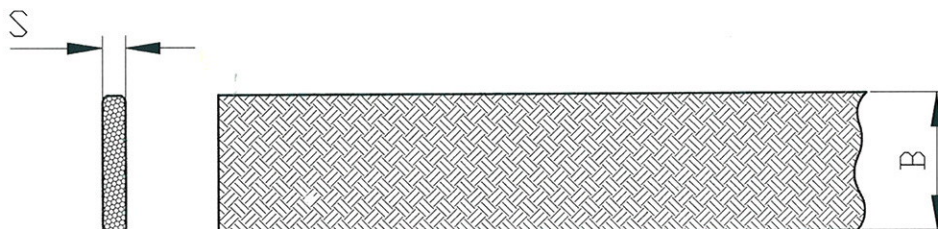


FLAT BRAIDS



Airbus Industrie



IN ACCORDANCE WITH : L 52-210 - LN 9264 AND DAN 416 SPECIFICATIONS

Part-No.		Cross section mm ²	Single wire diameter mm	Number of wires	Dimensions mm		Weight gr/m	Intensity at 20°C A max	Packing meters
Tin-plated Copper	Nickel-plated Copper				B	S			
11066		1,14	0,15	65	4,1	1	10	12	100
12465	10003	1,5	0,07	384	4	1	13,9	15	100
11934		1,53	0,10	195	4,6	1	14,5	15	100
11046		2,29	0,15	130	6	0,7	21	20	100
10205		3,44	0,15	195	8	1	31,2	30	100
12502	12766	4	0,07	1056	8,2	1	35,4	34	100
10207		4,6	0,15	260	9	1	42	37	100
11581		5,71	0,20	182	10	1	51	44	100
16333	12744	6	0,07	1568	10	1,3	57,6	48	100
11224		6,9	0,15	390	11	1,5	65	52	100
10210		8,98	0,20	286	12	1,3	80,3	59	100
11456	12769	10	0,07	2640	14	1,5	100	65	100
11321		11,3	0,20	360	12,5	1	105,7	70	50
11377	12722	13,03	0,15	736	16	2	133,7	80	50
11300	12743	16	0,10	2016	17,5	2	153,6	96	50
11266	12704	18,83	0,25	384	21	2,5	201	110	50
16357	10504	25	0,10	3240	21	2,4	229	145	50

CHARACTERISTICS

TIN-PLATED : The braid consists of 1 st degree electrolytic copper wire, in conformity with NFC 31111 specification.

NICKEL-PLATED : The braid consists of electrolytic copper wire, in conformity with the ASTM B355 specification.

TEMPERATURE RANGES

TIN-PLATED : between - 65°C and + 135°C

NICKEL-PLATED : between - 65°C and + 260°C

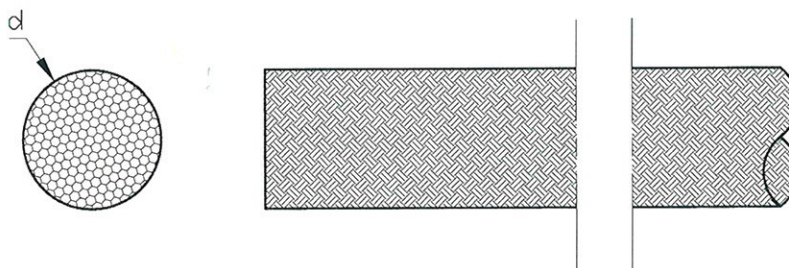
APPLICATIONS

Flexible conductor for the earthing of metallic materials.

DIMENSIONS

Because of the extensibility of the braids, the above dimensions are approximate.

ROUND BRAIDS



IN ACCORDANCE WITH : L 52-215 AND NSA936020 SPECIFICATIONS

Part-No.		Cross section mm ²	Single wire diameter mm	Number of wires	Diameter d mm	Weight gr/m	Intensity at 20°C A max	Packing meters
Tin-plated Copper	Nickel-plated Copper							
12509	14708	1,4	0,15	81	2	12,7	14	100
10128		3	0,15	176	3	29	25	100
60563		3,44	0,13	259	2,8	31,6	27	100
12510	12520	3,5	0,15	197	2,9	31,5	27	100
10129		4	0,15	224	3	38	30	100
12511	12765	4,5	0,15	261	3,45	42,2	33	100
10131	10611	6	0,15	344	4	57	43	100
12512	12615	7	0,15	357	4,2	57	46	100
12099		7,06	0,15	400	4,5	78	46	100
10132	10712	8	0,15	456	4,5	74,7	49	100
10133	10612	10	0,15	568	5	93,8	59	100
10134	10613	12	0,15	684	5,2	120	71	100
12513	12148	13	0,15	740	5,9	117	74	100
10058		16	0,15	896	6	153,6	86	100
10137	10614	20	0,15	1128	7	190	107	50
10138	10615	25	0,15	1408	8	247	130	50
10145	10616	70	0,15	3936	12,5	705	243	50
10146	10617	75	0,15	4224	13	734	250	50

CHARACTERISTICS

TIN-PLATED : The braid consists of 1 st degree electrolytic copper wire, in conformity with NFC 31111 specification.
NICKEL-PLATED : The braid consists of electrolytic copper wire, in conformity with the ASTM B355 specification.

