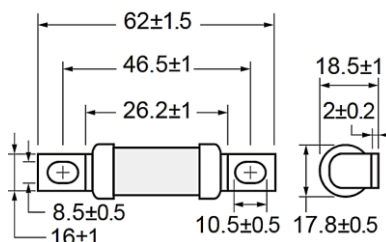
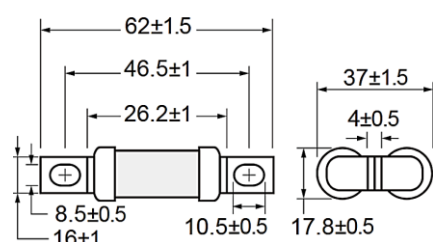
| Art. No.                  | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub> <sup>2)</sup><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------------------|----------------|-----------------------|----------------------------|-----------------------------------------|------------------------|----------------------------------------|
| PF-WH60-20                | 20 A           | 150                   | Auf Anfrage /              |                                         | 10.000                 | Auf Anfr. /                            |
| PF-WH60-25                | 25 A           | 150                   | On Request                 |                                         | 10.000                 | On Requ.                               |
| PF-WH60-32                | 32 A           | 150                   | 135                        | 4,3                                     | 10.000                 | 2560                                   |
| PF-WH60-40                | 40 A           | 150                   | 125                        | 5,0                                     | 10.000                 | 4100                                   |
| PF-WH60-50                | 50 A           | 150                   | 120                        | 6,0                                     | 10.000                 | 6000                                   |
| PF-WH60-60                | 60 A           | 150                   | 117                        | 7,5                                     | 10.000                 | 9000                                   |
| PF-WH60-80                | 80 A           | 150                   | 113                        | 9,0                                     | 10.000                 | 16000                                  |
| PF-WH60-100               | 100 A          | 150                   | 110                        | 11,0                                    | 10.000                 | 25000                                  |
| PF-WH60-125               | 125 A          | 150                   | 105                        | 13,0                                    | 10.000                 | 40000                                  |
| PF-WH60-150               | 150 A          | 150                   | 112                        | 17,8                                    | 10.000                 | 68000                                  |
| PF-WH60-160               | 160 A          | 150                   | 110                        | 19,0                                    | 10.000                 | 64000                                  |
| PF-WH60-180               | 180 A          | 150                   | 105                        | 19,5                                    | 10.000                 | 92000                                  |
| PF-WH60-200               | 200 A          | 150                   | 100                        | 20,0                                    | 10.000                 | 120000                                 |
| PF-WH60-250 <sup>1)</sup> | 250 A          | 150                   | 85                         | 20,7                                    | 10.000                 | 190000                                 |
| PF-WH60-300 <sup>1)</sup> | 300 A          | 150                   | 90                         | 23,1                                    | 10.000                 | 270000                                 |
| PF-WH60-400 <sup>1)</sup> | 400 A          | 150                   | 100                        | 40,0                                    | 10.000                 | 480000                                 |

In verschiedenen Versionen (siehe unten) / In different versions (see below):

z.B. / e.g. PF-WH60-50-M8

<sup>1)</sup> nur Twins-Version    <sup>2)</sup> @1xI<sub>N</sub>I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                   |
|----------------------------------------------------------|--------------------------------------------------|
|                                                          | 20 A<br>-<br>400 A                               |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                       | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                       | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

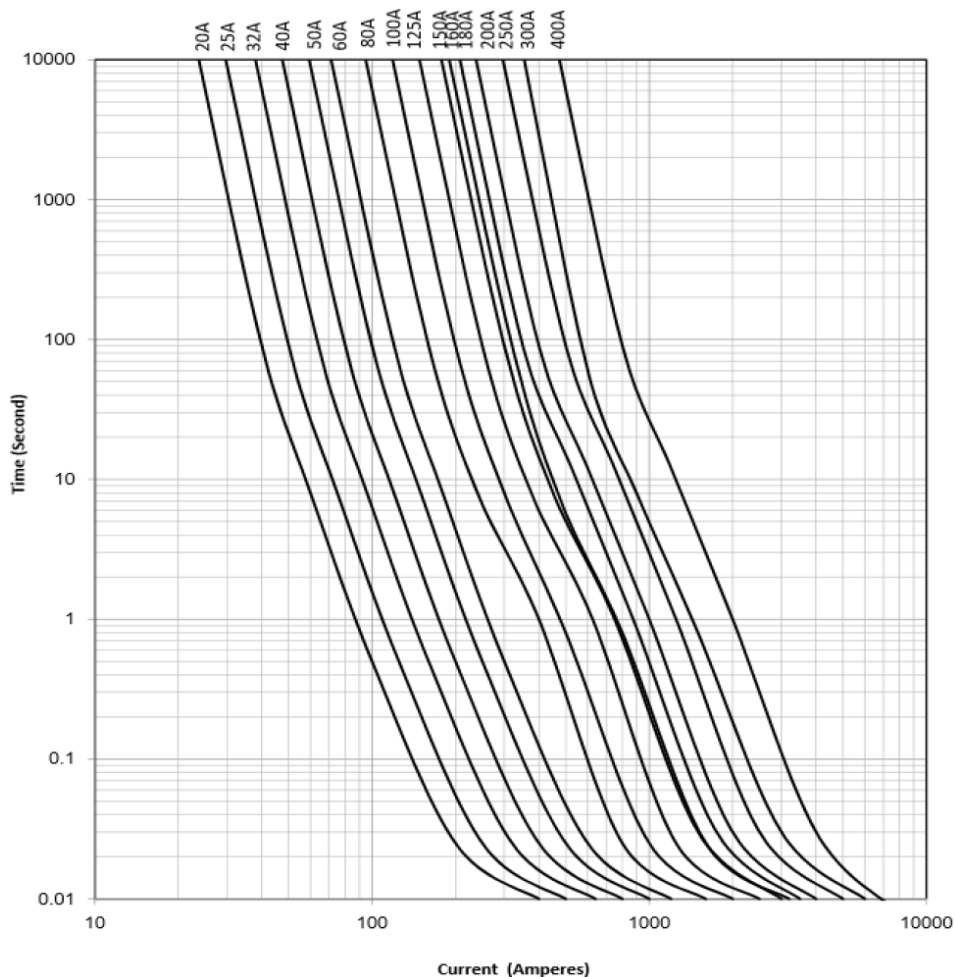
M6 Version  
WH60-XXX-M6M8 Version  
WH60-XXX-M8Twins Version  
WH60-XXX-VT

16,5 x 26,2 mm

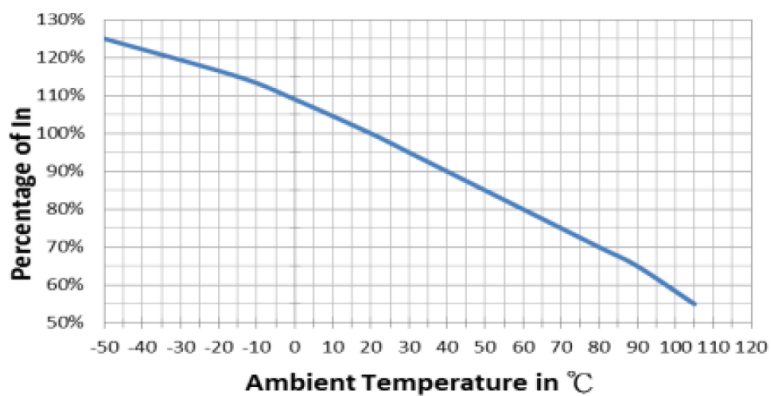


|                     |       |                  |              |                                        |          |
|---------------------|-------|------------------|--------------|----------------------------------------|----------|
| Spannung<br>Voltage | 150 V | Strom<br>Current | 20 A - 400 A | Ausschaltvermögen<br>Breaking capacity | 10.000 A |
|---------------------|-------|------------------|--------------|----------------------------------------|----------|

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-Derating / Temperature De-Rating Curve



107,6 x 25 mm



|                                   |              |                                |                     |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>700 V</b> | <b>Strom</b><br><i>Current</i> | <b>50 A - 600 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose  
geschüttet) / 100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

