



Medium Voltage Fuses Clips



Cat. No. 228-700-520
(Pair at bottom)

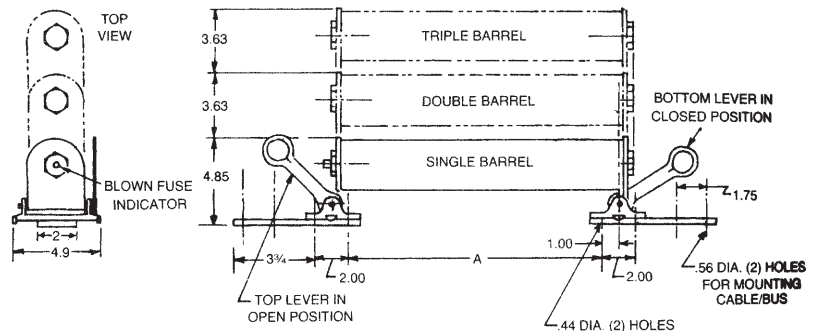
Cat. No. 228-700-530
(Single at top)

Clip lock design for CL-14 series

The Clip Lock design provides a reliable, high-pressure contact. Ferraz Shawmut CL-14 fuses have copper tabs which slide into position between the clip casting and cam. When the cam is locked by moving the pull ring, a high-pressure contact is made between the clip casting and fuse tab. Each clip includes two .44" diameter counter-sunk holes on 2" centers and two flat head socket screws (3/8-16 UNRC, recommended torque 200 pound-inches) for mounting the clip on standard NEMA insulators. These clips will accommodate 5kV and 15kV CL-14 fuses rated 10E to 600E. Order catalog number 228-700-520 for one pair of fuse clips, enough for one fuse.

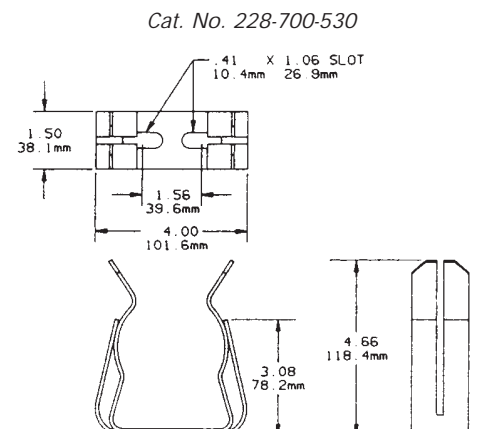
Mounting Details for Clip Lock Cat. No. 228-700-520

CL-14 Fuse Catalog Number	A Dimensions - Inches
A055C1DORO-(10E-150E)	13.25
A055C1DORO-(200E-400E)	19.25
A055C2DORO-(450E-600E)	19.25
A155C1DORO-(10E-50E)	19.25
A155C1DORO-(65E-100E)	19.25
A155C2DORO-(125E)	19.25
A155C3DORO-(150E-300E)	19.25



Clips for 3" diameter ferrule fuses

These spring-reinforced clips will accommodate all 3" diameter, one and two barrel E-rated and R-rated medium voltage ferrule-type fuses. The clip and reinforcing spring are intended to be bolted to a copper bus bar through two .41" x 1.06" slots. A minimum copper-bus cross section of 1/4" x 1-1/2" is recommended for maximum fuse ratings of 24R and 450E. Catalog number is 228-700-530 for one pair of spring-reinforced clips, enough for one fuse.

