

# Metallic Braids

## Plain and tinned copper, stainless steel

**EARTH BRAIDS WITH INTEGRAL PALMS** – SEE ON PAGE 41



**FLAT AND ROUND BRAIDS - INSULATED BRAIDS** – SEE ON PAGE 42-43



**TUBULAR BRAIDS** – SEE ON PAGE 43



**MISCELLANEOUS : MAKE YOUR OWN BRAIDS** – SEE ON PAGE 44



# Metallic Braids

## Earth Braids With Integral Palms

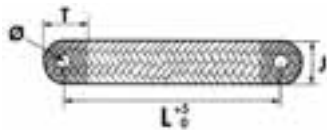
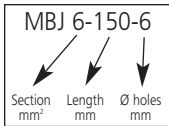


MBJ

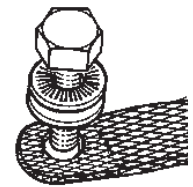
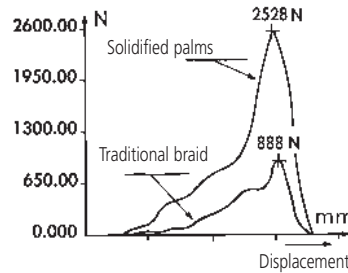
BJ



- Excellent electrical contact due to integral palms
- Good resistance to vibration and fatigue
- Recommended by the EMC directives
- UL recognised E220029
- Excellent tensile strength
  - Tinned electrolytic copper 0,15 mm wire
  - Possible to bend very close to the contact area
  - Working temperature up to 105°C



### COMPARISON OF TENSILE STRENGTH



Assembly Recommendation



Normal clamping forces

## MBJ

Part No.	DESCRIPTION	Intensity A	Thick. mm	Section mm <sup>2</sup>	L mm	Ø mm	J mm	T mm		
556600	MBJ 6-150-6	40	1,1	6	150	6,5	13	23	10	0,010
563410	MBJ 6-200-6	40	1,1	6	200	6,5	13	23	10	0,0167
556930	MBJ 10-200-6	75	1,1	10	200	6,5	12	22	10	0,022
556610	MBJ 10-300-6	75	1,1	10	300	6,5	12	22	10	0,033
563540	MBJ 16-100-6	120	1,5	16	100	6,5	15	25	10	0,018
556620	MBJ 16-100-8	120	1,5	16	100	8,5	15	25	10	0,018
563550	MBJ 16-150-6	120	1,5	16	150	6,5	15	25	10	0,035
556630	MBJ 16-150-8	120	1,5	16	150	8,5	15	25	10	0,035
563300	MBJ 16-200-6	120	1,5	16	200	6,5	15	25	10	0,033
556640	MBJ 16-200-8	120	1,5	16	200	8,5	15	25	10	0,033
556650	MBJ 16-250-8	120	1,5	16	250	8,5	15	25	10	0,040
563320	MBJ 16-300-6	120	1,5	16	300	6,5	15	25	10	0,05
556660	MBJ 16-300-8	120	1,5	16	300	8,5	15	25	10	0,05
556940	MBJ 16-500-8	120	1,5	16	500	8,5	15	25	10	0,082
556670	MBJ 25-100-10	150	1,5	25	100	10,5	23	33	10	0,027
556680	MBJ 25-150-10	150	1,5	25	150	10,5	23	33	10	0,039
563340	MBJ 25-200-6	150	1,5	25	200	6,5	23	33	10	0,052
556690	MBJ 25-200-10	150	1,5	25	200	10,5	23	33	10	0,052
563430	MBJ 25-200-12	150	1,5	25	200	12,5	23	33	10	0,052
556700	MBJ 25-250-10	150	1,5	25	250	10,5	23	33	10	0,064
556710	MBJ 25-300-10	150	1,5	25	300	10,5	23	33	10	0,077
556950	MBJ 25-500-10	150	1,5	25	500	10,5	23	33	10	0,013
556720	MBJ 30-100-10	180	2	30	100	10,5	23	33	10	0,032
556730	MBJ 30-150-10	180	2	30	150	10,5	23	33	10	0,047
556740	MBJ 30-200-10	180	2	30	200	10,5	23	33	10	0,062
556750	MBJ 30-250-10	180	2	30	250	10,5	23	33	10	0,075
556760	MBJ 30-300-10	180	2	30	300	10,5	23	33	10	0,092
556960	MBJ 30-500-10	180	2	30	500	10,5	23	33	10	0,155
556770	MBJ 35-100-10	197	2,1	35	100	10,5	23	33	10	0,037
556780	MBJ 35-150-10	197	2,1	35	150	10,5	23	33	10	0,054
556790	MBJ 35-200-10	197	2,1	35	200	10,5	23	33	10	0,072
556800	MBJ 35-250-10	197	2,1	35	250	10,5	23	33	10	0,089
565000	MBJ 35-250-25	197	1,5	35	250	25,5	40	50	10	0,089
556810	MBJ 35-300-10	197	2,1	35	300	10,5	23	33	10	0,110
556970	MBJ 35-500-10	197	2,1	35	500	10,5	23	33	10	0,180

