Ferrule Fuses
aM & gG 400V to 690V with/without Striker
aM & gG 8x32, 10x38, 14x51, 22x58

Residential and Industrial Cylindrical Fuse-links

Ferraz Shawmut gF/gG-gG and aM fuse-links cover a wide range of physical sizes and ampere ratings for 250, 380/ 400, 500, and 660* 690volts AC. gF/gG fuse-links are for residential use. gG and aM fuse-links are for industrial applications. Most ratings are available with an optional indicator. All industrial fuse-links have the option of a built-in striker. All cylindrical fuse-links have ceramic bodies and silver-plated ferrules.*

** Fuse-links marked 380V (gF/gG) and 660V (gG-aM) will be re-marked (and safely used at) 400V AC and 690V AC in compliance with changes in IEC Standard 269, but should not be used above 418V AC or 726V AC.*

gF/gG

Residential Full Range Protection

- *7 physical sizes from 6.3 x 23mm to 10.3 x 38 mm*
- *250 and 380 Volt ratings - 0.5A through 32A*
- *Most ratings available with indicator*
- *Meet IEC, NFC, UNE standards*
- *See residential fuse-links, Special Purpose section*

gG

Full Range Protection

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

gG

Full Range Protection

Fuse-links with striker

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

aM

Short Circuit Protection

- *4 physical sizes from 8 x 31 mm to 22 x 58 mm*
- *400, 500 and 690 Volt ratings- 0.16A through 125A*
- *Most ratings available with indicator*
- *Meet IEC, NFC and UNE standards*
- *Approved by Lloyds Register of Shipping and Bureau Veritas*

aM

Short Circuit Protection

Fuse-links with striker

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

Ferrule Fuses
gG 400V to 690V
with/without Striker
gG 8x32, 10x38, 14x51, 22x58

Ratings - gG (Optional Blown-Fuse Indicator)

Size	Rated In Current (A)	Rated Voltage	Previous References		Reference Number		Breaking Capacity	Catalog Number	
			w/o Indicator	w Indicator	w/o Indicator	w Indicator		w/o Indicator	w Indicator
8 x 31	0.5	400V	15009	-	P218191	-	20kA - 400V	FR8GG40V0.5	
	1		15011	-	C218709			FR8GG40V1	
	2		15013	15213	Q219227	B222204		FR8GG40V2	FR8GG40V2I
	4		15019	15219	W222958	X222959		FR8GG40V4	FR8GG40V4I
	6		15023	15223	A211025	V201291		FR8GG40V6	FR8GG40V6I
	8		15027	15227	B213096	B211026		FR8GG40V8	FR8GG40V8I
	10		15031	15231	A214613	A212060		FR8GG40V10	FR8GG40V10I
	12		15033	15233	R216146	C213097		FR8GG40V12	FR8GG40V12I
	16		15035	15235	P216650	Y214105		FR8GG40V16	FR8GG40V16I
	20		15037	15237	F217677	J215127		FR8GG40V20	FR8GG40V20I
	25		15039	15239	D218710	S216147		FR8GG40V25	FR8GG40V25I
10 X 38	0.5	500V	16009	-	C211027	-	120kA - 500V	FR10GG50V0.5	FR10GG50V2I
	1		16011	-	B212061	-		FR10GG50V1	FR10GG50V4I
	2		16013	16213	D213098	S216653		FR10GG50V2	FR10GG50V6I
	4		16019	16219	X213598	E217170		FR10GG50V4	FR10GG50V10I
	6		16023	16223	K215128	T218195		FR10GG50V6	FR10GG50V10I
	8		16027	16227	D217169	V219231		FR10GG50V10	FR10GG50V12I
	10		16031	16231	S218194	E222207		FR10GG50V10	FR10GG50V16I
	12		16033	16233	W219761	H200751		FR10GG50V12	FR10GG50V20I
	16		16035	16235	G200750	H201809		FR10GG50V16	FR10GG50V25I
	20		16037	16237	D211028	X211551		FR10GG50V20	FR10GG50V32I
	25		16039	16239	E213099	W212585		FR10GG50V25	FR10GG50V2I
	32	400V	16043	16243	A214107	Z213600	120kA - 400V	**FR10GG40V32**	FR10GG40V32I
14 X 51	1	690V	17011	-	K218716	-	80kA - 690V	FR14GG69V1	
	2		17013	17213	Y219234	C201298		FR14GG69V2	FR14GG69V2I
	4		17019	17219	A219765	H211032		FR14GG69V4	FR14GG69V4I
	6		17023	17223	H222210	G212066		FR14GG69V6	FR14GG69V6I
	8		17027	17227	D222965	K213104		FR14GG69V8	FR14GG69V8I
	10		17031	17231	L200754	H214620		FR14GG69V10	FR14GG69V10I
	12		17033	17233	L201812	R215640		FR14GG69V12	FR14GG69V12I
	16		17035	17235	A211554	X216657		FR14GG69V16	FR14GG69V16I
	20		17037	17237	Z212588	N217684		FR14GG69V20	FR14GG69V20I
	25		17039	17239	C213603	M218718		FR14GG69V25	FR14GG69V25I
	32	500V	17043	17243	W216656	C219767	120kA - 500V	FR14GG50V32	FR14GG50V32I
	40		17047	17247	X218198	F222967		FR14GG50V40	FR14GG50V40I
	50	400V	17051	17251	Z219235	D201299	120kA - 400V	FR14GG40V50	FR14GG40V50I
22 x 58	2	690V	18013	-	F219241	-	80kA - 690V	FR22GG69V2	
	4		18019	18219	H219772	Q211039		FR22GG69V4	FR22GG69V4I
	6		18023	18223	P222216	P212073		FR22GG69V6	FR22GG69V6I
	8		18027	18227	L222972	R213110		FR22GG69V8	FR22GG69V8I
	10		18031	18231	T200761	N214119		FR22GG69V10	FR22GG69V10I
	12		18033	18233	J201304	Y215140		FR22GG69V12	FR22GG69V12I
	16		18035	18235	S201818	D216157		FR22GG69V16	FR22GG69V16I
	20		18037	18237	P211038	R217181		FR22GG69V20	FR22GG69V20I
	25		18039	18239	N212072	F218206		FR22GG69V25	FR22GG69V25I
	32		18043	18243	F212594	H219243		FR22GG69V32	FR22GG69V32I
	40		18047	18247	J213609	R222218		FR22GG69V40	FR22GG69V40I
	50		18051	18251	P214626	W200763		FR22GG69V50	FR22GG69V50I
	63		18055	18255	Y215646	V201820		FR22GG69V63	FR22GG69V63I
	80		18059	18259	Q217180	K211563		FR22GG69V80	FR22GG69V80I
	100	500V	18063	18263	E218205	H212596	120kA -500V	FR22GG50V100	FR22GG50V100I
	125	400V	18065	18265	J219773	L213611	120kA -400V	FR22GG40V125	FR22GG40V125I