TEMPERATURE RANGES

TIN-PLATED : between - 65°C and + 135°C
NICKEL-PLATED : between - 65°C and + 260°C

APPLICATIONS

Flexible conductor for the earthing of metallic materials.

DIMENSIONS

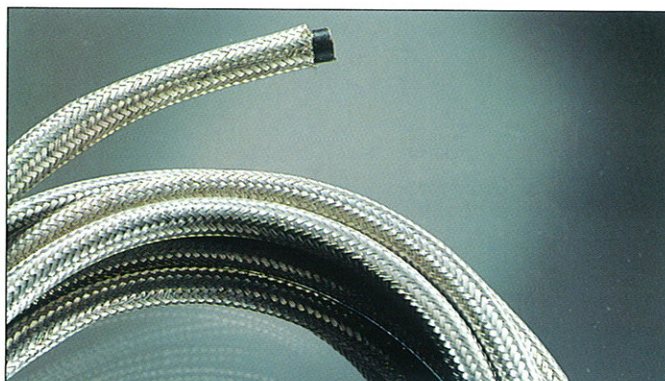
Because of the extensibility of the braids, the above dimensions are approximate.

TUBULAR SLEEVES

ON REMOVABLE SUPPORT



Airbus Industrie



Customer references :

DASSAULT-AEROSPATIALE

Part-No.		Nominal diameter mm	Single wire diameter mm	Number of wires	Cross section mm ²	Resistance /unit length mohm/m	Weight gr/m	Packing meters
Tin-plated Copper	Nickel-plated Copper							
14767	15415	4	0,1	168	1,32	18	15,1	100
14779	15416	6	0,1	256	2	12	22,3	100
14781	15417	8	0,1	320	2,51	9	29,5	100
14783	15418	10	0,1	440	3,46	7	36,7	100
14785	15419	12	0,1	520	4,08	6	43,92	100
14778	15420	14	0,1	576	4,52	5,6	51,1	100
16836	15421	15	0,1	640	5,03	4,5	54,7	100
14766	15422	16	0,13	480	6,37	4	76,1	100
14788	15423	18	0,13	576	7,64	3,5	85,5	100
14790	15424	20	0,15	576	10,1	2,5	109,6	50
14791	15425	22	0,15	624	11,03	2	120,4	50
14792	15426	25	0,2	576	18,1	1,4	182,9	50
14793	15427	30	0,2	624	19,6	1,32	218,9	50

CHARACTERISTICS

TIN-PLATED : The braid consists of 1 st degree electrolytic copper wire, in conformity with NFC 31111 specification.

NICKEL-PLATED : The braid consists of electrolytic copper wire, in conformity with the ASTM B355 specification.

The PVC trim strip guarantees an optimal geometry of the braid and facilitates a beam installation.

TEMPERATURE RANGES

TIN-PLATED : between - 65°C and + 135°C

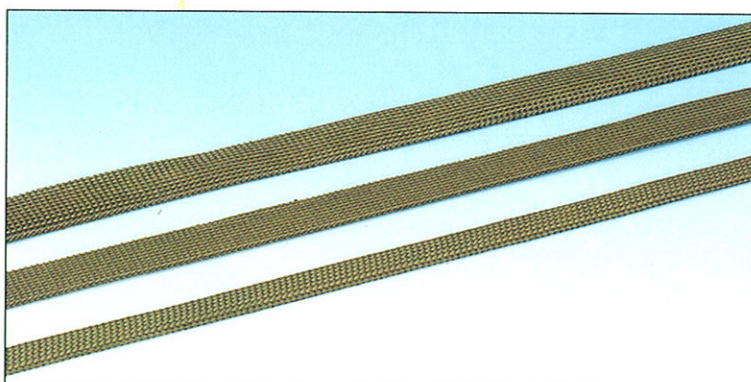
NICKEL-PLATED : between - 65°C and + 260°C

APPLICATIONS

The braids allow the realisation of beam over armouring, with reduced dimensions and mass.

DIMENSIONS

Because of the extensibility of the braids, the above dimensions are approximate.