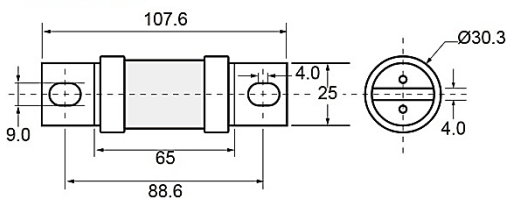
| Art. No.                     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------------------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WE30-50-CT                | 50 A           | 700                   |                            |                           | 10.000                 | 3.200                                  |
| PF-WE30-60-CT                | 60 A           | 700                   |                            |                           | 10.000                 | 5.040                                  |
| PF-WE30-70-CT                | 70 A           | 700                   | Auf                        |                           | 10.000                 | 6.860                                  |
| PF-WE30-80-CT                | 80 A           | 700                   | Anfrage                    |                           | 10.000                 | 8.960                                  |
| PF-WE30-90-CT                | 90 A           | 700                   |                            |                           | 10.000                 | 11.340                                 |
| PF-WE30-100-CT               | 100 A          | 700                   | /                          |                           | 10.000                 | 14.000                                 |
| PF-WE30-125-CT               | 125 A          | 700                   |                            |                           | 10.000                 | 23.000                                 |
| PF-WE30-150-CT               | 150 A          | 700                   | On                         |                           | 10.000                 | 31.000                                 |
| PF-WE30-175-CT               | 175 A          | 700                   | Request                    |                           | 10.000                 | 40.000                                 |
| PF-WE30-200-CT               | 200 A          | 700                   |                            |                           | 10.000                 | 52.000                                 |
| PF-WE30-500-VT <sup>1)</sup> | 500 A          | 700                   |                            |                           | 10.000                 |                                        |
| PF-WE30-600-VT <sup>1)</sup> | 600 A          | 700                   |                            |                           | 10.000                 |                                        |

<sup>1)</sup> Twins-Version

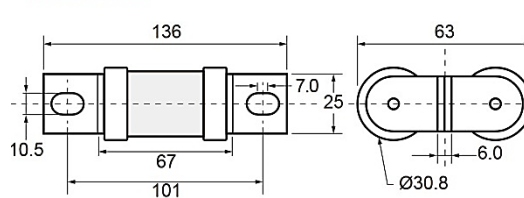
### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>         |
|------------------------------------------------------------------|--------------------------------------------------|
|                                                                  | 50 A<br>-<br>600 A                               |
| 1,1 · I <sub>N</sub>                                             | t <sub>min</sub> 4 h<br>t <sub>max</sub> -       |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

### Single-Version WE30-XXX-CT



### Twins-Version WE30-XXX-VT



107,6 x 25 mm



|                                   |              |                                |                     |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>60 A - 150 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

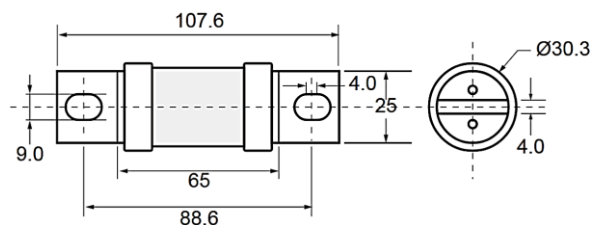
## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|-----------------|
| PF-WE35-60-CT  | 60 A  | 800          | Auf                  |                     | 10.000          | 5.040           |
| PF-WE35-70-CT  | 70 A  | 800          | Anfrage              |                     | 10.000          | 6.860           |
| PF-WE35-80-CT  | 80 A  | 800          |                      |                     | 10.000          | 8.960           |
| PF-WE35-90-CT  | 90 A  | 800          | /                    |                     | 10.000          | 11.340          |
| PF-WE35-100-CT | 100 A | 800          |                      |                     | 10.000          | 14.000          |
| PF-WE35-125-CT | 125 A | 800          | On                   |                     | 10.000          | 23.000          |
| PF-WE35-150-CT | 150 A | 800          | Request              |                     | 10.000          | 31.000          |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 60 A<br>-<br>150 A                       |
| $1,1 \cdot I_N$                                                  | $t_{min}$ 4 h<br>$t_{max}$ -             |
| $2 \cdot I_N$                                                    | $t_{min}$ 1 s<br>$t_{max}$ 5 min         |
| $3 \cdot I_N$                                                    | $t_{min}$ 200 ms<br>$t_{max}$ 30 s       |
| $5 \cdot I_N$                                                    | $t_{min}$ 100 ms<br>$t_{max}$ 10 s       |

## WE35-XXX-CT





135 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>500 A - 600 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

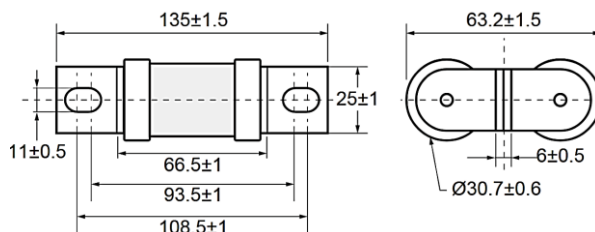
## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A <sup>2</sup> s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|------------------------------|
| PF-WE40-500-CT | 500 A | 800          | Auf Anfrage /        |                     | 20.000          |                              |
| PF-WE40-600-CT | 600 A | 800          | On request           |                     | 20.000          |                              |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 500 A<br>-<br>600 A                      |
| $2 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>Auf<br>Anfrage |
| $3 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>/<br>On        |
| $5 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>Request        |

## WE40-XXX-VT



91,5 x 25 mm



|                                   |              |                                |                     |                                                      |                                |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|--------------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>60 A - 300 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A /<br/>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|--------------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (Lötkolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

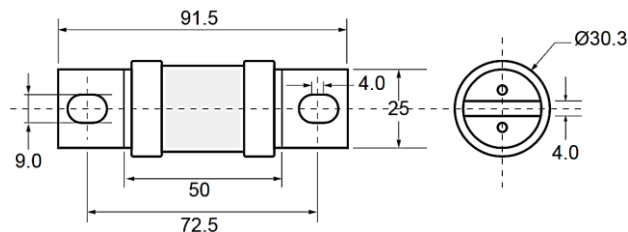
## Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WE50-60-CT  | 60 A           | 500                   |                            |                           | 20.000                 | 4.800                                  |
| PF-WE50-70-CT  | 70 A           | 500                   |                            |                           | 20.000                 | 6.550                                  |
| PF-WE50-80-CT  | 80 A           | 500                   | Auf                        |                           | 20.000                 | 8.450                                  |
| PF-WE50-90-CT  | 90 A           | 500                   | Anfrage                    |                           | 20.000                 | 10.500                                 |
| PF-WE50-100-CT | 100 A          | 500                   |                            |                           | 20.000                 | 12.050                                 |
| PF-WE50-125-CT | 125 A          | 500                   | /                          |                           | 20.000                 | 19.500                                 |
| PF-WE50-150-CT | 150 A          | 500                   |                            |                           | 20.000                 | 31.000                                 |
| PF-WE50-175-CT | 175 A          | 500                   | On                         |                           | 20.000                 | 40.000                                 |
| PF-WE50-200-CT | 200 A          | 500                   | Request                    |                           | 20.000                 | 52.000                                 |
| PF-WE50-250-CT | 250 A          | 500                   |                            |                           | 20.000                 | 75.000                                 |
| PF-WE50-300-CT | 300 A          | 500                   |                            |                           | 10.000                 |                                        |

I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>         |
|------------------------------------------------------------------|--------------------------------------------------|
|                                                                  | 60 A<br>-<br>300 A                               |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

## WE50-XXX-CT



91,5 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>100 A - 400 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                            |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | Werknorm / Factory standard                                                                                                |
| <b>Aufbau / Construction:</b>                      | zylindrisch / cylindrical<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                       |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                            |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                          |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 270 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5s |
| <b>Verpackungsmöglichkeiten / Packing options:</b> | 100 St. = Industrieverpackung (lose geschüttet) / 100 pcs. = Industrial box (bulk)                                         |

### Bemessungswerte / Ratings:

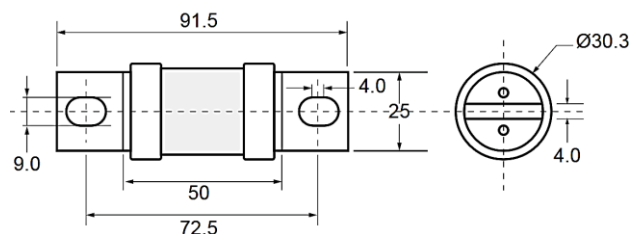
| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub> <sup>1)</sup><br>[W] | R <sub>C,typ.</sub><br>[mΩ] | I <sup>2</sup> t <sub>pre-arc</sub><br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|-----------------------------------------|-----------------------------|-----------------------------------------------------------|
| PF-WE55-100-CT | 100 A          | 500                   | 300                        | 2,9                                     | 1                           | 2.550                                                     |
| PF-WE55-150-CT | 150 A          | 500                   | 300                        | 4,2                                     | 0,9                         | 4.800                                                     |
| PF-WE55-175-CT | 175 A          | 500                   | 300                        | 5,3                                     | 0,7                         | 7.100                                                     |
| PF-WE55-200-CT | 200 A          | 500                   | 275                        | 6,1                                     | 0,495                       | 10.300                                                    |
| PF-WE55-250-CT | 250 A          | 500                   | 275                        | 7,2                                     | 0,32                        | 12.300                                                    |
| PF-WE55-300-CT | 300 A          | 500                   | 275                        | 8,9                                     | 0,285                       | 16.800                                                    |
| PF-WE55-350-CT | 350 A          | 500                   | 275                        | 10,8                                    | 0,26                        | 22.200                                                    |
| PF-WE55-400-CT | 400 A          | 500                   | 275                        | 12,6                                    | 0,23                        | 28.000                                                    |

