mecatraction

Railway Connections

Connecting Solutions

A young dynamic company

Founded in 1981, MECATRACTION quickly grew both in the domestic market and export markets. We are based in Pompadour, France, in premises of more than 8100 m². MECATRACTION designs, develops and produces a complete range of components for industrial electrical connections.

Our subsidiary CEGERS TOOLS adds an extensive range of tools and accessories.

MECATRACTION is a subsidiary of the SICAME group

The SICAME Group specializes in accessories for the transport and the transmission of electrical power.

Your best partner in the high-tech sector

MECATRACTION has forged a position for itself in many sectors of industry that demand know-how, precision and efficiency through the quality of our products and our capacity for innovation.
These sectors include the rail, automotive, aeronautic, space, nuclear, renewable energies, shipping and defence industries.

High means of production

The manufacturing of components for electrical connections requires a production apparatus both modern and extremely flexible.

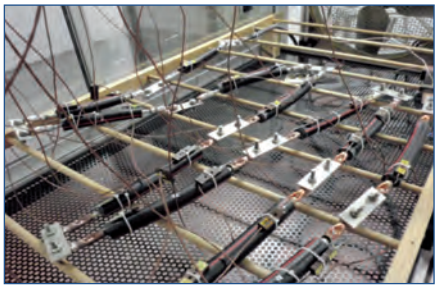
Research & Development

Our Research and Development department is composed of multi-disciplinary teams who combine creativity and reactivity.

Our knowledge of the requirements of various fields of activity such as railway, aeronautics, automotive or renewable energies enables us to offer original and strong solutions based on our experience.

Our research teams can rely on the capacity of our laboratory to investigate new technical solutions allowing to anticipate the needs of our customers.

Thus, our connections meet the permanent evolutions of the connectors in the most severe applications.



Quality and Environment

afaq ISO 9001 Qualité AFNOR CERTIFICATION

afaq EN/AS/JISQ 9100 Aéronautique AFNOR CERTIFICATION

afaq ISO 14001 Environnement AFNOR CERTIFICATION

afaq ISO/TS 16949 Automobile AFNOR CERTIFICATION

afaq OHSAS 18001 Santé Sécurité au Travail AFNOR CERTIFICATION

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Special products

For any information on special ranges and customized manufacturing : *please contact us*

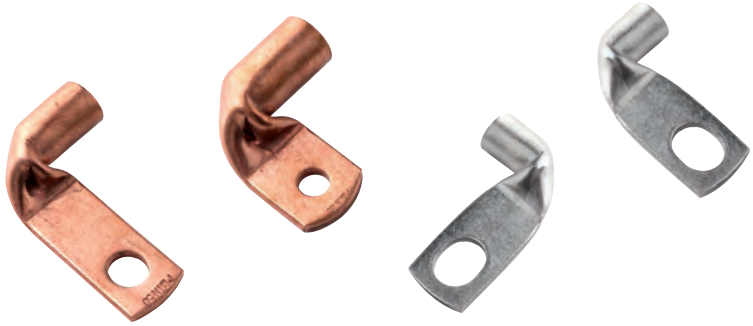
Automotive electrical connections

Aeronautic electrical connectons

Expanded copper tubular lugs for crimping on core and insulation

Customized electrical connections

Tubular lugs bent right or left



Key rules for crimping

The 5 key elements:

✔ An electrical connection must be electrically and mechanically sound. A complete system (terminal block, electric motor, automation, lighting…) depends upon the quality of this connection.

✔ In order to ensure the integrity of the final assembly (5), the product, the preparation, and the crimping operations should be implemented according to the key rules and by taking into account the first 4 essential key elements:

1 *A quality crimp termination suited to the application*

2 *An electric cable correctly stripped and matched to the application*

3 *A quality crimping tool matched to both termination and conductor*

4 *An operator with experience in crimping techniques*

5

General features of a crimped electrical connection:

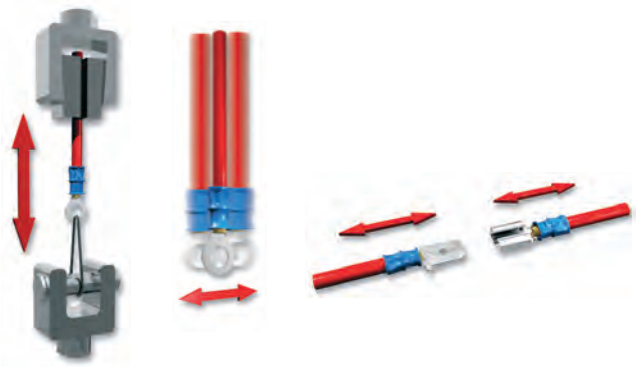
A crimped electrical connection provides the link between a cable and the electrical equipment.