IN ACCORDANCE WITH : ASNE0389 - EN 6059 SPECIFICATIONS

waterproof oleofuge version

Part-No.	Nominal diameter mm	Min. in-diameter mm	Max in-diameter mm	Weight gr/m	Packing meters
13150	2	1	2	2,5	100
13519	4	2	4	3,6	100
12868	6	4	8	7,1	100
13152	8	6	12	10,5	100
12869	10	8	16	10,9	100
13153	15	10	20	12,95	50
13154	20	12	24	12,85	50
13155	25	15	30	14,9	50
13156	30	20	40	24,7	50

light expansive version

Part-No.	Nominal diameter mm	Min. in-diameter mm	Max in-diameter mm	Weight gr/m	Packing meters
14586	5	2	8	5,5	100
14592	10	5	15	11	100
10861	15	8	24	18	100
14601	25	12	36	22	50
14603	40	22	60	31	50

STANDARD COLOUR

Reseda green.

CHARACTERISTICS

Sleeve obtained by the braiding of multifilaments made of aromatic Nomex[®] polyaramide.

APPLICATIONS

Mechanical protections of the cable harnesses and conduction wires.

QUALITIES

Mechanical : Excellent resistance to abrasion and bending.

Chemical : Excellent resistance to solvents, acids and alkalis, essence, hydraulic fluids (skydrol).

Physics : Fire classification : UL 94 VO and FAR 25-853 b-2 temperature ranges : between - 60°C and + 240°C

PREAMBLE

You will find on the next pages, a summary of the range of products we are able to manufacture.
If you don't find what you really need please **don't hesitate to contact us**.
We are ready to study the product that will be the most suitable for you and to do tests if necessary.

GENERALITIES

Prefabricated bonding straps for return to ground.
Equalization of potential.
Helicopters, Aircrafts and equipments on board anti-jamming.

GENERAL APPLICATIONS

Low section braids (< 3 mm²) are used for small equipments : pumps, clack valves, electronic boxes, etc...
Braids of 3 to 7 mm² section are used for medium importance : actuators, rods, flight controls etc...
Braids with section higher than 7 mm² are used for equipment supporting important electrical charges : Helicopter rotor blades, flaps...

CHARACTERISTICS

Mechanical : using braids with regards to other type of connection will permit : improvement of the bending as well as vibration resistance...
Flat braid : high flexibility on flat side and small thickness.
Round braid : high flexibility in all directions, good torsion behaviour.
Crimping : in accordance with the specifications : MIL T 7099, MIL T 7928
Others : **Temperature ranges :**
TIN-PLATED : between - 65°C and + 135°C
NICKEL-PLATED : between - 65°C and + 260°C.

CENTER TO CENTER LENGTH

standard (in mm)

63	80	100	125	160	200	220	250	280	300	350	450	500	600
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INSULATION

possibility to protect the braids by adding a heat-shrinkable sleeve approved by the aeronautic manufacturers.