<sup>1)</sup> @0,5x I<sub>N</sub>

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current factor</i> | Schmelzzeit<br>/ <i>Melting time:</i>                          |
|--------------------------------------------------------------|----------------------------------------------------------------|
| 100 A<br>-<br>400 A                                          |                                                                |
| 1,1 · I <sub>N</sub>                                         | t <sub>min</sub><br>t <sub>max</sub> siehe                     |
| 2 · I <sub>N</sub>                                           | t <sub>min</sub><br>t <sub>max</sub> Strom-Zeit-Kennlinie      |
| 3 · I <sub>N</sub>                                           | t <sub>min</sub><br>t <sub>max</sub> /                         |
| 5 · I <sub>N</sub>                                           | t <sub>min</sub><br>t <sub>max</sub> see<br>time-current curve |

WE55-XXX-CT



91,5 x 25 mm

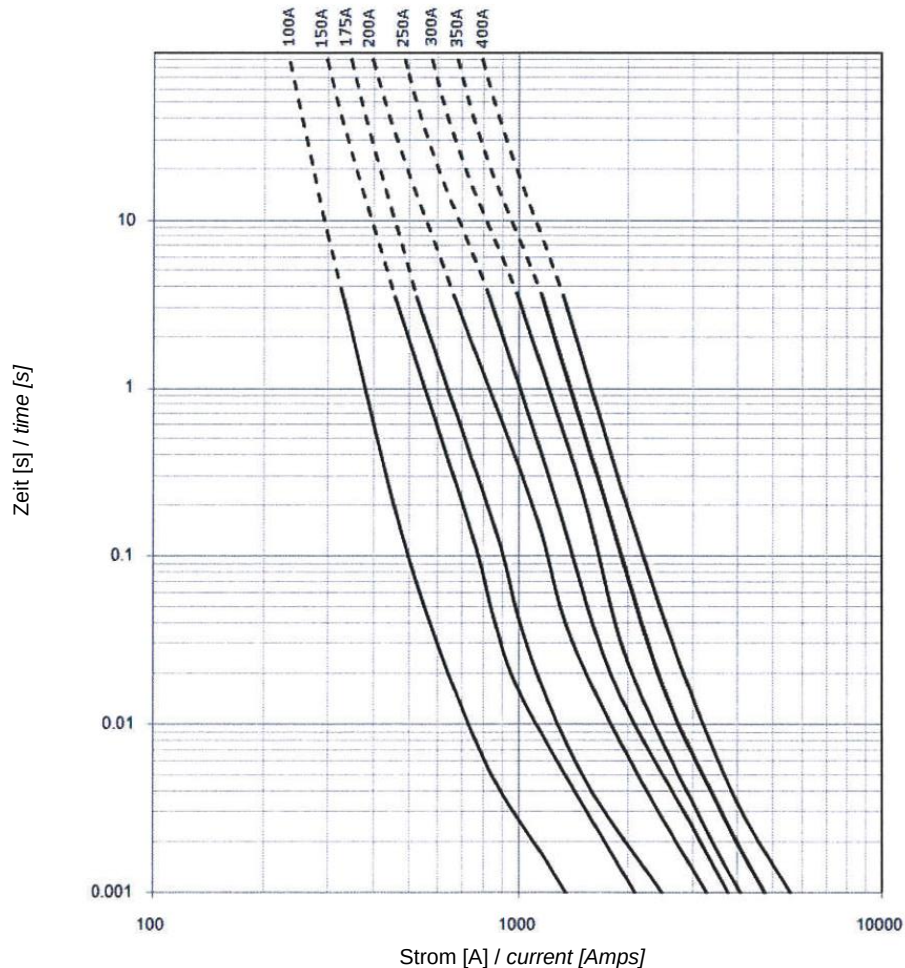


Spannung  
Voltage 500 V

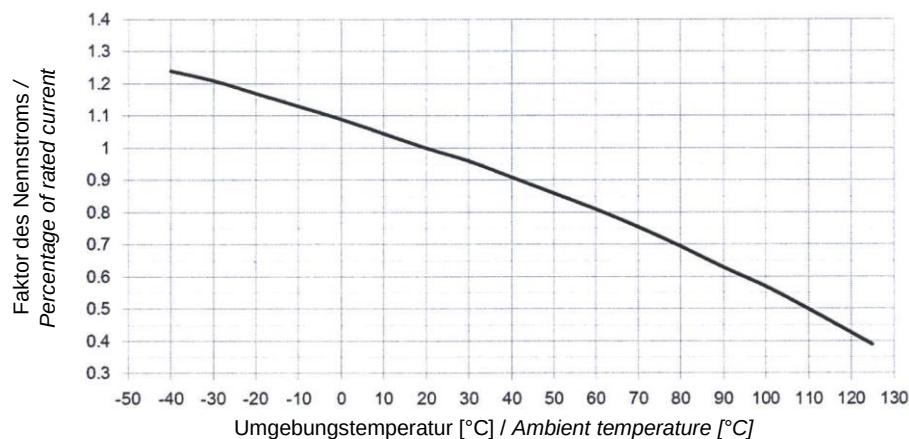
Strom  
Current 100 A - 400 A

Ausschaltvermögen  
Breaking capacity 20.000 A

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-Derating / Temperature De-Rating Curve



133 x 25 mm



**Spannung**  
*Voltage* **700 V**

**Strom**  
*Current* **125 A – 400 A**

**Ausschaltvermögen**  
*Breaking capacity* **50.000 A**



*Norm / Standard:*

Werknorm / Factory standard

*Aufbau / Construction:*

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

*Betriebstemperatur / Operating temperature:*

-55 °C - +125 °C  
De-Rating beachten ! / Consider De-Rating !

*Lagerung / Storage:*

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

*Lötbarkeit / Solderability:*

Wellenlöten / wave soldering:  
T = 260 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

*Verpackungsmöglichkeiten / Packing options:*

100 St. = Industrieverpackung (lose geschüttet) /  
100 pcs. = Industrial box (bulk)

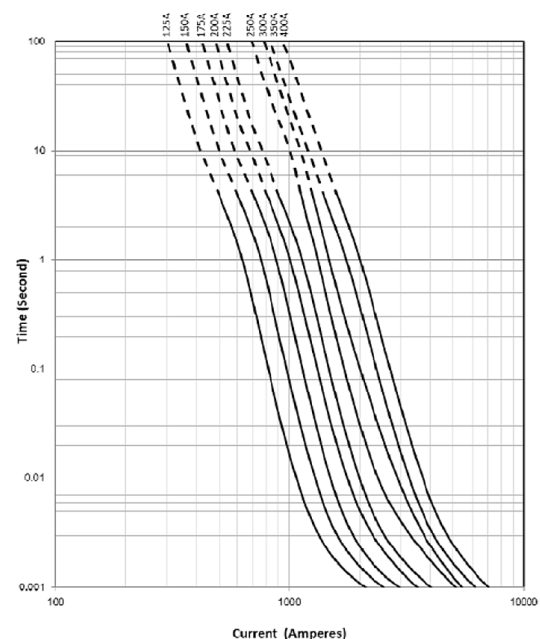
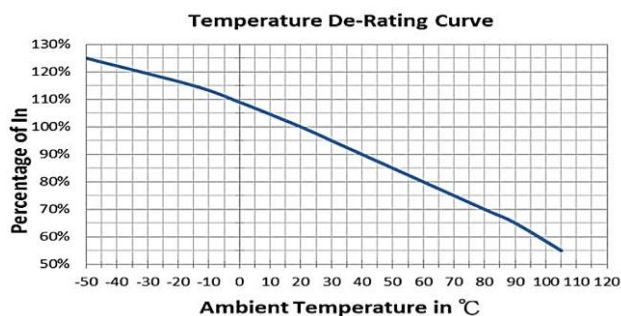
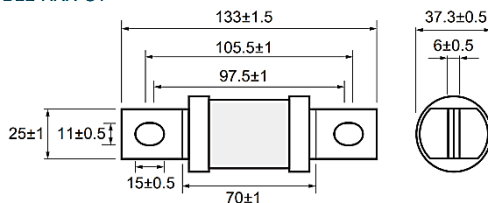
### Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD22-125-CT | 125 A          | 700                   | Auf                        | 26                        | 50.000                 | 4.600                                  |
| PF-WD22-150-CT | 150 A          | 700                   | Anfrage                    | 30                        | 50.000                 | 7.000                                  |
| PF-WD22-175-CT | 175 A          | 700                   |                            | 35                        | 50.000                 | 9.500                                  |
| PF-WD22-200-CT | 200 A          | 700                   | /                          | 42                        | 50.000                 | 12.500                                 |
| PF-WD22-225-CT | 225 A          | 700                   |                            | 43                        | 50.000                 | 15.800                                 |
| PF-WD22-250-CT | 250 A          | 700                   | On                         | 45                        | 50.000                 | 24.500                                 |
| PF-WD22-300-CT | 300 A          | 700                   | Request                    | 50                        | 50.000                 | 30.000                                 |
| PF-WD22-350-CT | 350 A          | 700                   |                            | 65                        | 50.000                 | 34.500                                 |
| PF-WD22-400-CT | 400 A          | 700                   |                            | 71                        | 50.000                 | 45.000                                 |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>                 |
|------------------------------------------------------------------|----------------------------------------------------------|
| 1,1 · I <sub>N</sub>                                             | t <sub>min</sub><br>t <sub>max</sub><br>Siehe unten<br>/ |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>See below        |