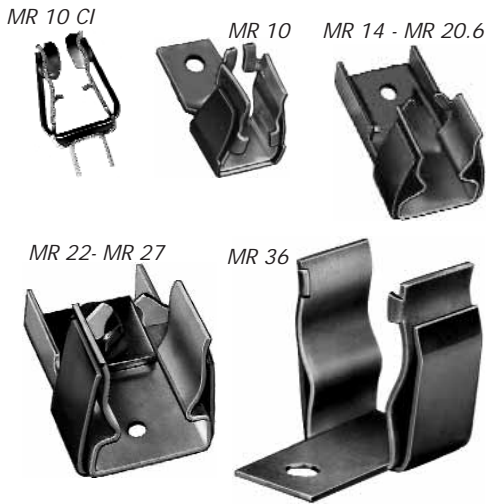


Cat. No. 228-700-530



Gears & Fuse Gears

Medium Voltage Fuses Clips



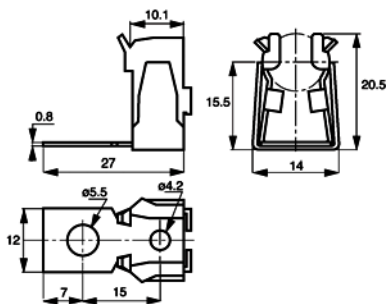
For Ferrule style Fuses
 \varnothing 10 - 14 - 22 - 27 - 36 - 45 - 55

- SILVER-PLATED COPPER CLIPS: EXTREMELY HIGH THERMAL AND ELECTRIC CONDUCTIVITY
- MOUNTING TYPE:
 - SCREWING ON ISOLATORS
 - SCREWING ON BARS OR INSULATED BARS
 - WELDING ON P.C.B. (MR 10 CI)
- STAINLESS STEEL PRESSURE SPRINGS: HIGHLY RESISTANT TO SALT SPRAY

Main Characteristics

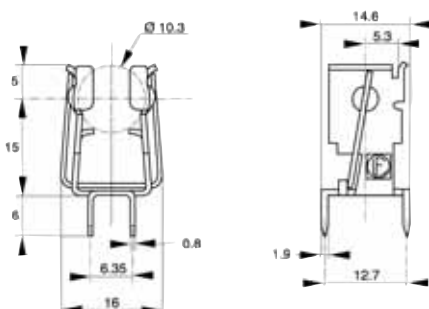
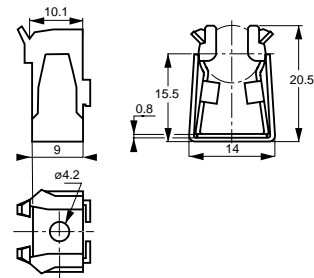
Designation	Current rating IN (A)	Maximum R.M.S continuous current through IN - rated current fuses (A)	Recommended copper cable section (mm ²)
MR 10	32	32	4
MR 10 CI	32	32	4
MR 14	63	63	10
MR 20	125	125	35
MR 22	135	135	35
MR 27	250	250	120
MR 36	250	250	120
MR45	525	525	-
MR55	750	750	-

MR 10 - MR 10 CI



Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR10RESSORT	MR 10	B098004	7	20 pieces

Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR10RESSORTSP	MR 10 without connection	C098994	5,7	20 pieces



Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR10RESSORTCI	MR 10 CI	Y098507	4,5	200 pieces



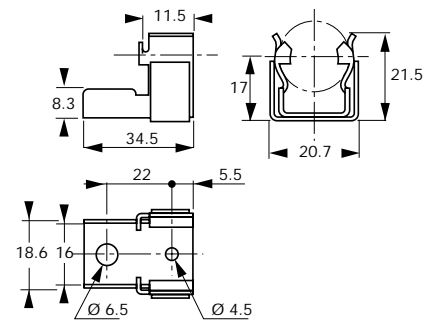
Medium Voltage Fuses Clips



For Ferrule style Fuses
 \varnothing 10 - 14 - 22 - 27 - 36 - 45 - 55

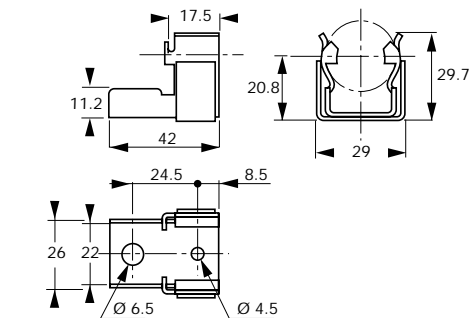
MR 14

Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR14SPRING	MR 14	G098170	16	10 pieces