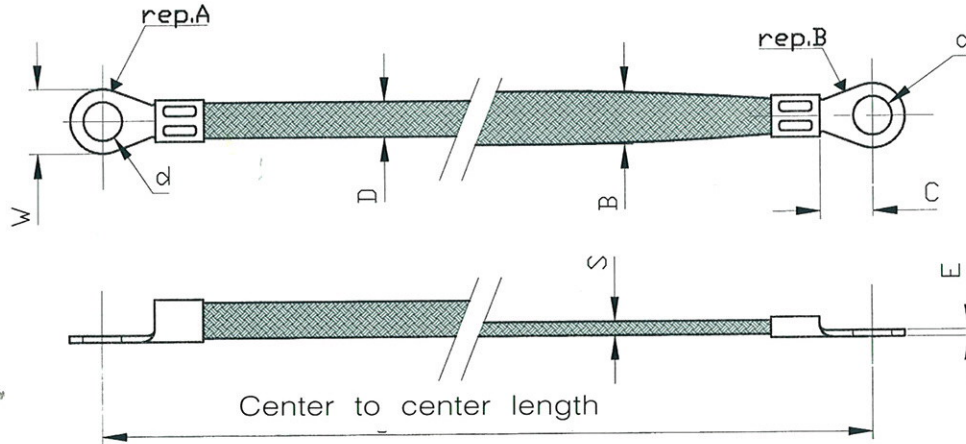
BONDING STRAPS

tin-plated



Airbus Industrie

terminals in accordance with the NSA 936506 specification

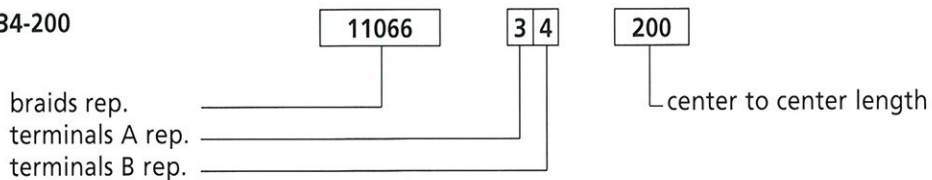


IN ACCORDANCE WITH : ASNE 0088 TO ASNE 0092, AND GIR 9930 TO 9933 75-20 SPECIFICATIONS

BRAIDS					TERMINALS					
Cross section mm ²	Part-No.	D or B*S	Weight gr/m	Shape	DIMENSIONS mm				Part-No.	Weight gr
					d	W	E	C		
1,14	11066	4,1*1	10	FLAT	3,5	6,3	0,8	4,4	3	1,1
1,4	12509	2	12,7	ROUND	4,17	8,7		7,1	4	
					4,83	8,7		11,1	5	
					6,35	11,9		11,1	6	
					7,94	11,9		11,1	7	
3	10128	3	29	ROUND	3,5	9,5	1	7,6	3	1,2
3,5	12510	2,9	31,5	ROUND	4,17	9,5		7,6	4	
4,5	12511	3,45	42,2	ROUND	4,83	9,5		7,6	5	
4,6	10207	9*1	42	FLAT	6,35	13,5		11,91	6	
					4,17	11,9	1,2	9,1	4	1,3
6	10131	10*1,3	57	FLAT	4,83	11,9		9,1	5	
7	12512	4,2	57	ROUND	6,35	11,9		9,1	6	
					7,94	15,1		13,5	8	
8,98	10210	12*1,3	80,3	FLAT	4,83	11,9	1,45	13,5	4	1,4
11,3	11321	12,5*1	105,7	FLAT	6,35	11,9		13,5	6	
13	12513	5,9	117	ROUND	7,94	15,9		13,5	8	
13,03	11377	16*2	133,7	FLAT	9,52	15,9		13,5	10	
					4,83	16,7	1,8	13,1	5	1,5
16	10136	6	153	ROUND	6,35	16,7		13,1	6	
18,83	11266	21*2,5	201	FLAT	7,94	16,7		13,1	8	
					8,35	16,7		13,1	10	

Designation :

ex : 11066-34-200

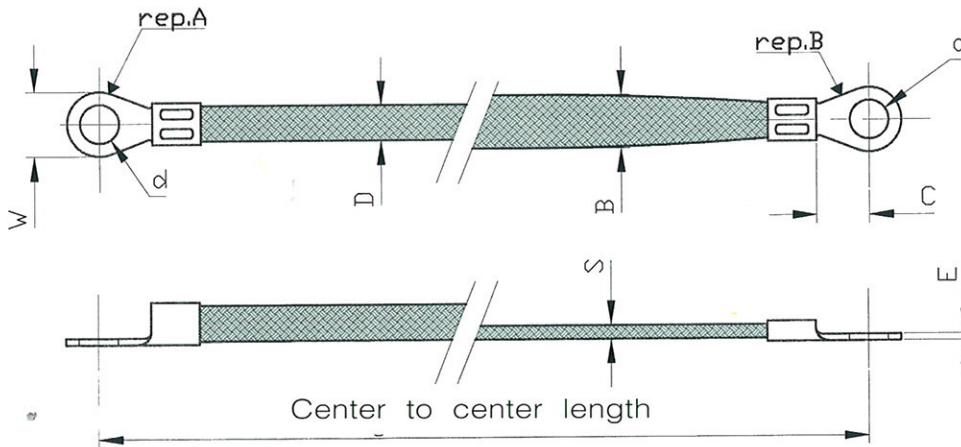


BONDING STRAPS

nickel-plated



terminals in accordance with the NSA 936507 specification

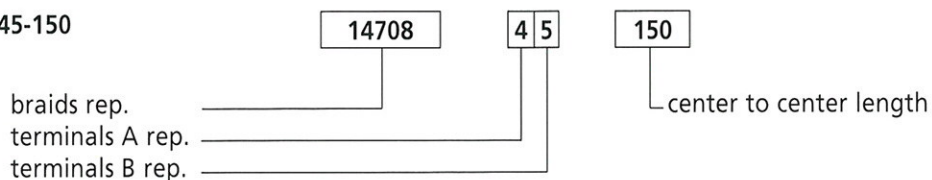


IN ACCORDANCE WITH : ASNE 0088 TO ASNE 0092, AND LN 9264 SPECIFICATIONS

BRAIDS					TERMINALS											
Cross section mm ²	Part-No.	D or B*S	Weight gr/m	Shape	DIMENSIONS mm				Part-No.	Weight en gr						
					d	W	E	C								
1,5	14708	1,8	15	ROUND	3,5	6,55	0,84	4,34	3	0,8						
					4,17	8,95		7,13								
					4,83	8,95		7,13								
1,5	10003	4	13,9	FLAT	6,35	12,2	1,02	11,09	6	0,9						
					4,83	9,75		7,67								
					4,17	9,75		7,67								
3,5	12520	2,9	31,5	ROUND	3,5	9,75	1,2	7,67	3	0,9						
4	12766	8,2	40	FLAT	4,17	9,75		7,67	4							
4,5	12765	3,45	40,5	ROUND	4,83	9,75		1,02	7,67		5					
6	12744	10	57,6	FLAT	4,17	12,2	1,45	9,1	4	0,9						
					4,83	10,55		9,1								
					6,35	12,15		9,1								
7	12615	4,2	63	ROUND	7,94	14,5	1,8	10,3	8	1						
10	12769	14	100	FLAT	4,83	12,1		1,8	13,5		4	0,9				
					13	12148			5,5				127,5	ROUND	6,35	12,2
					13,03	12722	16		133,7	FLAT			7,94	16,1	13,5	8
16	12743	17,5	153,6	FLAT	9,52	16,2	1,8	13,4	10	1						
					4,83	12,1		13			5					
					6,35	13		12,7			6					
18,83	12704	21	200	FLAT	7,94	16,2	1,8	12,7	8	1						
					9,52	19,95		13			10					
					6,35	16,1		17,3			6					
25	10504	21	227	FLAT	7,94	16,2	1,8	17,4	8	1						
					9,52	16,2		17,4			10					
					13	20,6		18,3			13					

