

# MINIATURE FUSES



## SIBA Miniature Fuses

### Sizes:

- Cylindrical fuses: 5 x 20 · 6.3 x 32 · 5 x 25  
5 x 30 · 8 x 50 · 8 x 85  
10 x 85 · 8 x 120 · 8 x 150 mm
- Radial lead
- 2 pin fuses: KS, Ø 8.4 mm
- SMD fuses:

Voltage ratings: 65 V - 10 kV

Operation class: **F** fast acting  
**T** time lag  
**M** medium time lag  
**FF** very fast acting

Standards: IEC 60127  
DIN VDE 0820  
CEE4  
UL 248-14  
UL 512  
CSA-C22.2 No. 248.14

Approvals:



SEV, BEAB

## Features / Benefits

- ▷ Very high interrupting rating up to 70 kA
- ▷ High rated voltages up to 10 kV
- ▷ High fuse ratings available for semiconductor protection
- ▷ Fuse bases, clips and accessories are available



## MINIATURE FUSES

### Selection Guide

### Fuse Links

Size	Rated Voltage AC	Operating class	Part No.	Selector Guide Page
SMD	65/125 V	fast acting	157 000	G 4
SMD	125 V	time lag	158 000	G 6
SMD	250 V	time lag	160 000	G 7
KS	250 V	fast acting	164 000	G 8
KS	250 V	medium time lag	165 000	G 9
KS	250 V	time lag	166 000	G 10
KS	250 V	fast acting	164 500	G 11
KS	250 V	time lag	166 500	G 12
5 x 20	250 V	fast acting	179 020	G 13
5 x 20	250 V	fast acting	179 021	G 14
5 x 20	250 V	fast acting	171 100	G 15
5 x 20	250 V	medium time lag	172 000	G 16
5 x 20	250 V	medium time lag	172 100	G 16
5 x 20	250 V	medium time lag	172 200	G 17
5 x 20	250 V	time lag	179 120	G 18
5 x 20	250 V	time lag	173 100	G 19
5 x 20	250 V	time lag	179 200	G 20
5 x 20	250 V	time lag	179 150	G 21
5 x 20	250 V	time lag	179 500	G 22
5 x 20	250 V	very fast acting	70 001 40	G 23
6.3 x 32	250 V	fast acting	189 000	G 24
6.3 x 32	440/500 V	fast acting	189 020	G 25
6.3 x 32	250 V	time lag	189 100	G 27
6.3 x 32	250/440/500 V	time lag	189 140	G 28
6.3 x 32	125/250 V	time lag	189 500	G 30
6.3 x 32	500/700 V	very fast acting	70 125 40	G 31
5 x 25	250 V	fast acting	171 526	G 33
5 x 25	250 V	medium time lag	172 526	G 34
5 x 25	250 V	medium time lag	70 016 07/70 017 07	G 35
5 x 20	250 V	medium time lag	70 014 07/70 012 05	G 36
5 x 25	450 V	fast acting	70 089 13	G 37
5 x 25	250 V	fast acting	171 525	G 38
5 x 25	250 V	medium time lag	172 525	G 39
5 x 30	500 V	fast acting	171 530	G 40
5 x 30	500 V	medium time lag	172 530	G 41
8 x 50	1.2 kV		184 000	G 42
8 x 85	3 kV		185 000	G 43
10 x 85	3 kV		70 115 09	G 44
8 x 120	6 kV		186 000	G 45
8 x 150	10 kv		187 000	G 46



## MINIATURE FUSES

### Selection Guide

### Fuse holder

Size	Rated Voltage AC	Rated current	Part No.	Selector Guide Page
KS	250 V	6.3 A	166 602	G 47
5 x 20	250 V	6.3 A	199 010	G 49
5 x 20	250 V	6.3 A	199 020	G 49
5 x 20	250 V	6.3 A	199 018	G 49
5 x 20	250 V	6.3 A	199 060	G 50
5 x 20	250 V	6.3 A	199 015	G 50
6.3 x 32	250 V	10 A	199 022	G 51
6.3 x 32	250 V	25 A	199 037	G 51
5 x 20	250 V	6.3 A	191 100	G 52
5 x 20	250 V	6.3 A	197 100	G 52
5 x 20	250 V	6.3 A	199 040	G 52
5 x 20	250 V	6.3 A	199 030	G 52
5 x 20	250 V	6.3 A	199 035	G 52
5 x 20	250 V	6.3 A	199 045	G 53
5 x 20	250 V	6.3 A	199 050	G 53
5 x 20	250 V	6.3 A	199 055	G 53
5 x 20	250 V	6.3 A	199 070	G 53
5 x 20	250 V	6.3 A	199 090	G 53
5 x 20	42 V	6.3 A	199 081	G 54
6.3 x 32	250 V	15 A	199 043	G 54
6.3 x 32	250 V	20 A	199 052	G 54

### Selection Guide

### Fuse clips

Size	Rated Voltage AC	Rated current	Part No.	Selector Guide Page
Ø 5	500 V	6.3 A	199 073	G 47
Ø 5	500 V	6.3 A	199 207	G 47
Ø 5	500 V	6.3 A	199 429	G 47
Ø 6.3	500 V	6.3 A	199 487	G 47
Ø 6.3	500 V	6.3 A	199 488	G 47

### Selection Guide

### Push-on caps

Size	Rated current	Part No.	Selector Guide Page
Ø 5	6.3 A	204 000	G 48
Ø 6.3	6.3 A	204 100	G 48
Example of fuselink including Push-on caps		(XXX XXX) AK	G 48


**SMD FUSES**
**F**

**SMD**      Rated voltage **125 V**      **fast acting**      Standard **UL 248-14 · CSA C22.2 No. 248.14**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Cold resistance mΩ	cURus	Weight (kg/100)	Pack
62 mA	157 000	600	0.00019	50 A	5,500	✓	0.015	100
80 mA	157 000	550	0.00033	50 A	4,050	✓	0.015	100
100 mA	157 000	350	0.0014	50 A	2,000	✓	0.015	100
125 mA	157 000	240	0.0028	50 A	1,500	✓	0.015	100
160 mA	157 000	350	0.0031	50 A	1,400	✓	0.015	100
200 mA	157 000	250	0.0066	50 A	800	✓	0.015	100
250 mA	157 000	230	0.011	50 A	600	✓	0.015	100
315 mA	157 000	210	0.023	50 A	420	✓	0.015	100
375 mA	157 000	180	0.043	50 A	300	✓	0.015	100
400 mA	157 000	180	0.048	50 A	290	✓	0.015	100
500 mA	157 000	180	0.073	50 A	230	✓	0.015	100
630 mA	157 000	180	0.12	50 A	190	✓	0.015	100
750 mA	157 000	170	0.18	50 A	160	✓	0.015	100
800 mA	157 000	160	0.26	50 A	130	✓	0.015	100
1 A	157 000	150	0.45	50 A	100	✓	0.015	100
1.25 A	157 000	150	0.68	50 A	78	✓	0.015	100
1.5 A	157 000	150	0.85	50 A	63	✓	0.015	100
1.6 A	157 000	140	1.05	50 A	58	✓	0.015	100
2 A	157 000	100	0.57	50 A	37	✓	0.015	100
2.5 A	157 000	100	1.1	50 A	28	✓	0.015	100
3 A	157 000	100	1.5	50 A	23	✓	0.015	100
3.15 A	157 000	100	1.9	50 A	21	✓	0.015	100
3.5 A	157 000	100	2.5	50 A	19	✓	0.015	100
4 A	157 000	100	3.3	50 A	16	✓	0.015	100
5 A	157 000	90	6.2	50 A	12.5	✓	0.015	100
6.3 A	157 000	90	9.1	50 A	10	✓	0.015	100
7 A	157 000	90	11	50 A	8.6	✓	0.015	100

1000 pcs. on tape Part No. 157 000 .... GT

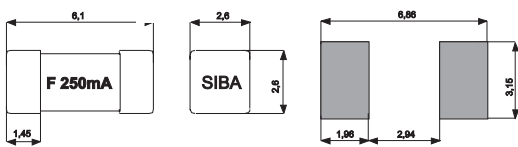
**SMD**      Rated voltage **65 V**      **fast acting**      Standard **UL 248-14 · CSA C22.2 No. 248.14**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Cold resistance mΩ	cURus	Weight (kg/100)	Pack
10 A	157 000	90	27	50 A	5.9	✓	0.015	100
12 A	157 000	90	45	50 A	4.9	✓	0.015	100
15 A	157 000	90	81	50 A	3.8	✓	0.015	100

1000 pcs. on tape Part No. 157 000 .... GT

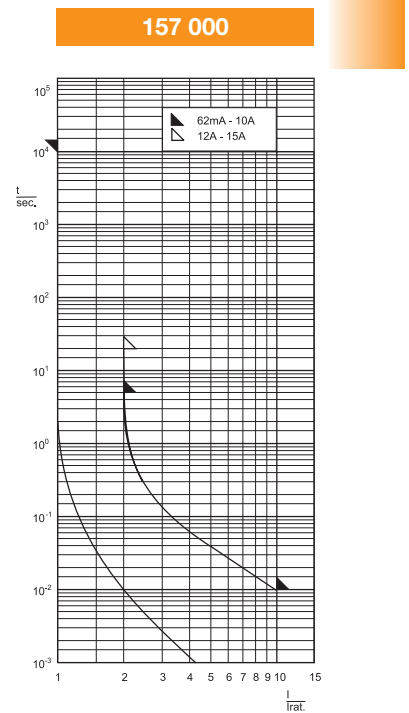


**SMD FUSES** **F**



**Pre-arcing time limits**

Rated current	$1.0 I_n$	$2.0 I_n$	$2.75 I_n$	$4 I_n$	$10 I_n$
62 mA	> 4 h	< 5 s	-	-	< 10 ms
10 A		< 20 s	-	-	< 10 ms
12 A					
15 A					





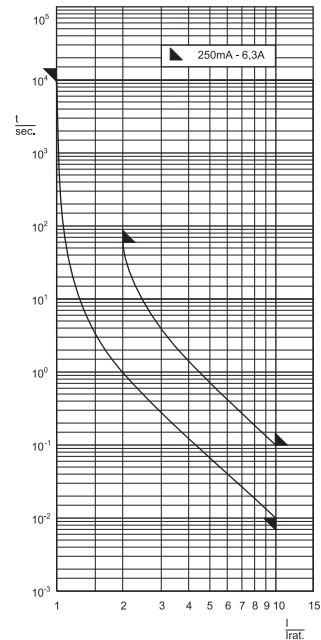
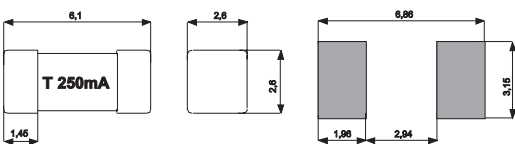
**SMD FUSES**

**T**

**SMD**      **Rated voltage**      **Standard**  
**125 V**      **time lag**      **UL 248-14 · CSA C22.2 No. 248.14**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Cold resistance mΩ	cURus	Weight (kg/100)	Pack
250 mA	158 000	280	0.08	50 A	900	✓	0.015	100
315 mA	158 000	260	0.16	50 A	700	✓	0.015	100
375 mA	158 000	230	0.30	50 A	500	✓	0.015	100
400 mA	158 000	220	0.32	50 A	450	✓	0.015	100
500 mA	158 000	200	0.7	50 A	300	✓	0.015	100
630 mA	158 000	200	0.8	50 A	200	✓	0.015	100
750 mA	158 000	190	1.2	50 A	170	✓	0.015	100
800 mA	158 000	170	1.4	50 A	140	✓	0.015	100
1 A	158 000	150	2.5	50 A	120	✓	0.015	100
1.25 A	158 000	150	4.0	50 A	90	✓	0.015	100
1.5 A	158 000	130	4.5	50 A	60	✓	0.015	100
1.6 A	158 000	130	5	50 A	55	✓	0.015	100
2 A	158 000	120	8	50 A	45	✓	0.015	100
2.5 A	158 000	120	15	50 A	30	✓	0.015	100
3 A	158 000	110	22	50 A	23	✓	0.015	100
3.15 A	158 000	100	23	50 A	20	✓	0.015	100
3.5 A	158 000	100	30	50 A	18	✓	0.015	100
4 A	158 000	100	40	50 A	15	✓	0.015	100
5 A	158 000	90	60	50 A	11	✓	0.015	100
6.3 A	158 000	80	130	50 A	8	✓	0.015	100

1000 pcs. on tape Part No. 158 000 .... GT



**Pre-arcing time limits**

Rated current	1.0 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
250 mA ▼ 6.3 A	> 4 h	< 60 s	-	-	10 ms ▼ 100 ms

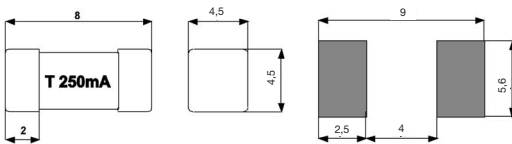


**SMD FUSES** **T**

**SMD**      **Rated voltage 250 V**      **time lag**      **Standard DIN VDE 0820-3/4 · IEC 60127-3/4**

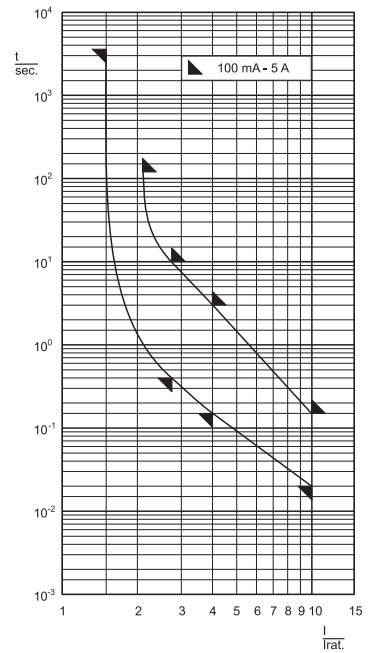
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	cURus	Weight (kg/100)	Pack
100 mA	160 000	350	0.06	100 A	✓	0.2	100
125 mA	160 000	300	0.12	100 A	✓	0.2	100
160 mA	160 000	280	0.21	100 A	✓	0.2	100
200 mA	160 000	260	0.32	100 A	✓	0.2	100
250 mA	160 000	240	0.5	100 A	✓	0.2	100
315 mA	160 000	220	0.8	100 A	✓	0.2	100
400 mA	160 000	200	1.1	100 A	✓	0.2	100
500 mA	160 000	190	1.8	100 A	✓	0.2	100
630 mA	160 000	180	3.2	100 A	✓	0.2	100
800 mA	160 000	160	5.2	100 A	✓	0.2	100
1 A	160 000	140	6.8	100 A	✓	0.2	100
1.25 A	160 000	130	12	100 A	✓	0.2	100
1.6 A	160 000	120	22	100 A	✓	0.2	100
2 A	160 000	100	30	100 A	✓	0.2	100
2.5 A	160 000	100	46	100 A	✓	0.2	100
3.15 A	160 000	100	80	100 A	✓	0.2	100
4 A	160 000	100	130	100 A	✓	0.2	100
5 A	160 000	100	130	100 A	✓	0.2	100

1000 pcs. on tape Part No. 160 000 .... GT



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
100 mA	> 1 h	< 2 min.	400 ms	150 ms	20 ms
5 A			10 s	3 s	150 ms





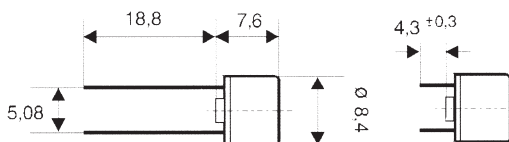
**SUB MINIATURE FUSES**

**F**

**KS**      Rated voltage **250 V**      fast acting      Standard **DIN VDE 0820-3/3 · IEC 60127-3/3**

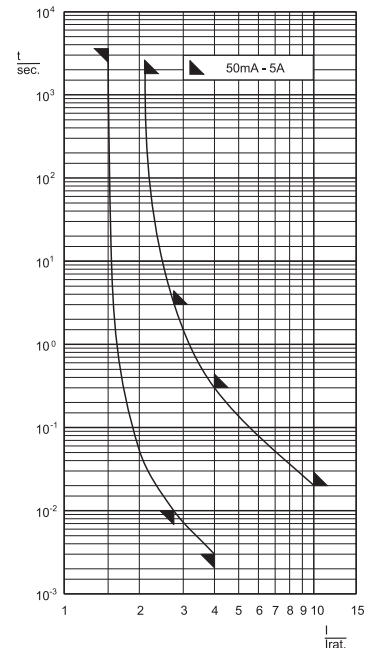
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation mW	SEMKO	Weight (kg/100)	Pack
50 mA	164 000	820	0.0003	35 A	95	✓	0.1	100
63 mA	164 000	750	0.0007	35 A	110	✓	0.1	100
80 mA	164 000	630	0.0015	35 A	120	✓	0.1	100
100 mA	164 000	500	0.0035	35 A	155	✓	0.1	100
125 mA	164 000	500	0.006	35 A	175	✓	0.1	100
160 mA	164 000	460	0.011	35 A	210	✓	0.1	100
200 mA	164 000	150	0.018	35 A	80	✓	0.1	100
250 mA	164 000	140	0.035	35 A	90	✓	0.1	100
315 mA	164 000	130	0.05	35 A	120	✓	0.1	100
400 mA	164 000	120	0.10	35 A	140	✓	0.1	100
500 mA	164 000	110	0.18	35 A	160	✓	0.1	100
630 mA	164 000	100	0.33	35 A	180	✓	0.1	100
800 mA	164 000	90	0.14	35 A	200	✓	0.1	100
1 A	164 000	80	0.24	35 A	220	✓	0.1	100
1.25 A	164 000	75	0.35	35 A	260	✓	0.1	100
1.6 A	164 000	70	0.6	35 A	280	✓	0.1	100
2 A	164 000	60	1.2	35 A	340	✓	0.1	100
2.5 A	164 000	60	2.0	35 A	420	✓	0.1	100
3.15 A	164 000	60	3.5	35 A	580	✓	0.1	100
4 A	164 000	60	6.2	40 A	700	✓	0.1	100
5 A	164 000	60	13	50 A	900	✓	0.1	100

short pins (4.3 mm) Part No. 164 050  
1000 pcs. on tape Part No. 164 000 .... GT