Part No.	DESCRIPTION	Intensity A	Thick. mm	Section mm <sup>2</sup>	L mm	Ø mm	J mm	T mm		
556820	MBJ 50-100-10	250	2,5	50	100	10,5	28	48	10	0,052
556830	MBJ 50-150-10	250	2,5	50	150	10,5	28	48	10	0,077
563350	MBJ 50-200-6	250	2,5	50	200	6,5	28	48	10	0,12
556840	MBJ 50-200-10	250	2,5	50	200	10,5	28	48	10	0,120
563440	MBJ 50-200-12	250	2,5	50	200	12,5	28	48	10	0,120
563360	MBJ 50-200-16	250	2,5	50	200	16,5	28	48	10	0,11
563370	MBJ 50-200-18	250	2,5	50	200	18,5	28	48	10	0,11
556850	MBJ 50-250-10	250	2,5	50	250	10,5	28	48	10	0,127
563380	MBJ 50-300-6	250	2,5	50	300	6,5	28	48	10	0,15
556860	MBJ 50-300-10	250	2,5	50	300	10,5	28	48	10	0,153
563390	MBJ 50-300-16	250	2,5	50	300	16,5	28	48	10	0,15
563400	MBJ 50-300-18	250	2,5	50	300	18,5	28	48	10	0,14
556980	MBJ 50-500-10	250	2,5	50	500	10,5	28	48	10	0,255
563560	MBJ 50-500-12	250	2,5	50	500	12,5	28	48	10	0,255
563450	MBJ 70-300-6	290	5	70	300	6,5	28	48	10	0,21
563460	MBJ 70-300-10	290	5	70	300	10,5	28	48	10	0,21
563420	MBJ 70-300-12	290	5	70	300	12,5	28	48	10	0,21
563470	MBJ 70-300-16	290	5	70	300	16,5	28	48	10	0,20
563480	MBJ 70-300-22	290	3,5	70	300	22,5	40	60	10	0,20
563490	MBJ 70-500-10	290	5	70	500	10,5	28	48	10	0,34
563500	MBJ 100-250-16	349	4	100	250	16,5	50	70	10	0,254
563510	MBJ 100-250-30	349	4	100	250	30,5	50	70	10	0,254
563520	MBJ 100-500-16	349	4	100	500	16,5	50	70	10	0,508
563530	MBJ 100-500-30	349	4	100	500	30,5	50	70	10	0,508

## BJ



Round braids with crimped lugs

Part No.	DESCRIPTION	Section mm <sup>2</sup>	L mm	Ø D mm	Intensity A		
556900	BJ 6-150 S	6	150	6,5	45	10	0,010
556910	BJ 6-200 S	6	200	6,5	45	10	0,015
556920	BJ 10-300 S	10	300	6,5	75	10	0,033