Designation :

ex : 14708-45-150



The above is only an indication of our range.

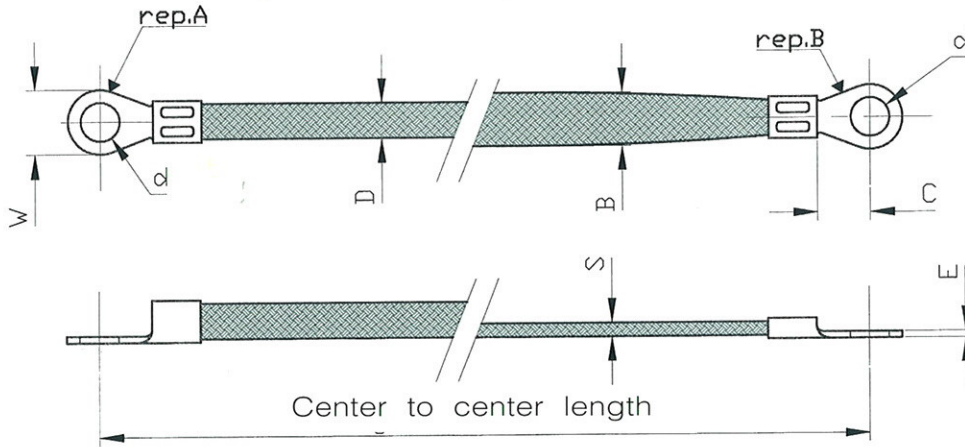
BONDING STRAPS

tin-plated



terminals in accordance with the DIN 46234 specification

C DEBOS

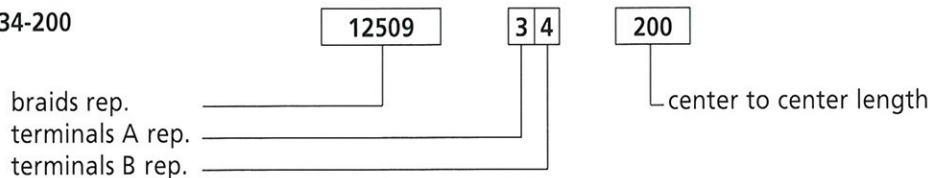


IN ACCORDANCE WITH : LN 9264 - 7520 AND JN1061 SPECIFICATIONS

BRAIDS					TERMINALS						
Cross section mm ²	Part-No.	D or B*S	Weight gr/m	Shape	DIMENSIONS mm				Part-No.	Weight gr	
					d	W	E	C			
1,5	12509	2	12,7	ROUND	3,7	6	0,8	6	3	0,8	
1,5	12465	4*1	13,9	FLAT	4,3	8		7	4		
					5,3	10		9	5		
					6,5	11		11	6		
					8,4	14	12	8			
3	10128	3	29	ROUND	4,3	8	1	8	4	0,9	
3,5	12510	2,9	31,5	ROUND	5,3	10		9	5		
4,5	12511	3,45	42,2	ROUND	6,5	11		10	6		
4	12502	9*1	42	FLAT	8,4	14		13	8		
6		10*1,3	57,6	FLAT	5,3	10	1,1	8	5	0,9	
6	10131	4	57	ROUND	6,5	11		9	6		
7	12512	4,2	57	ROUND	8,4	14		12	8		
					10,5	18		13	10		
10	11321	14*1,5	100	FLAT	5,3	11	1,2	10	5	0,9	
13	12513	5,9	117	ROUND	6,5	11		10	6		
13,03	11377	16*2	133,7	FLAT	8,4	14		12	8		
16		17,5*2	153,6	FLAT	5,3	12		14	5		
18,83	11266	21*2,5	201	FLAT	6,5	12	1,5	14	6	1	
					8,4	16		14	8		
					6,5	15		14	6		
					8,4	16		14	8		
25		21*2,4	229	FLAT	8,4	16	1,6	14	8	1,2	
					10,5	18		14	10		