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 1 h	< 30 min.	10 ms	3 ms	< 20 ms
5 A			3 s	300 ms	





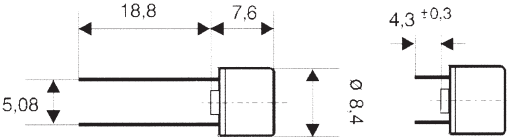


**SUB MINIATURE FUSES** **M**

**KS**      Rated voltage **250 V**      medium time lag      Standard **IEC 60127-3**

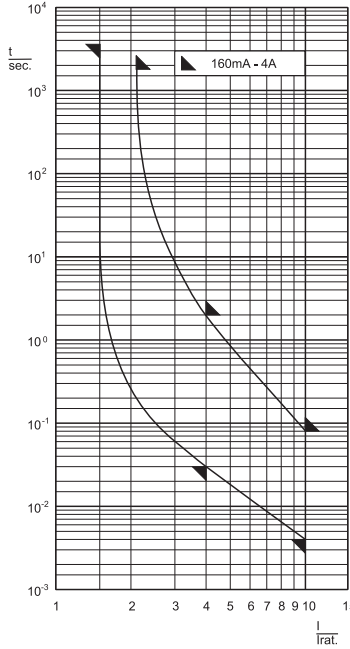
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation mW	Weight (kg/100)	Pack
160 mA	165 000	325	0.075	35 A	140	0.1	100
200 mA	165 000	120	0.020	35 A	80	0.1	100
250 mA	165 000	120	0.036	35 A	90	0.1	100
315 mA	165 000	120	0.055	35 A	120	0.1	100
400 mA	165 000	110	0.11	35 A	140	0.1	100
500 mA	165 000	100	0.20	35 A	160	0.1	100
630 mA	165 000	90	0.33	35 A	180	0.1	100
800 mA	165 000	80	0.58	35 A	140	0.1	100
1 A	165 000	70	0.9	35 A	160	0.1	100
1.25 A	165 000	65	1.4	35 A	190	0.1	100
1.6 A	165 000	65	2.5	35 A	200	0.1	100
2 A	165 000	60	3.1	35 A	350	0.1	100
2.5 A	165 000	55	5.2	35 A	380	0.1	100
3.15 A	165 000	55	9.9	35 A	510	0.1	100
4 A	165 000	50	16	40 A	550	0.1	100

short pins (4.3 mm) Part No. 165 050  
1000 pcs. on tape Part No. 165 000 .... GT



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
160 mA ▼ 4 A	> 1 h	< 30 min.	-	30 ms ▼ 2 s	4 ms ▼ 80 ms





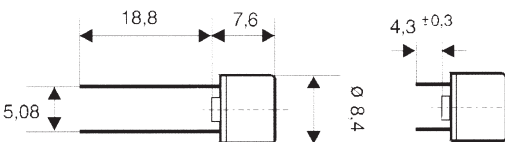
**SUB MINIATURE FUSES**

**F**

**KS**      Rated voltage **250 V**      fast acting      Standard **DIN VDE 0820-3/3 · IEC 60127-3/3**

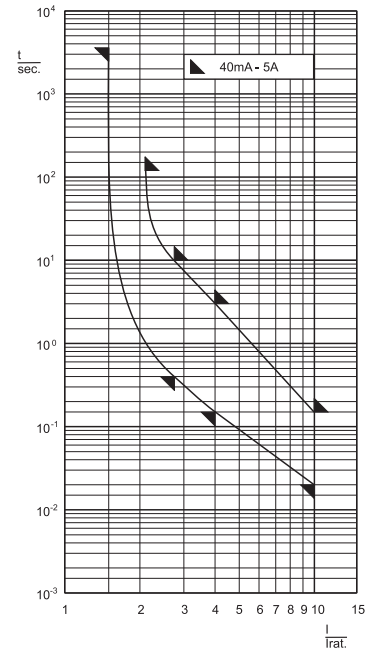
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation mW	SEMKO VDE cURus	Weight (kg/100)	Pack
40 mA	166 000	530	0.015	35 A	60	✓✓✓	0.1	100
50 mA	166 000	490	0.017	35 A	70	✓✓✓	0.1	100
63 mA	166 000	390	0.02	35 A	80	✓✓✓	0.1	100
80 mA	166 000	300	0.035	35 A	90	✓✓✓	0.1	100
100 mA	166 000	260	0.06	35 A	100	✓✓✓	0.1	100
125 mA	166 000	180	0.12	35 A	110	✓✓✓	0.1	100
160 mA	166 000	170	0.21	35 A	130	✓✓✓	0.1	100
200 mA	166 000	160	0.32	35 A	140	✓✓✓	0.1	100
250 mA	166 000	150	0.5	35 A	150	✓✓✓	0.1	100
315 mA	166 000	140	0.8	35 A	160	✓✓✓	0.1	100
400 mA	166 000	130	1.1	35 A	170	✓✓✓	0.1	100
500 mA	166 000	120	1.8	35 A	180	✓✓✓	0.1	100
630 mA	166 000	110	3.2	35 A	200	✓✓✓	0.1	100
800 mA	166 000	100	5.2	35 A	220	✓✓✓	0.1	100
1 A	166 000	85	8	35 A	240	✓✓✓	0.1	100
1.25 A	166 000	75	12	35 A	290	✓✓✓	0.1	100
1.6 A	166 000	70	22	35 A	350	✓✓✓	0.1	100
2 A	166 000	70	30	35 A	480	✓✓✓	0.1	100
2.5 A	166 000	70	46	35 A	520	✓✓✓	0.1	100
3.15 A	166 000	70	80	35 A	600	✓✓✓	0.1	100
4 A	166 000	70	130	40 A	800	✓✓✓	0.1	100
5 A	166 000	70	130	50 A	1000	✓✓✓	0.1	100

short pins (4.3 mm) Part No. 166 050  
1000 pcs. on tape Part No. 166 000 .... GT



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
40 mA	> 1 h	< 2 min.	400 ms	150 ms	20 ms
5 A			10 s	3 s	150 ms





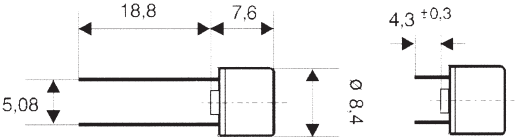
**SUB MINIATURE FUSES**

**F**

**KS**      Rated voltage **250 V**      fast acting      Standard **UL 248-14 · CSA C22.2 No. 248.14**

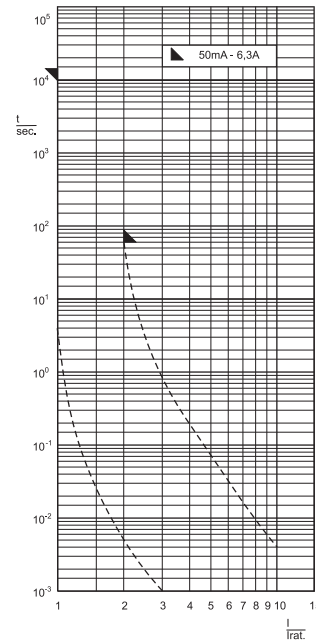
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation mW	UL		Weight (kg/100)	Pack
						5	10		
50 mA	164 500	1500	0.0002	50 A	75	✓	✓	0.1	100
63 mA	164 500	1350	0.0003	50 A	85	✓	✓	0.1	100
80 mA	164 500	1200	0.0007	50 A	95	✓	✓	0.1	100
100 mA	164 500	1100	0.0015	50 A	110	✓	✓	0.1	100
125 mA	164 500	1000	0.0030	50 A	125	✓	✓	0.1	100
160 mA	164 500	950	0.0075	50 A	155	✓	✓	0.1	100
200 mA	164 500	850	0.013	50 A	170	✓	✓	0.1	100
250 mA	164 500	240	0.020	50 A	60	✓	✓	0.1	100
315 mA	164 500	230	0.030	50 A	75	✓	✓	0.1	100
400 mA	164 500	220	0.055	50 A	90	✓	✓	0.1	100
500 mA	164 500	210	0.10	50 A	105	✓	✓	0.1	100
630 mA	164 500	200	0.19	50 A	130	✓	✓	0.1	100
800 mA	164 500	190	0.36	50 A	155	✓	✓	0.1	100
1 A	164 500	180	0.14	50 A	180	✓	✓	0.1	100
1.25 A	164 500	170	0.24	50 A	215	✓	✓	0.1	100
1.6 A	164 500	160	0.34	50 A	260	✓	✓	0.1	100
2 A	164 500	150	0.56	50 A	300	✓	✓	0.1	100
2.5 A	164 500	140	1.1	50 A	350	✓	✓	0.1	100
3.15 A	164 500	130	2.0	50 A	410	✓	✓	0.1	100
4 A	164 500	120	3.2	50 A	480	✓	✓	0.1	100
5 A	164 500	110	6.2	50 A	550	✓	✓	0.1	100
6.3 A	164 500	100	14	50 A	630	✓	✓	0.1	100

short pins (4.3 mm) Part No. 164 550  
1000 pcs. on tape Part No. 164 500 .... GT



**Pre-arcing time limits**

Rated current	1.0 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA ▼ 6.3 A	> 4 h	< 60 s	-	-	-





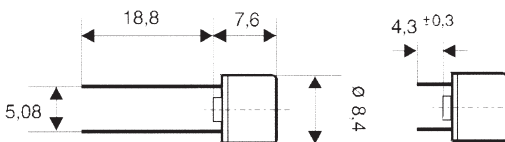
**SUB MINIATURE FUSES**

**T**

**KS**      Rated voltage **250 V**      time lag      Standard **UL 248-14 · CSA C22.2 No. 248.14**

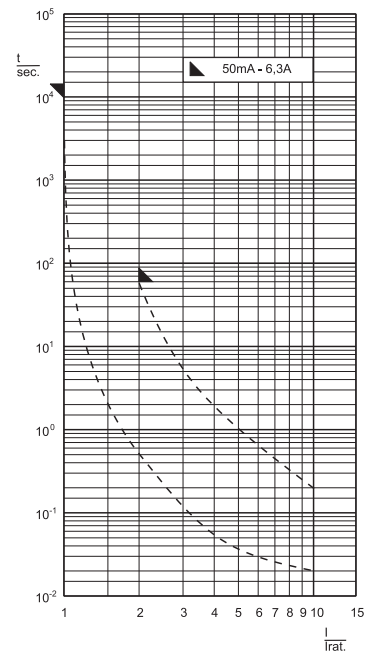
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation mW	UL	CSA	Weight (kg/100)	Pack
50 mA	166 500	800	0.015	50 A	50	✓	✓	0.1	100
63 mA	166 500	700	0.017	50 A	50	✓	✓	0.1	100
80 mA	166 500	600	0.020	50 A	50	✓	✓	0.1	100
100 mA	166 500	550	0.025	50 A	55	✓	✓	0.1	100
125 mA	166 500	500	0.03	50 A	65	✓	✓	0.1	100
160 mA	166 500	450	0.07	50 A	75	✓	✓	0.1	100
200 mA	166 500	400	0.14	50 A	80	✓	✓	0.1	100
250 mA	166 500	370	0.25	50 A	95	✓	✓	0.1	100
315 mA	166 500	340	0.42	50 A	110	✓	✓	0.1	100
400 mA	166 500	310	0.53	50 A	130	✓	✓	0.1	100
500 mA	166 500	270	1.0	50 A	140	✓	✓	0.1	100
630 mA	166 500	230	1.5	50 A	150	✓	✓	0.1	100
800 mA	166 500	220	3.1	50 A	180	✓	✓	0.1	100
1 A	166 500	200	4.8	50 A	200	✓	✓	0.1	100
1.25 A	166 500	120	5.7	50 A	150	✓	✓	0.1	100
1.6 A	166 500	120	11	50 A	190	✓	✓	0.1	100
2 A	166 500	115	18	50 A	230	✓	✓	0.1	100
2.5 A	166 500	110	25	50 A	280	✓	✓	0.1	100
3.15 A	166 500	100	40	50 A	320	✓	✓	0.1	100
4 A	166 500	95	72	50 A	380	✓	✓	0.1	100
5 A	166 500	90	130	50 A	450	✓	✓	0.1	100
6.3 A	166 500	90	130	50 A	570	✓	✓	0.1	100

short pins (4.3 mm) Part No. 166 550  
1000 pcs. on tape Part No. 166 500 .... GT



**Pre-arcing time limits**

Rated current	1.0 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 4 h	< 60 s	-	-	-
6.3 A					



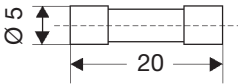


**MINIATURE FUSES**  
GLASS TUBE **F**

**5 x 20**      Rated voltage **125 V**      fast acting      Standard **UL 248-14 · CSA C22.2 No. 248.14**

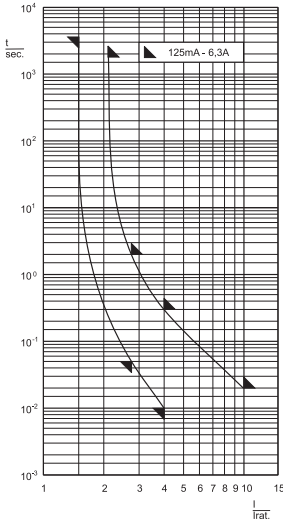
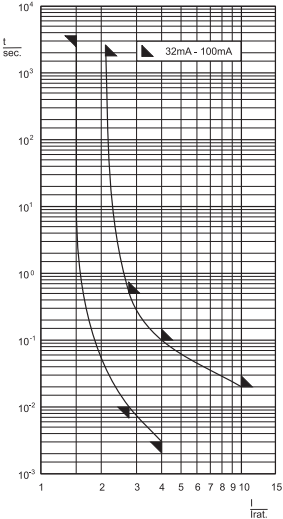
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	SEMKO	VDE	SEV	BEAB	cURus	Weight (kg/100)	Pack
32 mA	179 020	10000	0.0001	35 A	0.8	✓	✓	✓	✓	✓	0.1	100
40 mA	179 020	8000	0.0002	35 A	0.8	✓	✓	✓	✓	✓	0.1	100
50 mA	179 020	3500	0.0004	35 A	0.4	✓	✓	✓	✓	✓	0.1	100
63 mA	179 020	3500	0.0007	35 A	0.5	✓	✓	✓	✓	✓	0.1	100
80 mA	179 020	2500	0.0017	35 A	0.5	✓	✓	✓	✓	✓	0.1	100
100 mA	179 020	2200	0.0022	35 A	0.6	✓	✓	✓	✓	✓	0.1	100
125 mA	179 020	2000	0.0036	35 A	0.6	✓	✓	✓	✓	✓	0.1	100
160 mA	179 020	1900	0.0085	35 A	0.7	✓	✓	✓	✓	✓	0.1	100
200 mA	179 020	1400	0.018	35 A	0.7	✓	✓	✓	✓	✓	0.1	100
250 mA	179 020	1300	0.047	35 A	0.8	✓	✓	✓	✓	✓	0.1	100
315 mA	179 020	1200	0.067	35 A	0.9	✓	✓	✓	✓	✓	0.1	100
400 mA	179 020	1100	0.14	35 A	1.0	✓	✓	✓	✓	✓	0.1	100
500 mA	179 020	160	0.16	35 A	0.3	✓	✓	✓	✓	✓	0.1	100
630 mA	179 020	140	0.39	35 A	0.3	✓	✓	✓	✓	✓	0.1	100
800 mA	179 020	130	0.8	35 A	0.4	✓	✓	✓	✓	✓	0.1	100
1 A	179 020	130	1.5	35 A	0.5	✓	✓	✓	✓	✓	0.1	100
1.25 A	179 020	120	2.0	35 A	0.6	✓	✓	✓	✓	✓	0.1	100
1.6 A	179 020	120	4.1	35 A	0.7	✓	✓	✓	✓	✓	0.1	100
2 A	179 020	120	6.2	35 A	0.9	✓	✓	✓	✓	✓	0.1	100
2.5 A	179 020	120	11	35 A	1.0	✓	✓	✓	✓	✓	0.1	100
3.15 A	179 020	120	20	35 A	1.2	✓	✓	✓	✓	✓	0.1	100
4 A	179 020	100	25	40 A	1.4	✓	✓	✓	✓	✓	0.1	100
5 A	179 020	100	42	50 A	1.7	✓	✓	✓	✓	✓	0.1	100
6.3 A	179 020	100	79	63 A	2.0	✓	✓	✓	✓	✓	0.1	100
(8) A	179 020	100	125	80 A	2.2						0.1	100
(10) A	179 020	100	220	100 A	2.4						0.1	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA			10 ms	3 ms	
100 mA			500 ms	100 ms	
125 mA	> 1 h	< 30 min.	50 ms	10 ms	< 20 ms
6.3 A			2 s	300 ms	





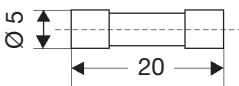
**MINIATURE FUSES**  
CERAMIC TUBE

**F**

Size **5 x 20 mm**      Rated voltage **250 V**      fast acting      Standard **DIN VDE 0820-2/1 · IEC 60127-2/1**