# Metallic Braids



## Copper and Stainless Steel Braids



### FTCB 15

#### Flat tinned copper braids



- Standard wire diameter: 0,15 mm
- 25 m coils

Part No.	DESCRIPTION	Section mm <sup>2</sup>	mm	Number of strands	Nominal current A		
557200	FTCB 15-3	3	5 x 1	168	30	25 m	0,03
557210	FTCB 15-5	5	8 x 1	288	45	25 m	0,05
557220	FTCB 15-8	8	8 x 1,5	456	65	25 m	0,08
557230	FTCB 15-10	10	10 x 1,5	576	75	25 m	0,10
557240	FTCB 15-16	16	15 x 1,5	896	120	25 m	0,16
557250	FTCB 15-20	20	20 x 1,5	1120	140	25 m	0,20
557260	FTCB 15-25	25	23 x 1,5	1404	150	25 m	0,25
557270	FTCB 15-30	30	23 x 2,0	1692	180	25 m	0,30
557280	FTCB 15-35	35	23 x 2,5	1980	200	25 m	0,35
557290	FTCB 15-40	40	25 x 2,5	2272	220	25 m	0,40
557300	FTCB 15-50	50	28 x 3	2848	250	25 m	0,50
557310	FTCB 15-60	60	30 x 3	3392	280	25 m	0,60
557320	FTCB 15-70	70	30 x 3,5	3968	290	25 m	0,70
557330	FTCB 15-75	75	30 x 4	4256	300	25 m	0,75
557340	FTCB 15-95	95	40 x 4	5376	340	25 m	0,95
557350	FTCB 15-100	100	40 x 4	5664	360	25 m	1,00

### FTCB 20

#### Flat tinned copper braids



- Standard wire diameter: 0,20 mm
- Extra long reels

Part No.	DESCRIPTION	Section mm <sup>2</sup>	mm	Number of strands	Nominal current A		
503500	FTCB 20-3	3	5 x 1	96	30	500 m	0,03
503510	FTCB 20-5	5	8 x 1	168	45	500 m	0,05
503520	FTCB 20-10	10	10 x 1,5	312	75	150 m	0,10
503530	FTCB 20-16	16	15 x 2	512	120	150 m	0,16
503540	FTCB 20-25	25	25 x 1,5	792	150	100 m	0,25

### FRCB 15

#### Flat plain copper braids



- Standard wire diameter: 0,15 mm
- 25 m coils

Part No.	DESCRIPTION	Section mm <sup>2</sup>	mm	Number of strands	Nominal current A		
557000	FRCB 15-3	3	5 x 1	168	30	25 m	0,03
557010	FRCB 15-5	5	8 x 1	283	45	25 m	0,05
557020	FRCB 15-8	8	8 x 1,5	456	65	25 m	0,08
557030	FRCB 15-10	10	10 x 1,5	576	75	25 m	0,10
557040	FRCB 15-16	16	15 x 1,5	896	120	25 m	0,16
557050	FRCB 15-20	20	20 x 1,5	1120	140	25 m	0,20
557060	FRCB 15-25	25	23 x 1,5	1404	150	25 m	0,25
557070	FRCB 15-30	30	23 x 2	1692	180	25 m	0,30
557080	FRCB 15-35	35	23 x 2,5	1980	200	25 m	0,35
557090	FRCB 15-40	40	25 x 2,5	2272	220	25 m	0,40
557100	FRCB 15-50	50	28 x 3	2848	250	25 m	0,50
557110	FRCB 15-60	60	30 x 3	3392	280	25 m	0,60
557120	FRCB 15-70	70	30 x 3,5	3968	290	25 m	0,70
557130	FRCB 15-75	75	30 x 4	4256	300	25 m	0,75
557140	FRCB 15-95	95	40 x 4	5376	340	25 m	0,95
557150	FRCB 15-100	100	40 x 4	5664	360	25 m	1,00

### FSSB 25

#### Stainless steel flat braids



- Standard wire diameter: 0,25 mm
- Stainless steel 304
- 25 m coils

Part No.	DESCRIPTION	mm <sup>2</sup>	mm		
557160	FSSB 25-16 <sup>2</sup>	16	15 x 1,5	25 m	0,14
557170	FSSB 25-25 <sup>2</sup>	25	23 x 1,5	25 m	0,22
557390	FSSB 25-50 <sup>2</sup>	50	30 x 3	25 m	0,44