Designation :

ex : 12509-34-200

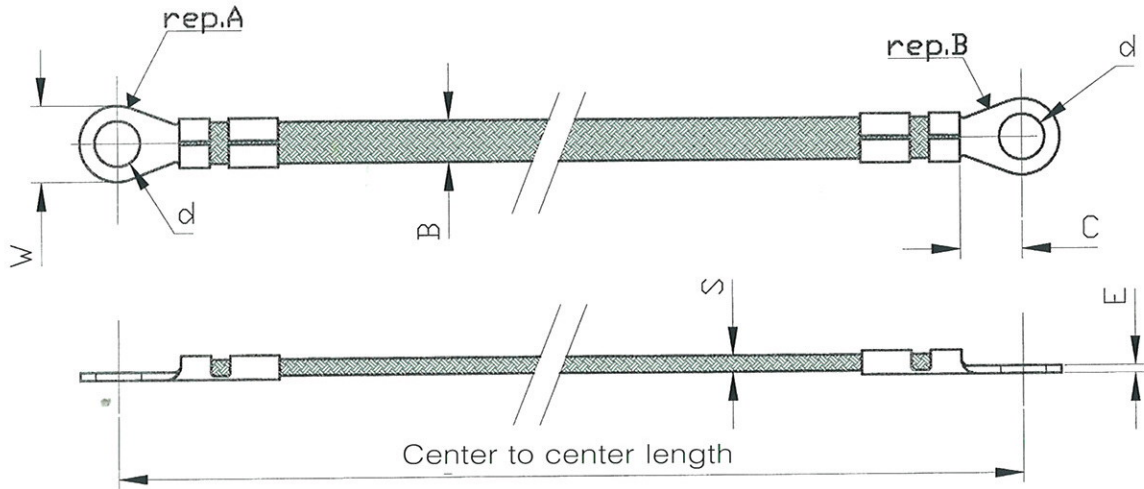


BONDING STRAPS

flat, tin-plated



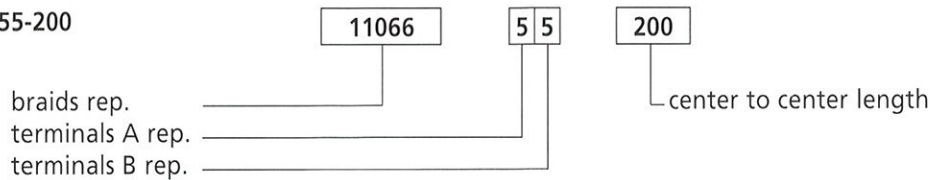
terminals type MT



BRAIDS					TERMINAL					
Cross section mm ²	Part-No.	B mm	S mm	Weight gr/m	DIMENSIONS mm				Part-No.	Weight en gr
					d	W	E	C		
1,14	11066	4,1	1	10	4,3	10	0,5	17	4	1,7
1,53	11934	4,6	1	14,5	5,3	10		17	5	1,6
2,29	11046	6	0,7	21	6,3	10		17	6	1,5
					6,6	10		17	7	1,4
3,44	11046	6	0,7	31,2	5,3	12	0,8	20	5	1,9
					6,3	12		20	6	1,8
5,71	11581	10	1	51	7,3	12		20	7	1,7
					8,5	12		20	8	2,4
					10,5	16		20	11	2,3
8,98	10210	12	1,3	80,3	5,3	20	0,8	20	5	3
					6,3	20		20	6	2,9
11,3	11321	12,5	1	105,7	7,3	20		20	7	2,8
					8,5	20		20	8	2,7
18,83	11266	21	2,5	201	8,5	21	1	27	8	6,6
					10,5	21		27	11	6,4
					12,5	21		27	13	6,2
					14,5	21		27	15	5,8

Designation :

ex : 11066-55-200



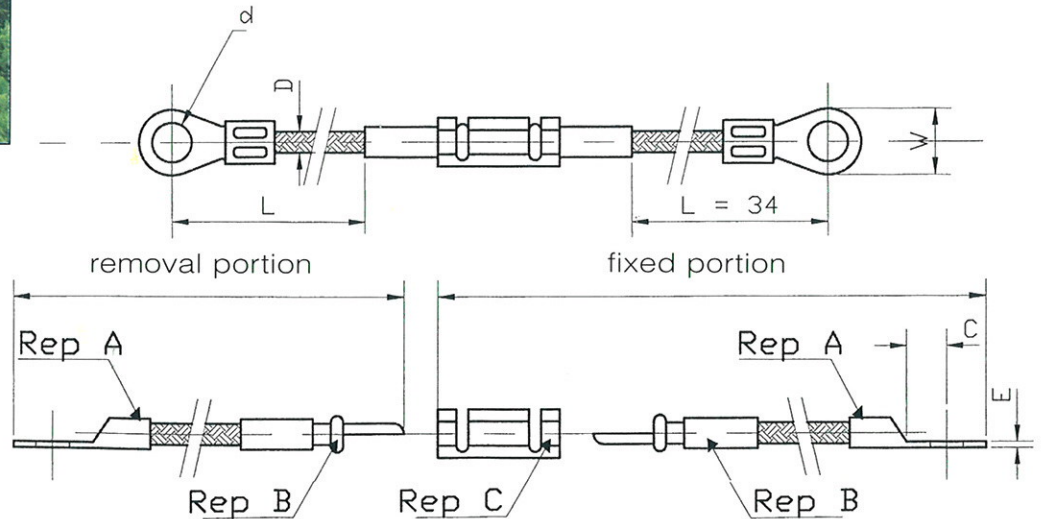
The above is only an indication of our range.