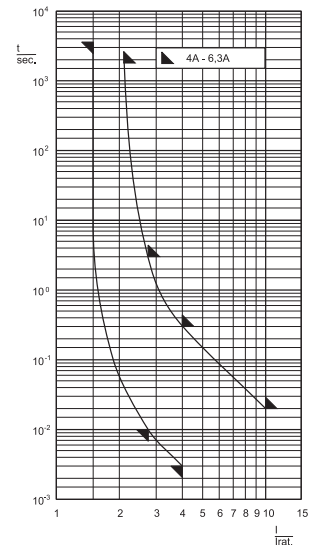
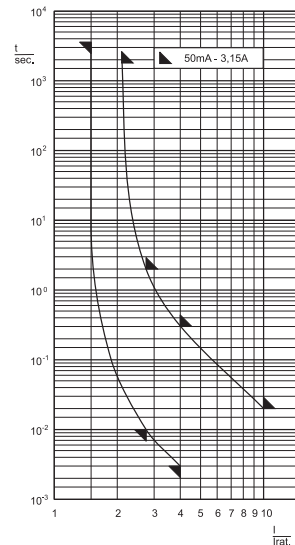
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	SEMKO	Weight (kg/100)	Pack
50 mA	179 021	4000	0.00022	1500 A	0.5		0.13	100
63 mA	179 021	3900	0.00037	1500 A	0.6		0.13	100
80 mA	179 021	3200	0.00073	1500 A	0.7		0.13	100
100 mA	179 021	2600	0.0011	1500 A	0.8		0.13	100
125 mA	179 021	2500	0.0018	1500 A	0.9		0.13	100
160 mA	179 021	1900	0.0034	1500 A	0.9		0.13	100
200 mA	179 021	1700	0.007	1500 A	1.0		0.13	100
250 mA	179 021	1300	0.013	1500 A	1.0		0.13	100
315 mA	179 021	700	0.029	1500 A	0.8		0.13	100
400 mA	179 021	650	0.055	1500 A	0.9		0.13	100
500 mA	179 021	600	0.10	1500 A	1.0	✓	0.13	100
630 mA	179 021	550	0.19	1500 A	1.1	✓	0.13	100
800 mA	179 021	500	0.16	1500 A	1.3	✓	0.13	100
1 A	179 021	450	0.28	1500 A	1.4	✓	0.13	100
1.25 A	179 021	400	0.6	1500 A	1.6	✓	0.13	100
1.6 A	179 021	350	1.0	1500 A	1.8	✓	0.13	100
2 A	179 021	320	1.8	1500 A	2.0	✓	0.13	100
2.5 A	179 021	270	3.0	1500 A	2.1	✓	0.13	100
3.15 A	179 021	220	6.2	1500 A	2.2	✓	0.13	100
4 A	179 021	180	15	1500 A	2.3	✓	0.13	100
5 A	179 021	150	31	1500 A	2.4	✓	0.13	100
6.3 A	179 021	130	52	1500 A	2.6	✓	0.13	100
(8) A	179 021	100	110	1500 A	2.8		0.13	100
(10) A	179 021	100	200	1500 A	3.0		0.13	100
(12.5) A	179 021			1500 A			0.13	100
(16) A	179 021			1500 A			0.13	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA			10 ms		
3.15 A			2 s	3 ms	
4 A	> 1 h	< 30 min.	10 ms	300 ms	< 20 ms
6.3 A			3 s		



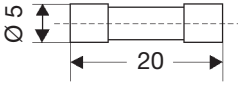


**MINIATURE FUSES**  
**GLASS TUBE WITH FILLING** **F**

Size **5 x 20 mm**      Rated voltage **250 V**      fast acting      Standard **DIN 41571 Part 1**

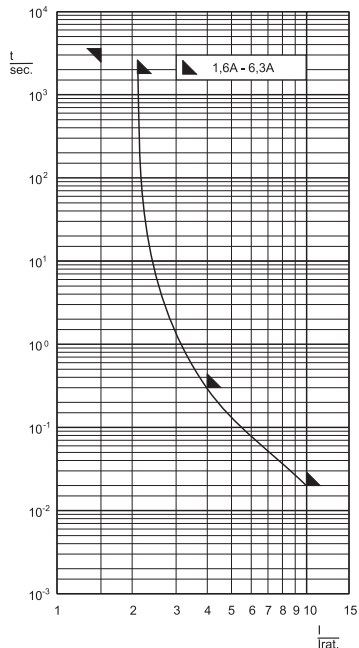
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
1.6 A	171 100	480	1.1	1000 A	1.3	0.13	100
2 A	171 100	400	2	1000 A	1.5	0.13	100
2.5 A	171 100	400	4	1000 A	1.6	0.13	100
3.15 A	171 100	240	9	1000 A	1.7	0.13	100
4 A	171 100	240	18	1000 A	1.9	0.13	100
5 A	171 100	230	32	1000 A	2.3	0.13	100
6.3 A	171 100	170	52	1000 A	2.8	0.13	100
(8) A	171 100	160	100	300 A	3.2	0.13	100
(10) A	171 100	150	200	300 A	3.4	0.13	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
1.6 A ▼ 6.3 A	> 1 h	< 30 min.	-	< 300 ms	< 20 ms





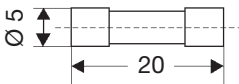
**MINIATURE FUSES**  
GLASS TUBE > 1.25 A WITH FILLING

**M**

Size **5 x 20 mm**      Rated voltage **250 V**      Standard **DIN 41571 Part 2**  
medium time lag

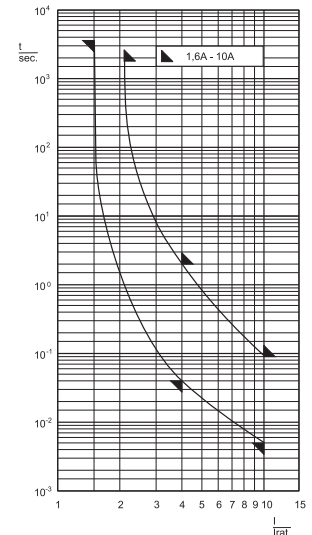
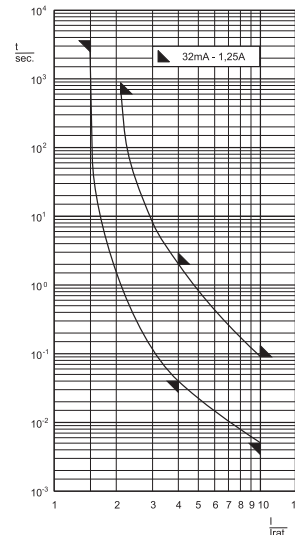
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
32 mA	172 000	640	0.0055	80 A	0.1	0.1	100
40 mA	172 000	630	0.008	80 A	0.1	0.1	100
50 mA	172 000	600	0.017	80 A	0.1	0.1	100
63 mA	172 000	560	0.025	80 A	0.1	0.1	100
80 mA	172 000	520	0.040	80 A	0.1	0.1	100
100 mA	172 000	470	0.055	80 A	0.1	0.1	100
125 mA	172 000	420	0.011	80 A	0.1	0.1	100
160 mA	172 000	370	0.036	80 A	0.1	0.1	100
200 mA	172 000	320	0.05	80 A	0.2	0.1	100
250 mA	172 000	280	0.1	80 A	0.2	0.1	100
315 mA	172 000	250	0.2	80 A	0.2	0.1	100
400 mA	172 000	230	0.4	80 A	0.2	0.1	100
500 mA	172 000	210	0.6	80 A	0.2	0.1	100
630 mA	172 000	190	0.9	80 A	0.2	0.1	100
800 mA	172 000	170	1.6	80 A	0.3	0.1	100
1 A	172 000	160	2.6	80 A	0.3	0.1	100
1.25 A	172 000	160	3.9	80 A	0.3	0.1	100
1.6 A	172 100	160	3.1	1000 A	0.8	0.12	100
2 A	172 100	160	5.2	1000 A	0.8	0.12	100
2.5 A	172 100	160	10	1000 A	0.9	0.12	100
3.15 A	172 100	160	20	1000 A	1.0	0.12	100
4 A	172 100	160	37	1000 A	1.1	0.12	100
5 A	172 100	150	72	1000 A	1.3	0.12	100
6.3 A	172 100	140	130	1000 A	1.6	0.12	100
8 A	172 100	140	230	300 A	2.0	0.12	100
10 A	172 100	120	370	300 A	2.5	0.12	100

<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 10 min.	-	40 ms	5 ms
1.25 A		< 30 min.	-	2 s	90 ms
1.6 A					
10 A					





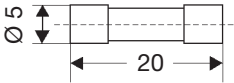


**MINIATURE FUSES**  
CERAMIC TUBE **M**

Size **5 x 20 mm**      Rated voltage **250 V**      Standard **not standardized**  
medium time lag

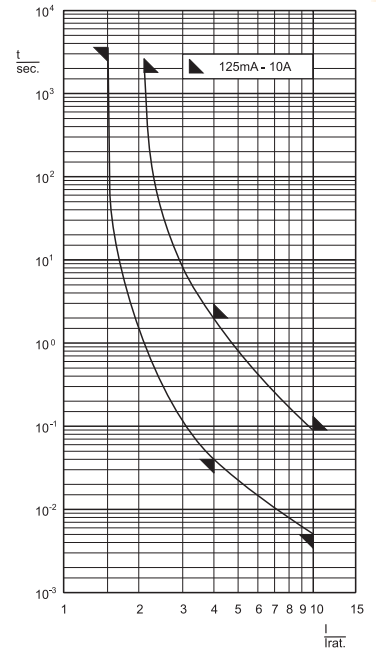
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
125 mA	172 200	2500	0.011	1500 A	0.1	0.14	100
160 mA	172 200	2000	0.036	1500 A	0.1	0.14	100
200 mA	172 200	1800	0.05	1500 A	0.2	0.14	100
250 mA	172 200	1600	0.1	1500 A	0.2	0.14	100
315 mA	172 200	1400	0.2	1500 A	0.2	0.14	100
400 mA	172 200	1200	0.4	1500 A	0.2	0.14	100
500 mA	172 200	800	0.6	1500 A	0.2	0.14	100
630 mA	172 200	650	0.6	1500 A	0.4	0.14	100
800 mA	172 200	500	1.0	1500 A	0.6	0.14	100
1 A	172 200	450	1.5	1500 A	0.8	0.14	100
1.25 A	172 200	400	3.1	1500 A	0.8	0.14	100
1.6 A	172 200	160	3.1	1500 A	0.8	0.14	100
2 A	172 200	160	5.2	1500 A	0.8	0.14	100
2.5 A	172 200	160	10	1500 A	0.9	0.14	100
3.15 A	172 200	160	20	1500 A	1.0	0.14	100
4 A	172 200	160	37	1500 A	1.1	0.14	100
5 A	172 200	150	72	1500 A	1.3	0.14	100
6.3 A	172 200	140	130	1500 A	1.6	0.14	100
8 A	172 200	140	230	1500 A	2.0	0.14	100
10 A	172 200	120	370	1500 A	2.5	0.14	100

<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
125 mA ▼ 10 A	> 1 h	< 30 min.	-	40 ms ▼ 2 s	5 ms ▼ 90 ms





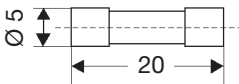
**MINIATURE FUSES**  
GLASS TUBE

**T**

Size **5 x 20 mm**      Rated voltage **250 V**      time lag      Standard **DIN VDE 0820-2/3 · IEC 60127-2/3**

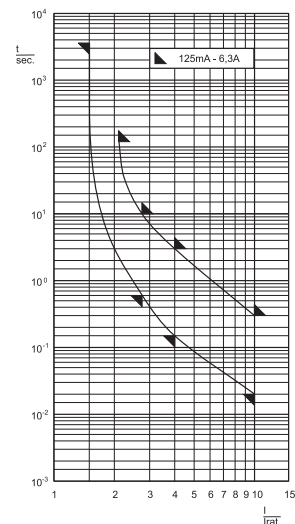
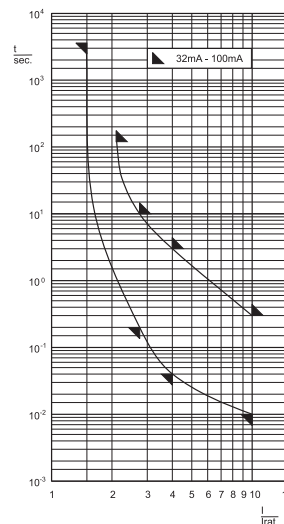
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	SEMKO	VDE	SEV	BEAB	cURus	BSI	Weight (kg/100)	Pack
32 mA	179 120	3000	0.010	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
40 mA	179 120	2000	0.020	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
50 mA	179 120	1500	0.035	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
63 mA	179 120	1000	0.05	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
80 mA	179 120	800	0.12	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
100 mA	179 120	700	0.16	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
125 mA	179 120	600	0.24	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
160 mA	179 120	600	0.4	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
200 mA	179 120	500	0.7	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
250 mA	179 120	400	1.4	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
315 mA	179 120	350	2.1	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
400 mA	179 120	120	0.6	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
500 mA	179 120	110	0.9	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
630 mA	179 120	110	1.6	35 A	0.2	✓	✓	✓	✓	✓	✓	0.1	100
800 mA	179 120	100	3.5	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
1 A	179 120	80	3.9	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
1.25 A	179 120	80	5.0	35 A	0.3	✓	✓	✓	✓	✓	✓	0.1	100
1.6 A	179 120	80	10	35 A	0.4	✓	✓	✓	✓	✓	✓	0.1	100
2 A	179 120	80	20	35 A	0.5	✓	✓	✓	✓	✓	✓	0.1	100
2.5 A	179 120	80	26	35 A	0.6	✓	✓	✓	✓	✓	✓	0.1	100
3.15 A	179 120	80	44	35 A	0.6	✓	✓	✓	✓	✓	✓	0.1	100
4 A	179 120	80	72	40 A	0.8	✓	✓	✓	✓	✓	✓	0.1	100
5 A	179 120	80	130	50 A	1.2	✓	✓	✓	✓	✓	✓	0.1	100
6.3 A	179 120	70	230	63 A	1.3	✓	✓	✓	✓	✓	✓	0.1	100
(8) A	179 120	70	240	80 A	1.8							0.1	100
(10) A	179 120	70	380	100 A	2.4							0.1	100
(12.5) A	179 120	70	650	125 A	3.0							0.1	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 2 min.	200 ms	40 ms	10 ms
100 mA			10 s	3 s	300 ms
125 mA			600 ms	150 ms	20 ms
6.3 A			10 s	3 s	300 ms





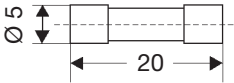
**MINIATURE FUSES**  
GLASS TUBE WITH FILLING **T**

Size **5 x 20 mm**      Rated voltage **250 V**      time lag      Standard **DIN 47571 Part 3**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
1.6 A	173 100	200 <sup>2</sup>	16	300 A	0.8	0.13	100
2 A	173 100	190 <sup>2</sup>	26	300 A	0.9	0.13	100
2.5 A	173 100	180 <sup>2</sup>	45	300 A	1.1	0.13	100
3.15 A	173 100	140	72	300 A	1.3	0.13	100
4 A	173 100	135	130	300 A	1.4	0.13	100
5 A	173 100	130	150	300 A	1.2	0.13	100
6.3 A	173 100	125	240	300 A	1.3	0.13	100
8 A <sup>1</sup>	173 100	120	390	300 A	1.6	0.13	100
10 A <sup>1</sup>	173 100	115	620	300 A	1.9	0.13	100
12.5 A <sup>1</sup>	173 100	100	1150	300 A	2.8	0.13	100
15 A <sup>1</sup>	173 100	80	1800	300 A	3.3	0.13	100
16 A <sup>1</sup>	173 100	80	1800	300 A	3.8	0.13	100

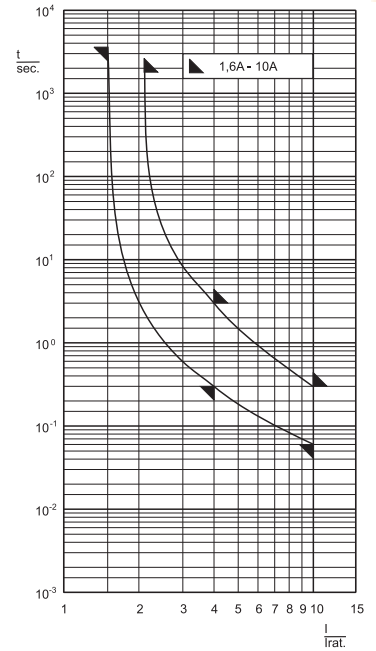
<sup>1</sup> Consideration should be given to heat dissipation.

<sup>2</sup> max according to EN 60127-2/5.