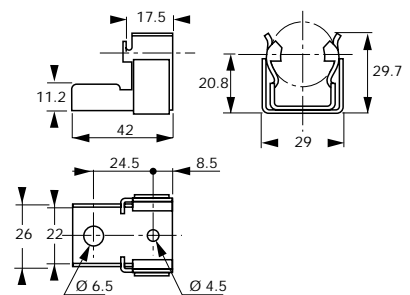
MR 20.6

Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR20RESSORT	MR 20.6	H099988	40	20 pieces



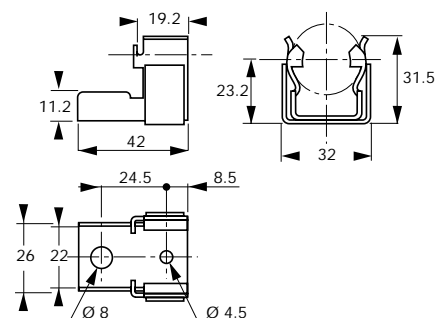
MR 22

Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR22SPRING	MR 22	K098909	40	10 pieces



MR 27

Catalog Number	Designation	Ref. Number	Weight (g)	Packaging
MR27RESSORT	MR 27	Y092734	50	20 pieces



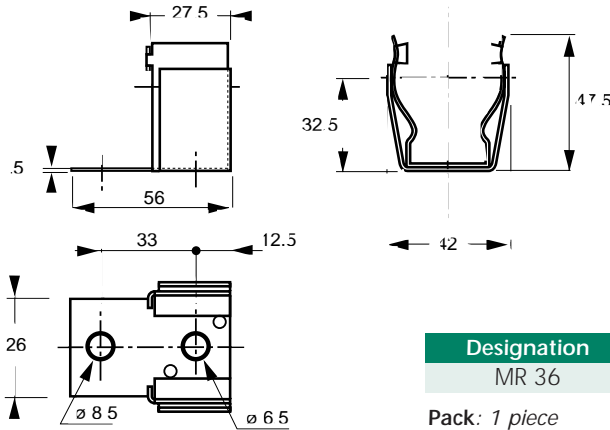


Medium Voltage Fuses Clips



MR 36

For Ferrule style Fuses
 \varnothing 10 - 14 - 22 - 27 - 36 - 45 - 55



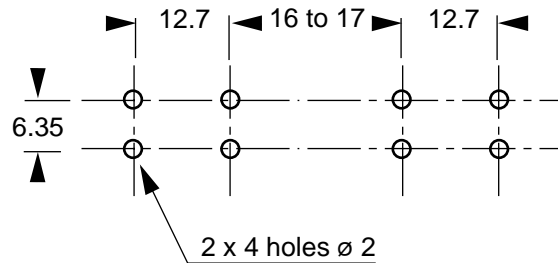
Designation	Ref. Number	Weight (g)	Catalog Number
MR 36	M091275	85	MR36R

Pack: 1 piece

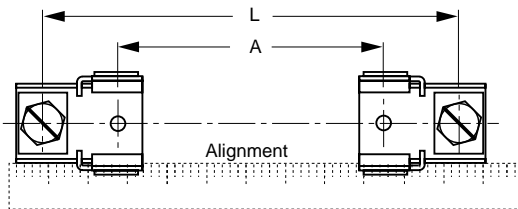
All clips silver-plated copper with stainless steel springs.

Mounting Instructions

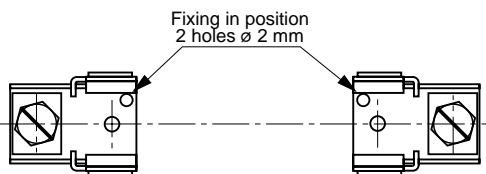
P.C.B. Drilling for MR10 CI clip (10 X 38 Size Fuse)



Clip Mounting



Fuse size	A	L
10 x 38	31	61
14 x 51	42	86
22 x 58	42	91
20 x 51	36	85
20 x 127	113	162
20 x 190	175	224
27 x 60	41	91
36 x 127	100	148
36 x 190	165	231