The main features of these connections are:

✔ Excellent conductivity
✔ Good tensile strength
✔ Good corrosive resistance
✔ Good resistance to vibration
✔ No voltage drop or rise in temperature

Qualification of a crimped termination :

✔ Mechanical tests



Tensile strength

Vibration resistance

Insertion extraction
For disconnects and tabs

✔ Electrical tests

Voltage drop

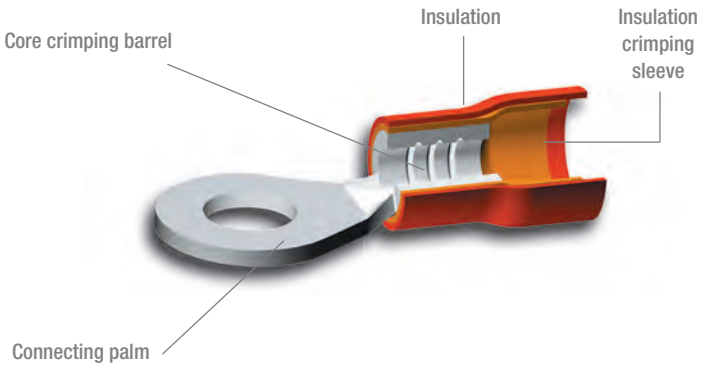
Voltage strength
For preinsulated terminals

Increase in temperature

Key rules for crimping

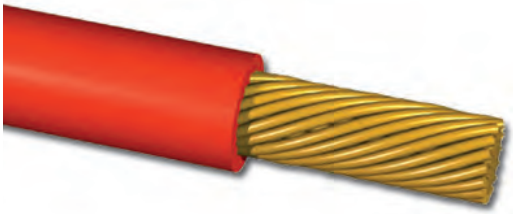
Crimping of preinsulated terminals

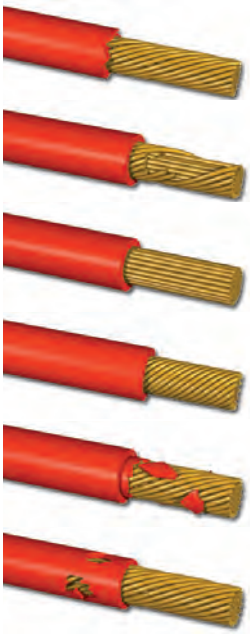
Types of preinsulated terminals “single crimp” and “double crimp”. “Double crimp” type is particularly suited to electrical connections suffering stress or vibrating stress.



Cables

Cable correctly stripped:





✗ Insulation poorly stripped

✗ Cable strands damaged or cut

✗ Cable strands not twisted

✗ Cable strands over twisted

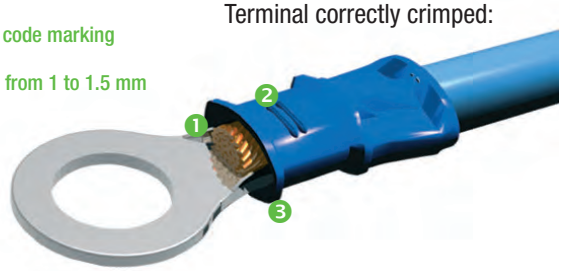
✗ Insulation particles on cable core

✗ Cable insulation damaged

Crimping

1. Conductor strands protruding approximately 1 mm
2. Colour code marking
3. Flange from 1 to 1.5 mm

Terminal correctly crimped:



Conductor insufficiently stripped ✗

Crimped off centre ✗

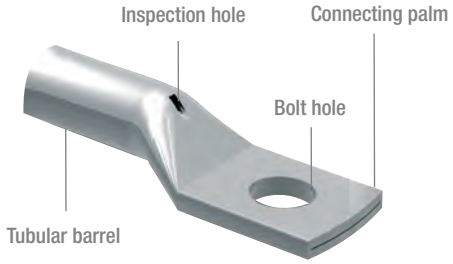
Crimped off centre ✗

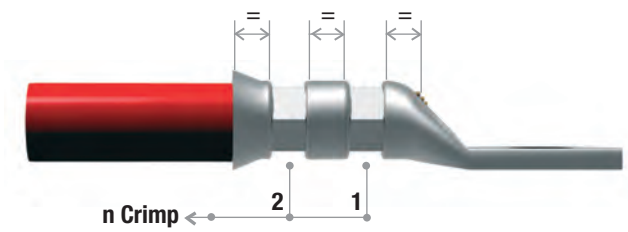
Tool presented incorrectly ✗

Cable over stripped, difficult to assemble on the tab ✗

Key rules for crimping

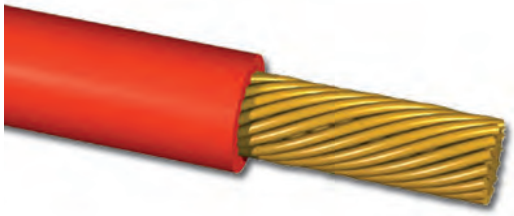
Crimping of copper tubular lugs

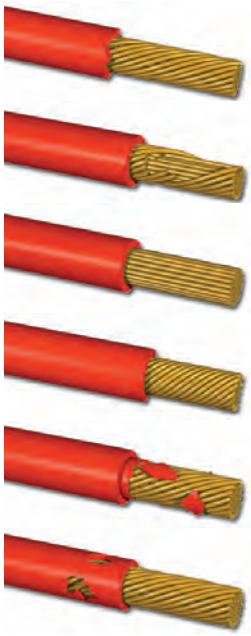




Cables

Cable correctly stripped:





✗ Insulation poorly stripped

✗ Cable strands damaged or cut

✗ Cable strands not twisted

✗ Cable strands over twisted

✗ Insulation particles on cable core

✗ Cable insulation damaged

Crimping

Terminal correctly crimped:

1. Cable strands viewed through inspection hole,
2. cable correctly stripped and sufficiently introduced into the barrel,
3. crimping mark correctly centred on the barrel.

Cable not fully inserted ✗

Crimped off center ✗

Crimped off centre ✗

Incorrect or damaged die, handles appear ✗

Crimps incorrectly positioned ✗

Technical support for tooling

Our technical and commercial department can provide you with technical support services adapted to your needs

Demonstration

-

Maintenance / repair

-

Commissioning

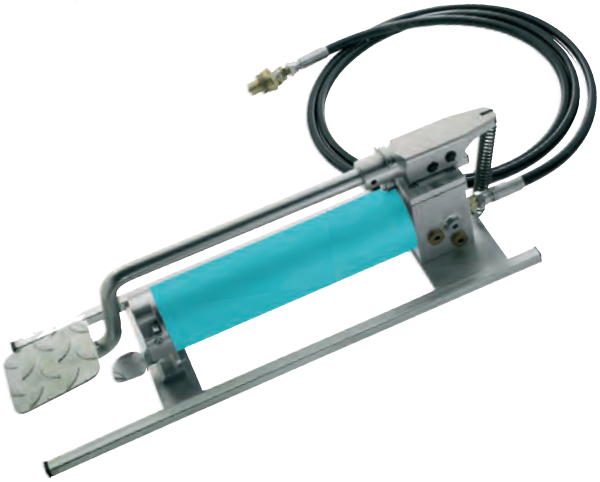
-

Control / verification *

***on site or in our factory**

-

Training on crimping techniques



Please feel free to contact us by phone :
(33) 555 73 89 80
or e-mail :
service.technico@mecatraction.fr
www.mecatraction.fr

Traction and rolling stock products

14 Preinsulated terminals, disconnects and pins .....

22 Copper tubular lugs .....

33 Aluminium tubular lugs .....

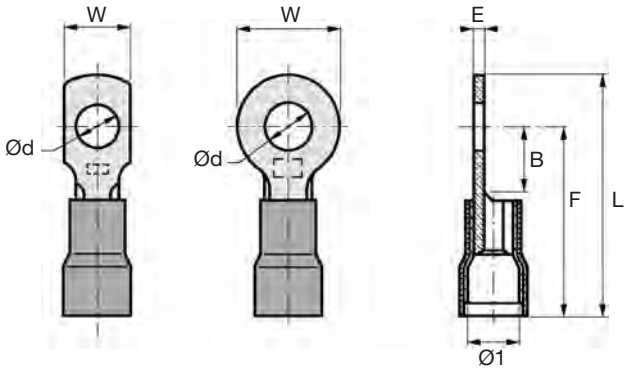
35 Shunts .....

Preinsulated terminals from 0.34 to 6 mm²

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ Suitable for copper cables according NFF or EN standards
- ✔ SNCF drawing : 10-5050-309 / 10-5206-826
- ✔ RATP drawing : MR-3-52964

see page 45



mm²	p/n	W	L	E	Ød	F	B	Ø1	SNCF	
0.34 - 1.5 ●	51143-2	5.6	17.3	0.80	3.2	14.5	3.5	3.6	7-847-4839	TH1 or TH1S
	51153-2	8	21	0.80	3.2	17	6	3.6	7-847-5643	
	51153 R-2	6.5	20.5	0.80	3.2	16.5	5.5	3.6	7-847-5603	
	51154-2	8	21	0.80	4.2	17	6	3.6	7-847-5028	
	51154 R-2	6.5	20.5	0.80	4.2	16.5	5.5	3.6	7-847-4654	
	51155-2	8	21	0.80	5.2	17	6	3.6	7-847-1112	
	51134-2	12.5	27	0.80	4.2	20.7	6.5	3.6		
	51135-2	12.5	27	0.80	5.2	20.7	6.5	3.6	7-847-4586	
	51136-2	12.5	27	0.80	6.3	20.7	6.5	3.6	7-847-4251	
	51138-2	12.5	27	0.80	8.4	20.7	6.5	3.6		
1 - 2.5 ●	51183-2	8.6	21	0.80	3.2	16.7	6	4.8	7-847-5237	TH2 or TH2S
	51184-2	8.6	21	0.80	4.2	16.7	6	4.8	7-847-5532	
	51185-2	8.6	21	0.80	5.2	16.7	6	4.8	7-847-5483	
	51174-2	12.5	27	0.80	4.2	20.7	6	4.8		
	51175-2	12.5	27	0.80	5.2	20.7	6	4.8	7-847-5602	
	51176-2	12.5	27	0.80	6.3	20.7	6	4.8	7-847-5484	
	51178-2	12.5	27	0.80	8.4	20.7	6	4.8	7-847-4678	
	51183 R-2	6.4	20.5	0.80	3.2	16.5	5.5	4.8	7-847-4426	
	51184 R-2	6.4	20.5	0.80	4.2	16.5	5.5	4.8	7-847-4250	