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
1.6 A ▼ 10 A	> 1 h	< 30 min.	-	300 ms ▼ 3 s	60 ms ▼ 300 ms





**MINIATURE FUSES**  
CERAMIC TUBE

**T**

Size  
**5 x 20 mm**

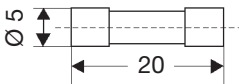
Rated voltage  
**250 V**

time lag

Standard  
**DIN VDE 0820-2/5 · IEC 60127-2/5**

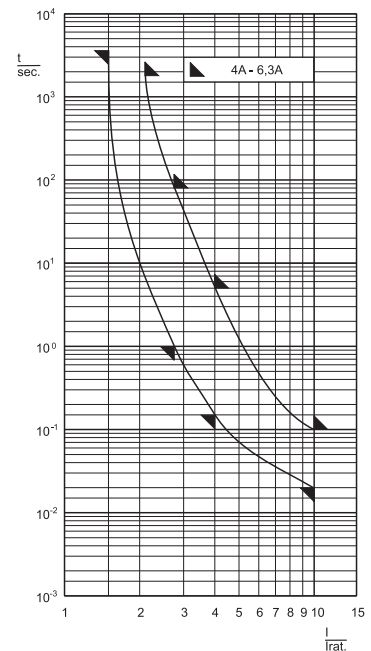
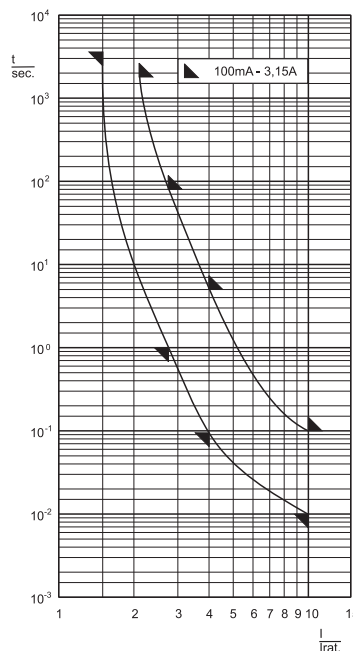
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	SEMKO	VDE	BEAB	cURus	UR	BSI	Weight (kg/100)	Pack
100 mA	179 200	2300	0.020	1500 A	0.6							0.13	100
125 mA	179 200	2200	0.045	1500 A	0.8							0.13	100
160 mA	179 200	2100	0.08	1500 A	0.9							0.13	100
200 mA	179 200	1800	0.14	1500 A	0.9							0.13	100
250 mA	179 200	1500	0.25	1500 A	1.0							0.13	100
315 mA	179 200	1000	0.45	1500 A	1.0							0.13	100
400 mA	179 200	850	0.8	1500 A	1.0							0.13	100
500 mA	179 200	700	1.6	1500 A	1.0							0.13	100
630 mA	179 200	300	0.6	1500 A	0.4							0.13	100
800 mA	179 200	300	1.0	1500 A	0.6							0.13	100
1 A	179 200	350	1.5	1500 A	0.8	✓	✓	✓	✓	✓		0.13	100
1.25 A	179 200	250	3.1	1500 A	0.8	✓	✓	✓	✓	✓		0.13	100
1.6 A	179 200	150	3.1	1500 A	0.8	✓	✓	✓	✓	✓		0.13	100
2 A	179 200	130	5.2	1500 A	0.8	✓	✓	✓	✓	✓		0.13	100
2.5 A	179 200	110	10	1500 A	0.9	✓	✓	✓	✓	✓		0.13	100
3.15 A	179 200	100	20	1500 A	1.0	✓	✓	✓	✓	✓		0.13	100
4 A	179 200	90	37	1500 A	1.1	✓	✓	✓	✓	✓		0.13	100
5 A	179 200	90	72	1500 A	1.3	✓	✓	✓	✓	✓		0.13	100
6.3 A	179 200	90	130	1500 A	1.6	✓	✓	✓	✓	✓		0.13	100
8 A	179 200	90	230	1500 A	2.0					✓		0.13	100
10 A	179 200	90	370	1500 A	2.5					✓		0.13	100

<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
100 mA	> 1 h	< 30 min.	1 s 80 s	95 ms	10 ms
3.15 A				5 s	100 ms
4 A				150 ms	20 ms
6.3 A				5 s	100 ms

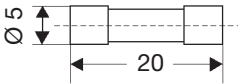




**MINIATURE FUSES**  
GLASS TUBE **T**

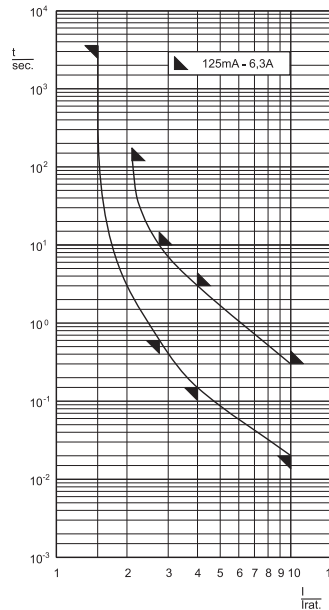
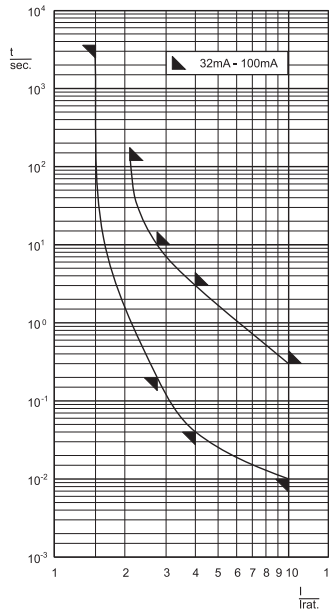
Size **5 x 20 mm**      Rated voltage **250 V**      time lag      Standard **DIN VDE 0820-2/6 · IEC 60127-2/6**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	SEMLO VDE	Weight (kg/100)	Pack
32 mA	179 150	3000	0.010	150 A	0.2		0.1	100
40 mA	179 150	2000	0.020	150 A	0.2		0.1	100
50 mA	179 150	1500	0.035	150 A	0.2		0.1	100
63 mA	179 150	1000	0.05	150 A	0.2		0.1	100
80 mA	179 150	800	0.12	150 A	0.2		0.1	100
100 mA	179 150	700	0.16	150 A	0.3		0.1	100
125 mA	179 150	600	0.24	150 A	0.3		0.1	100
160 mA	179 150	600	0.4	150 A	0.3		0.1	100
200 mA	179 150	500	0.7	150 A	0.3		0.1	100
250 mA	179 150	400	1.4	150 A	0.3		0.1	100
315 mA	179 150	350	2.1	150 A	0.3		0.1	100
400 mA	179 150	120	0.6	150 A	0.2		0.1	100
500 mA	179 150	110	0.9	150 A	0.2	✓ ✓	0.1	100
630 mA	179 150	110	1.6	150 A	0.2	✓ ✓	0.1	100
800 mA	179 150	100	3.5	150 A	0.3	✓ ✓	0.1	100
1 A	179 150	80	3.9	150 A	0.3	✓ ✓	0.1	100
1.25 A	179 150	80	5.0	150 A	0.3	✓ ✓	0.1	100
1.6 A	179 150	80	10	150 A	0.4	✓ ✓	0.1	100
2 A	179 150	80	20	150 A	0.5	✓ ✓	0.1	100
2.5 A	179 150	80	26	150 A	0.6	✓ ✓	0.1	100
3.15 A	179 150	80	44	150 A	0.6	✓ ✓	0.1	100
4 A	179 150	80	72	150 A	0.8	✓ ✓	0.1	100
5 A	179 150	80	130	150 A	1.2		0.1	100
6.3 A	179 150	70	230	150 A	1.3		0.1	100



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 2 min.	200 ms	40 ms	10 ms
100 mA			10 s	3 s	300 ms
125 mA			600 ms	150 ms	20 ms
160 mA			10 s	3 s	300 ms
6.3 A					





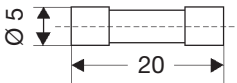
**MINIATURE FUSES**  
GLASS TUBE

**T**

Size **5 x 20 mm**      Rated voltage **250 V**      time lag      Standard **UL 248-14 · CSA C22.2 No. 248.14**

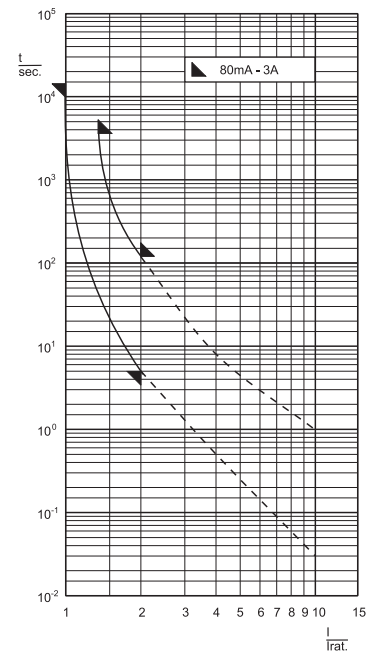
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	UL	UL	Weight (kg/100)	Pack
80 mA	179 500	2800	0.024	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
100 mA	179 500	2400	0.053	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
125 mA	179 500	2100	0.08	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
150 mA	179 500	1800	0.13	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
200 mA	179 500	1300	0.24	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
250 mA	179 500	1100	0.42	35 A <sup>1</sup>	0.3	✓	✓	0.1	100
300 mA	179 500	1050	0.8	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
375 mA	179 500	900	1.5	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
400 mA	179 500	850	1.6	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
500 mA	179 500	650	2.0	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
600 mA	179 500	550	3.1	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
700 mA	179 500	500	4.5	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
750 mA	179 500	450	5.5	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
800 mA	179 500	400	6.4	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
1 A	179 500	350	12	35 A <sup>1</sup>	0.4	✓	✓	0.1	100
1.25 A	179 500	300	19	100 A <sup>1</sup>	0.4	✓	✓	0.1	100
1.5 A	179 500	280	25	100 A <sup>1</sup>	0.5	✓	✓	0.1	100
1.6 A	179 500	270	32	100 A <sup>1</sup>	0.5	✓	✓	0.1	100
2 A	179 500	325	55	100 A <sup>1</sup>	0.5	✓	✓	0.1	100
2.5 A	179 500	215	90	100 A <sup>1</sup>	0.6	✓	✓	0.1	100
3 A	179 500	200	160	100 A <sup>1</sup>	0.6	✓	✓	0.1	100

<sup>1</sup> 10.000 A @ 125 V AC



**Pre-arcing time limits**

Rated current	1.0 I <sub>n</sub>	1.35 I <sub>n</sub>	2 I <sub>n</sub>
80 mA	4 h	1 h	5 s
3 A			120 s



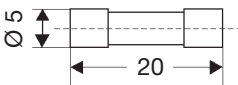


**MINIATURE FUSES**  
CERAMIC TUBE

**FF**

Size **5 x 20 mm**      Rated voltage **250 V**      **very fast acting**      Standard **not standardized**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus	Weight (kg/100)	Pack
100 mA	70 001 40	4000	0.0016	300 kA	0.4	✓	0.14	100
125 mA	70 001 40	3500	0.0024	300 kA	0.5	✓	0.14	100
160 mA	70 001 40	1300	0.004	300 kA	0.3	✓	0.14	100
200 mA	70 001 40	1100	0.008	300 kA	0.3	✓	0.14	100
250 mA	70 001 40	1000	0.019	300 kA	0.3	✓	0.14	100
315 mA	70 001 40	900	0.03	300 kA	0.3	✓	0.14	100
400 mA	70 001 40	850	0.065	300 kA	0.4	✓	0.14	100
500 mA	70 001 40	800	0.12	300 kA	0.4	✓	0.14	100
630 mA	70 001 40	700	0.17	300 kA	0.5	✓	0.14	100
800 mA	70 001 40	600	0.26	300 kA	0.5	✓	0.14	100
1 A	70 001 40	750	0.17	300 kA	0.8	✓	0.14	100
1.25 A	70 001 40	750	0.26	300 kA	1.0	✓	0.14	100
1.6 A	70 001 40	700	0.31	300 kA	1.2	✓	0.14	100
2 A	70 001 40	650	0.64	300 kA	1.3	✓	0.14	100
2.5 A	70 001 40	600	0.88	300 kA	1.5	✓	0.14	100
3.15 A	70 001 40	550	1.6	300 kA	1.8	✓	0.14	100
4 A	70 001 40	500	3.2	300 kA	2.0	✓	0.14	100
5 A	70 001 40	500	5.9	300 kA	2.4	✓	0.14	100
6.3 A	70 001 40	450	10	1500 A	2.8		0.14	100
8 A	70 001 40	400	19	1500 A	3.2		0.14	100
10 A	70 001 40	400	30	1500 A	4.0		0.14	100
6.3 A	70 007 40	250	1.6	300 kA	2.8	✓	0.14	100
8 A	70 007 40	250	4.5	300 kA	3.0	✓	0.14	100
10 A	70 007 40	200	8.8	300 kA	3.4	✓	0.14	100
12.5 A	70 007 40	200	15	300 kA	4.0	✓	0.14	100



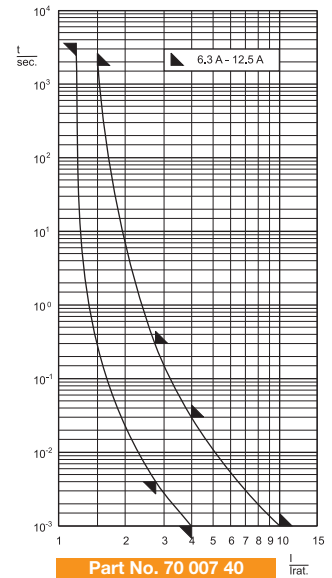
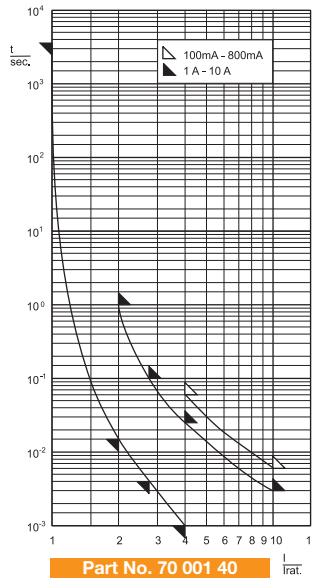
**Pre-arcing time limits**

**Part No. 70 001 40**

Rated current	1.0 I <sub>rat</sub>	2.0 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
160 mA	> 1 h	> 1 h	> 1 h	< 60 ms	< 6 ms
800 mA					
1 A	> 1 h	15 ms	4 ms	1 ms	< 3 ms
10 A		1 s	100 ms	25 ms	

**Part No. 70 007 40**

Rated current	1.2 I <sub>rat</sub>	1.5 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
6.3 A	> 1 h	< 30 min	4 ms	1 ms	< 1 ms
12.5 A			300 ms	30 ms	





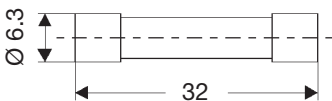
**MINIATURE FUSES**  
GLASS TUBE

**F**

Size **6.3 x 32 mm**      Rated voltage **250 V**      fast acting      Standard **DIN VDE 0820-2/4 · IEC 60127-2/4**

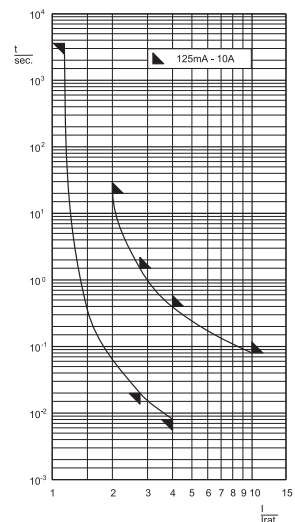
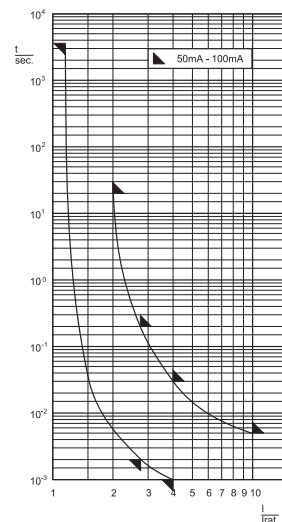
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
50 mA	189 000	9600	0.0003	35 A	0.7	0.1	100
63 mA	189 000	6000	0.0005	35 A	0.5	0.1	100
80 mA	189 000	5000	0.0010	35 A	0.6	0.1	100
100 mA	189 000	4500	0.0014	35 A	0.7	0.1	100
125 mA	189 000	4000	0.0034	35 A	0.7	0.1	100
160 mA	189 000	3500	0.007	35 A	0.8	0.1	100
200 mA	189 000	3000	0.013	35 A	0.9	0.1	100
250 mA	189 000	3000	0.022	35 A	1.0	0.1	100
315 mA	189 000	2500	0.054	35 A	1.1	0.1	100
400 mA	189 000	2500	0.11	35 A	1.2	0.1	100
500 mA	189 000	1900	0.21	35 A	1.3	0.1	100
630 mA	189 000	400	0.26	35 A	0.4	0.1	100
800 mA	189 000	350	0.57	35 A	0.4	0.1	100
1 A	189 000	300	1.1	35 A	0.5	0.1	100
1.25 A	189 000	300	2.0	35 A	0.6	0.1	100
1.6 A	189 000	300	3.3	35 A	0.7	0.1	100
2 A	189 000	250	6.2	35 A	0.8	0.1	100
2.5 A	189 000	220	13	35 A	0.9	0.1	100
3.15 A	189 000	200	24	35 A	1.1	0.1	100
4 A	189 000	200	40	40 A	1.3	0.1	100
5 A	189 000	180	80	50 A	1.4	0.1	100
6.3 A	189 000	170	150	63 A	1.6	0.1	100
8 A	189 000	160	240	80 A	2.0	0.1	100
10 A	189 000	150	500	100 A	2.3	0.1	100
12.5 A	189 000	140	650	125 A	2.5	0.1	100
16 A	189 000	130	1250	160 A	2.8	0.1	100
20 A	189 000	130	1600	200 A	4.0	0.1	100

<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-arcing time limits**

Rated current	1.15 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 1 h	20 s	2 ms	1 ms	< 5 ms
100 mA			200 ms	30 ms	
125 mA			20 ms	8 ms	
10 A			1.5 s	400 ms	< 80 ms







**MINIATURE FUSES**  
**CERAMIC TUBE**

**F**

**Size** 6.3 x 32 mm      **Rated voltage** 500 V      **fast acting**      **Standard** not standardized

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	UR	Weight (kg/100)	Pack
160 mA	189 020	7000	0.0015	1500 A *	2.5		0.24	100
200 mA	189 020	6500	0.0035	1500 A *	2.9		0.24	100
250 mA	189 020	6000	0.0085	1500 A *	3.4		0.24	100
315 mA	189 020	1000	0.025	1500 A *	0.9		0.24	100
400 mA	189 020	900	0.045	1500 A *	1.0		0.24	100
500 mA	189 020	800	0.09	1500 A *	1.1		0.24	100
630 mA	189 020	700	0.15	1500 A *	1.3		0.24	100
800 mA	189 020	600	0.3	1500 A *	1.4		0.24	100
1 A	189 020	400	0.4	50 kA **	1.2	✓	0.24	100
1.25 A	189 020	300	0.8	50 kA **	1.3	✓	0.24	100
1.6 A	189 020	300	1.5	50 kA **	1.4	✓	0.24	100
2 A	189 020	280	2.5	50 kA **	1.6	✓	0.24	100
2.5 A	189 020	260	5	50 kA **	1.8	✓	0.24	100
3.15 A	189 020	240	9	50 kA **	2.3	✓	0.24	100
4 A	189 020	220	18	50 kA **	2.6	✓	0.24	100
5 A	189 020	190	40	50 kA **	2.9	✓	0.24	100
6.3 A	189 020	170	80	50 kA **	3.2	✓	0.24	100
8 A	189 020	160	150	1500 A *	3.7		0.24	100
10 A	189 020	150	240	1500 A *	4.0		0.24	100
12.5 A	189 020	140	500	1500 A *	5.5		0.24	100
16 A	189 020	130	920	1500 A *	6.5		0.24	100

**Size** 6.3 x 32 mm      **Rated voltage** 440 V      **fast acting**      **Standard** not standardized

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	UR	Weight (kg/100)	Pack
20 A <sup>1</sup>	189 020	120	1500	1500 A	8.4		0.24	100
25 A <sup>1</sup>	189 020	110	3100	1500 A	11		0.24	100

<sup>1</sup> Consideration should be given to heat dissipation.