WD22-XXX-CT



138 x 25 mm



|                                   |              |                                |                      |                                                      |                            |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>750 V</b> | <b>Strom</b><br><i>Current</i> | <b>125 A - 300 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A / 50.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|----------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (Lötkolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

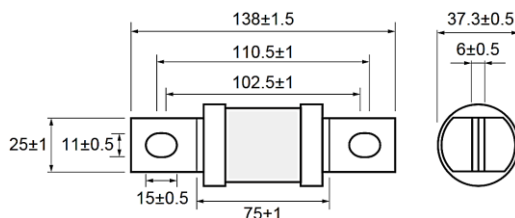
## Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD25-125-CT | 125 A          | 750                   | Auf                        |                           | 50.000                 | Auf                                    |
| PF-WD25-150-CT | 150 A          | 750                   | Anfrage                    |                           | 20.000                 | Anfrage                                |
| PF-WD25-175-CT | 175 A          | 750                   |                            |                           | 20.000                 |                                        |
| PF-WD25-200-CT | 200 A          | 750                   | /                          |                           | 20.000                 | /                                      |
| PF-WD25-225-CT | 225 A          | 750                   |                            |                           | 20.000                 |                                        |
| PF-WD25-250-CT | 250 A          | 750                   | On                         |                           | 20.000                 | On                                     |
| PF-WD25-300-CT | 300 A          | 750                   | Request                    |                           | 20.000                 | Request                                |

I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>               |
|------------------------------------------------------------------|--------------------------------------------------------|
|                                                                  | 125 A<br>-<br>300 A                                    |
| 1,1 · I <sub>N</sub>                                             | t <sub>min</sub><br>Auf<br>t <sub>max</sub><br>Anfrage |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>/<br>t <sub>max</sub>              |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub><br>On<br>t <sub>max</sub>             |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub><br>Request<br>t <sub>max</sub>        |

WD25-XXX-CT (Single)





133 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>150 A - 400 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (Lötkolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

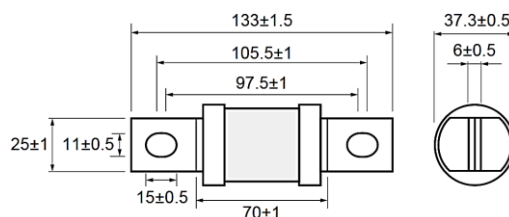
## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|-----------------|
| PF-WD35-150-CT | 150 A | 800          | Auf                  |                     | 20.000          | Auf             |
| PF-WD35-200-CT | 200 A | 800          | Anfrage              |                     | 20.000          | Anfrage         |
| PF-WD35-250-CT | 250 A | 800          | /                    |                     | 20.000          | /               |
| PF-WD35-300-CT | 300 A | 800          | On                   |                     | 20.000          | On              |
| PF-WD35-350-CT | 350 A | 800          | Request              |                     | 20.000          | Request         |
| PF-WD35-400-CT | 400 A | 800          |                      |                     | 20.000          |                 |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 150 A<br>-<br>400 A                      |
| $1,1 \cdot I_N$                                                  | $t_{min}$<br>$t_{max}$<br>Auf<br>Anfrage |
| $2 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>/              |
| $3 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>On             |
| $5 \cdot I_N$                                                    | $t_{min}$<br>$t_{max}$<br>Request        |

WD35-XXX-CT





133 x 25 mm



|                                   |                |                                |                      |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.000 V</b> | <b>Strom</b><br><i>Current</i> | <b>250 A - 600 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>50.000 A</b> |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / Consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 260 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) /  
100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d max</sub><br>[mV] | P <sub>d max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD38-250-CT | 250 A          | 1.000                 | Auf                        | 33                        | 50.000                 | Auf                                    |
| PF-WD38-315-CT | 315 A          | 1.000                 | Anfrage                    | 36                        | 50.000                 | Anfrage                                |
| PF-WD38-350-CT | 350 A          | 1.000                 | /                          | 45                        | 50.000                 | /                                      |
| PF-WD38-400-CT | 400 A          | 1.000                 | On                         | 48                        | 50.000                 | On                                     |
| PF-WD38-500-VT | 500 A          | 1.000                 | Request                    | 60                        | 50.000                 | Request                                |
| PF-WD38-600-VT | 600 A          | 1.000                 |                            | 68                        | 50.000                 |                                        |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time: |
|-------------------------------------------------------------|-----------------------------------|
|                                                             | 250 A<br>-<br>600 A               |

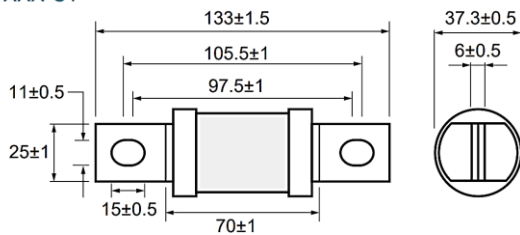
1,1 · I<sub>N</sub>

t<sub>min</sub>  
t<sub>max</sub>

Siehe unten /  
See below

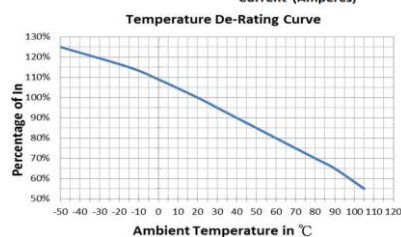
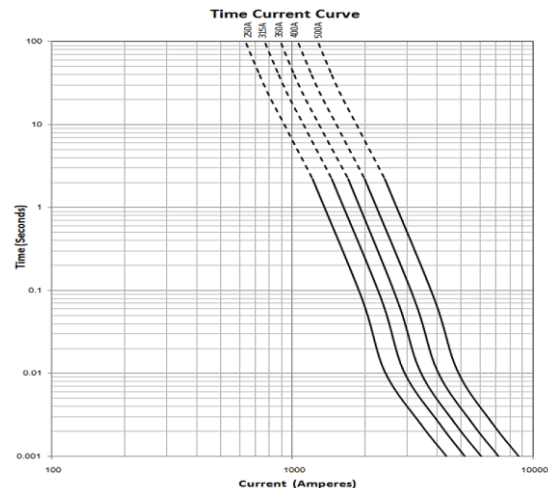
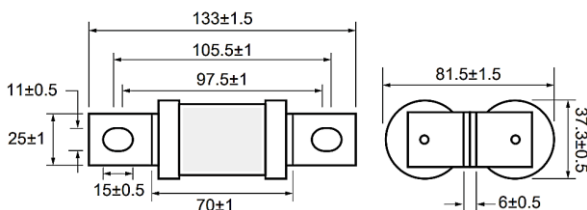
### CT (Single Version)

WD38-XXX-CT



### VT (Twins Version)

WD38-XXX-VT



113 x 25,4 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>300 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 A - 400 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