Packaging 10

X211551

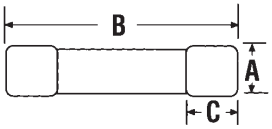
M218718

K211563

Blown-Fuse Indicator

BEFORE 

AFTER 



Dimensions

Fuse Size	A	B	C
8 x 31	8.5	31.5	6.3
10 x 38	10.3	38	10.5
14 x 51	14.3	51	13.8
22 x 58	22.2	58	16.2

Ferraz Shawmut

Ferrule Fuses
gG 400V to 690V
with/without Striker
gG 8x32, 10x38, 14x51, 22x58

P201815

R212075

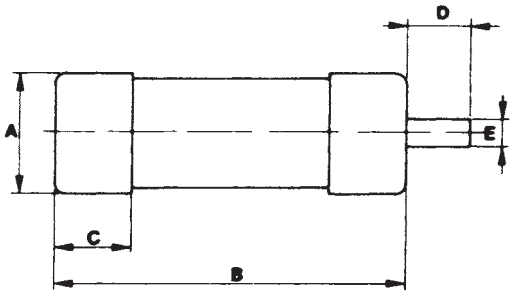
Ratings – gI-gG with Striker

Size (mm x mm)	Rated Current In (A)	Rated Voltage	Previous Reference	Reference Number	Breaking Capacity	Catalog Number
14 X 51	2	500V	17413	J211033	120kA - 500V	FR14GG50V2P
	4		17419	H212067		FR14GG50V4P
	6		17423	G214113		FR14GG50V6P
	8		17427	R215134		FR14GG50V8P
	10		17431	Z216153		FR14GG50V10P
	12		17433	L217176		FR14GG50V12P
	16		17435	Z218200		FR14GG50V16P
	20		17437	B219237		FR14GG50V20P
	25		17439	L222213		FR14GG50V25P
	32		17443	P200757		FR14GG50V32P
	40		17447	P201815		FR14GG50V40P
	50	400V	17451	D211557	120kA - 400V	FR14GG40V50P
22 X 58	4	690V	18419	R214628	80kA - 690V	FR22GG69V4P
	6		18423	A215648		FR22GG69V6P
	8		18427	F216665		FR22GG69V8P