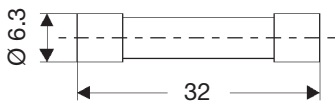
\* @ 500 V AC

\*\* @ 500 V AC and 20 kA @ 500 V DC approved



**MINIATURE FUSES**  
CERAMIC TUBE

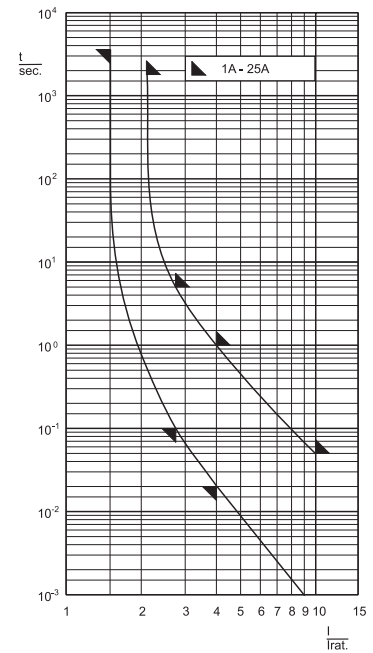
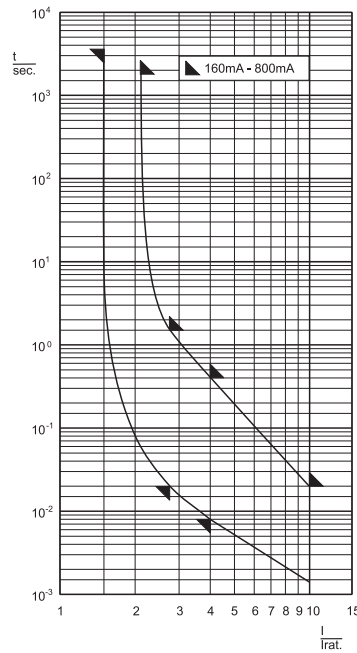
**F**



**Pre-arcing time limits**

Rated current	$1.5 I_n$	$2.1 I_n$	$2.75 I_n$	$4 I_n$	$10 I_n$
160 mA	> 1 h	30 min.	20 ms	8 ms	< 20 ms
800 mA			1.5 s	0.4 s	
1 A	> 1 h	30 min.	100 ms	20 ms	< 50 ms
25 A			5 s	1 s	

**189 020**



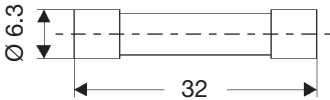


**MINIATURE FUSES**  
GLASS TUBE **T**

Size **6.3 x 32 mm**      Rated voltage **250 V**      time lag

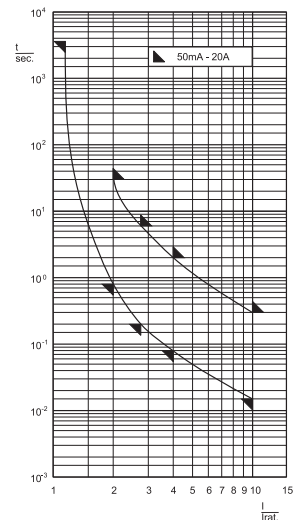
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	Weight (kg/100)	Pack
50 mA	189 100	3000	0.035	35 A	0.3	0.12	100
63 mA	189 100	2500	0.06	35 A	0.3	0.12	100
80 mA	189 100	2000	0.13	35 A	0.3	0.12	100
100 mA	189 100	1500	0.17	35 A	0.3	0.12	100
125 mA	189 100	1200	0.26	35 A	0.3	0.12	100
160 mA	189 100	1100	0.44	35 A	0.4	0.12	100
200 mA	189 100	1000	0.84	35 A	0.4	0.12	100
250 mA	189 100	900	1.5	35 A	0.5	0.12	100
315 mA	189 100	800	2.4	35 A	0.5	0.12	100
400 mA	189 100	300	0.6	35 A	0.2	0.12	100
500 mA	189 100	300	0.9	35 A	0.3	0.12	100
630 mA	189 100	300	1.6	35 A	0.3	0.12	100
800 mA	189 100	250	3.5	35 A	0.4	0.12	100
1 A	189 100	250	4	35 A	0.4	0.12	100
1.25 A	189 100	250	5	35 A	0.4	0.12	100
1.6 A	189 100	200	10	35 A	0.5	0.12	100
2 A	189 100	200	16	35 A	0.6	0.12	100
2.5 A	189 100	200	24	35 A	0.7	0.12	100
3.15 A	189 100	200	42	35 A	0.8	0.12	100
4 A	189 100	200	70	40 A	1.0	0.12	100
5 A	189 100	200	130	50 A	1.3	0.12	100
6.3 A	189 100	200	230	63 A	1.6	0.12	100
8 A	189 100	200	370	80 A	2.0	0.12	100
10 A	189 100	150	630	100 A	2.3	0.12	100
12.5 A	189 100	150	820	125 A	2.8	0.12	100
16 A	189 100	150	1200	160 A	3.0	0.12	100
20 A	189 100	150	1600	200 A	4.0	0.12	100

<sup>1</sup> Consideration should be given to heat dissipation.



**Pre-arcing time limits**

Rated current	1.15 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
50 mA	> 1 h	800 ms	200 ms	80 ms	15 ms
20 A		30 s	6 s	2 s	300 ms




**MINIATURE FUSES**  
**CERAMIC TUBE**
**T**

Size **6.3 x 32 mm** Rated voltage **500 V** time lag Standard **not standardized**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus UR	Weight (kg/100)	Pack
100 mA	189 140	3600	0.05	1500 A *	1.3		0.24	100
125 mA	189 140	3400	0.08	1500 A *	1.4		0.24	100
160 mA	189 140	3000	0.12	1500 A *	1.5		0.24	100
200 mA	189 140	2500	0.20	1500 A *	1.6		0.24	100
250 mA	189 140	2000	0.35	1500 A *	1.7		0.24	100
315 mA	189 140	1800	0.50	1500 A *	1.8		0.24	100
400 mA	189 140	1600	0.80	1500 A *	2.0		0.24	100
500 mA	189 140	450	0.32	1500 A *	0.6	✓	0.24	100
630 mA	189 140	400	0.60	1500 A *	0.7	✓	0.24	100
800 mA	189 140	350	1.0	1500 A *	0.8	✓	0.24	100
1 A	189 140	350	1.5	1500 A *	0.9	✓	0.24	100
1.25 A	189 140	300	3.1	1500 A *	1.0	✓	0.24	100
1.6 A	189 140	200	5.2	1500 A *	1.1	✓	0.24	100
2 A	189 140	180	10	1500 A *	1.2	✓	0.24	100
2.5 A	189 140	160	19	1500 A *	1.3	✓	0.24	100
3.15 A	189 140	150	37	1500 A *	1.4	✓	0.24	100
4 A	189 140	140	68	1500 A *	1.5	✓	0.24	100
5 A	189 140	135	80	1500 A *	2.2	✓	0.24	100
6.3 A	189 140	110	215	1500 A *	2.2	✓	0.24	100
8 A <sup>1</sup>	189 140	110	370	1500 A *	2.6	✓	0.24	100
10 A <sup>1</sup>	189 140	100	620	1500 A *	3.0	✓	0.24	100
12.5 A <sup>1</sup>	189 140	100	1300	1500 A *	3.5	✓	0.24	100
16 A <sup>1</sup>	189 140	100	2500	1500 A *	4.0	✓	0.24	100

Size **6.3 x 32 mm** Rated voltage **440 V** time lag Standard **not standardized**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus UR	Weight (kg/100)	Pack
20 A <sup>1</sup>	189 140	100	3400	1500 A	6		0.24	100
25 A <sup>1</sup>	189 140	100	5600	1500 A	8		0.24	100

Size **6.3 x 32 mm** Rated voltage **250 V** time lag Standard **not standardized**

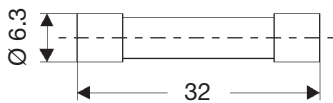
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus UR	Weight (kg/100)	Pack
32 A <sup>1</sup>	189 140	80	3900	1500 A	10		0.24	100

<sup>1</sup> Consideration should be given to heat dissipation.

\* @ 500 V and 10 kA @ 440 V DC



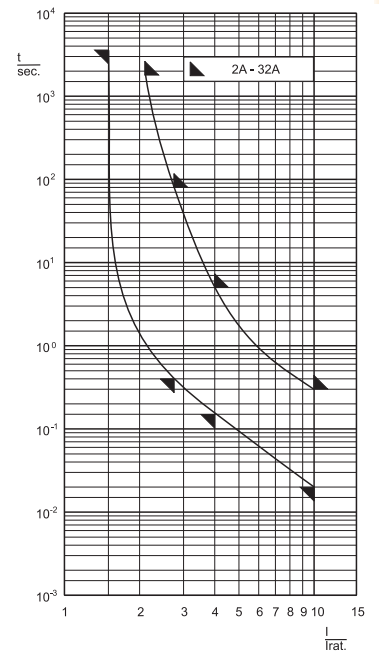
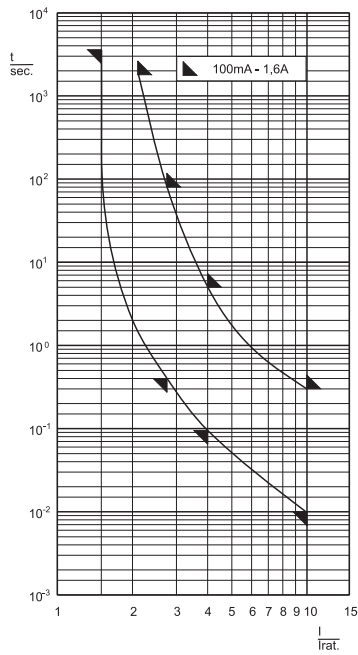
**MINIATURE FUSES  
CERAMIC TUBE** **T**



**Pre-arcing time limits**

Rated current	$1.5 I_n$	$2.1 I_n$	$2.75 I_n$	$4 I_n$	$10 I_n$
100 mA	1 h	30 min.	400 ms	95 ms	10 ms
1.6 A				5 s	300 ms
2 A				150 ms	20 ms
32 A				5 s	300 ms

**189 140**





**MINIATURE FUSES**  
GLASS TUBE

**T**

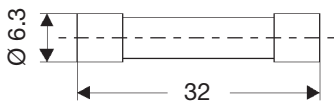
Size **6.3 x 32 mm**      Rated voltage **250 V**      time lag      Standard **not standardized**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cULus	Weight (kg/100)	Pack
300 mA	189 500	870	1.5	35 A <sup>1</sup>	0.6	✓	0.1	100
375 mA	189 500	840	2.5	35 A <sup>1</sup>	0.6	✓	0.1	100
400 mA	189 500	730	2.5	35 A <sup>1</sup>	0.6	✓	0.1	100
500 mA	189 500	660	5.4	35 A <sup>1</sup>	0.6	✓	0.1	100
600 mA	189 500	600	3.1	35 A <sup>1</sup>	0.6	✓	0.1	100
700 mA	189 500	580	4.5	35 A <sup>1</sup>	0.7	✓	0.1	100
800 mA	189 500	500	6.4	35 A <sup>1</sup>	0.7	✓	0.1	100
1 A	189 500	450	13	35 A <sup>1</sup>	0.7	✓	0.1	100
1.25 A	189 500	400	19	100 A <sup>1</sup>	0.7	✓	0.1	100
1.5 A	189 500	370	25	100 A <sup>1</sup>	0.8	✓	0.1	100
1.6 A	189 500	350	32	100 A <sup>1</sup>	0.8	✓	0.1	100
2 A	189 500	330	55	100 A <sup>1</sup>	0.9	✓	0.1	100
2.5 A	189 500	290	90	100 A <sup>1</sup>	0.9	✓	0.1	100
2.8 A	189 500	270	120	100 A <sup>1</sup>	1.0	✓	0.1	100
3 A	189 500	250	160	100 A <sup>1</sup>	1.0	✓	0.1	100
3.2 A	189 500	220	350	100 A <sup>1</sup>	1.0	✓	0.1	100

Size **6.3 x 32 mm**      Rated voltage **125 V**      time lag      Standard **not standardized**

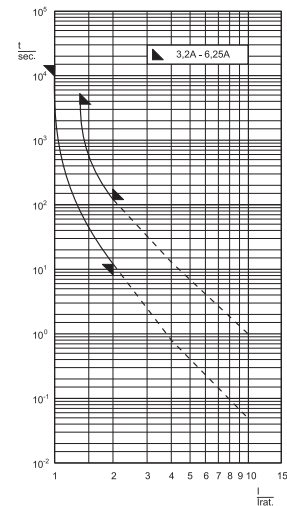
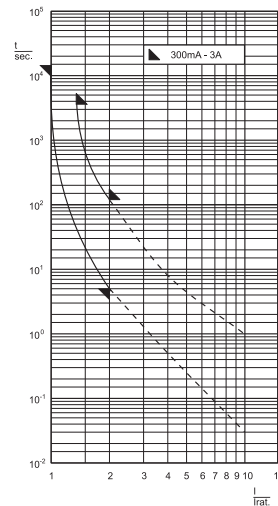
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> t <sub>s</sub> -value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	UR	Weight (kg/100)	Pack
4 A	189 500	200	590	100 A <sup>1</sup>	1.1	✓	0.1	100
5 A	189 500	200	600	100 A <sup>1</sup>	1.3	✓	0.1	100
6.25 A	189 500	200	1300	100 A <sup>1</sup>	1.7	✓	0.1	100

<sup>1</sup> 10.000 A @ 125 V AC



**Pre-arcing time limits**

Rated current		1.0 I <sub>n</sub>	1.35 I <sub>n</sub>	2.0 I <sub>n</sub>
300 mA				5 s
3.2 A (250 V)				120 s
4 A	-	> 4 h	< 1 h	12 s
6.25 A (125 V)				120 s





**MINIATURE FUSES**  
CERAMIC TUBE **FF**

Size **6.3 x 32 mm**      Rated voltage **700 V**      **very fast acting**      Standard **not standardized**

Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus	Weight (kg/100)	Pack
160 mA	70 125 40	2000	0.004	50 kA	0.5	✓	0.24	100
200 mA	70 125 40	1600	0.008	50 kA	0.6	✓	0.24	100
250 mA	70 125 40	1500	0.024	50 kA	0.7	✓	0.24	100
315 mA	70 125 40	1350	0.035	50 kA	0.7	✓	0.24	100
400 mA	70 125 40	1030	0.07	50 kA	0.8	✓	0.24	100
500 mA	70 125 40	950	0.14	50 kA	0.8	✓	0.24	100
630 mA	70 125 40	860	0.14	50 kA	0.9	✓	0.24	100
800 mA	70 125 40	760	0.22	50 kA	1.0	✓	0.24	100
1 A	70 125 40	1100	0.14	50 kA	1.3	✓	0.24	100
1.25 A	70 125 40	1000	0.22	50 kA	1.6	✓	0.24	100
1.6 A	70 125 40	900	0.31	50 kA	1.9	✓	0.24	100
2 A	70 125 40	800	0.64	50 kA	2.4	✓	0.24	100

Size **6.3 x 32 mm**      Rated voltage **500 V**      **very fast acting**      Standard **not standardized**

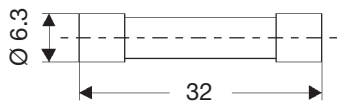
Rated current	Part No.	Voltage drop mV	Pre-arcing I <sup>2</sup> ts-value A <sup>2</sup> s	Rated breaking capacity	Power dissipation W	cURus	Weight (kg/100)	Pack
2.5 A	70 125 40	800	1.2	50 kA	2.7	✓	0.24	100
3.15 A	70 125 40	700	2	50 kA	3.0	✓	0.24	100
4 A	70 125 40	500	5	50 kA	3.2	✓	0.24	100
5 A	70 125 40	400	10	50 kA	3.6	✓	0.24	100
6.3 A	70 125 40	400	3	50 kA	4.0	✓	0.24	100
8 A <sup>1</sup>	70 125 40	350	6.5	50 kA	4.5	✓	0.24	100
10 A <sup>1</sup>	70 125 40	350	12	50 kA	5.0	✓	0.24	100
12.5 A <sup>1</sup>	70 125 40	300	18	50 kA	7.0	✓	0.24	100
16 A <sup>1</sup>	70 125 40	300	31	50 kA	9.0	✓	0.24	100
20 A <sup>1</sup>	70 125 40	300	46	50 kA	13	✓	0.24	100

<sup>1</sup> Consideration should be given to heat dissipation.