BONDING STRAPS

round, disconnectable



P PENNA - C. DEBOS



APPLICATIONS

With a quick disconnect to insulated equipment for breakdown test.

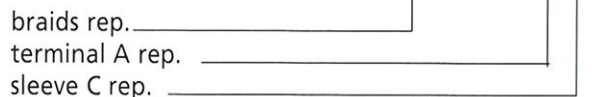
Connect equipments to the structure such as :
removable boards, flaps, switch boxes,
releasable equipments...

IN ACCORDANCE WITH : GIR 9935 MS 25083 AND 75-20 SPECIFICATIONS

Tin-plated copper BRAIDS				TERMINALS							
Cross section mm ²	Part-No.	D mm	Weight gr/m	REP. A				Part-No.	REP. B	REP. C	
				DIMENSIONS mm							
				d	W	E	C		Lug AN753-A3	Sleeve AN753-B3	
3,5	12185	3	31,5	3,5	6,3	1	7,6	3	0,5260	0,5269	
				4,17	8,7		7,6				4
				4,83	8,7		7,6				5
				6,35	11,9		11,9				6
7	12186	4,2	57	4,17	11,9	1,2	9,1	4	0,5260	0,5259	
				4,83	11,9		9,1				5
				6,35	11,9		9,1				6
				7,94	15,1		13,5				8

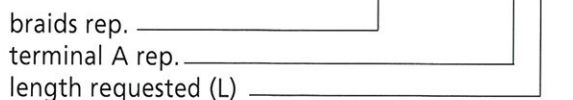
Fixed portion : made of rep. A and B
Length : 34 mm

Designation : ex : 12185-3-C



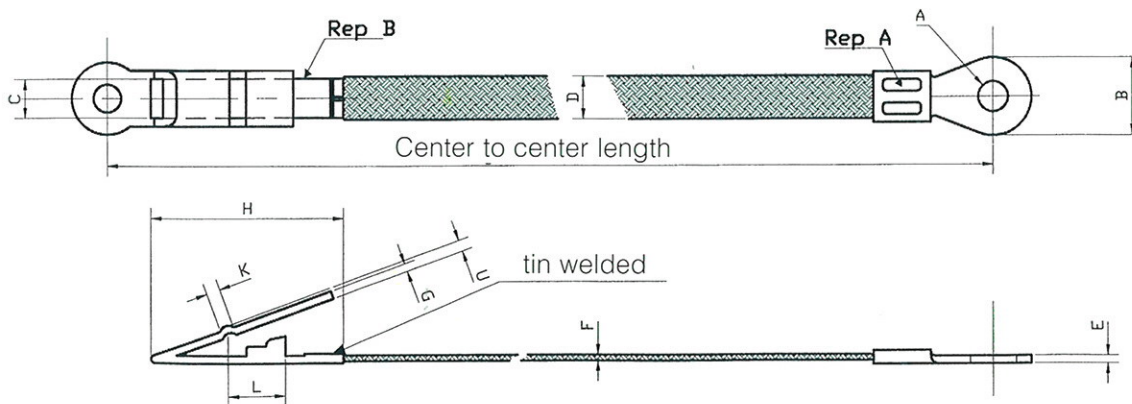
Removal portion : made of rep. A and B
Length : following request

Designation : ex : 12185-3-200



BONDING STRAPS

flat, disconnectable

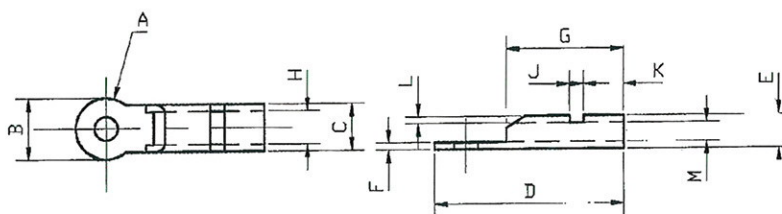
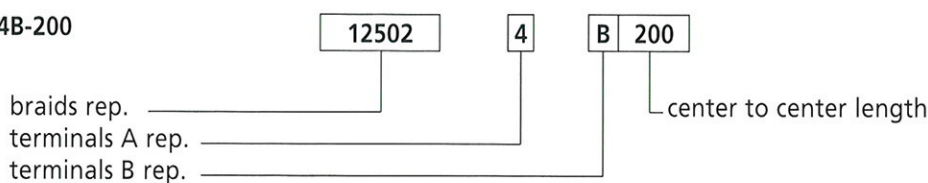