	10		18431	W217691		FR22GG69V10P
	12		18433	W218726		FR22GG69V12P
	16		18435	L219775		FR22GG69V16P
	20		18437	P222975		FR22GG69V20P
	25		18439	M201307		FR22GG69V25P
	32		18443	S211041		FR22GG69V32P
	40		18447	R212075		FR22GG69V40P
	50		18451	M213612		FR22GG69V50P
	63		18455	S214629		FR22GG50V63P
	80		18459	F216159		FR22GG50V80P
	100	500V	18463	T217183	120kA - 500V	FR22GG50V100P
	125	400V	18465	H218208	120kA - 400V	FR22GG40V125P

Packaging 10

Dimensions

Fuse Size	A	B	C	D	E
14 x 51	14.3	51	13.8	7.5	3.8
22 x 58	22.2	58	16.2	7.5	3.8

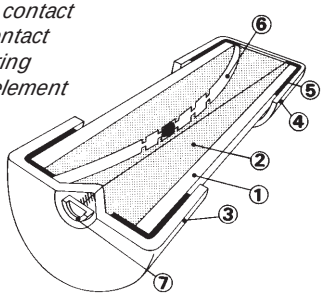


Striker

BEFORE

AFTER

1 Ceramic body
2 Sand
3 Indicator contact
4 Lower contact
5 Contact ring
6 Melting element
7 Indicator



Neutral

Size (mm x mm)	Previous Reference	Reference Number	Standard Pack/CTN	Catalog Number
10 x 38	19100	R211569		FRN1038
14 x 51	19200	M212600	10	FRN1451
22 x 58	19300	R213616		FRN2258

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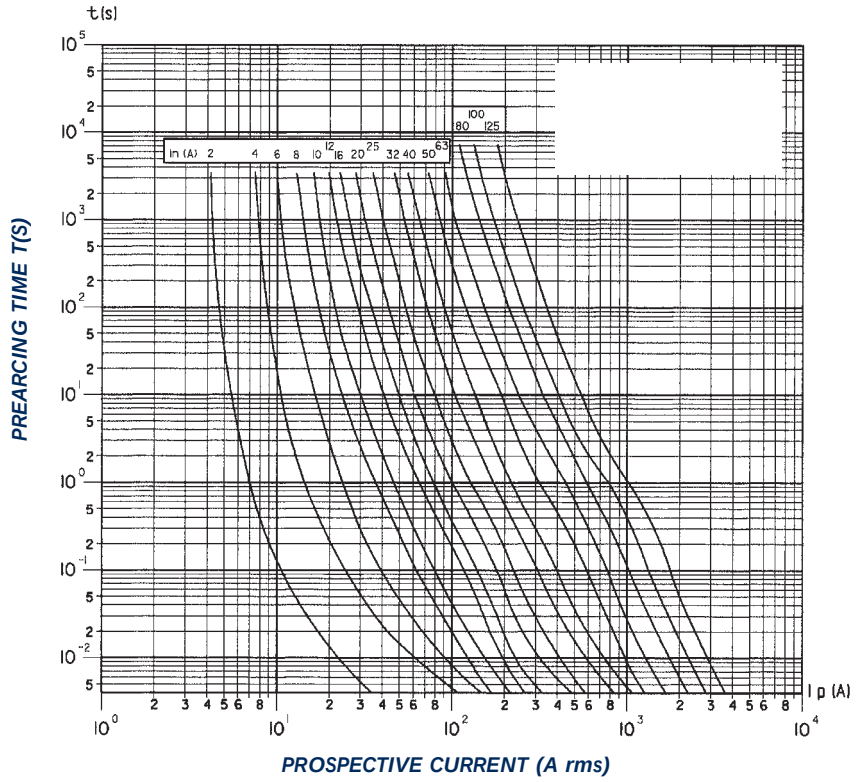
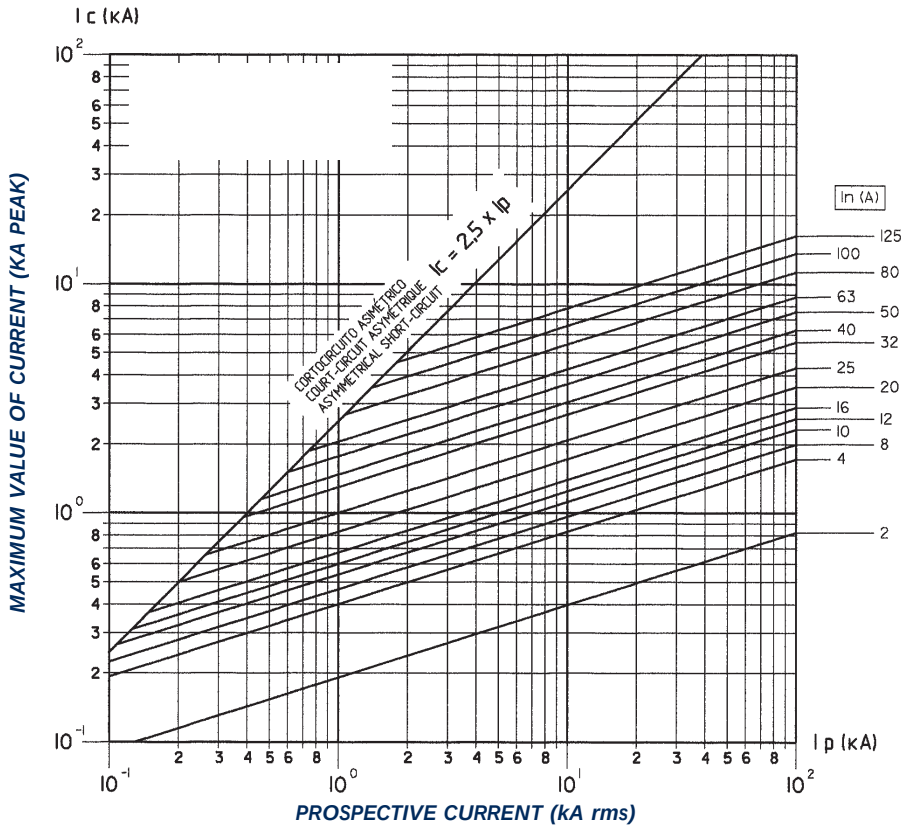
Characteristics t-I