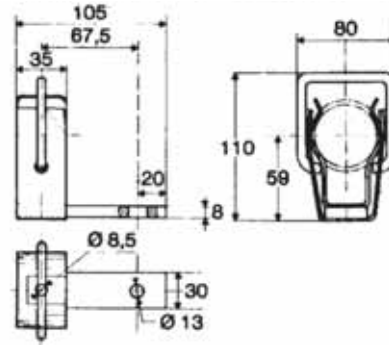
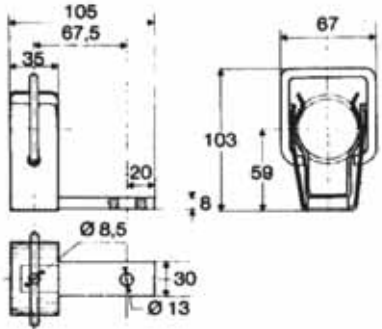
Mounting of two elastic stop pins of 2 mm dia. for fixing clips in position



Medium Voltage Fuses Clips

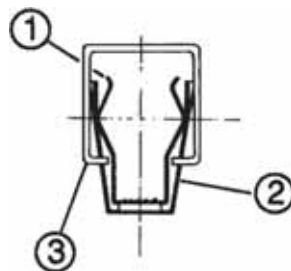


Dimensions MR45 - MR55



For fuse diameter	Designation	Reference Number	Catalog Number	Material ensuring the electrical contact (1)	Thermal current I _{th} (A)	Weight (g)
45	MR 45	L096472	MR45R	Silver-plated copper	525	450
55	MR55	L078969	MR55R	Silver-plated copper	750	450

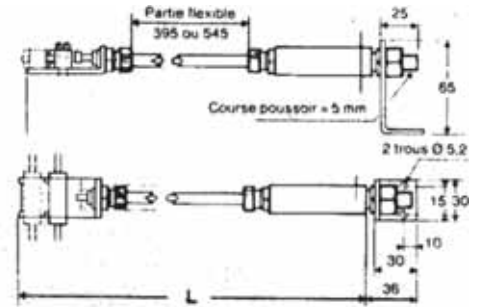
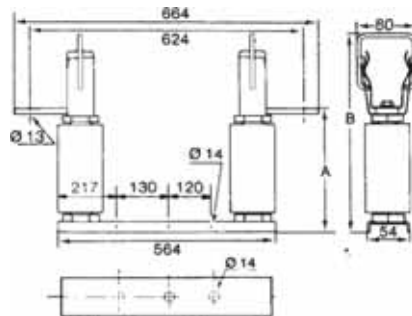
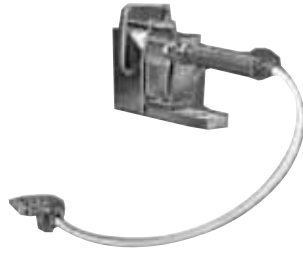
Packaging: 1 piece



All the clips are made of an electrical contact (1) and a spring in stainless steel (2).
The clip MR 45 and MR 55 have also a padlocking system (3) which enables to stop in rotation the heavy fuses.



Medium Voltage Fuses SI Fuse Bases NF Fuse Base



Fuse-holder

Rated voltage (kV)	Designation	Reference Number	Ground voltage withstand		A (mm)	B (mm)	Weight (kg)	Catalog Number
			50 Hz - 1 mn (RMS)	1,2/50µS (peak)				
7,2	SI 120 55x520	K092354	27	60	161	260	2.8	SI130-55-520
12/17,5	SI 175 55x520	Q092934	45	95	216	315	3.6	SI175-55-520
24	SI 225 55x520	R092935	55	125	266	365	4.8	SI210-55-520
36	SI 310 55x520	L092355	75	170	351	450	6.8	SI300-55-520

