CYLINDRICAL FUSES

df Electric

gG CYLINDRICAL FUSES

Cylindrical fuse links gG class for use as general protection against overloads and short circuits, intended as protection of cables, power lines and equipment. Made of ceramic tube with high withstand to internal pressure and thermal shock, that allow a high breaking capacity in a reduced physical space. The melting elements are specially designed in order to avoid aging and thus maintain unalterable the electrical characteristics. Contact caps are made of silver plated copper. Versions available with fusing indicator or with striker for use in fuse holders with microswitch.

www.df-sa.es/cylindrical/fuses/gG/

	In (A)	REFERENCE WITHOUT INDICATOR	REFERENCE WITH INDICATOR	U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni./BOX
8x32	0,5	**420500**	–	400	20	–	–	–	10/100
	1	**420501**	–	400	20	–	–	–	10/100
	2	**420502**	**420602**	400	20	–	–	–	10/100
	4	**420504**	**420604**	400	20	–	–	–	10/100
	6	**420506**	**420606**	400	20	–	–	–	10/100
	8	**420508**	**420608**	400	20	–	–	–	10/100
	10	**420510**	**420610**	400	20	–	–	–	10/100
	12	**420512**	**420612**	400	20	–	–	–	10/100
	16	**420516**	**420616**	400	20	–	–	–	10/100
	20	**420720**	**420820**	400	20	–	–	–	10/100

420500

10x38	0,5	**420000**	–	500	120	–	–	–	10/100
	1	**420001**	–	500	120	–	–	–	10/100
	2	**420002**	**420102**	500	120	–	–	–	10/100
	4	**420004**	**420104**	500	120	–	–	–	10/100
	6	**420006**	**420106**	500	120	–	–	–	10/100
	8	**420008**	**420108**	500	120	–	–	–	10/100
	10	**420010**	**420110**	500	120	–	–	–	10/100
	12	**420012**	**420112**	500	120	–	–	–	10/100
	16	**420016**	**420116**	500	120	–	–	–	10/100
	20	**420020**	**420120**	500	120	–	–	–	10/100
	25	**420025**	**420125**	500	120	–	–	–	10/100
	32*	**420032**	**420132**	400	120	–	–	–	10/100

* OVERRATING FUSES

420025

14x51	1	**421001**	–	690	80	–	–	–	10/50
	2	**421002**	**421102**	690	80	**421202**	500	120	10/50
	4	**421004**	**421104**	690	80	**421204**	500	120	10/50
	6	**421006**	**421106**	690	80	**421206**	500	120	10/50
	8	**421008**	**421108**	690	80	**421208**	500	120	10/50
	10	**421010**	**421110**	690	80	**421210**	500	120	10/50
	12	**421012**	**421112**	690	80	**421212**	500	120	10/50
	16	**421016**	**421116**	690	80	**421216**	500	120	10/50
	20	**421020**	**421120**	690	80	**421220**	500	120	10/50
	25	**421025**	**421125**	690	80	**421225**	500	120	10/50
	32	**421032**	**421132**	500	120	**421232**	500	120	10/50
	40	**421040**	**421140**	500	120	**421240**	500	120	10/50
	50	**421050**	**421150**	400	120	**421250**	400	120	10/50

STANDARDS
IEC 60269-1
IEC 60269-2
EN 60269-1
EN 60269-2

APPROVALS
Cd-Pb FREE
RoHS compliant

TECHNICAL t-I AND CUT-OFF CHARACTERISTICS PAGE 12
TECHNICAL I^2t CHARACTERISTICS AND POWER DISSIPATION PAGE 13
TECHNICAL DC APPLICATIONS FOR CYLINDRICAL FUSES PAGE 24
COMPATIBLE PMF MODULAR FUSE HOLDERS PAGE 06
COMPATIBLE PMX MODULAR FUSE HOLDERS PAGE 07
COMPATIBLE PMC & PMCC FUSE HOLDERS PAGE 09
COMPATIBLE SC SCREW FIXING & BAC OPEN FUSE HOLDERS PAGE 10

sales@prom-elec.com / ООО ПРОМЭЛЕКТРОНИКА

CYLINDRICAL FUSES

gG CYLINDRICAL FUSES

22x58

In (A)	REFERENCE WITHOUT INDICATOR	REFERENCE WITH INDICATOR	U (V)	BREAKING CAPACITY (kA)	REFERENCE WITH STRIKER	U (V)	BREAKING CAPACITY (kA)	PACKING Uni./BOX
2	**422002**	**422102**	690	80	–	–	–	10/50
4	**422004**	**422104**	690	80	**422204**	690	80	10/50
6	**422006**	**422106**	690	80	**422206**	690	80	10/50
8	**422008**	**422108**	690	80	**422208**	690	80	10/50
10	**422010**	**422110**	690	80	**422210**	690	80	10/50
12	**422012**	**422112**	690	80	**422212**	690	80	10/50
16	**422016**	**422116**	690	80	**422216**	690	80	10/50
20	**422020**	**422120**	690	80	**422220**	690	80	10/50
25	**422025**	**422125**	690	80	**422225**	690	80	10/50
32	**422032**	**422132**	690	80	**422232**	690	80	10/50
40	**422040**	**422140**	690	80	**422240**	690	80	10/50
50	**422050**	**422150**	690	80	**422250**	690	80	10/50
63	**422063**	**422163**	690	80	**422263**	690	80	10/50
80	**422080**	**422180**	500	120	**422280**	500	120	10/50
100	**422000**	**422100**	500	120	**422200**	500	120	10/50
125*	**422015**	**422115**	400	120	**422215**	400	120	10/50