Cut-off characteristics



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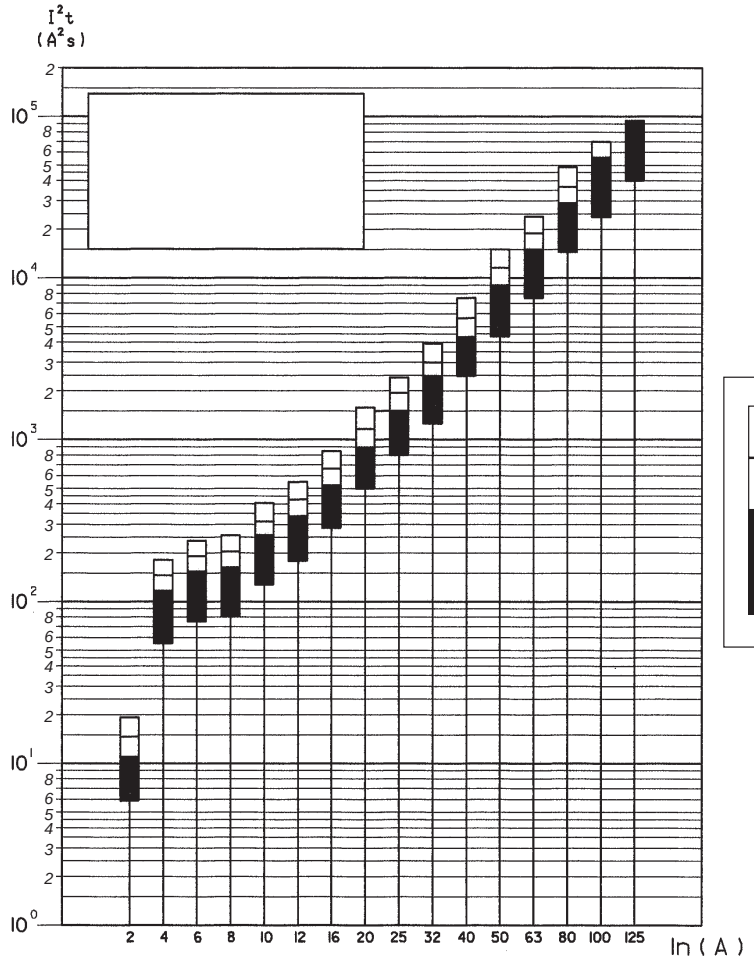
Characteristics I2t



