

## PROCESSING:

### 1- Flatening

The braids are flatened in order to obtain the width with tolerances at +/- 1 mm.

### 2- Batch size and packaging

MOQ is the Minimum Order Quantity.

Nominal section in mm <sup>2</sup>	Linear mass kg / m	MOQ Kg	MOQ m	Standard packaging
2	0.02	20	1000	DIN 250
3	0.03	21	700	DIN 250
4	0.04	30	750	Bobine AL
5	0.05	27.5	550	Bobine AL
6	0.06	27	450	Bobine AL
8	0.08	28	350	Bobine AL
10	0.10	30	300	Bobine AL
16	0.16	30	180	Bobine AL
20	0.20	80	400	XZ d.600
25	0.25	80	320	XZ d.600
30	0.30	80	260	XZ d.600
35	0.35	80	220	XZ d.600
50	0.50	80	160	XZ d.600
70	0.70	80	110	XZ d.600
75	0.75	80	100	XZ d.600
100	1.00	80	80	XZ d.600
120	1.20	80	65	XZ d.600
150	1.50	80	50	XZ d.600
200	2.00	180	90	AZ d.750
250	2.50	180	70	AZ d.750
300	3.00	180	60	AZ d.750
400	4.00	180	45	AZ d.750
500	5.00	180	35	AZ d.750



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## FLAT BRAIDS



### CONCEPTION AND DESIGN:

The flat braids in the INTERNATIONAL WIRE range are designed from assemblies of 0.1 mm up to 0.2 mm single wires.

The braids are existing flatened or not made with red copper, tinned copper, nicked or silvered copper.

The choice of the braids and that of wire diameter make it possible to define the best technical solution to suit the braid's operating conditions. This technical optimization ensures an optimum braid service life, thus limiting replacement or maintenance operations and reducing costs.

### THE RANGE:

Standardized sections: 2 mm<sup>2</sup> to 500 mm<sup>2</sup>.

Wire diameter: 0.1 mm to 0.2 mm.

Finishes:

- bare copper,
- tin-plated copper,
- silver-plated copper,
- nickel-plated copper (only in 0.15 mm dia. wire)

**Option:**

Oxygen-free copper – Cu-OF to EN 13602 – guaranteed oxygen content <10 PPM (as recommended in American standard ASTM B 170)

### APPLICATIONS:

In installations in which the electrical connection is subjected to a considerable number of movements or vibrations and where it is fundamental to absorb them.

In installations in which the electrical connection requires dynamic characteristics and fundamental flexibility for proper operation.

### BENEFITS:

INTERNATIONAL WIRE solution:

Our manufacturing facility, capable of producing any types of braids, enables us to provide our customers with the best value for money solution.

Our knowledge of the market, our experience and our laboratory give us the capabilities required to develop the accurate for every application.

### TECHNICAL CHARACTERISTICS:

#### WIRES

##### Copper classification:

according to French Standard (NF) EN 13602

- Désignation: Cu-ETP
- Min. copper content: 99.9 %
- Max. electrical resistivity at 20°C (annealed state): 1.7241 μΩ.cm (100%I ACS)

##### Copper spécification:

- Mechanical strength: 200 Mpa mini
- Metallurgical state: Annealed (State 0)

#### SURFACE TREATMENT OF WIRES

- Electrolytic tin-plating:** Nominal thickness of 0.1 μm to EN 13602 (Class C)
- Electrolytic silver-plating:** Nominal thickness of 1.02 μm to ASTM B 298
- Electrolytic nickel-plating:** Nominal thickness of 1.3 μm to ASTM B 335

### DESIGNATION:

TP  
FLAT BRAID

50 MM2  
Section mm<sup>2</sup>

30x3.3  
Width x  
thickness (mm)

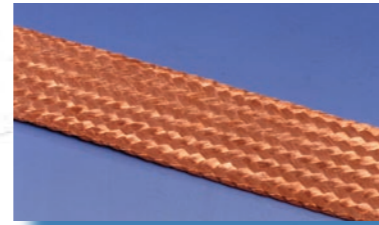
CRN  
Bare (red) Copper  
(CRE) Tin-plated  
copper

20  
diameter of the  
single wire  
in 1/100 mm

# FLAT BRAIDS

## Maximum Ampacity depending on the section of the braid for an ambient temperature of 25°C, 35°C and 45°C

### FLAT BRAIDS



The values in the table correspond to a utilisation of a single braid in a temperature-stabilised environment and for a maximum braid temperature of:

- 90°C for bare copper braids (red copper)

- 105°C for tin-plated copper braids

#### Selection principle:

The tables below make it possible to define the maximum ampacity (I Max) for a braid of fixed section in stabilized operation in an ambient temperature (amb. T) of 25°C, 35°C and 45°C.