**MINIATURE FUSES**  
CERAMIC TUBE

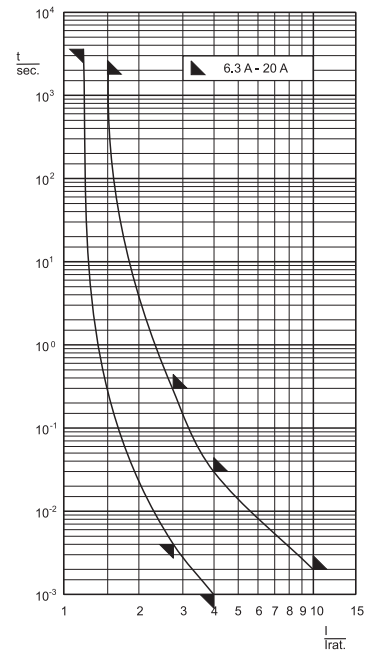
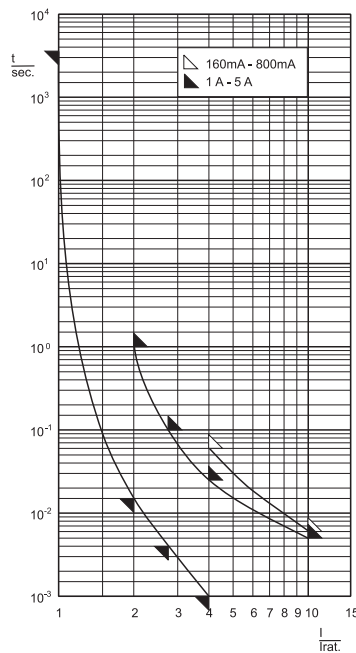
**FF**



**Pre-arcing time limits**

Rated current	1.0 I <sub>rat</sub>	2.0 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
160 mA ▼ 800 mA	> 1 h	> 1 h	> 1 h	< 60 ms	< 6 ms
1 A ▼ 5 A		15 ms ▼ 1 s	4 ms ▼ 100 ms	1 ms ▼ 25 ms	< 5 ms
Rated current	1.2 I <sub>rat</sub>	1.5 I <sub>rat</sub>	2.75 I <sub>rat</sub>	4 I <sub>rat</sub>	10 I <sub>rat</sub>
6.3 A ▼ 20 A	> 1 h	< 30 min	4 ms ▼ 300 ms	1 ms ▼ 30 ms	< 2 ms

**70 125 40**





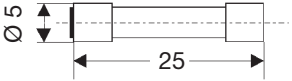


**MINIATURE FUSES WITH INDICATOR**  
**CERAMIC TUBE** **F**

Size **5 x 25 mm**      Rated voltage **250 V**      fast acting      Standard **DIN 41576 Part 1**

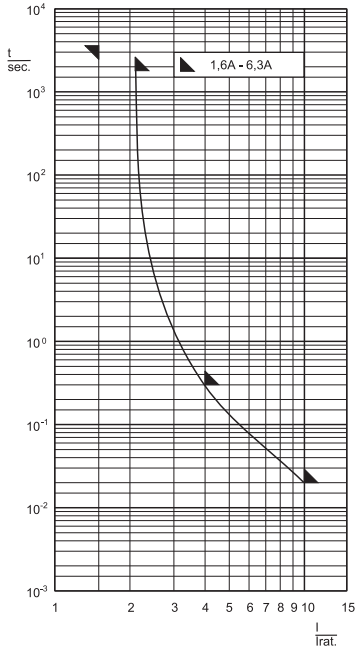
Rated current	Part No.	Voltage drop mV	Color code	Rated breaking capacity	Weight (kg/100)	Pack
1.6 A	171 526	640	orange	1500 A	0.13	100
2 A	171 526	420	blue	1500 A	0.13	100
2.5 A	171 526	320	yellow	1500 A	0.13	100
3.15 A	171 526	250	black	1500 A	0.13	100
4 A	171 526	200	brown	1500 A	0.13	100
5 A	171 526	180	white	1500 A	0.13	100
6.3 A	171 526	170	green	1500 A	0.13	100
(8) A	171 526	150	grey	1500 A	0.13	100
(10) A	171 526	120	red	1500 A	0.13	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
1.6 A ▼ 6.3 A	> 1 h	< 30 min.	-	< 300 ms	< 20 ms





**MINIATURE FUSES WITH INDICATOR**  
**CERAMIC TUBE**

**M**

Size  
**5 x 25 mm**

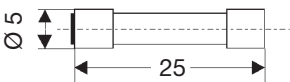
Rated voltage  
**250 V**

**medium time lag**

Standard  
**DIN 41576 Part 2**

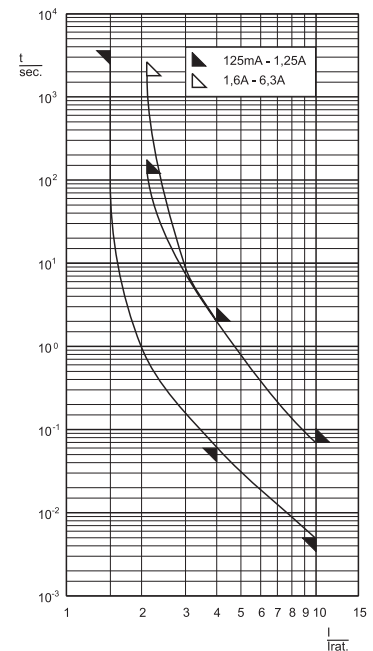
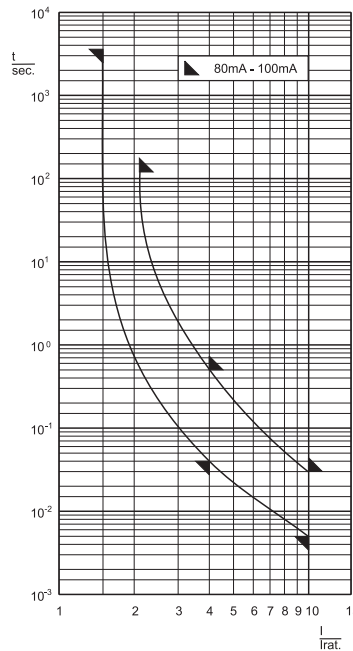
Rated current	Part No.	Voltage drop mV	Color code	Rated breaking capacity	Weight (kg/100)	Pack
80 mA	172 526	520	grey	80 A	0.15	100
100 mA	172 526	500	red	80 A	0.15	100
125 mA	172 526	500	violet	80 A	0.15	100
160 mA	172 526	400	orange	80 A	0.15	100
200 mA	172 526	400	blue	80 A	0.15	100
250 mA	172 526	375	yellow	1500 A	0.15	100
315 mA	172 526	410	black	1500 A	0.15	100
400 mA	172 526	280	brown	1500 A	0.15	100
500 mA	172 526	250	white	1500 A	0.15	100
630 mA	172 526	220	green	1500 A	0.15	100
800 mA	172 526	400	grey	1500 A	0.15	100
1 A	172 526	350	red	1500 A	0.15	100
1.25 A	172 526	315	lilac	1500 A	0.15	100
1.6 A	172 526	480	orange	1500 A	0.15	100
2 A	172 526	360	blue	1500 A	0.15	100
2.5 A	172 526	300	yellow	1500 A	0.15	100
3.15 A	172 526	250	black	1500 A	0.15	100
4 A	172 526	180	brown	1500 A	0.15	100
5 A	172 526	180	white	1500 A	0.15	100
6.3 A	172 526	160	green	1500 A	0.15	100
(8) A	172 526	160	grey	1500 A	0.15	100
(10) A	172 526	160	red	1500 A	0.15	100

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
80 mA	> 1 h	< 2 min.	-	40 ms	5 ms
100 mA				500 ms	30 ms
125 mA					
1.5 A	< 30 min.			60 ms	5 ms
1.6 A				2 s	70 ms
6.3 A					

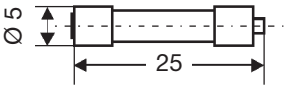




**MINIATURE FUSES WITH INDICATOR  
CERAMIC TUBE** **M**

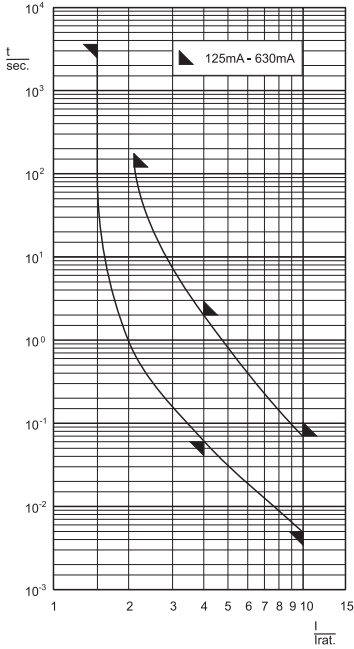
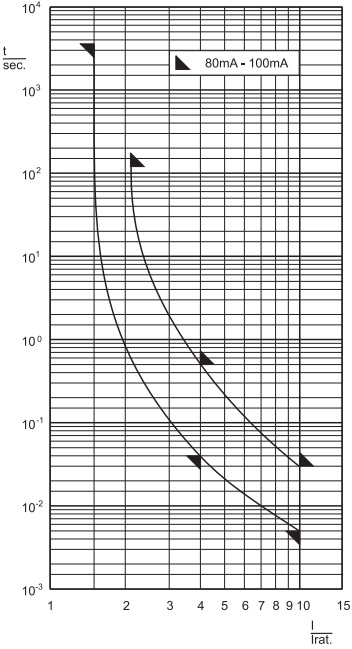
Size **5 x 25 mm**      Rated voltage **250 V**      medium time lag      Standard **DIN 41577 Part 2**

Rated current	Part No.	Voltage drop mV	Color code	Rated breaking capacity	Weight (kg/100)	Pack
80 mA	70 016 07	520	grey	80 A	0.15	100
100 mA	70 016 07	500	red	80 A	0.15	100
125 mA	70 016 07	500	violet	80 A	0.15	100
160 mA	70 016 07	400	orange	80 A	0.15	100
200 mA	70 016 07	400	blue	80 A	0.15	100
250 mA	70 017 07	500	yellow	1500 A	0.15	100
315 mA	70 017 07	470	black	1500 A	0.15	100
400 mA	70 017 07	400	brown	1500 A	0.15	100
500 mA	70 017 07	400	white	1500 A	0.15	100
630 mA	70 017 07	380	green	1500 A	0.15	100



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.0 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
80 mA	> 1 h	< 2 min.	-	40 ms	5 ms
100 mA				500 ms	30 ms
125 mA				60 ms	5 ms
630 mA				2 s	70 ms



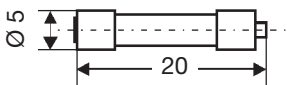

**MINIATURE FUSES WITH INDICATOR**  
**CERAMIC TUBE**
**M**

 Size  
**5 x 20 mm**

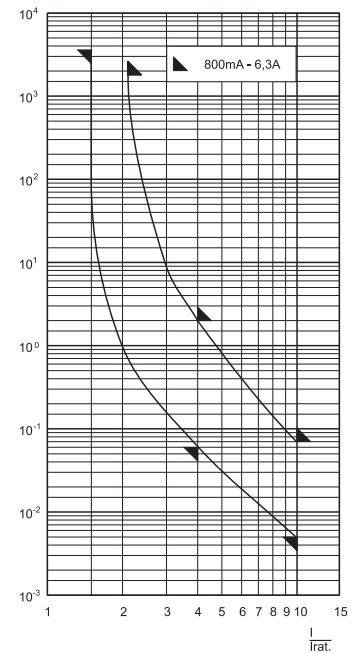
 Rated voltage  
**250 V**
**medium time lag**

 Standard  
**DIN 41577 Part 2**

Rated current	Part No.	Voltage drop mV	Color code	Rated breaking capacity	Weight (kg/100)	Pack
800 mA	70 014 07	520	grey	1500 A	0.15	100
1 A	70 014 07	470	red	1500 A	0.15	100
1.25 A	70 014 07	400	violet	1500 A	0.15	100
1.6 A	70 014 07	400	orange	1500 A	0.15	100
2 A	70 014 07	380	blue	1500 A	0.15	100
2.5 A	70 014 07	380	yellow	1500 A	0.15	100
3.15 A	70 014 07	380	black	1500 A	0.15	100
4 A	70 014 07	380	brown	1500 A	0.15	100
6.3 A <sup>1</sup>	70 012 05	380	green	1500 A	0.15	100

<sup>1</sup> without fitting device

**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
1.6 A	> 1 h	< 30 min.	-	60 ms	5 ms
6.3 A				2 s	70 ms



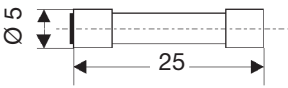


**MINIATURE FUSES WITH INDICATOR  
CERAMIC TUBE** **F**

**Size** 5 x 25 mm      **Rated voltage** 450 V      **fast acting**      **Lloyds registered**

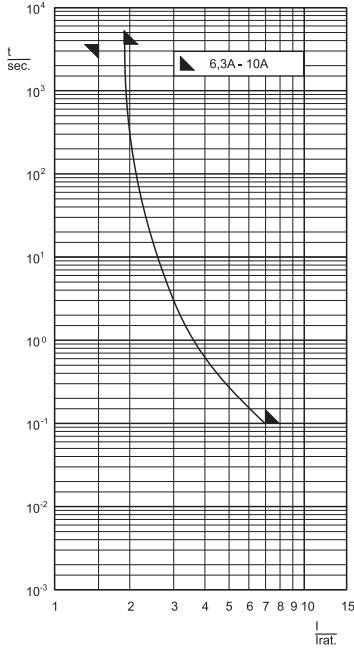
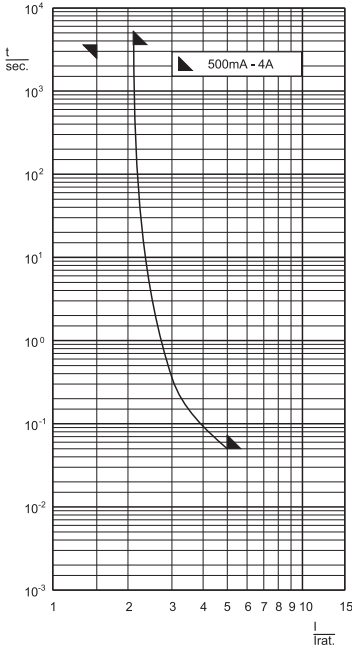
Rated current	Part No.	Voltage drop mV	Color code	Rated breaking capacity	Weight (kg/100)	Pack
500 mA	70 089 13	700	white	70 kA	0.13	100
1 A	70 089 13	300	red	70 kA	0.13	100
1.25 A	70 089 13	250	violet	70 kA	0.13	100
1.6 A	70 089 13	400	orange	70 kA	0.13	100
2 A	70 089 13	400	blue	70 kA	0.13	100
2.5 A	70 089 13	350	yellow	70 kA	0.13	100
3.15 A	70 089 13	300	black	70 kA	0.13	100
4 A	70 089 13	200	brown	70 kA	0.13	100
6.3 A	70 089 13	150	green	70 kA	0.13	100
10 A	70 089 13	130	red	70 kA	0.13	100

Note: Suitable fuse holder panel mounting Part No. 71 044 03 and screw cap Part No. 72 044 02 see cataloge MAR



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	1.9 I <sub>n</sub>	2.1 I <sub>n</sub>	5 I <sub>n</sub>	7 I <sub>n</sub>
500 mA	> 1 h	-	< 1 h	< 0.05 s	-
4 A		-	-	-	-
6.3 A	> 1 h	< 1 h	-	-	< 0.1 s
10 A		-	-	-	-





**MINIATURE FUSES**  
**GLASS TUBE**

**F**

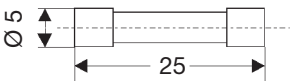
Size  
**5 x 25 mm**

Rated voltage  
**250 V**

**fast acting**

Standard  
**not standardized**

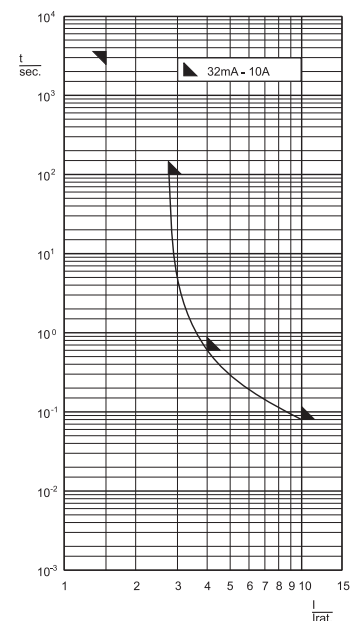
Rated current	Part No.	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	171 525	50 A	0.12	100
50 mA	171 525	50 A	0.12	100
63 mA	171 525	50 A	0.12	100
80 mA	171 525	50 A	0.12	100
100 mA	171 525	50 A	0.12	100
125 mA	171 525	50 A	0.12	100
160 mA	171 525	50 A	0.12	100
200 mA	171 525	50 A	0.12	100
250 mA	171 525	50 A	0.12	100
315 mA	171 525	50 A	0.12	100
400 mA	171 525	50 A	0.12	100
500 mA	171 525	50 A	0.12	100
630 mA	171 525	50 A	0.12	100
800 mA	171 525	50 A	0.12	100
1 A	171 525	50 A	0.12	100
1.25 A	171 525	50 A	0.12	100
1.6 A	171 525	80 A	0.12	100
2 A	171 525	80 A	0.12	100
2.5 A	171 525	80 A	0.12	100
3.15 A	171 525	80 A	0.12	100
4 A	171 525	80 A	0.12	100
5 A	171 525	80 A	0.12	100
6.3 A	171 525	80 A	0.12	100
8 A	171 525	80 A	0.12	100
10 A	171 525	80 A	0.12	100



**Pre-arcing time limits**

Part No. 171 525

Rated current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA ▼ 10 A	> 1 h	< 100 s	< 600 ms	< 80 ms



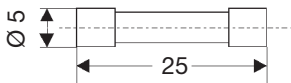


**MINIATURE FUSES**  
GLASS TUBE

**M**

Size **5 x 25 mm**      Rated voltage **250 V**      medium time lag      Standard **not standardized**

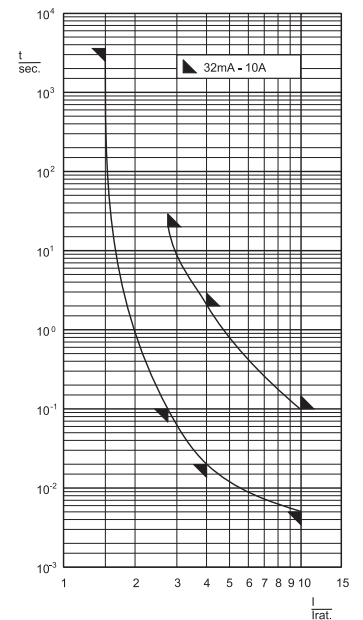
Rated current	Part No.	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	172 525	50 A	0.12	100
50 mA	172 525	50 A	0.12	100
63 mA	172 525	50 A	0.12	100
80 mA	172 525	50 A	0.12	100
100 mA	172 525	50 A	0.12	100
125 mA	172 525	50 A	0.12	100
160 mA	172 525	50 A	0.12	100
200 mA	172 525	50 A	0.12	100
250 mA	172 525	50 A	0.12	100
315 mA	172 525	50 A	0.12	100
400 mA	172 525	50 A	0.12	100
500 mA	172 525	50 A	0.12	100
630 mA	172 525	50 A	0.12	100
800 mA	172 525	50 A	0.12	100
1 A	172 525	50 A	0.12	100
1.25 A	172 525	50 A	0.12	100
1.6 A	172 525	80 A	0.12	100
2 A	172 525	80 A	0.12	100
2.5 A	172 525	80 A	0.12	100
3.15 A	172 525	80 A	0.12	100
4 A	172 525	80 A	0.12	100
5 A	172 525	80 A	0.12	100
6.3 A	172 525	80 A	0.12	100
8 A	172 525	80 A	0.12	100
10 A	172 525	80 A	0.12	100