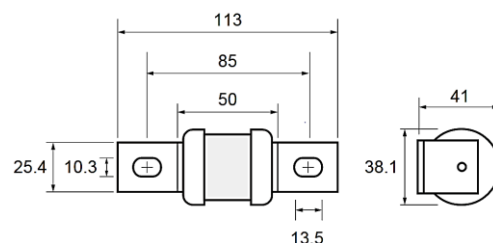
## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|-----------------|
| PF-WD50-200-BT | 200 A | 300          | Auf                  |                     | 10.000          | Auf             |
| PF-WD50-225-BT | 225 A | 300          | Anfrage              |                     | 10.000          | Anfrage         |
| PF-WD50-250-BT | 250 A | 300          | /                    |                     | 10.000          | /               |
| PF-WD50-300-BT | 300 A | 300          | On                   |                     | 10.000          | On              |
| PF-WD50-350-BT | 350 A | 300          | Request              |                     | 10.000          | Request         |
| PF-WD50-400-BT | 400 A | 300          |                      |                     | 10.000          |                 |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 200 A<br>-<br>400 A                      |
| $1,1 \cdot I_N$                                                  | $t_{min}$ 4 h<br>$t_{max}$ -             |
| $2 \cdot I_N$                                                    | $t_{min}$ 1 s<br>$t_{max}$ 5 min         |
| $3 \cdot I_N$                                                    | $t_{min}$ 200 ms<br>$t_{max}$ 30 s       |
| $5 \cdot I_N$                                                    | $t_{min}$ 100 ms<br>$t_{max}$ 10 s       |

WD50-XXX-BT (Single)



### 113,5 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 A - 600 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

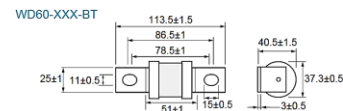
+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 270 °C; t < 10 s  
Manuell (Lötcolben) / hand-soldering:  
T = 350 °C ± 5 °C; t < 5 s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) /  
100 pcs. = Industrial box (bulk)



#### Bemessungswerte / Ratings:

| Art. No.                  | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|---------------------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD60-200               | 200 A          | 500                   |                            |                           | 10.000                 |                                        |
| PF-WD60-225 <sup>1)</sup> | 225 A          | 500                   | Auf                        |                           | 10.000                 | Auf                                    |
| PF-WD60-250               | 250 A          | 500                   | Anfrage                    |                           | 10.000                 | Anfrage                                |
| PF-WD60-300               | 300 A          | 500                   |                            |                           | 10.000                 |                                        |
| PF-WD60-350               | 350 A          | 500                   | /                          |                           | 10.000                 | /                                      |
| PF-WD60-400               | 400 A          | 500                   |                            |                           | 10.000                 |                                        |
| PF-WD60-450 <sup>2)</sup> | 450 A          | 500                   | On                         |                           | 10.000                 | On                                     |
| PF-WD60-500 <sup>2)</sup> | 500 A          | 500                   | Request                    |                           | 10.000                 | Request                                |
| PF-WD60-600 <sup>2)</sup> | 600 A          | 500                   |                            |                           | 10.000                 |                                        |

In verschiedenen Versionen (siehe unten) /

In different versions (see below): **PF-WD60-200-CT**

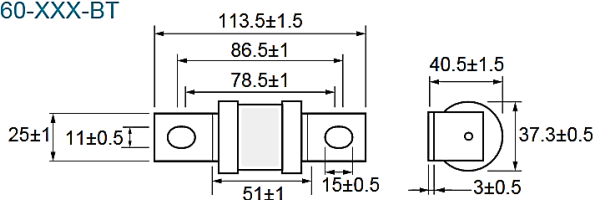
<sup>1)</sup> Ausschließlich als BT Version verfügbar / Only BT version available

<sup>2)</sup> Twins-Version

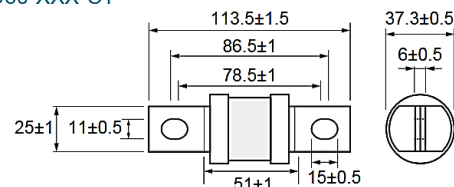
#### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:                |
|-------------------------------------------------------------|--------------------------------------------------|
|                                                             | 200 A<br>-<br>600 A                              |
| 1 · I <sub>N</sub>                                          | t <sub>min</sub> 4 h<br>t <sub>max</sub> -       |
| 2 · I <sub>N</sub>                                          | t <sub>min</sub> 1 s<br>t <sub>max</sub> 5 min   |
| 3 · I <sub>N</sub>                                          | t <sub>min</sub> 200 ms<br>t <sub>max</sub> 30 s |
| 5 · I <sub>N</sub>                                          | t <sub>min</sub> 100 ms<br>t <sub>max</sub> 10 s |

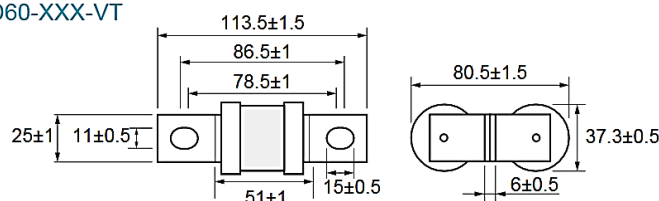
#### BT-Version WD60-XXX-BT



#### CT-Version WD60-XXX-CT



#### VT-Version WD60-XXX-VT



113,5 x 25 mm



|                                   |              |                                |              |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|--------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>500 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

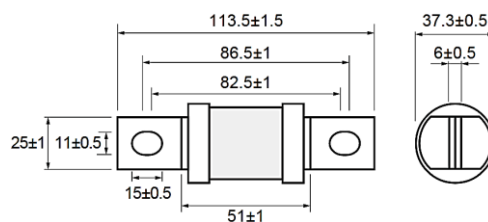
## Bemessungswerte / Ratings:

| Art. No.        | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV]     | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|-----------------|-------|--------------|--------------------------|---------------------|-----------------|-----------------|
| PF-WD60X-500-CT | 500 A | 500          | Auf Anfrage / On Request |                     | 10.000          |                 |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
| 1 · $I_N$                                                        | 500 A                                    |
| $t_{min}$                                                        | 1 h                                      |
| $t_{max}$                                                        | -                                        |

## WD60X-XXX-CT (Single)



113,5 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>250 A - 400 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>50.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramicrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-55 °C - +125 °C  
De-Rating beachten ! / Consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 260 °C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

100 St. = Industrieverpackung (lose geschüttet) /  
100 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD63-250-CT | 250 A          | 500                   | Auf                        | 37                        | 50.000                 | 18.560                                 |
| PF-WD63-300-CT | 300 A          | 500                   | Anfrage /                  | 51                        | 50.000                 | 32.000                                 |
| PF-WD63-350-CT | 350 A          | 500                   | On                         | 60                        | 50.000                 | 48.500                                 |
| PF-WD63-400-CT | 400 A          | 500                   | Request                    | 80                        | 50.000                 | 57.000                                 |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

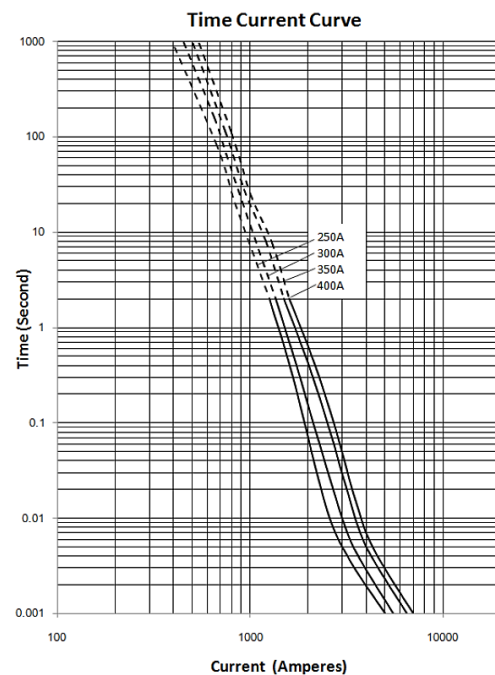
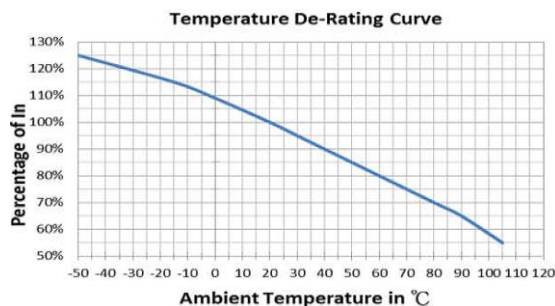
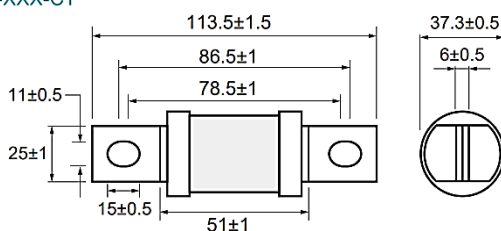
| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
| 250 A                                                            |                                          |
| 400 A                                                            |                                          |