The max temp of the conductor at I (max) is:

- 90°C for bare copper braids (red copper)

- 105°C for tin-plated copper braids.

The values communicated are for information only and INTERNATIONAL WIRE cannot be held responsible for the circumstances.

Nominal section in mm <sup>2</sup>	Construction		Width x thick in mm	Ohmic resistance at 20°C (Ω/Km)	Weight kg/m	BARE COPPER			TINNED COPPER		
	Number of wires	Diameter in mm				I <sub>max</sub> T 25°C	I <sub>max</sub> T 35°C	I <sub>max</sub> T 45°C	I <sub>max</sub> T 25°C	I <sub>max</sub> T 35°C	I <sub>max</sub> T 45°C
2	16x7	0.15	3x1	8.62	0.02	30	27	24	33	31	28
3	16x11	0.15	5x1.2	5.75	0.03	40	36	32	45	41	38
4	32x7	0.15	6x1	4.31	0.04	50	45	40	56	51	47
5	24x27	0.10	8x1	3.44	0.05	65	59	52	72	67	61
6	24x15	0.15	10x1	2.87	0.06	72	65	57	80	74	67
8	24x19	0.15	8x1.5	2.15	0.08	79	72	63	88	81	74
10	32x10	0.15	10x1.5	1.72	0.10	95	86	76	106	98	89
16	32x28	0.15	20x1.6	1.07	0.16	152	137	121	168	155	141
16	32x16	0.20	16x2	1.07	0.16	141	128	113	157	145	132
20	32x80	0.10	17x2.5	0.86	0.20	163	147	130	181	166	152
20	32x20	0.20	25x1.6	0.86	0.20	184	166	147	204	188	171
25	32x100	0.10	18x2.4	0.69	0.25	190	171	152	210	194	177
25	32x25	0.20	16x3	0.69	0.25	165	149	132	183	169	154
30	32x54	0.15	25x2.4	0.574	0.30	228	206	182	253	233	212
30	32x30	0.20	25x2.4	0.574	0.30	228	206	182	253	233	212
35	32x63	0.15	25x2.8	0.49	0.35	248	224	198	275	253	230
35	32x35	0.20	25x3	0.49	0.35	248	224	198	275	253	230
50	32x89	0.15	25x4	0.344	0.50	301	272	240	334	308	280
50	32x50	0.20	30x3.3	0.344	0.50	317	287	254	352	325	296
70	32x276	0.10	25x6	0.246	0.70	403	328	290	403	372	338
70	32x70	0.20	30x4.7	0.246	0.70	382	345	305	424	390	355
75	32x133	0.15	30x5	0.23	0.75	396	358	317	440	405	369
75	32x75	0.20	25x6	0.23	0.75	378	341	302	420	387	352
100	32x177	0.15	40x5	0.17	1.00	505	456	403	560	516	470
100	32x100	0.20	40x5	0.17	1.00	505	456	403	560	516	470
120	32x213	0.15	40x6	0.143	1.20	558	504	446	619	571	519
120	32x120	0.20	40x6	0.143	1.20	558	504	446	619	571	519
150	32x265	0.15	65x4.6	0.114	1.50	733	662	586	813	750	683
150	32x150	0.20	50x6	0.114	1.50	694	627	554	770	710	646
200	32x354	0.15	50x8	0.086	2.00	744	672	594	826	761	693
200	32x200	0.20	50x8	0.086	2.00	788	712	630	875	806	734
250	32x250	0.20	50x10	0.068	2.50	893	807	714	991	913	832
300	32x300	0.20	50x12	0.057	3.00	991	895	792	1100	1014	923
400	32x400	0.20	50x16	0.043	4.00	1172	1059	937	1301	1199	1092
500	32x500	0.20	80x12	0.034	5.00	1495	1350	1195	1659	1529	1392