### FTCBI

#### Insulated flat tinned copper braids

- Insulation in clear PVC, thickness 1 mm, self-extinguishing UL 94 VO
- Standard wire diameter: 0,15 mm
- 25 m coils
- Insulation voltage: 450 V
- Working temperature: up to 70°C

Part No.	DESCRIPTION	Section mm <sup>2</sup>	mm	Number of strands	Nominal current A		
510300	FTCBI 16	16	17 x 3,5	896	120	25 m	0,18
510310	FTCBI 25	25	25 x 3,5	1404	150	25 m	0,29
510320	FTCBI 35	35	25 x 4,5	1980	200	25 m	0,40
510340	FTCBI 50	50	30 x 5	2848	250	25 m	0,60



Standard wire diameter 0,15 mm - Extra long reels

503600	FTCBI 15-16	16	17 x 3,5	896	120	100 m	0,18
503610	FTCBI 15-25	25	25 x 3,5	1404	150	100 m	0,29
503620	FTCBI 15-35	35	25 x 4,5	1980	200	75 m	0,40

### RTCBI/RTCBI HL

#### Insulated round tinned copper braids

- Standard wire diameter 0,15 mm
- Insulation in clear PVC, thickness 1 mm, self-extinguishing UL 94 VO
- Insulation voltage: 450 V
- 25 m coils
- Working temperature: up to 70°C

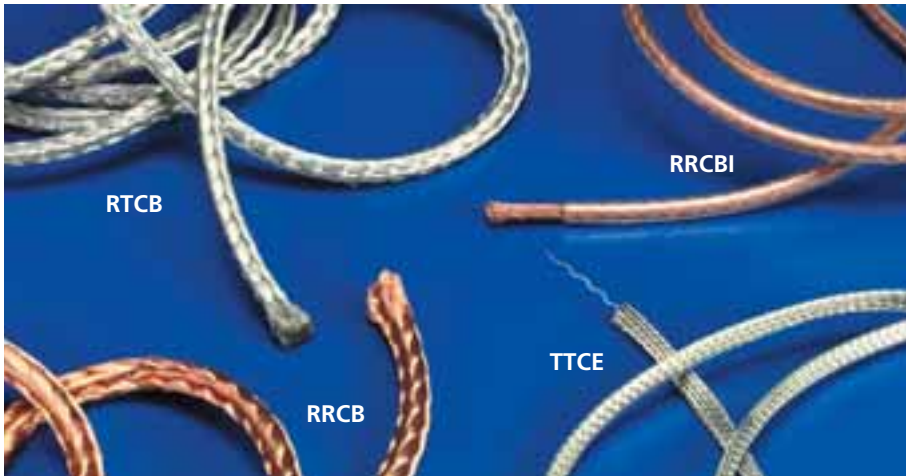
Part No.	DESCRIPTION	Section mm <sup>2</sup>	mm	Number of strands	Nominal current A		
503400	RTCBI 15-10	10	7	560	75	25 m	0,12
503410	RTCBI 15-16	16	8	900	120	25 m	0,18
503420	RTCBI 15-25	25	9,5	1416	150	25 m	0,25
503430	RTCBI 15-30	30	10	1680	180	25 m	0,35
503440	RTCBI 15-50	50	12,5	2820	250	25 m	0,58

Standard wire diameter 0,15 mm - Extra long reels

503800	RTCBI 15-10/HL	10	7	560	75	100 m	0,12
503810	RTCBI 15-16/HL	16	8	900	120	100 m	0,18
503820	RTCBI 15-25/HL	25	9,5	1416	150	100 m	0,28
503830	RTCBI 15-30/HL	30	10	1680	180	75 m	0,35

# Metallic Braids

## Copper Round and Tubular Braids





- A large range of braids for all your applications
- Bare or insulated
- Tubulars for shielding
- Stainless steel for corrosive environment