1,1 · I<sub>N</sub>

t<sub>min</sub>  
t<sub>max</sub>

Siehe unten /  
See below

### WD63-XXX-CT



113,5 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>700 V</b> | <b>Strom</b><br><i>Current</i> | <b>250 A - 600 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

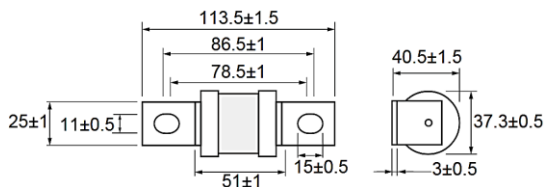
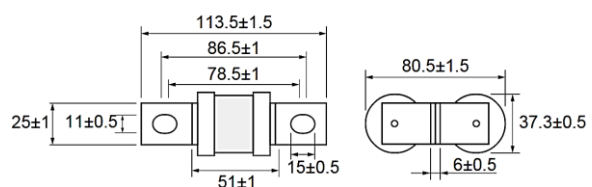
 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

| Art. No.                     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_max</sub><br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|------------------------------|----------------|-----------------------|----------------------------|---------------------------|------------------------|----------------------------------------|
| PF-WD70-250-CT               | 250 A          | 700                   | Auf                        |                           | 20.000                 | Auf                                    |
| PF-WD70-300-CT               | 300 A          | 700                   | Anfrage                    |                           | 20.000                 | Anfrage                                |
| PF-WD70-400-CT               | 400 A          | 700                   | /                          |                           | 20.000                 | /                                      |
| PF-WD70-500-VT <sup>1)</sup> | 500 A          | 700                   | On                         |                           | 20.000                 | On                                     |
| PF-WD70-600-VT <sup>1)</sup> | 600 A          | 700                   | Request                    |                           | 20.000                 | Request                                |

<sup>1)</sup> Twins-VersionI<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i>               |
|------------------------------------------------------------------|--------------------------------------------------------|
|                                                                  | 250 A<br>-<br>600 A                                    |
| 2 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>Auf<br>Anfrage |
| 3 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>/<br>On        |
| 5 · I <sub>N</sub>                                               | t <sub>min</sub><br>t <sub>max</sub><br>Request        |

Single-Version  
WD70-XXX-CTTwins-Version  
WD70-XXX-VT

98 x 25 mm



|                                   |              |                                |                      |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>250 V</b> | <b>Strom</b><br><i>Current</i> | <b>200 A - 500 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>10.000 A</b> |
|-----------------------------------|--------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -55 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

 +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
 +10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

 Wellenlöten / wave soldering:  
 T = 270 °C; t < 10 s  
 Manuell (LötKolben) / hand-soldering:  
 T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

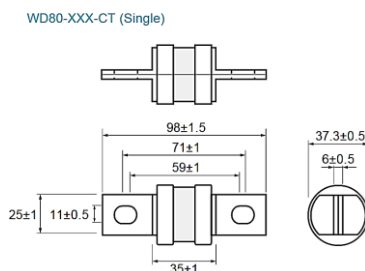
 100 St. = Industrieverpackung (lose  
 geschüttet) / 100 pcs. = Industrial box (bulk)

## Bemessungswerte / Ratings:

| Art. No.       | $I_N$ | $U_N$<br>[V] | $U_{d\_max}$<br>[mV] | $P_{d\_max}$<br>[W] | $I_{BC}$<br>[A] | $I^2t$<br>[A²s] |
|----------------|-------|--------------|----------------------|---------------------|-----------------|-----------------|
| PF-WD80-200-CT | 200 A | 250          | Auf                  |                     | 10.000          | Auf             |
| PF-WD80-300-CT | 300 A | 250          | Anfrage              |                     | 10.000          | Anfrage         |
| PF-WD80-350-CT | 350 A | 250          | /                    |                     | 10.000          | /               |
| PF-WD80-400-CT | 400 A | 250          | On                   |                     | 10.000          | On              |
| PF-WD80-450-CT | 450 A | 250          | Request              |                     | 10.000          | Request         |
| PF-WD80-500-CT | 500 A | 250          |                      |                     | 10.000          |                 |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current<br/>factor</i> | Schmelzzeit<br>/<br><i>Melting time:</i> |
|------------------------------------------------------------------|------------------------------------------|
|                                                                  | 200 A<br>-<br>500 A                      |
| $2 \cdot I_N$                                                    | $t_{min}$ 1 s<br>$t_{max}$ 5 min         |
| $3 \cdot I_N$                                                    | $t_{min}$ 200 ms<br>$t_{max}$ 30 s       |
| $5 \cdot I_N$                                                    | $t_{min}$ 100 ms<br>$t_{max}$ 10 s       |





### 136 x 26 mm



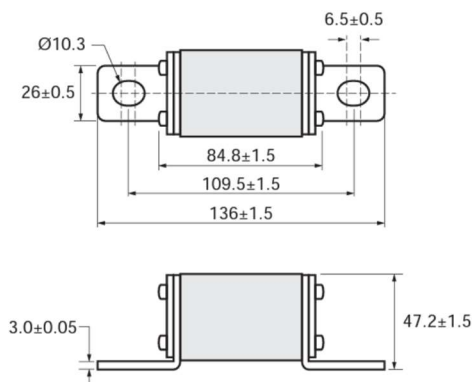
|                                   |                |                                |                      |                                                      |                 |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>1.500 V</b> | <b>Strom</b><br><i>Current</i> | <b>160 A - 300 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>30.000 A</b> |
|-----------------------------------|----------------|--------------------------------|----------------------|------------------------------------------------------|-----------------|



|                                                    |                                                                                                                            |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Norm / Standard:</b>                            | JASOD622, ISO8820                                                                                                          |
| <b>Aufbau / Construction:</b>                      | rechteckig / rectangular<br>Keramikrohr / Ceramictube<br>mit Löschmittel / with extinguishing agent                        |
| <b>Betriebstemperatur / Operating temperature:</b> | -55 °C - +125 °C<br>De-Rating beachten ! / consider De-Rating !                                                            |
| <b>Lagerung / Storage:</b>                         | +10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /<br>+10 °C until +60 °C @RH ≤ 75%, 3 years                                          |
| <b>Lötbarkeit / Solderability:</b>                 | Wellenlöten / wave soldering:<br>T = 260 °C; t < 10 s<br>Manuell (LötKolben) / hand-soldering:<br>T = 350 °C ± 5°C; t < 5s |

#### Bemessungswerte / Ratings:

| Art. No.       | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d_max</sub><br>[mV] | P <sub>d_m</sub><br>ax<br>[W] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t<br>[A <sup>2</sup> s] |
|----------------|----------------|-----------------------|----------------------------|-------------------------------|------------------------|----------------------------------------|
| PF-WS70-160-BT | 160 A          | 1.500                 | Auf                        |                               | 30.000                 | Auf                                    |
| PF-WS70-200-BT | 200 A          | 1.500                 | Anfrage /                  |                               | 30.000                 | Anfrage /                              |
| PF-WS70-250-BT | 250 A          | 1.500                 | On                         |                               | 30.000                 | On                                     |
| PF-WS70-300-BT | 300 A          | 1.500                 | request                    |                               | 30.000                 | request                                |



14,3 x 51 mm



|                                   |              |                                |                     |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>50 A - 100 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>50.000 A</b> |
|-----------------------------------|--------------|--------------------------------|---------------------|------------------------------------------------------|-----------------|

Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -40 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

## Bemessungswerte / Ratings:

| Art. No.      | $I_N$ | $U_N$<br>[V] | $P_{d,typ}$<br>[W] | $R_{c,typ}$<br>[mΩ] | $I_{BC}$<br>[A] | $I^2 t_{pre-arc}$<br>[A²s] |
|---------------|-------|--------------|--------------------|---------------------|-----------------|----------------------------|
| PF-RJ05E-50A  | 50 A  | 500          | 19                 | 3,28                | 50 kA           | 2.250                      |
| PF-RJ05E-80A  | 80 A  | 500          | 18                 | 1,45                |                 | 12.800                     |
| PF-RJ05E-90A  | 90 A  | 500          | 20                 | 1,35                |                 | 15.400                     |
| PF-RJ05E-100A | 100 A | 500          | 25                 | 1,20                |                 | 18.000                     |

 $I_N - t$  Verhalten /  $I_N - t$  characteristics:

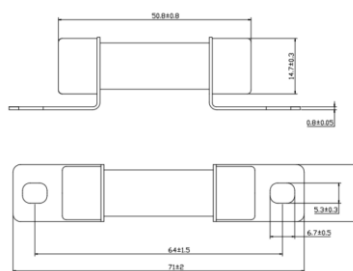
| Bemessungs-<br>strom-Faktor<br>/<br>Rated current<br>factor | Schmelzzeit<br>/<br>Melting time:  |
|-------------------------------------------------------------|------------------------------------|
|                                                             | 10 A<br>-<br>40 A                  |
| $1,1 \cdot I_N$                                             | $t_{min}$ 14.400 s<br>$t_{max}$    |
| $2 \cdot I_N$                                               | $t_{min}$ 0,5 s<br>$t_{max}$ 100 s |
| $3 \cdot I_N$                                               | $t_{min}$ 0,1 s<br>$t_{max}$ 15 s  |
| $5 \cdot I_N$                                               | $t_{min}$<br>$t_{max}$ 1 s         |

Schraubflaschenversion z.B. / screw version e.g.: PF-RJ05E-XXA-EP

## PF-RJ05E-XXA



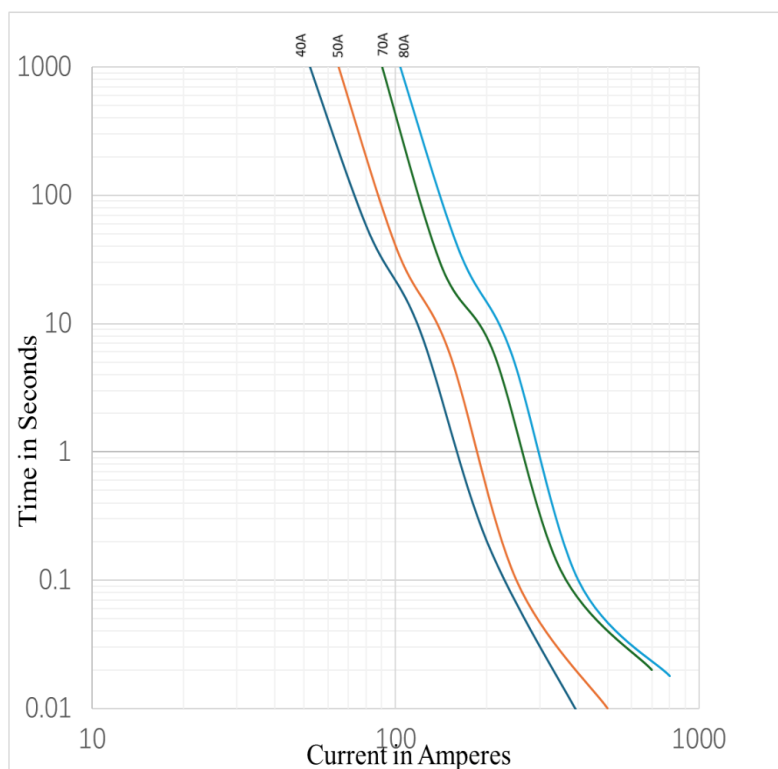
## PF-RJ05E-XXA-EP



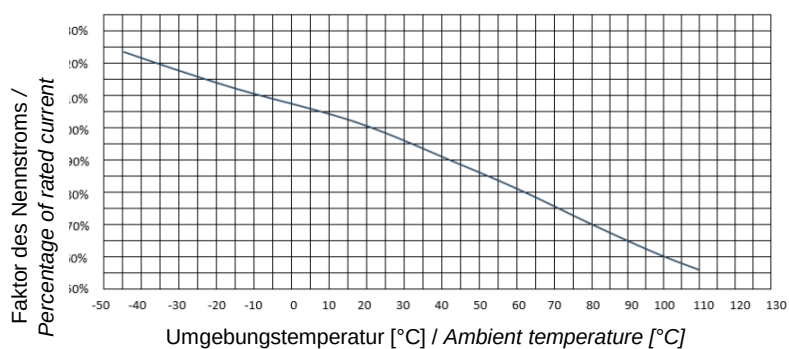
Recommended: 4,5 ± 1 Nm (M5)

## Strom-Zeit-Kennlinie / Time-current Curve

14,3 x 51 mm

**Spannung**  
Voltage **500 V****Strom**  
Current **50 A - 100 A****Ausschaltvermögen**  
Breaking capacity **50.000 A**

Temperatur-Derating / Temperature De-Rating Curve



14,3 x 51 mm



|                                   |              |                                |                    |                                                      |                 |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>800 V</b> | <b>Strom</b><br><i>Current</i> | <b>40 A - 80 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>50.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|-----------------|

Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

 zylindrisch / cylindrical  
 Keramikrohr / Ceramictube  
 mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

 -40 °C - +125 °C  
 De-Rating beachten ! / consider De-Rating !

## Bemessungswerte / Ratings:

| Art. No.     | $I_N$ | $U_N$<br>[V] | $P_{d,typ}$<br>[W] | $R_{c,typ}$<br>[mΩ] | $I_{BC}$<br>[A] | $I^2 t_{pre-arc}$<br>[A²s] |
|--------------|-------|--------------|--------------------|---------------------|-----------------|----------------------------|
| PF-RJ08E-40A | 40 A  | 800          | 8                  | 3,9                 | 50kA            | 1.450                      |
| PF-RJ08E-50A | 50 A  | 800          | 15                 | 3,3                 |                 | 2.500                      |
| PF-RJ08E-70A | 70 A  | 800          | 17                 | 2,3                 |                 | 9.800                      |
| PF-RJ08E-80A | 80 A  | 800          | 18                 | 1,43                |                 | 11.500                     |

 $I_N$  - t Verhalten /  $I_N$  - t characteristics:

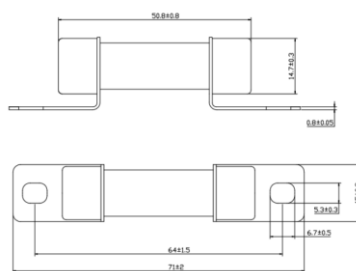
| Bemessungs-<br>strom-Faktor<br>/ <i>Rated current factor</i> | Schmelzzeit<br>/ <i>Melting time:</i> |
|--------------------------------------------------------------|---------------------------------------|
|                                                              | 10 A<br>-<br>40 A                     |
| $1,1 \cdot I_N$                                              | $t_{min}$ 14.400 s<br>$t_{max}$       |
| $2 \cdot I_N$                                                | $t_{min}$ 0,5 s<br>$t_{max}$ 100 s    |
| $3 \cdot I_N$                                                | $t_{min}$ 0,1 s<br>$t_{max}$ 15 s     |
| $5 \cdot I_N$                                                | $t_{min}$<br>$t_{max}$ 1 s            |

Schraubflaschenversion z.B. / screw version e.g.: PF-RJ08E-XXA-EP

## PF-RJ08E-XXA



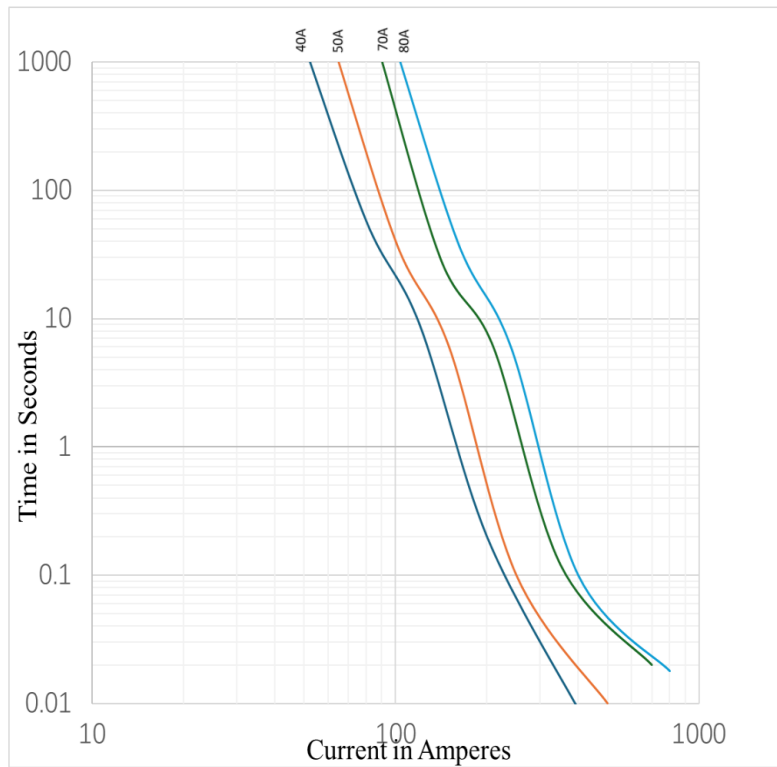
## PF-RJ08E-XXA-EP



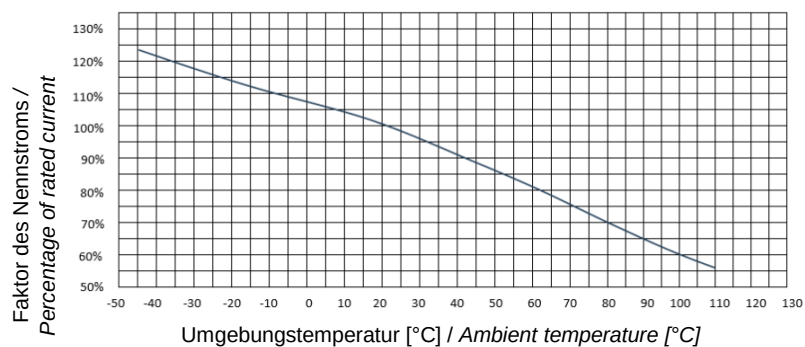
Recommended: 4,5 ± 1 Nm (M5)