* OVERRATING FUSES

gG aM NEUTRAL LINKS

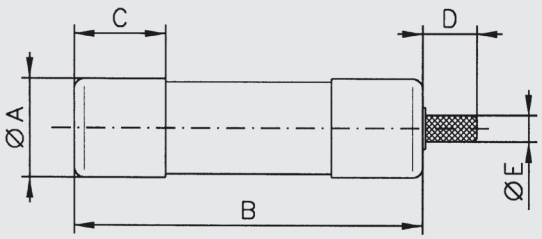
8x32
10x38
14x51
22x58

SIZE	REFERENCE	PACKING Uni./BOX
8x31	**430000**	10/100
10x38	**431000**	10/100
14x51	**432000**	10/50
22x58	**433000**	10/50

431000

TECHNICAL

gG CYLINDRICAL FUSES DIMENSIONS

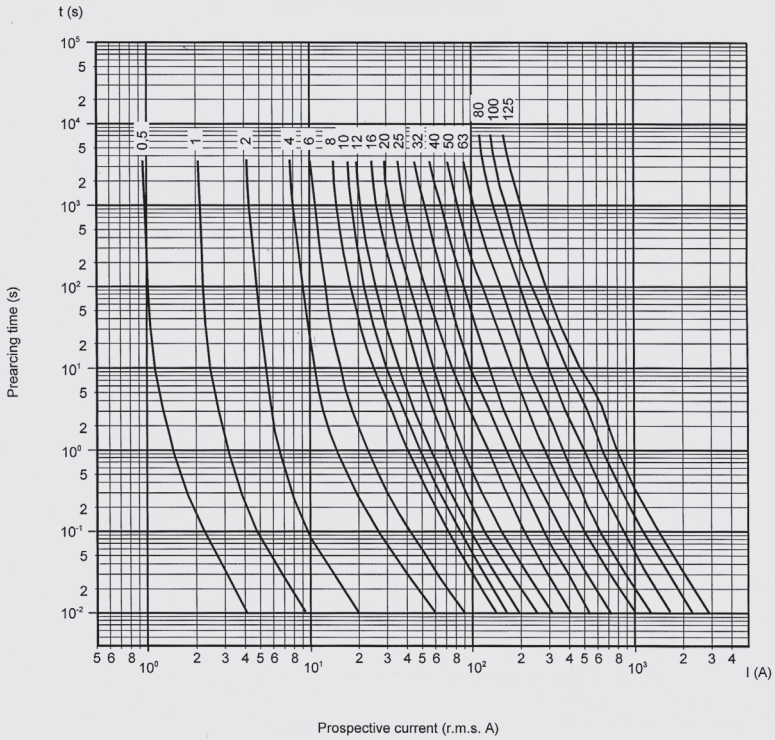


SIZE	A	B	C	D	E
8,5x31,5	8,5	31,5	6,3	–	–
10,3x38	10,3	38	8,5	–	–
14,3x51	14,3	51	11,5	8	4
22,2x58	22,2	58	15,5	8	4