Note : part number with "R" suffix are square terminals.

2.6 - 6 ●	STC2-8-4J	13.8	32.5	1	8.3	25.5	8	6.8	7-847-4215
	STC2-10-4J	13.8	32.5	1	10.3	25.5	8	6.8	7-847-4485
2.6 - 6 ●	STC2-8-2JN	13.8	35	1	8.3	28	8	8.8	7-847-4363
	STC2-10-2JN	13.8	35	1	10.3	28	8	8.8	7-847-5390

Cross section (mm²) · SNCF code · Crimping tool

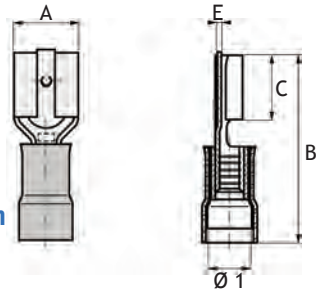
Unless otherwise stated, all dimensions are in milimeters

Preinsulated disconnects 2.8 - 5 and 6.35 mm
Pin and blade terminals

General features

- ✔ Material for disconnects : tin-plated phophorous bronze
- ✔ Material for pin and blade terminals : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ Suitable for copper cables according NFF or EN standards
- ✔ SNCF drawing : 10-5050-310
- ✔ RATP drawing : MR-3-52965

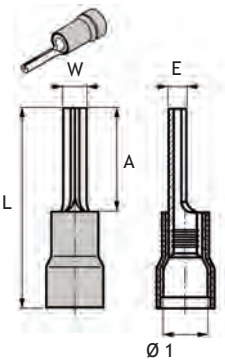
see page 45

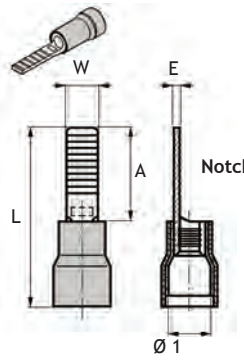


Preinsulated disconnets : 2.8 - 5 and 6.35 m

mm²	p/n	l x e	A	B	C	Ø 1	E	SNCF	
0.34 - 1.5 ●	51027(doré)	2.8 x 0.5	3.7	18.5	6.5	3.6	0.25	7-847-4593	TH1 or TH1S
	51031-2	2.8 x 0.5	3.7	18.5	6.5	3.6	0.25	7-847-1903	
	51081-2	5 x 0.8	6.4	21	7.7	3.6	0.5	7-847-4728	
	51181-2	6.35 x 0.8	7.7	21	7.7	3.6	0.5	7-847-4700	
1 - 2.5 ●	51131-2	5 x 0,8	6.4	21	7.7	4.8	0.5	7-847-4999	TH2 or TH2S
●	51231-2	6.35 x 0.8	7.7	20.2	7.7	4.8	0.5	7-847-4797	»
○	51161-4BC	5 x 0.8	6.4	25	7.7	6.8	0.5	7-847-4994	TH3
●	51161-2NR	5 x 0.8	6.4	27.5	7.7	8.8	0.5		TH3-2
○	51261-4BC	6.35 x 0.8	7.7	25	7.7	6.8	0.5	7-847-5070	TH3
●	51261-2NR	6.35 x 0.8	7.7	27.5	7.7	8.8	0.5	7-847-6798	TH3-2
2.6 - 6 ●	51661-4J	6.35 x 0.8	7.7	25	7.7	6.8	0.5		TH3
●	51661-2JN	6.35 x 0.8	7.7	25	7.7	8.8	0.5		TH3-2