## Strom-Zeit-Kennlinie / Time-current Curve

14,3 x 51 mm

**Spannung**  
Voltage **800 V****Strom**  
Current **40 A - 80 A****Ausschaltvermögen**  
Breaking capacity **50.000 A**

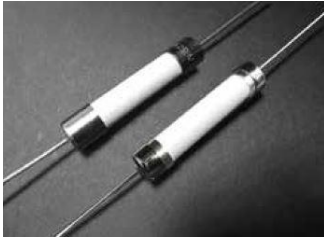
Temperatur-Derating / Temperature De-Rating Curve



6,3 x 32 mm



|                                   |              |                                |                    |                                                      |                                |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|--------------------------------|
| <b>Spannung</b><br><i>Voltage</i> | <b>500 V</b> | <b>Strom</b><br><i>Current</i> | <b>10 A - 40 A</b> | <b>Ausschaltvermögen</b><br><i>Breaking capacity</i> | <b>20.000 A -<br/>30.000 A</b> |
|-----------------------------------|--------------|--------------------------------|--------------------|------------------------------------------------------|--------------------------------|



Norm / Standard:

Werknorm / Factory standard

Aufbau / Construction:

zylindrisch / cylindrical  
Keramikkrohr / Ceramictube  
mit Löschmittel / with extinguishing agent

Betriebstemperatur / Operating temperature:

-40 °C - +125 °C  
De-Rating beachten ! / consider De-Rating !

Lagerung / Storage:

+10 °C bis +60 °C @RH ≤ 75 %, 3 Jahre /  
+10 °C until +60 °C @RH ≤ 75%, 3 years

Lötbarkeit / Solderability:

Wellenlöten / wave soldering:  
T = 260 °C ± 3°C; t < 10 s  
Manuell (LötKolben) / hand-soldering:  
T = 350 °C ± 5°C; t < 5s

Verpackungsmöglichkeiten / Packing options:

250 St. = Industrieverpackung (lose  
geschüttet) / 250 pcs. = Industrial box (bulk)

### Bemessungswerte / Ratings:

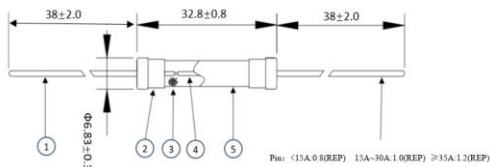
| Art. No.     | I <sub>N</sub> | U <sub>N</sub><br>[V] | U <sub>d</sub><br>[mV] | R <sub>c,typ.</sub><br>[mΩ] | I <sub>BC</sub><br>[A] | I <sup>2</sup> t <sub>pre-arc</sub><br>[A²s] |
|--------------|----------------|-----------------------|------------------------|-----------------------------|------------------------|----------------------------------------------|
| PF-RM05G-10A | 10 A           | 500                   | 230                    | 13,2                        |                        | 50                                           |
| PF-RM05G-12A | 12 A           | 500                   | 250                    | 12,9                        | 30kA                   | 45                                           |
| PF-RM05G-15A | 15 A           | 500                   | 280                    | 10,7                        | @ AC                   | 80                                           |
| PF-RM05G-16A | 16 A           | 500                   | 300                    | 10,7                        | 500 V                  | 90                                           |
| PF-RM05G-20A | 20 A           | 500                   | 320                    | 7,2                         |                        | 150                                          |
| PF-RM05G-25A | 25 A           | 500                   | 280                    | 5,1                         | 20kA                   | 220                                          |
| PF-RM05G-30A | 30 A           | 500                   | 300                    | 4,3                         | @ DC                   | 270                                          |
| PF-RM05G-35A | 35 A           | 500                   | 310                    | 3,5                         | 500V                   | 650                                          |
| PF-RM05G-40A | 40 A           | 500                   | 280                    | 2,75                        |                        | 2080                                         |

### I<sub>N</sub> - t Verhalten / I<sub>N</sub> - t characteristics:

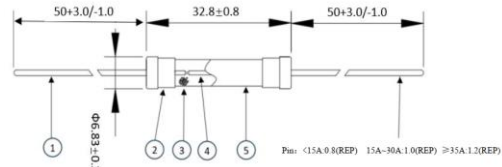
| Bemessungs-<br>strom-Faktor<br>/ Rated current<br>factor | Schmelzzeit<br>/ Melting time:                |
|----------------------------------------------------------|-----------------------------------------------|
|                                                          | 10 A<br>-<br>40 A                             |
| 1,0 · I <sub>N</sub>                                     | t <sub>min</sub><br>t <sub>max</sub><br>4h    |
| 2 · I <sub>N</sub>                                       | t <sub>min</sub><br>t <sub>max</sub><br>5 min |
| 3 · I <sub>N</sub>                                       | t <sub>min</sub><br>t <sub>max</sub><br>10 s  |
| 10 · I <sub>N</sub>                                      | t <sub>min</sub><br>t <sub>max</sub><br>1 s   |

Bestellnummer und zugehörige Zeichnung unterhalb / Ordernumber and relating drawing below

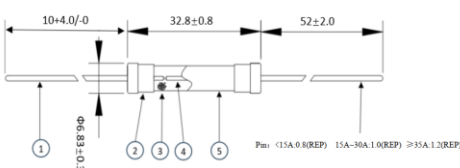
### PF-RM05G-XXA



### PF-RM05G-XXA-L



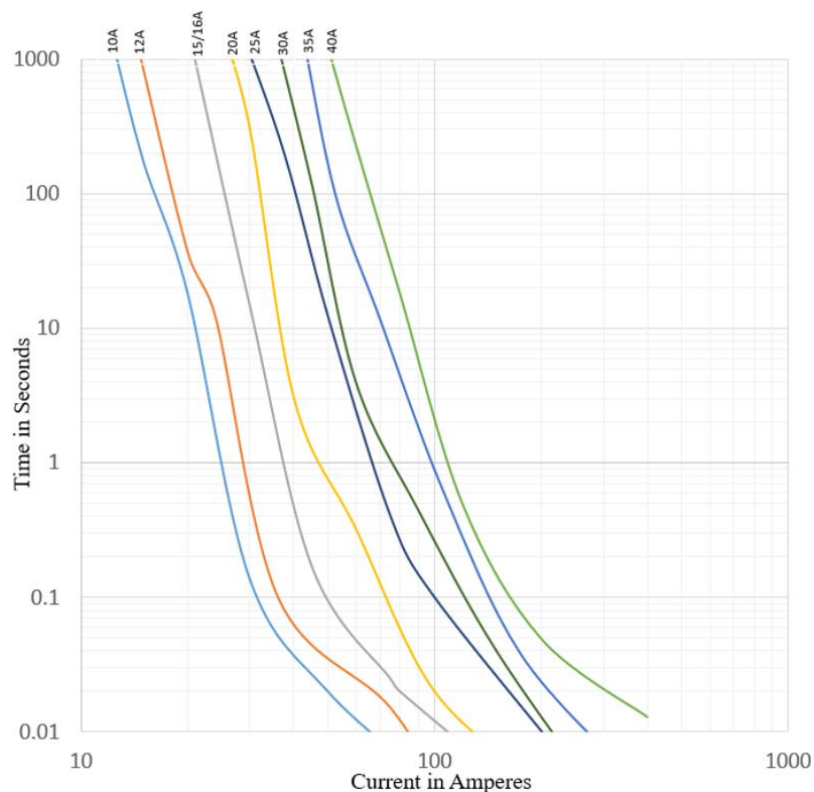
### PF-RM05G-XXA-SXL



6,3 x 32 mm

**Spannung**  
Voltage **500 V****Strom**  
Current **10 A - 40 A****Ausschaltvermögen**  
Breaking capacity **20.000 A -  
30.000 A**

Strom-Zeit-Kennlinie / Time-current Curve



Temperatur-Derating / Temperature De-Rating Curve