COMPATIBLE
PMP PANEL MOUNTING & PMB SOCKET FUSE HOLDERS
PAGE 11

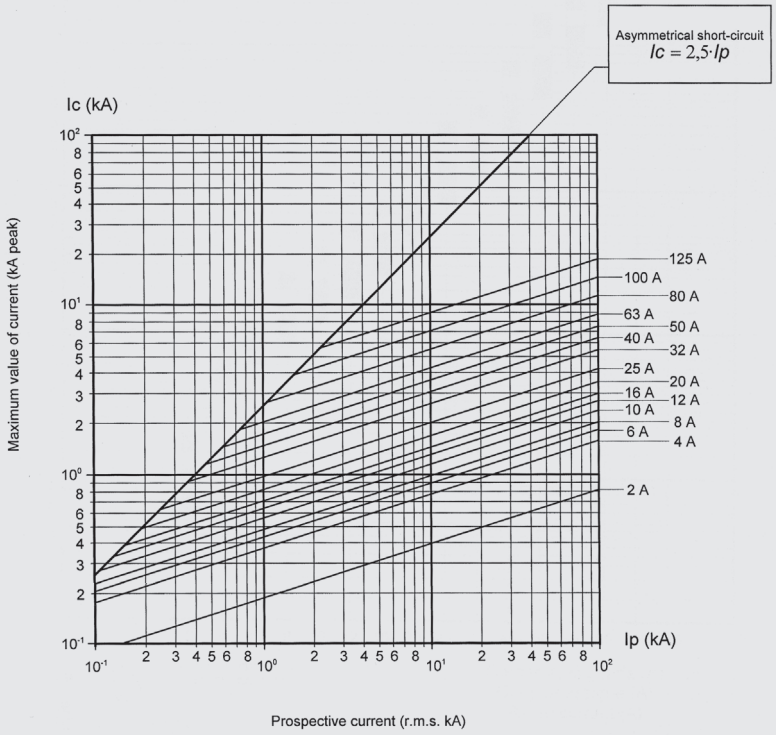
TECHNICAL

gG CYLINDRICAL FUSES
t-I CHARACTERISTICS



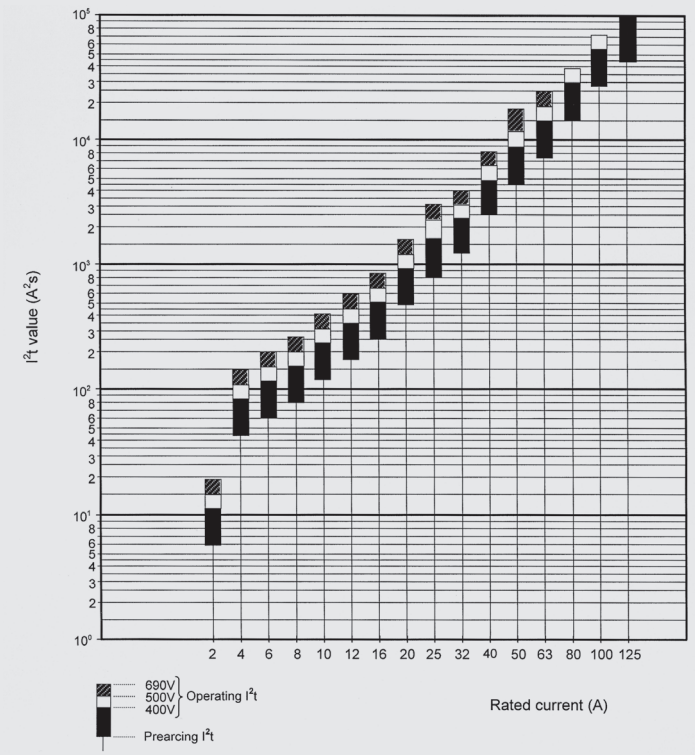
TECHNICAL

gG CYLINDRICAL FUSES
CUT-OFF CHARACTERISTICS



TECHNICAL

gG CYLINDRICAL FUSES
I²t CHARACTERISTICS



TECHNICAL

gG CYLINDRICAL FUSES
POWER DISSIPATION

I_n (A)	SIZE 8,5x32 (VW)	10x38 (VW)	14x51 (VW)	22x58 (VW)
0,5	1,2	1,43	–	–
1	2,0	2,77	3,90	–
2	0,5	0,60	0,90	1,00
4	0,8	0,70	1,00	1,10
6	1,1	0,85	1,15	1,30
8	1,3	0,75	1,00	1,10
10	1,0	1,00	1,30	1,50
12	1,2	1,30	1,70	1,80
16	1,5	1,60	2,00	2,10
20	2,0	2,00	2,50	2,70
25	–	2,60	3,30	3,30
32	–	2,90	3,50	3,50
40	–	–	4,75	4,00
50	–	–	4,80	5,50
63	–	–	–	6,90
80	–	–	–	7,80
100	–	–	–	9,00
125	–	–	–	11,4

TECHNICAL

gG

CYLINDRICAL FUSES
DC APLICATIONS

Fuses are generally suitable for both AC and DC applications. The DC performance of fuse-links is different and AC ratings cannot be used for DC applications. There is no simple rule that safely converts an AC voltage rating of a fuse-link to DC voltage rating. For this reason it is necessary to take into account a lot of aspects in order to determine the DC applications.

In the **DF ELECTRIC gG cylindrical fuses** it is necessary to take into account the following considerations:

- The power dissipations are the same in AC (RMS value) and the DC values.
- The time current characteristics are the same for DC applications under steady-state conditions.
- The DC rated voltage and maximum breaking capacity are lower than the AC values (see the table).

SIZE	RATED CURRENT	MAX. DC VOLTAGE	DC BREAKING CAPACITY
8,5x31,5	0,5A...10A 12A...20A	150V DC 60V DC	5 kA
10x38	0,5A...16A 20A...32A	250V DC 80V DC	15 kA
14x51	1A...25A 32A & 40A 50A	440V DC 80V DC 48V DC	15 kA
22x58	2A...63A 80A & 100A 125A	440V DC 80V DC 48V DC	15 kA

NOTES
These values are referred to a time constant L/R = 15 ms.
For higher values of time constant, the maximum utilization voltage must be reduced.

For circuits with very inductive behaviour, we recommend to connect two fuses in series.