Pin
Fig. 1





Notched blade terminals
Fig. 2

Preinsulated cable pins and blade terminals

mm²	p/n		W	A	L	Ø 1	E	SNCF	
0.34 - 1.5 ●	51220-2	Fig. 1	1.6	12	22.5	3.6	1.9	7-847-5051	TH1 or TH1S
	51225-2	Fig. 2	2.9	11.3	21	3.6	0.8	7-847-5556	
1 - 2.5 ●	51222-2	Fig. 1	1.8	12	22	4.8	1.8	7-847-5002	TH2 or TH2S
	51226-2	Fig. 2	3.9	12	22	4.8	0.8	7-847-5555	
2.6 - 6 ●	51223-4J	Fig. 1	2.5	14.5	28	6.8	2.5	7-847-5003	TH3
	51227-4J	Fig. 2	3.9	13	26.5	6.8	1.0	7-847-5561	
2.6 - 6 ●	51223-2JN	Fig. 1	2.5	14.5	28	8.8	2.5	7-847-5393	TH3-2
	51227-2JN	Fig. 2	3.9	13	30.5	8.8	1.0	7-847-5370	

Cross section (mm²) · SNCF code · For tabs · Crimping tool

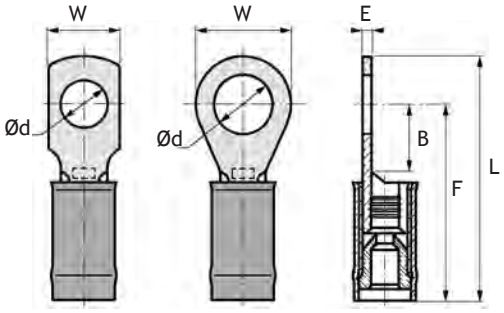
Unless otherwise stated, all dimensions are in milimeters

Preinsulated terminals for thin insulating conductors according to EN 50306

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5297-405

see page 45



mm²	p/n	Ø mm	Ø mm min.	Ø mm max.	Ø d	W	E	L	F	B	Reducer colour	
0.5 ●	451143	1.04	1.15	2	3.2	5.6	0.8	17.3	14.5	3.5		TH1 or TH1S
	451153				3.2	8	0.8	21.5	17.5	6		
	451153R				3.2	6.5	0.8	21	17	5.5		
	451154				4.2	8	0.8	21.5	17.5	6		
	451154R				4.2	6.5	0.8	21	17	5.5		
	451155				5.2	8	0.8	21.5	17.5	6		
	451134				4.2	12.5	0.8	27	20.7	6.5		
	451135				5.2	12.5	0.8	27	20.7	6.5		
	451136				6.3	12.5	0.8	27	20.7	6.5		
	451138				8.4	12.5	0.8	27	20.7	6.5		
0.75 ●	551143	1.15	1.30	2	3.2	5.6	0.8	17.3	14.5	3.5		TH1 or TH1S
	551153				3.2	8	0.8	21.5	17.5	6		
	551153R				3.2	6.5	0.8	21	17	5.5		
	551154				4.2	8	0.8	21.5	17.5	6		
	551154R				4.2	6.5	0.8	21	17	5.5		
	551155				5.2	8	0.8	21.5	17.5	6		
	551134				4.2	12.5	0.8	27	20.7	6.5		
	551135				5.2	12.5	0.8	27	20.7	6.5		
	551136				6.3	12.5	0.8	27	20.7	6.5		
	551138				8.4	12.5	0.8	27	20.7	6.5		
1 ●	351143	1.30	1.45	2	3.2	5.6	0.8	17.3	14.5	3.5		TH1 or TH1S
	351153				3.2	8	0.8	21.5	17.5	6		
	351153R				3.2	6.5	0.8	21	17	5.5		
	351154				4.2	8	0.8	21.5	17.5	6		
	351154R				4.2	6.5	0.8	21	17	5.5		
	351155				5.2	8	0.8	21.5	17.5	6		
	351134				4.2	12.5	0.8	27	20.7	6.5		
	351135				5.2	12.5	0.8	27	20.7	6.5		
	351136				6.3	12.5	0.8	27	20.7	6.5		
	351138				8.4	12.5	0.8	27	20.7	6.5		

Note : part number with "R" suffix are square terminals.

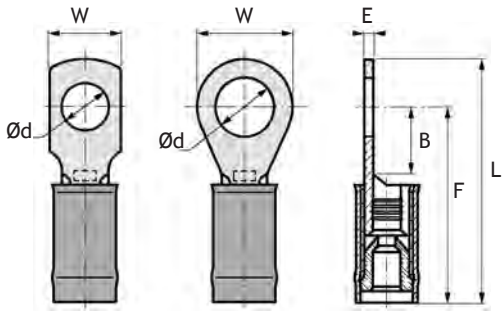
Cross section (mm²) · max. wire Ø Ø mm · Insulation Ø Ø mm · Crimping tool