### RTCB/RTCB HL

#### Tinned copper round braids

- Standard wire diameter : 0,15 mm
- 25 m coils

Part No.	DESCRIPTION	Section mm <sup>2</sup>	External dia in mm	Number of strands	Nominal current A		
557600	RTCB 15-6	6	4	352	45	25 m	0,06
557610	RTCB 15-8	8	4,5	464	65	25 m	0,08
557620	RTCB 15-10	10	5	560	75	25 m	0,10
557630	RTCB 15-16	16	6	900	120	25 m	0,16
557640	RTCB 15-25	25	8	1416	150	25 m	0,25
557650	RTCB 15-30	30	9	1680	180	25 m	0,30
557660	RTCB 15-50	50	11	2820	250	25 m	0,50
557670	RTCB 15-75	75	13,5	4236	300	25 m	0,75
557680	RTCB 15-100	100	17	5652	360	25 m	1,00



Standard wire diameter 0,15 mm - Extra long reels

503700	RTCB 15-10/HL	10	5	560	75	100 m	0,100
503710	RTCB 15-16/HL	16	6	900	120	100 m	0,160
503720	RTCB 15-25/HL	25	7,5	1416	150	100 m	0,250
503730	RTCB 15-30/HL	30	8	1680	180	75 m	0,300

### RRCB

#### Plain copper round braids

- Standard wire diameter : 0,15 mm
- 25 m coils

Part No.	DESCRIPTION	Section mm <sup>2</sup>	External dia in mm	Number of strands	Nominal current A		
557400	RRCB 15-6	6	4	352	45	25 m	0,06
557410	RRCB 15-8	8	4,5	464	65	25 m	0,08
557420	RRCB 15-10	10	5	560	75	25 m	0,10
557430	RRCB 15-16	16	6	900	120	25 m	0,16
557440	RRCB 15-25	25	8	1416	150	25 m	0,25
557450	RRCB 15-30	30	9	1680	180	25 m	0,30
557460	RRCB 15-50	50	11	2820	250	25 m	0,50
557470	RRCB 15-75	75	14	4236	300	25 m	0,75
557480	RRCB 15-100	100	18	5652	360	25 m	1,00



### RRCBI

#### Insulated plain copper round braids

- Standard wire diameter : 0,15 mm
- Insulation in clear PVC, thickness 1 mm
- Self-extinguishing UL 94 VO
- Insulation voltage : 450 V - 25 m coils

#### ON REQUEST SPECIAL MANUFACTURING :



- Tubular braids up to 60 mm dia maximum
- Flat or round copper braids up to 400 mm<sup>2</sup> maximum
- Insulation 105° C

Part No.	DESCRIPTION	Section mm <sup>2</sup>	External dia in mm	Number of strands	Nominal current A		
510500	RRCBI 15-10	10	7	560	75	25 m	0,10
510510	RRCBI 15-16	16	8	900	120	25 m	0,16



### TTCE

#### Tubular braids

- For screening connecting cables between equipment used in an electromagnetically disturbed environment.
- Supplied with draw wire