IN ACCORDANCE WITH : ABS 0607-B53 SPECIFICATIONS

Tin-plated copper BRAIDS				TERMINALS										
				REP. A					REP. B					
Cross section mm ²	Part-No.	L mm	Weight gr/m	DIMENSIONS mm				Part-No.	DIMENSIONS mm				Part-No.	
				d	W	E	C		H	K	J	C		
4	12502	8,2	35,4	4,3	8	1	8	4	7,85	8,5	2,5	10	13946	
				5,3	10		9							5
				6,5	11		10							6
				8,4	14		13							8
6	16333	10	57,6	5,3	10	1,1	8	5	7,85	8,5	2,5	10	13946	
				6,5	11		9							6
				8,4	14		12							8
				10,5	18		13							10

Designation :

ex : 12502-4B-200



IN ACCORDANCE WITH : ABS 0607 SPECIFICATIONS

REP. C Part-No.	DIMENSIONS												
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	Weight gr
15557	5,3	14	10	41	7	1	25	7,85	2,5	8,5	2	5	8

Designation :

12502-4BC-200

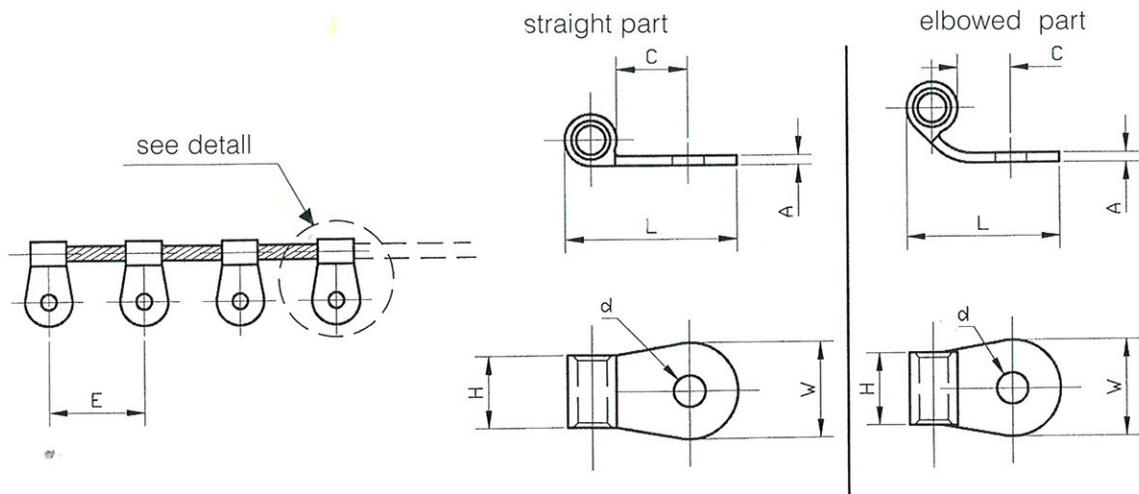
The above is only an indication of our range.

BONDING STRAPS

flag terminals



C DEBOS

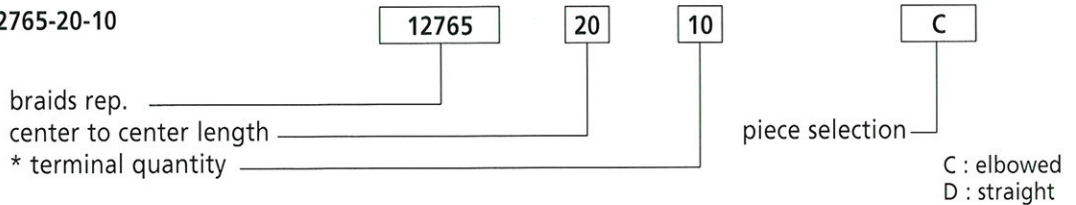


IN ACCORDANCE WITH : NSA 939526 AND 939590 SPECIFICATIONS

Nickel-plated copper BRAIDS				E mm	TERMINALS NSA 936505 Specifications					
Cross section mm ²	Part-No.	D mm	Weight gr/m		DIMENSIONS mm					Weight en gr
					d	W	C	H	L	
4,5	12765	3	42,2	20	4,5	9,5	6,3	9,5	17,9	17,9
				30						
7	12615	4,2	57	20	4,5	12,7	7,1	9,5	20	20
				30						

Designation :

ex : 12765-20-10



* available for 2 to 80 terminals, for higher quantities please contact us.

APPLICATIONS

Installed in chain, these type of braids permit the electrical continuity between circuit breakers.