Unless otherwise stated, all dimensions are in milimeters

Preinsulated terminals for thin insulating conductors according to EN 50306

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5297-405



mm²	p/n	Ø mm	Ø mm min.	Ø mm max.	Ø d	W	E	L	F	B	Reducer colour	
1.5 ●	451183	1.65	1.80	2.70	3.2	8.6	0.8	21.5	17.2	6		TH2 or TH2S
	451183R				3.2	6.5	0.8	21	17	5.5		
	451184				4.2	8.6	0.8	21.5	17.2	6		
	451184R				4.2	6.5	0.8	21	17	5.5		
	451185				5.2	8.6	0.8	21.5	17.2	6		
	451174				4.2	12.5	0.8	27	20.7	6		
	451175				5.2	12.5	0.8	27	20.7	6		
	451176				6.3	12.5	0.8	27	20.7	6		
	451178				8.4	12.5	0.8	27	20.7	6		
2.5 ●	551183	2.15	2.30	2.90	3.2	8.6	0.8	21.5	17.2	6		TH2 or TH2S
	551183R				3.2	6.5	0.8	21	17	5.5		
	551184				4.2	8.6	0.8	21.5	17.2	6		
	551184R				4.2	6.5	0.8	21	17	5.5		
	551185				5.2	8.6	0.8	21.5	17.2	6		
	551174				4.2	12.5	0.8	27	20.7	6		
	551175				5.2	12.5	0.8	27	20.7	6		
	551176				6.3	12.5	0.8	27	20.7	6		
	551178				8.4	12.5	0.8	27	20.7	6		

Note : part number with "R" suffix are square terminals.

Cross section (mm²) — max. wire Ø (Ø mm) — Insulation Ø (Ø mm) — Crimping tool

Unless otherwise stated, all dimensions are in milimeters

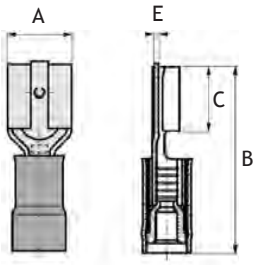
Preinsulated disconnects and pins terminals for thin insulating conductors according to EN 50306

General features

Preinsulated disconnects : tin-plated phosphorous bronze
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5050-310

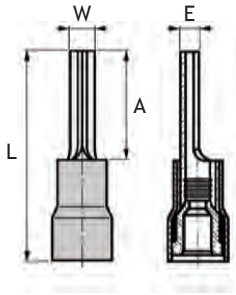
Preinsulated pins terminals ; tined-plated copper
- ✔ Insulation according to EN 45545
- ✔ SNCF drawing : 10-5297-407

see page 45



Preinsulated disconnects for thin insulating conductors according to EN 50306

mm²	p/n	l x e	Ø mm	Ø mm min.	Ø mm max.	A	B	C	E	Reducer colour	
0.5 ●	451031	2.8x0.5	1.04	1.15	2	3.7	18.5	6.5	0.25		TH1 or TH1S
	451081	5x0.8				6.4	21.5	7.7	0.5		
	451181	6.35x0.8				7.7	21.5	7.7	0.5		
0.75 ●	551031	2.8x0.5	1.15	1.30	2	3.7	18.5	6.5	0.25		TH1 or TH1S
	551081	5x0.8				6.4	21.5	7.7	0.5		
	551181	6.35x0.8				7.7	21.5	7.7	0.5		
1 ●	51033	2.8x0.5	1.30	1.45	2	3.7	18.5	6.5	0.25		TH1 or TH1S
	51083	5x0.8				6.4	21.5	7.7	0.5		
	51183	6.35x0.8				7.7	21.5	7.7	0.5		
1.5 ●	451131	5x0.8	1.65	1.80	2.70	6.4	21.5	7.7	0.5		TH2 or TH2S
	451231	6.35x0.8				7.7	21.5	7.7	0.5		
2.5 ●	551131	5x0.8	2.15	2.30	2.90	6.4	21.5	7.7	0.5		TH2 or TH2S
	551231	6.35x0.8				7.7	21.5	7.7	0.5		



Preinsulated pins terminals for thin insulating conductors according to EN 50306

mm²	p/n	Ø mm	Ø mm mini	Ø mm max.	A	B	C	E	Reducer colour	
0.5 ●	451220	1.04	1.15	2.0	1.6	12	22.5	1.9		TH1 ou TH1S
0.75 ●	551220	1.15	1.30	2.0	1.6	12	22.5	1.9		
1 ●	351220	1.30	1.45	2.0	1.6	12	22.5	1.9		

Cross section (mm²) · max. wire Ø (Ø mm) · Insulation Ø (Ø mm) · For tabs · Crimping tools

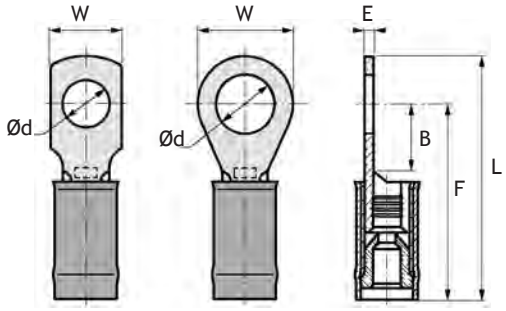
Unless otherwise stated, all dimensions are in milimeters