Indicating device

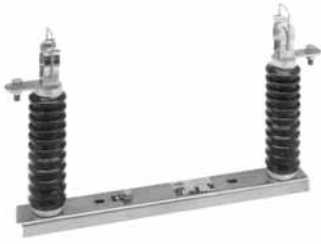
Rated voltage of corresponding fuse-holder (kV)	Designation	Reference Number	Number of Microswitches	Length of flexible part	L (mm)	Weight (kg)	Catalog Number
7,2	MC 1-5 FlexQ	E092694	1	395	560	0,205	MC1-5NFLEXQ
7,2	MC 1-9 FlexQ	F092695	2	395	560	0,215	MC1-9NFLEXQ
12 to 36	MC 1-5 FlexQ640	T092615	1	545	710	0,220	MC1-5NFLEXQ640
12 to 36	MC 1-9 FlexQ640	K078945	2	545	710	0,230	MC1-9NFLEXQ640

The indicating device enables electrical actuating of the opening mechanism for a circuit or triggering of an indicator during the melting of a fuse equipped with a trip-indicator. This very robust and original device means freedom for any mechanical system and offers the advantage of being able to incorporate a microswitch unit or units according to the equipment configuration.



Gears & Fuse Gears

Medium Voltage Fuses SI Fuse Bases DIN Fuse Base



K209424A



E092855A

Fuse Holder

Rated Voltage (V)	Size	Use	Reference Number	Catalog Number
7200	SI 7,2/192	indoor	G209421	SI72V192
12000	SI 12/292	indoor	H209422	SI120V292
17500	SI 17,5/292	indoor	J209423	SI175V292
24000	SI 24/442	indoor	K209424	SI 240V442
36000	SI 36/537	indoor	M209426	SI360V537
12000	SE 12/292	outdoor	S210328	SE120V292
17500	SE 17,5/292	outdoor	T210329	SE175V292
24000	SE 24/442	outdoor	V210330	SE240V442
36000	SE 36/537	outdoor	W210331	SE360V537

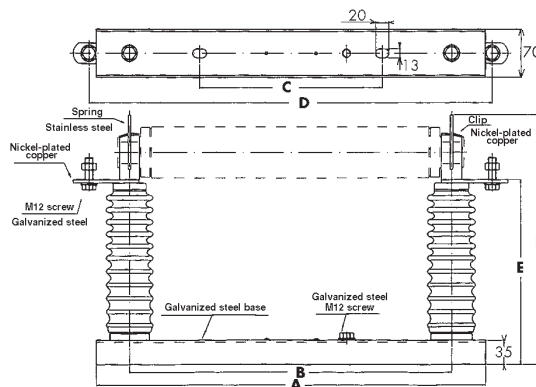
Packaging: 1 piece

Indicating Device

Rated Voltage (KV)	Number of microswitches	Reference Number	Catalog Number
12/36	1 NO/NC	E092855A	MC1-5NFLEXQS500
12/36	2 NO/NC	F092856A	MC1-9NFLEXQS500