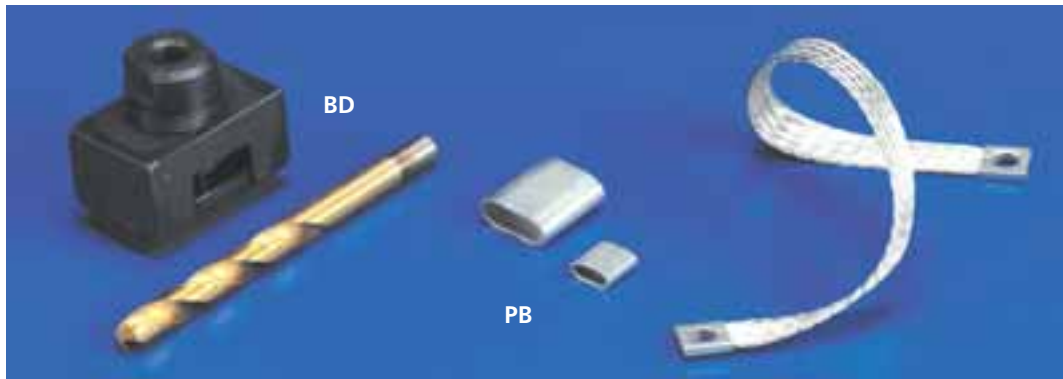
Part No.	DESCRIPTION	Section mm <sup>2</sup>	DIAMETER (mm)				Number of strands	Ø wires mm	Nominal Current A		
			Int.	Covering %	Exp.	Covering %					
510100	TTCE 3	1,7	3	100%	6	90%	96	0,15	13	50 m	0,020
510110	TTCE 5	2,5	5	99%	10	92%	144	0,15	19	50 m	0,026
510120	TTCE 8	4,45	8	99%	16	95%	252	0,15	37	50 m	0,050
510130	TTCE 10	5,7	10	100%	20	92%	320	0,15	43	50 m	0,054
510140	TTCE 15	12	15	100%	30	94%	384	0,20	90	50 m	0,120
510150	TTCE 20	20,4	20	99%	40	87%	288	0,30	122	50 m	0,190
510160	TTCE 25	27,1	25	99%	50	92%	384	0,30	163	25 m	0,270
510170	TTCE 30	33,9	30	100%	60	90%	480	0,30	185	25 m	0,320
510180	TTCE 35	40,7	35	100%	70	94%	576	0,30	244	25 m	0,380

#### • Extra long reels

Part No.	DESCRIPTION	Section mm <sup>2</sup>	Ø Int. mm	Ø Exp. mm	Number of strands	Ø wires mm	Int. Nom.		
504690	TTCE 8/HL	6,8	8	16	216	0,20	37	200 m	0,050

# Metallic Braids

## Miscellaneous: Make Your Own Braids Connections



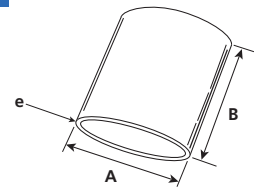
### BD CRIMP AND DRILL TOOL

- Comprising of a guide and specially adapted drill bit, this tool has been developed by ERICO specifically for crimping and drilling of braid terminals

Part No.	DESCRIPTION	For Flat	Ø drill bit	Bolt		
558610	BD 16	FTCB or FRCB 15-16	6,5	M6	1	0,653
558640	BD 16-8,5	FTCB or FRCB 15-16	8,5	M8	1	0,653
558620	BD 25	FTCB or FRCB 15-25	11	M10	1	0,678
558630	BD 50	FTCB or FRCB 15-50	12,5	M12	1	0,712

### PB LUGS FOR FLAT BRAIDS (FTCB OR FRCB)

- In tinned annealed copper.



Part No.	DESCRIPTION	For Flat	A	B	e		
557180	PB 16	FTCB or FRCB 15-16	16	15	1	100	0,004
557190	PB 25	FTCB or FRCB 15-25	22	25	1	100	0,010
557380	PB 50	FTCB or FRCB 15-50	30	30	1	100	0,017

### ON REQUEST TINNED COPPER FLAT BRAIDS

- Length on request
- Supplied with 2 predrilled lugs
- Tolerance : A, B ± 1
- Minimum quantity : 100

SECTION mm <sup>2</sup>	Lugs A X B	Ø	Intensity A		
16	17 x 17	8,5 - 10,5	120	≥ 100	0,16
25	25 x 25	10,5 - 13	150		0,25
50	32 x 32	13 - 17 - 20	250		0,50

## ABOUT ELECTROMAGNETIC COMPATIBILITY...

In an environment where electromagnetic disturbances are more and more numerous, the ElectroMagnetic Compatibility (EMC) is increasingly important in the design and building of electrical panels.

In order to avoid stray currents, it is necessary that all the metallic framework, inside the panel or outside, is at the same electrical potential. Thus, it is essential to link all these metal parts with connections presenting a low impedance at High Frequency (H.F.).

Connections with cables are not efficient. Only short and flat conductors are. Their H.F. impedances are 10 times lower than the wire impedances.