**Pre-arcing time limits**

Part No. 172 525

Rated current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	100 ms	20 ms	5 ms
10 A		20 s	2 s	100 ms





**MINIATURE FUSES**  
GLASS TUBE > 1.25 A WITH FILLING

**F**

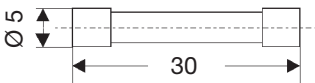
Size  
**5 x 30 mm**

Rated voltage  
**500 V**

**fast acting**

Standard  
**not standardized**

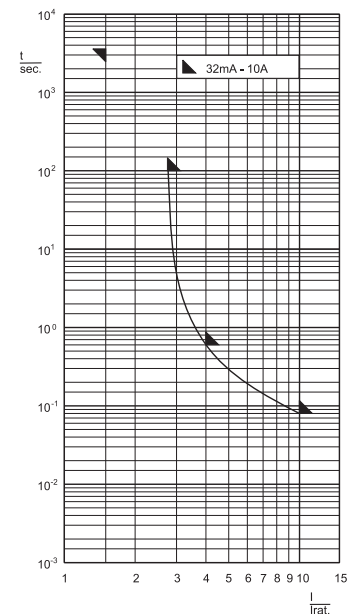
Rated current	Part No.	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	171 530	50 A	0.12	100
50 mA	171 530	50 A	0.12	100
63 mA	171 530	50 A	0.12	100
80 mA	171 530	50 A	0.12	100
100 mA	171 530	50 A	0.12	100
125 mA	171 530	50 A	0.12	100
160 mA	171 530	50 A	0.12	100
200 mA	171 530	50 A	0.12	100
250 mA	171 530	50 A	0.12	100
315 mA	171 530	50 A	0.12	100
400 mA	171 530	50 A	0.12	100
500 mA	171 530	50 A	0.12	100
630 mA	171 530	50 A	0.12	100
800 mA	171 530	50 A	0.12	100
1 A	171 530	50 A	0.12	100
1.25 A	171 530	50 A	0.12	100
1.6 A	171 530	80 A	0.12	100
2 A	171 530	80 A	0.12	100
2.5 A	171 530	80 A	0.12	100
3.15 A	171 530	80 A	0.12	100
4 A	171 530	80 A	0.12	100
5 A	171 530	80 A	0.12	100
6.3 A	171 530	80 A	0.12	100
8 A	171 530	80 A	0.12	100
10 A	171 530	80 A	0.12	100



**Pre-arcing time limits**

Part No. 171 530

Rated current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA ▼ 10 A	> 1 h	< 100 s	< 600 ms	< 80 ms





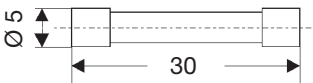


**MINIATURE FUSES**  
GLASS TUBE > 1.25 A WITH FILLING

**M**

Size **5 x 30 mm**      Rated voltage **500 V**      medium time lag      Standard **not standardized**

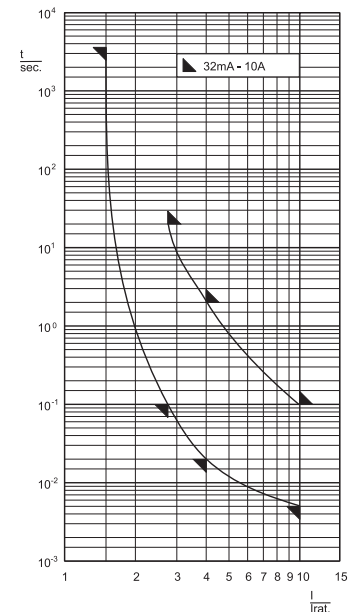
Rated current	Part No.	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	172 530	50 A	0.12	100
50 mA	172 530	50 A	0.12	100
63 mA	172 530	50 A	0.12	100
80 mA	172 530	50 A	0.12	100
100 mA	172 530	50 A	0.12	100
125 mA	172 530	50 A	0.12	100
160 mA	172 530	50 A	0.12	100
200 mA	172 530	50 A	0.12	100
250 mA	172 530	50 A	0.12	100
315 mA	172 530	50 A	0.12	100
400 mA	172 530	50 A	0.12	100
500 mA	172 530	50 A	0.12	100
630 mA	172 530	50 A	0.12	100
800 mA	172 530	50 A	0.12	100
1 A	172 530	50 A	0.12	100
1.25 A	172 530	50 A	0.12	100
1.6 A	172 530	80 A	0.12	100
2 A	172 530	80 A	0.12	100
2.5 A	172 530	80 A	0.12	100
3.15 A	172 530	80 A	0.12	100
4 A	172 530	80 A	0.12	100
5 A	172 530	80 A	0.12	100
6.3 A	172 530	80 A	0.12	100
8 A	172 530	80 A	0.12	100
10 A	172 530	80 A	0.12	100



**Pre-arcing time limits**

Part No. 172 530

Rated current	1.5 I <sub>n</sub>	2.75 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	50 ms	20 ms	5 ms
10 A		30 s	2 s	100 ms





**MINIATURE FUSES**

GLASS TUBE > 100 mA CERAMIC TUBE

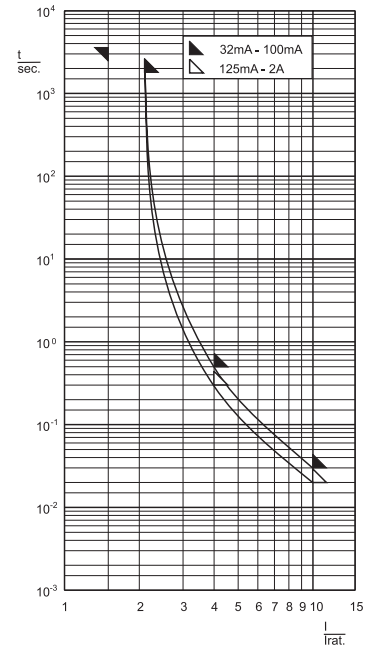
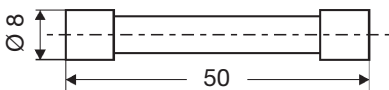
Size  
**8 x 50 mm**

Rated voltage  
**1.2 kV**

Standard  
**DIN 41570**

Rated current	Part No.	Voltage drop mV	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	184 000	2300	35 A	0.35	50
50 mA	184 000	1900	35 A	0.35	50
63 mA	184 000	1700	35 A	0.35	50
80 mA	184 000	1500	35 A	0.35	50
100 mA	184 000	1300	35 A	0.35	50
125 mA	184 000	9500	35 A	0.68	50
160 mA	184 000	8000	35 A	0.68	50
200 mA	184 000	7000	35 A	0.68	50
250 mA	184 000	6000	35 A	0.68	50
315 mA	184 000	5000	35 A	0.68	50
400 mA	184 000	2000	35 A	0.68	50
500 mA	184 000	950	35 A	0.68	50
630 mA	184 000	860	35 A	0.68	50
800 mA	184 000	760	35 A	0.68	50
1 A	184 000	640	35 A	0.68	50
1.25 A	184 000	540	35 A	0.68	50
1.6 A	184 000	500	35 A	0.68	50
2 A	184 000	460	35 A	0.68	50
(2.5) A	184 000		35 A	0.68	50
(3.15) A	184 000		35 A	0.68	50
(4) A	184 000		35 A	0.68	50
(5) A	184 000		35 A	0.68	50
(6.3) A	184 000		35 A	0.68	50

(...) = not standardized



**Pre-arcing time limits**

Rated current	$1.5 I_n$	$2.1 I_n$	$4 I_n$	$10 I_n$
32 mA	> 1 h	< 30 min.	< 500 ms	< 30 ms
100 mA				< 20 ms
125 mA	> 1 h	< 30 min.	< 300 ms	< 20 ms
2 A				< 20 ms

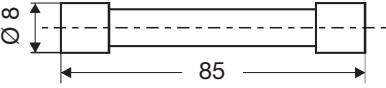


**MINIATURE FUSES**  
**CERAMIC TUBE**

Size **8 x 85 mm**      Rated voltage **3 kV**      Standard **DIN 41569**

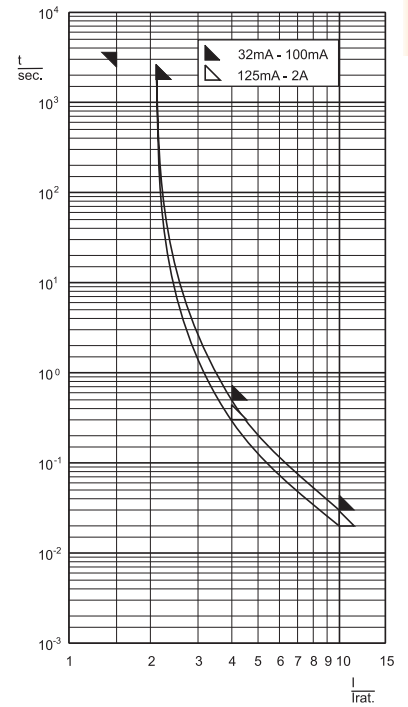
Rated current	Part No.	Voltage drop mV	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	185 000	4500	35 A	0.43	50
50 mA	185 000	3000	35 A	0.43	50
63 mA	185 000	2400	35 A	0.43	50
80 mA	185 000	1900	35 A	0.43	50
100 mA	185 000	1500	35 A	0.43	50
125 mA	185 000	17000	35 A	0.84	50
160 mA	185 000	14000	35 A	0.84	50
200 mA	185 000	12000	35 A	0.84	50
250 mA	185 000	10500	35 A	0.84	50
315 mA	185 000	9000	35 A	0.84	50
400 mA	185 000	3500	35 A	0.84	50
500 mA	185 000	1600	35 A	0.84	50
630 mA	185 000	1500	35 A	0.84	50
800 mA	185 000	1300	35 A	0.84	50
1 A	185 000	1200	35 A	0.84	50
1.25 A	185 000	1000	35 A	0.84	50
1.6 A	185 000	900	35 A	0.84	50
2 A	185 000	800	35 A	0.84	50
(2.5) A	185 000		35 A	0.84	50
(3.15) A	185 000		35 A	0.84	50
(4) A	185 000		35 A	0.84	50

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 30 min.	< 500 ms	< 30 ms
100 mA			< 300 ms	< 20 ms
125 mA				
2 A				

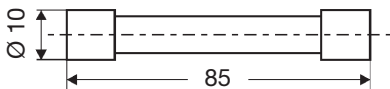




**MINIATURE FUSES**  
**CERAMIC TUBE**

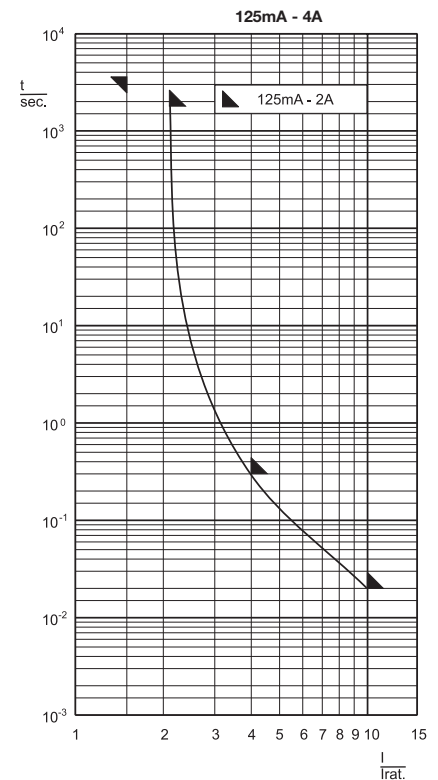
Size **10 x 85 mm**      Rated voltage **3 kV**

Rated current	Part No.	Voltage drop mV	Rated breaking capacity	Weight (kg/100) mW	Pack
125 mA	70 115 09	17000	on request	1.4	10
160 mA	70 115 09	14000	on request	1.4	10
200 mA	70 115 09	12000	on request	1.4	10
250 mA	70 115 09	10500	on request	1.4	10
315 mA	70 115 09	9000	on request	1.4	10
400 mA	70 115 09	3500	on request	1.4	10
500 mA	70 115 09	1600	on request	1.4	10
630 mA	70 115 09	1500	on request	1.4	10
800 mA	70 115 09	1300	on request	1.4	10
1 A	70 115 09	1200	on request	1.4	10
1.25 A	70 115 09	1000	on request	1.4	10
1.6 A	70 115 09	900	on request	1.4	10
2 A	70 115 09	800	on request	1.4	10
2.5 A	70 115 09		on request	1.4	10
3.15 A	70 115 09		on request	1.4	10
4 A	70 115 09		on request	1.4	10



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
125 mA ▼ 4 A	> 1 h	< 30 min.	< 0.3 s	< 20 ms



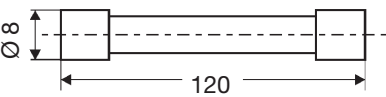


**MINIATURE FUSES**  
GLASS TUBE > 100 mA CERAMIC TUBE

Size **8 x 120 mm**      Rated voltage **6 kV**      Standard **DIN 41683**

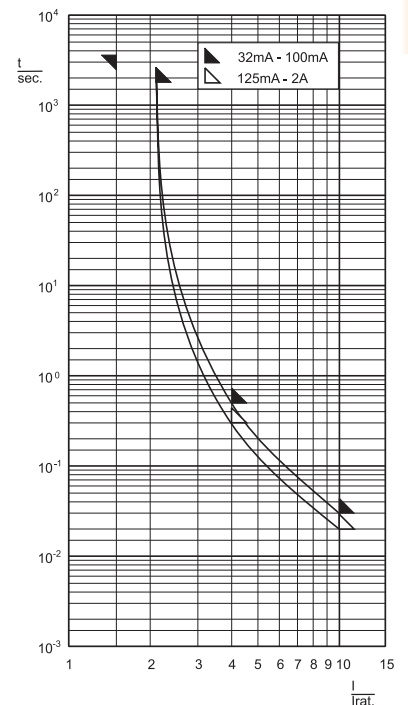
Rated current	Part No.	Voltage drop mV	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	186 000	6000	35 A	0.52	50
50 mA	186 000	4400	35 A	0.52	50
63 mA	186 000	3800	35 A	0.52	50
80 mA	186 000	3200	35 A	0.52	50
100 mA	186 000	2900	35 A	0.52	50
125 mA	186 000	22000	35 A	1.00	50
160 mA	186 000	19000	35 A	1.00	50
200 mA	186 000	16000	35 A	1.00	50
250 mA	186 000	14000	35 A	1.00	50
315 mA	186 000	12000	35 A	1.00	50
400 mA	186 000	5000	35 A	1.00	50
500 mA	186 000	2300	35 A	1.00	50
630 mA	186 000	2000	35 A	1.00	50
800 mA	186 000	1900	35 A	1.00	50
1 A	186 000	1800	35 A	1.00	50
1.25 A	186 000	1400	35 A	1.00	50
1.6 A	186 000	1300	35 A	1.00	50
2 A	186 000	1000	35 A	1.00	50
(2.5) A	186 000		35 A	1.00	50
(3.15) A	186 000		35 A	1.00	50
(4) A	186 000		35 A	1.00	50

(...) = not standardized



**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 30 min.	< 500 ms	< 30 ms
100 mA			< 300 ms	< 20 ms
125 mA				
2 A				





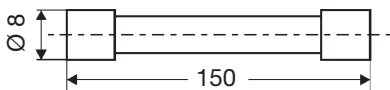
**MINIATURE FUSES**  
**CERAMIC TUBE**

Size  
**8 x 150 mm**

Rated voltage  
**10 kV**

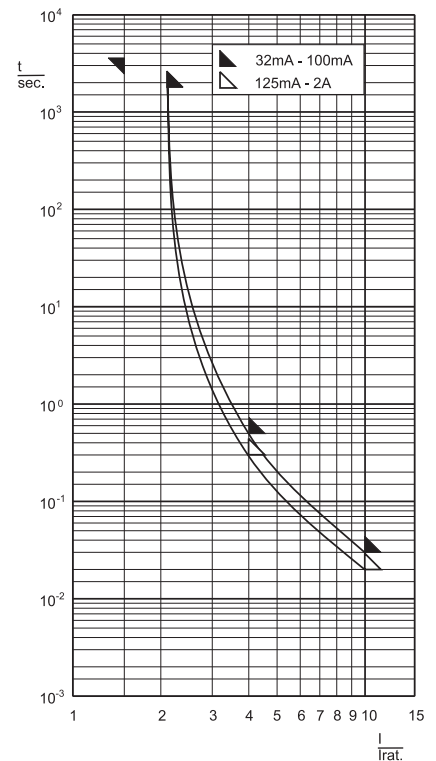
Standard  
**DIN 41684**

Rated current	Part No.	Voltage drop mV	Rated breaking capacity	Weight (kg/100)	Pack
32 mA	187 000	14000	35 A	0.70	50
50 mA	187 000	8500	35 A	0.70	50
63 mA	187 000	6500	35 A	0.70	50
80 mA	187 000	5000	35 A	0.70	50
100 mA	187 000	4000	35 A	0.70	50
125 mA	187 000	27000	35 A	1.30	50
160 mA	187 000	24000	35 A	1.30	50
200 mA	187 000	21000	35 A	1.30	50
250 mA	187 000	18500	35 A	1.30	50
315 mA	187 000	17000	35 A	1.30	50
400 mA	187 000	6000	35 A	1.30	50
500 mA	187 000	2900	35 A	1.30	50
630 mA	187 000	2700	35 A	1.30	50
800 mA	187 000	2400	35 A	1.30	50
1 A	187 000	2100	35 A	1.30	50
1.25 A	187 000	1800	35 A	1.30	50
1.6 A	187 000	1600	35 A	1.30	50
2 A	187 000	1400	35 A	1.30	50