Preinsulated terminals for thin insulating conductors according to NFF 63808

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5091-965
- ✔ RATP drawing : MR-3-53173

see page 45



mm²	p/n	Ø mm	Ø mm min.	Ø mm max.	Ø d	W	E	L	F	B	Reducer colour	SNCF	
0.6 ●	251153	1.04	1.2	2	3.2	8	0.8	21.5	17.5	6			TH1 or TH1S
	251153R				3.2	6.5	0.8	21	17	5.5			
	251154				4.2	8	0.8	21.5	17.5	6			
	251154R				4.2	6.5	0.8	21	17	5.5		7-847-7325	
	251155				5.2	8	0.8	21.5	17.5	6			
	251134				4.2	12.5	0.8	27	20.7	6.5			
	251135				5.2	12.5	0.8	27	20.7	6.5			
	251136				6.3	12.5	0.8	27	20.7	6.5			
	251138				8.4	12.5	0.8	27	20.7	6.5			
0.93 ●	351153	1.3	1.4	2	3.2	8	0.8	21.5	17.5	6			TH1 or TH1S
	351153R				3.2	6.5	0.8	21	17	5.5		7-847-1234	
	351154				4.2	8	0.8	21.5	17.5	6			
	351154R				4.2	6.5	0.8	21	17	5.5			
	351155				5.2	8	0.8	21.5	17.5	6			
	351134				4.2	12.5	0.8	27	20.7	6.5			
	351135				5.2	12.5	0.8	27	20.7	6.5			
	351136				6.3	12.5	0.8	27	20.7	6.5			
	351138				8.4	12.5	0.8	27	20.7	6.5			
1.34 ●	251183	1.5	1.6	2.6	3.2	8.6	0.8	21.5	17.2	6			TH2 or TH2S
	251183R				3.2	6.5	0.8	21	17	5.5			
	251184				4.2	8.6	0.8	21.5	17.2	6			
	251184R				4.2	6.5	0.8	21	17	5.5			
	251185				5.2	8.6	0.8	21.5	17.2	6			
	251174				4.2	12.5	0.8	27	20.7	6			
	251175				5.2	12.5	0.8	27	20.7	6			
	251176				6.3	12.5	0.8	27	20.7	6			
	251178				8.4	12.5	0.8	27	20.7	6			
1.82 ●	351183	1.73	1.9	2.6	3.2	8.6	0.8	21.5	17.2	6			TH2 or TH2S
	351183R				3.2	6.5	0.8	21	17	5.5			
	351184				4.2	8.6	0.8	21.5	17.2	6		7-847-7038	
	351184R				4.2	6.5	0.8	21	17	5.5			
	351185				5.2	8.6	0.8	21.5	17.2	6			
	351174				4.2	12.5	0.8	27	20.7	6			
	351175				5.2	12.5	0.8	27	20.7	6			
	351176				6.3	12.5	0.8	27	20.7	6			
	351178				8.4	12.5	0.8	27	20.7	6			

Note : part number with "R" suffix are square terminals.

Cross section (mm²) · max. wire Ø Ø mm · Insulation Ø Ø mm · Crimping tool · SNCF SNCF code

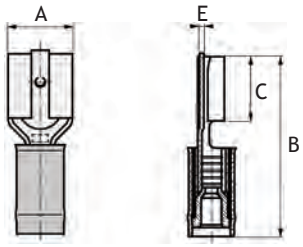
Unless otherwise stated, all dimensions are in milimeters

Preinsulated disconnects 2.8 - 5 and 6.35 and pins terminals for thin insulating conductors according to NFF 63808

General features

- ✔ Material : tin-plated phosphorous bronze
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5091-966
- ✔ RATP drawing : MR-3-53172

see page 45

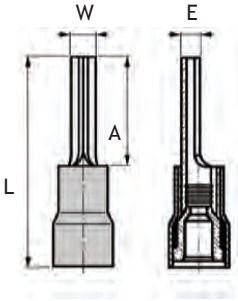


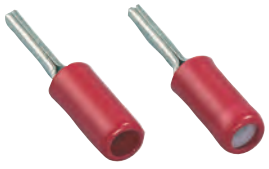
Preinsulated disconnects 2.8 - 5 and 6.35 for thin insulating conductors according to NFF 63808