Packaging: 1 piece

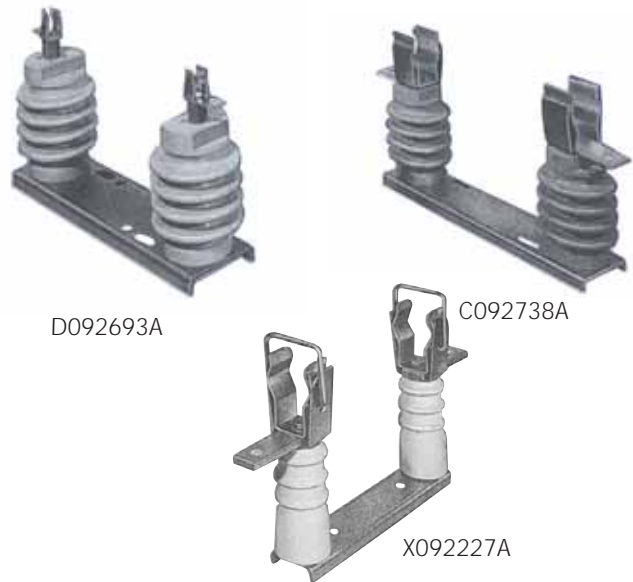
Dimensions



Rated Voltage (V)	Fuse Length L (mm)	Size	Rated withstand Voltage line-mass		Dimensions (mm)						Weight (kg)
			50 HZ - 1 min Kv rms	1,2/50 μ s Kv peak	A	B	C	D	E	F	
7200	192	SI 7,2/192	20	60	400	226	322	347	175	270	3,8
12000	292	SI 12/292	28	75	424	324	200	445	175	270	4,1
17500	292	SI 17,5/292	38	95	424	324	200	445	220	315	5,1
24000	442	SI 24/442	50	125	576	476	270	597	270	365	5,5
36000	537	SI 36/537	70	170	670	570	350	691	354	449	7,7
12000	292	SE 12/292	28	75	424	324	200	445	261	356	7,5
17500	292	SE 17,5/292	38	95	424	324	200	445	261	356	7,5
24000	442	SE 24/442	50	125	576	476	270	597	309	404	8,8
36000	537	SE 36/537	70	170	670	570	350	691	381	476	13,2



Medium Voltage Fuses SI Fuse Bases Other MV Fuse Base



Fuse-holder

Rated voltage (kV)	Designation	Reference Number	Ground voltage withstand		Weight (kg)	Catalog Number
			50 Hz - 1 mn (RMS)	1,2/50µS (kV-peak)		
3,6	SI 50 10x180	S092706	21	45	0,22	SI50-10-180
7,2	S1 85 36x190	C092738	27	60	1,05	SI85-36-190TRA
7,2	S1 85 10x180	D092693	27	60	0,27	SI85-10-180
7,2	S1 85 36x250	P092864	27	60	1,15	SI85-36-250
7,2	S1 120 55x259	X092227	27	60	3,9	SI130-55-259

Pack: 1 piece

The clip MR10, MR 36 and MR 55 can be supplied separately

Indicating Device

Designation	Number of microswitch	Reference Number	Type of fuse that can be equipped	Length of flexible part	Weight (kg)	Catalog Number
MC 1-5 Flex	1NO/NC	E098674	36x190 and 36x250	395	0,110	MC1-5NFLEX
MC 1-9 Flex	2NO/NC	F098675	36x190 and 36x250	395	0,120	MC1-9NFLEX
MC 1-5 Flex Q	1NO/NC	E092694	55x259	395	0,205	MC1-5NFLEXQ
MC 1-9 Flex Q	2NO/NC	F092695	55x259	395	0,215	MC1-9NFLEXQ

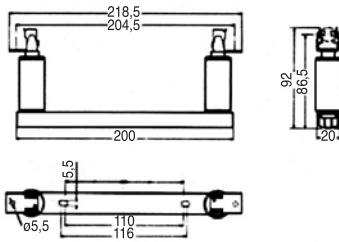
Pack: 1 piece



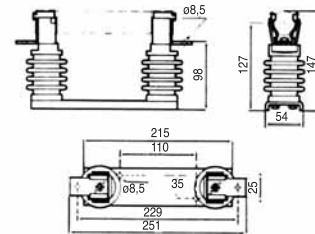
Medium Voltage Fuses SI Fuse Bases Other MV Fuse Base

Dimensions

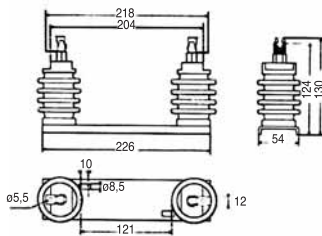
SI 50 10x180



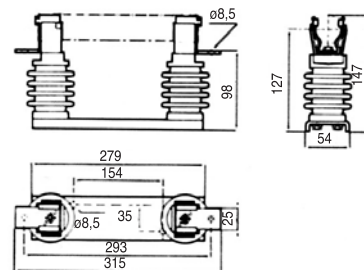
SI 85 36x190



SI 85 10x180



SI 85 36x250



SI 120 55x259