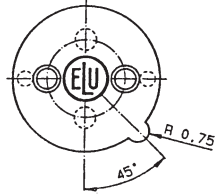
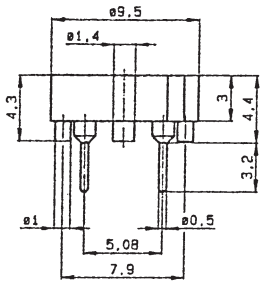
**Pre-arcing time limits**

Rated current	1.5 I <sub>n</sub>	2.1 I <sub>n</sub>	4 I <sub>n</sub>	10 I <sub>n</sub>
32 mA	> 1 h	< 30 min.	< 500 ms	< 30 ms
100 mA			< 300 ms	< 20 ms
125 mA	> 1 h	< 30 min.	< 300 ms	< 20 ms
2 A			< 300 ms	< 20 ms



**Fuse holder** for sub miniature fuses size **Rated current**  
**Screw cap** **8.4 x 7.6 mm** **6.3 A**

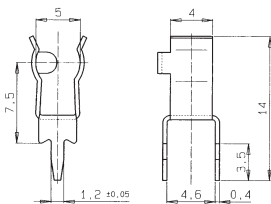
Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm	Connections
250 V	166 602	Printed circuit board	5.08	1	Solder



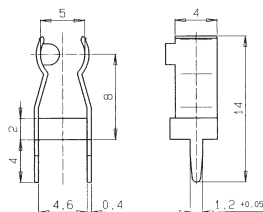
**Fuse clips** for fuse links cap size **Rated current**  
**5 + 6.3 mm Ø** **6.3 A** **other types on request**

Rated Voltage AC	Part No.	Mounting	Material	Connections
500 V	199 073	Printed circuit board	Brass, tinned	Solder
500 V	199 207	Printed circuit board	Brass, tinned	Solder
500 V	199 429	Printed circuit board	Brass, tinned	Solder
500 V	199 487	Printed circuit board	Brass, tinned	Solder
500 V	199 488	Printed circuit board	Brass, tinned	Solder

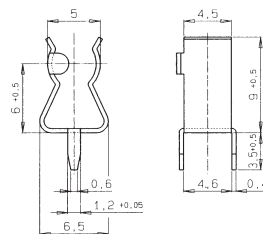
**199 073**



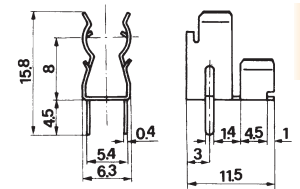
**199 207**



**199 487**



**199 488**



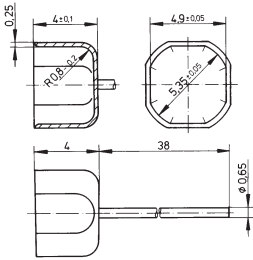
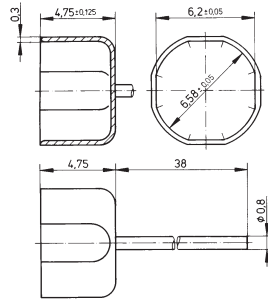
**Push-on caps**

Contact caps brass, silver-plated, wire-ends cooper, tinned

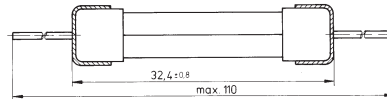
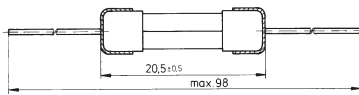
Rated current

**6.3 A**

for fuse links with contact cap Ø	Part No.	Mounting	Connections
5 mm	204 000	Printed circuit board	Axially welded wire-ends of 40 mm, solderable
6.3 mm	204 100	Printed circuit board	Axially welded wire-ends of 40 mm, solderable

**204 000**

**204 100**


Below we show the assembly of 5 x 20 or 6.3 x 32 mm fuse links with caps. You can order this completely assembled unit by adding the letters "AK" at the end of the article No..



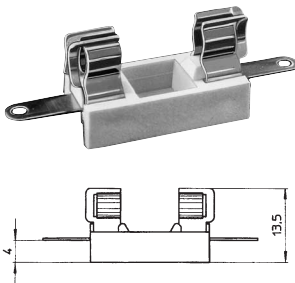


**Fuse holders** for fuse links size **5 x 20 mm** Rated current **6.3 A**

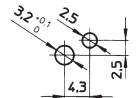
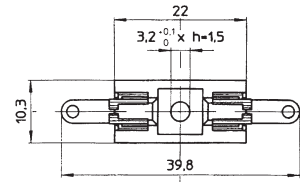
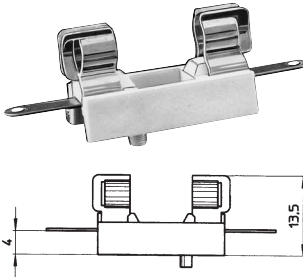
Rated Voltage AC	Part No.	Mounting	Connections
250 V	199 010	Printed circuit board, screw or rivet	Solder or plug
250 V	199 020 <sup>1</sup>	Printed circuit board, screw or rivet	Solder or plug

<sup>1</sup> with locating pin

**199 010**

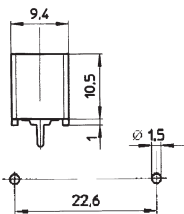
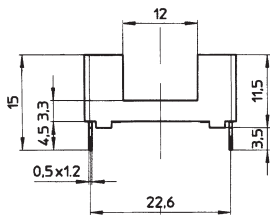


**199 020**

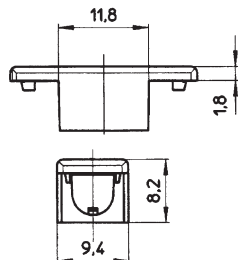
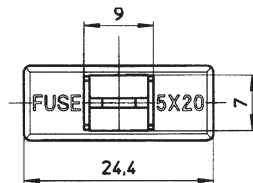


**Fuse holder** for fuse links size **5 x 20 mm** Rated current **6.3 A**

Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm	Connections
250 V	199 018	Printed circuit board	22.5	1.5	Solder

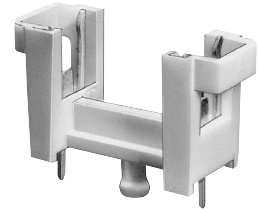
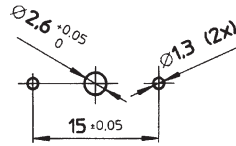
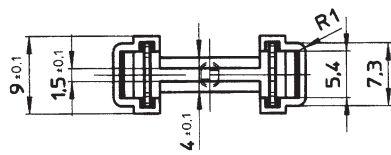
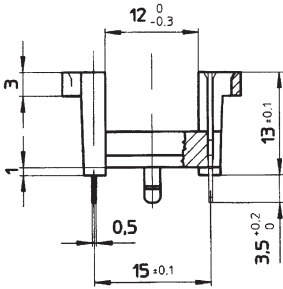


**Cover 199 019** for fuse holder 199 018



**Fuse holder** for fuse links size **5 x 20 mm** Rated current **6.3 A**

Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm	Connections
250 V	199 060	Printed circuit board	15	1.3 / 2.6	Solder or plug

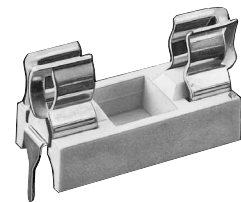
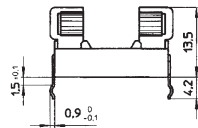
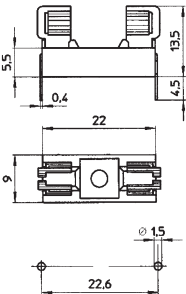


**Fuse holder** for fuse links size **5 x 20 mm** Rated current **6.3 A**

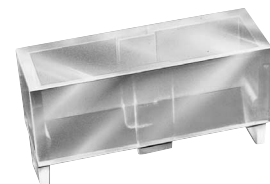
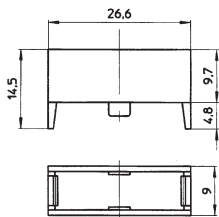
Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm	Connections
250 V	199 015	Printed circuit board	22.5	1.5	Solder
250 V	199 015 A	Printed circuit board	22.5	1.5	Solder

**199 015**

**199 015 A**

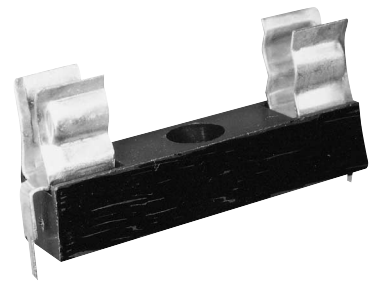
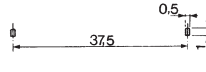
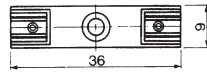
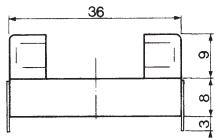


**Cover 199 016** for fuse holders 199 015 / 199 015 A



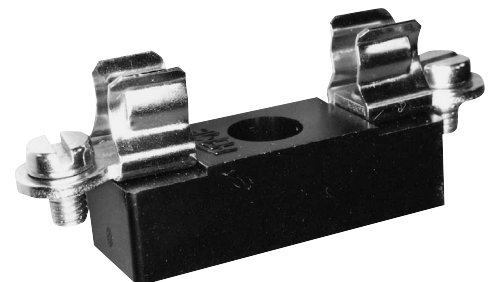
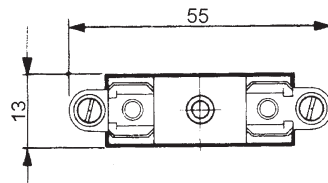
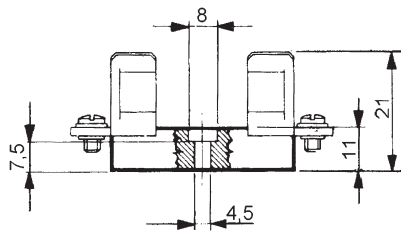
**Fuse holder (Fuse blocks)** for fuse links size **6.3 x 32 mm** Rated current **10 A**

Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm
250 V	199 022	Printed circuit board	37.5	0.5 x 1



**Fuse holder (Fuse blocks)** for fuse links size **6.3 x 32 mm** Rated current **25 A**

Rated Voltage AC	Part No.	Mounting	connections
500 V	199 037	Printed circuit board, screw or rivet	screw



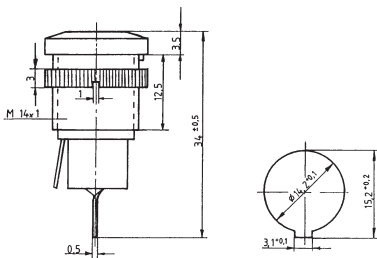
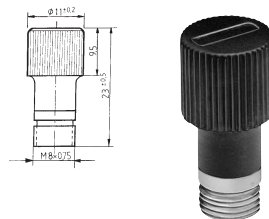
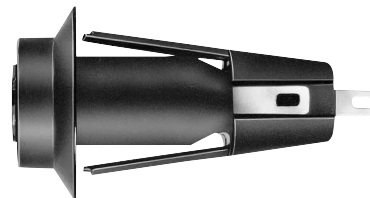
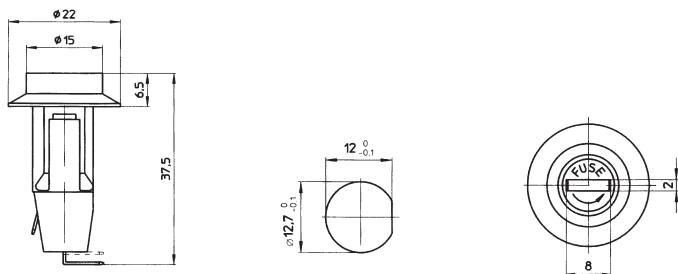
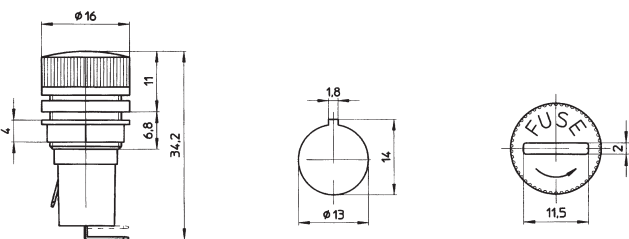
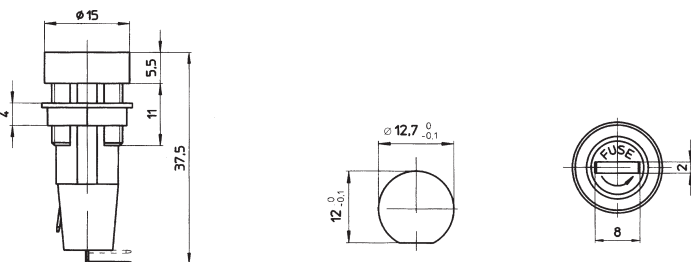
**Fuse holders  
(Screw cap)**

 for fuse links size  
**5 x 20 mm**

 Rated current  
**6.3 A**

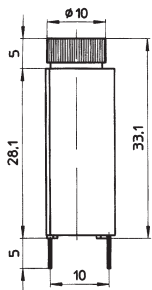
 Protection class  
**IP 40**

Rated Voltage AC	Part No.	Mounting	Hole Ø mm	Connections
250 V	191 100	Panel, locating lug, locknut M 14 x 1	14.2 + 0.1	Solder or plug
250 V	197 100	Panel, locating lug, locknut M 14 x 1	14.2 + 0.1	Solder or plug
250 V	199 040	Panel, with flat as shown, snap-in	12.7	Solder or plug
250 V	199 030	Panel, locating lug, locknut SW 14	13	Solder or plug
250 V	199 035	Panel, with flat as shown, locknut SW 14	12.7	Solder or plug

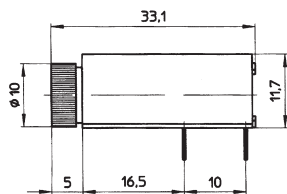
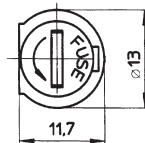
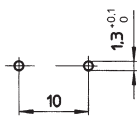
**191 100**

**197 100**

**199 040**

**199 030**

**199 035**


**Fuse holder (Bayonet cap)** for fuse links size **5 x 20 mm** Rated current **6.3 A** Protection class **IP 40**

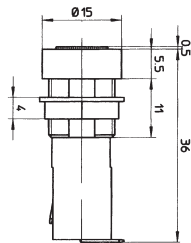
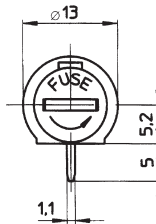
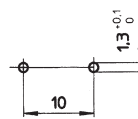
Rated Voltage AC	Part No.	Mounting	Pin distance mm	Hole Ø mm	Connections
250 V	199 045	Printed circuit board, vertical mounting	10	1.3 + 0.1	Solder
250 V	199 050	Printed circuit board, horizontal mounting	10	1.3 + 0.1	Solder
250 V	199 055	Panel, with flat as shown, locknut SW 14		12.7	Solder or plug
250 V	199 070	Panel, with flat as shown, locknut SW 14		12.7	Solder or plug
250 V	199 090	Panel, with flat as shown, locknut SW 16		12.7	Solder or plug



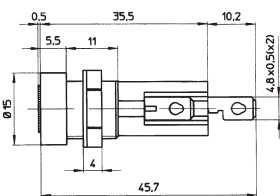
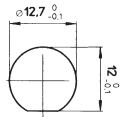
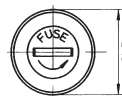
**199 035**



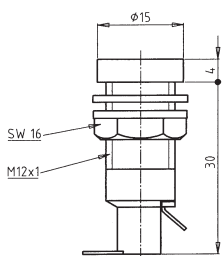
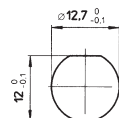
**199 035**



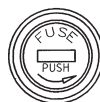
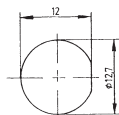
**199 035**



**199 035**

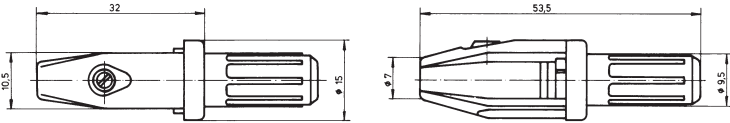


**199 035**



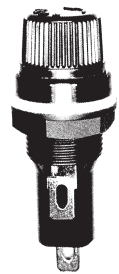
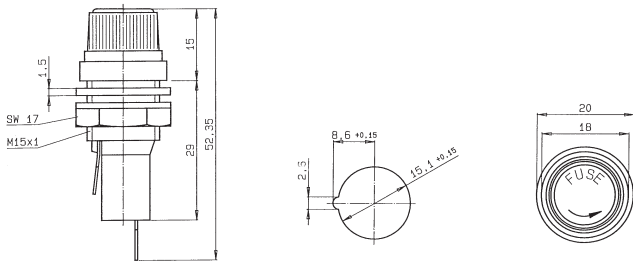
**Fuse holder** for fuse links size **5 x 20 mm** Rated current **6.3 A**

Rated Voltage AC	Part No.	Mounting	Connections
42 V	199 081	In-line fuse holder, bayonet locking	Solder or screw



**Fuse holder (Screw cap)** for fuse links size **6.3 x 32 mm** Rated current **15 A** Protection class **IP 40**

Rated Voltage AC	Part No.	Mounting	Hole Ø mm	Connections
250 V	199 043	Panel, locating lug, locknut SW 17	15.1	Solder or plug



**Fuse holder Screw cap** for fuse links size **6.3 x 32 mm** Rated current **20 A** Protection class **IP 40**

Rated Voltage AC	Part No.	Mounting	Hole Ø mm	Connections
250 V	199 052	Panel, locating lug, locknut SW 18	15.1	Solder