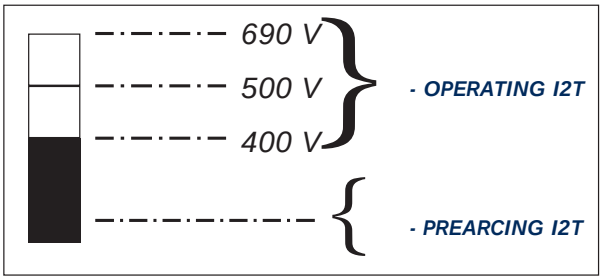
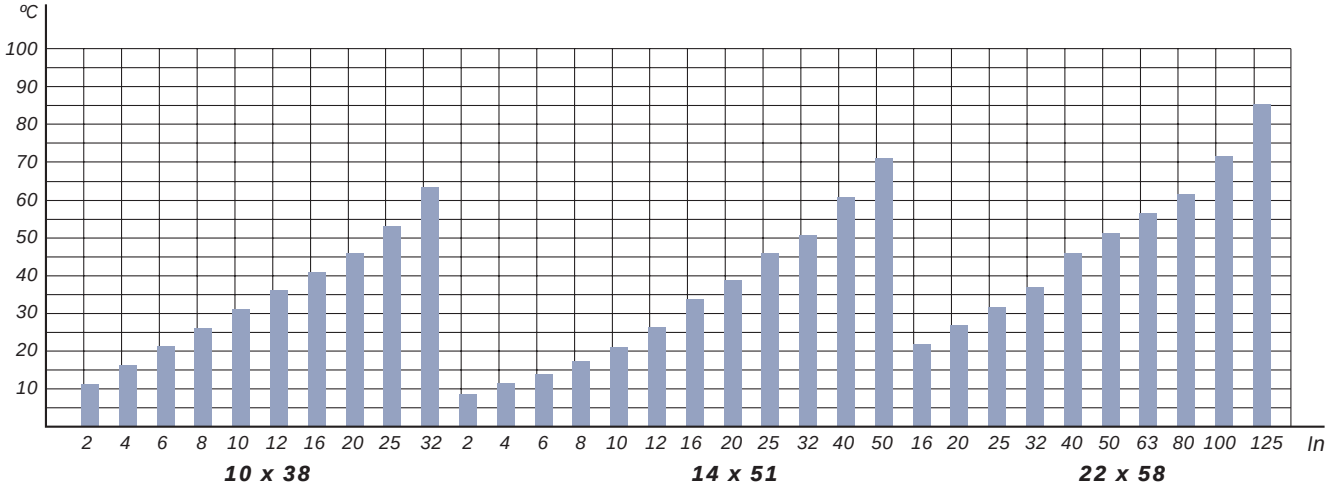


Table temperature increase (testing in superior contact)



Ferrule Fuses
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Power loss table

In	Size		
	10 x 38	14 x 51	22 x 58
0,5 A	2 W		
1 A	2,5 W	3,4 W	
2 A	0,70 W	1 W	1,20 W
4 A	0,80 W	1,10 W	1,30 W
6 A	0,90 W	1,20 W	1,40 W
8 A	1,10 W	1,50 W	1,65 W
10 A	1,35 W	1,80 W	2 W
12 A	1,55 W	2,10 W	2,40 W
16 A	1,90 W	2,55 W	3 W
20 A	2,30 W	3 W	3,40 W
25 A	2,80 W	3,50 W	3,80 W
32 A	3 W	3,80 W	4,30 W
40 A		4,40 W	5,10 W
50 A		4,7 W	5,50 W
63 A			6,70 W
80 A			8 W
100 A			9 W
125 A			12,5 W

Maximum standardized power low.

IEC 269-2-1 NFC 63.213 UNE 21.103-2-1	10 x 38	14 x 51	22 x 58
	25 A	40 A	100 A
	3 W	5 W	9,5 W

Table of maximum length of network in function of In and conductor section.
Maximum standardized power low.

gG Class Fuses

Copper conductor section (mm^2)	Rated Current (In) OF gG Fuses (in A)									
	16	20	25	32	40	50	63	80	100	125
1,5	99/113	86/87	40/59	21/29	13/16	7/9				
2,5		134	110/122	67/84	41/51	25/33	13/20	8/11		
4			183	139	108/119	67/84	46/58	24/32	14/17	7,3/10
6				214	165	139	94/113	55/70	33/41	20/27
10					275	226	172	130	90/108	57/70
16							283	217	168	128
25								336	257	197
35									367	283
50										379

* 99/118:
- 99; Cond. PVC / 118; Cond. PRC