



Technical Parameters

- Length: between 2m and 3m
- Strip thickness: 0.8mm +
- Maximum copper width: 100mm
- Number of strips: between 2 and 12
- Insulation: Extruded PVC insulation, Halogen Free, Low Smoke
- Flame retardant Class: UL 94v0
- Copper Type: Cu-ETP
- Material condition: Annealed
- Copper purity: 99.9%
- More sizes available on request

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M-Bar

Flexible Copper Busbars by MSS Products Ltd

MSS Products newest connection within the busbar range "M-Bar" comprises of a collection of soft annealed Cu-ETP strips secured within an extruded PVC insulation.

This easy to shape busbar provides the user with various bending possibilities or configurations for a more custom fit.



Conforming to both UL and CE standard and with a Cu content of 99.9%, M-Bar is a perfect solution for providing power connections within distribution panels, busbar systems, and disconnection devices.

YOU DESIGN IT, WE MANUFACTURE IT

Talk to us about your design, submit your drawings and technical requirements to MSS and let us quote competitively

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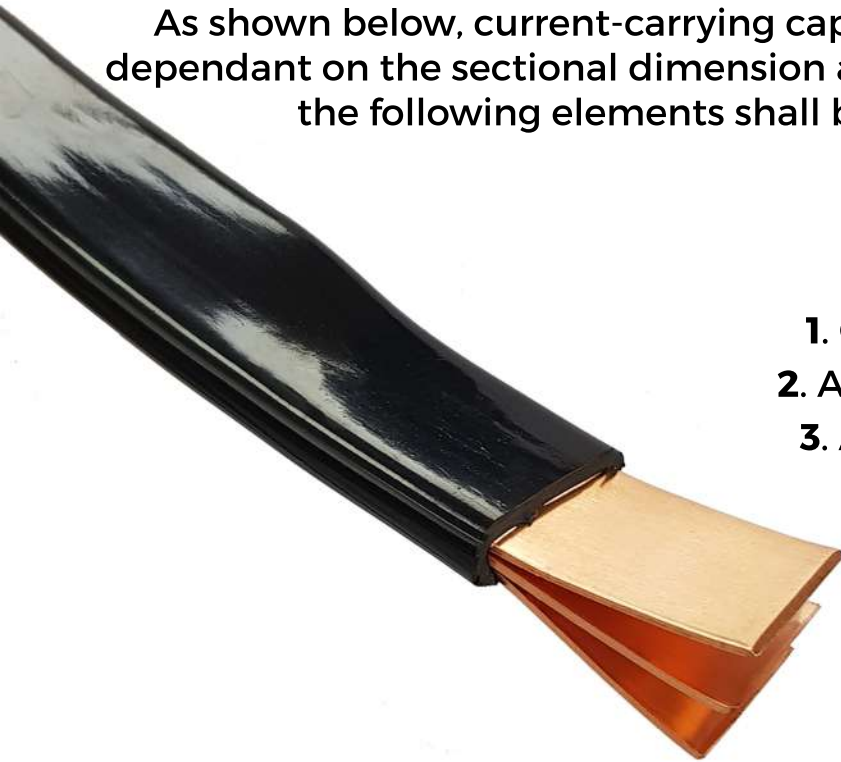
Current Carrying Capacity

Specifications (mm x mm x Q)	Sections (mm)	(A) Ampacity		
		$\Delta T = 20K$ (3)	$\Delta T = 40K$ (4)	$\Delta T = 50K$ (5)
15.5 x 0.8 x 2	24.8	125	175	200
15.5 x 0.8 x 3	37.2	160	210	240
15.5 x 0.8 x 4	49.6	195	265	295
15.5 x 0.8 x 6	74.4	225	320	360
15.5 x 0.8 x 8	99.2	265	380	430
15.5 x 0.8 x 10	124	300	420	480
20 x 1 x 2	40	170	240	270
20 x 1 x 3	60	230	320	360
20 x 1 x 4	80	270	380	440
20 x 1 x 5	100	300	430	490
20 x 1 x 6	120	330	470	530
20 x 1 x 8	160	400	560	620
20 x 1 x 10	200	420	580	650
24 x 1 x 2	48	200	280	320
24 x 1 x 3	72	250	360	410
24 x 1 x 4	96	280	410	460
24 x 1 x 5	120	330	470	530
24 x 1 x 6	144	360	510	570
24 x 1 x 8	192	420	590	670
24 x 1 x 10	240	500	700	790
32 x 1 x 2	64	230	320	360
32 x 1 x 3	96	280	410	460
32 x 1 x 4	128	320	460	520
32 x 1 x 5	160	390	550	610
32 x 1 x 6	192	440	620	700
32 x 1 x 8	256	510	720	822
32 x 1 x 10	320	600	840	930
40 x 1 x 2	80	240	330	380
40 x 1 x 3	120	330	480	540
40 x 1 x 4	160	400	560	630
40 x 1 x 5	200	450	630	710
40 x 1 x 6	240	480	680	750
40 x 1 x 8	320	600	830	920
40 x 1 x 10	400	670	920	1030
50 x 1 x 3	150	400	570	650
50 x 1 x 4	200	490	700	790
50 x 1 x 5	250	540	780	880
50 x 1 x 6	300	590	840	950
50 x 1 x 8	400	680	1000	1130
50 x 1 x 10	500	750	1100	1300
63 x 1 x 5	315	650	900	1000
63 x 1 x 6	378	690	980	1100
63 x 1 x 8	504	840	1200	1350
63 x 1 x 10	630	920	1300	1450
80 x 1 x 5	400	700	1100	1230
80 x 1 x 6	480	780	1210	1360
80 x 1 x 8	640	950	1400	1570
80 x 1 x 10	800	1090	1550	1730
100 x 1 x 5	500	860	1250	1400
100 x 1 x 6	600	950	1380	1530
100 x 1 x 8	800	1100	1580	1760
100 x 1 x 10	1000	1220	1710	1920
100 x 1 x 12	1200	1300	1800	2010

See page 3 for guidance reference

Guidance for model selection

As shown below, current-carrying capacity of insulated flexible busbar is dependant on the sectional dimension and temperature of busbar. Therefore, the following elements shall be taken into consideration:



1. Current-carrying capacity (A)
2. Acceptable busbar heating (ΔT)
3. Acceptable busbar width (W)

The computation formula of busbar heating (ΔT) is as follow: $\Delta T = T_a - T_c$

T_c : Ambient temperature

T_a : Busbar temperature after being charged with electricity
(Important Note: $T_a \leq 105^\circ\text{C}$ for electrical equipment in general).

Sample of selection (for reference only)

Example requirements: The ambient temperature for the equipment operation is 40°C , current carrying capacity of the copper bar shall be 510A, the highest temperature of copper busbar does not exceed 100°C , and width of copper busbar shall not exceed 40mm.

Model selection: According to the formula, the highest temperature allowed could be worked out as 60°C ($100^\circ\text{C} - 40^\circ\text{C} = 60^\circ\text{C}$), so the flexible copper busbar with specification of 21x1x4 could be selected: copper busbar of this specification has a temperature rise of 50°C under the load of 520A, so this selection is possible, and there is sufficient margin of safety.