mm²	p/n	l x e	Ø mm	Ø mm min.	Ø mm max.	A	B	C	E	Reducer colour	SNCF	
0.6 ●	51032	2.8 x 0.5	1.04	1.2	2	3.7	18.5	6.5	0.25			TH1 or TH1S
	51082	5 x 0.8		1.2	2	6.4	21.5	7.7	0.5		0-847-6041	
	51182	6.3 x 0.8		1.2	2	7.7	21.5	7.7	0.5		0-847-6042	
0.93 ●	51033	2.8 x 0.5	1.3	1.4	2	3.7	18.5	6.5	0.25			TH1 or TH1S
	51083	5 x 0.8		1.4	2	6.4	21.5	7.7	0.5		0-847-6036	
	51183	6.3 x 0.8		1.4	2	7.7	21.5	7.7	0.5		0-847-6038	
1.34 ●	51132	5 x 0.8	1.5	1.6	2.6	6.4	21.5	7.7	0.5			TH2 or TH2S
	51232	6.3 x 0.8		1.6	2.6	7.7	21.5	7.7	0.5		0-847-6043	
1.82 ●	51133	5 x 0.8	2.6	1.9	2.6	6.4	21.5	7.7	0.5		0-847-6039	TH2 or TH2S
	51233	6.3 x 0.8		1.9	2.6	7.7	21.5	7.7	0.5		0-847-6040	

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5100-991
- ✔ RATP drawing : MR-3-53170





Pins terminals for thin insulating conductors according to NFF 63808

mm²	p/n	Ø mm	Ø mm mini	Ø mm max.	W	A	L	E	Reducer colour	
0.6 ●	251220	1.04	1.2	2	1.6	12	22.5	1.9		TH1 or TH1S
0.93 ●	351220	1.3	1.4	2	1.6	12	22.5	1.9		

Cross section (mm²) · max. wire Ø (Ø mm) · Insulation Ø (Ø mm) · SNCF code · For tabs · Crimping tools

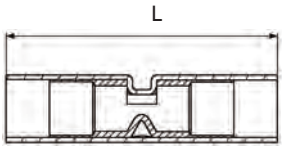
Unless otherwise stated, all dimensions are in milimeters

Preinsulated butt connectors with inspection window

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ SNCF drawing : 10-5194-221
- ✔ RATP drawing : MR-3-53171

see page 45



mm²	p/n	Ø mm max.	L	SNCF	
0.34 - 1.5 ●	51391	3.6	32	7-847-4323	TH1 + stopper HF20 or TH1S
1 - 2.5 ●	51402	4	32	7-847-4344	TH2 + stopper HF20 or TH2S
2.6 - 6 ●	51413	5.5	41.5	7-847-4120	TH3

Cross section (mm²) | SNCF code | Insulation Ø Ø mm | Crimping tool

Unless otherwise stated, all dimensions are in milimeters

Copper tubular lugs

Low power preinsulated copper tubular lugs

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ Suitable for copper cables according NFF or EN standards
- ✔ SNCF drawing : 10-5102-962
- ✔ RATP drawing : MR-3-52970

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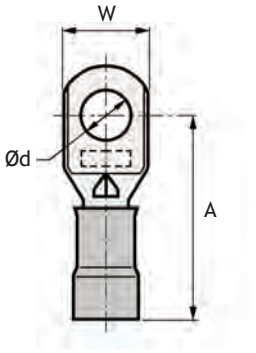

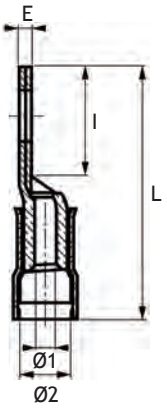

51190+ series

mm²	p/n	W	L	E	Ød	A	I	Ø1	Ø2	SNCF	
	51193-4BC	11	32	1.6	3.2	25.8	13.6			7-847-7033	
	51193R4BC	8.5	32	2.2	3.2	25.8	13.6			7-847-4628	
	51193RR4BC	8.5	29	2.2	3.2	23.5	10				
	511944BC	11	32	1.6	4.2	25.8	13.6			7-847-7031	
	51194R4BC	8.5	32	2.2	4.2	25.8	13.6			7-847-5040	
	51194RR4BC	8.5	29	2.2	4.2	23.5	10				
1 - 2.5 ○	51195-4BC	11	32	1.6	5.2	25.8	13.6	2.8	6.8	7-847-4837	TH3
	51195R4BC	8.5	32	2.2	5.2	25.8	13.6			7-847-4540	
	51195RR4BC	8.5	29	2.2	5.2	23.5	10				
	51196-4BC	11	32	1.6	6.4	25.8	13.6			7-847-7032	
	51198-4BC	12.5	32	1.5	8.4	25.8	14			7-847-5605	
	51193RRS4BC	7.5	32	2.2	3.2	27.8	13.5				
	51194RRS4BC	7.5	32	2.2	4.2	27.8	13.5				
	51193-2NR	11	34	1.6	3.2	27.8	13.6				
	51193R2NR	8.5	34	2.2	3.2	27.8	13.6			7-847-5366	
	51193RR2NR	8.5	31	2.2	3.2	25.5	10				
	51194-2NR	11	34	1.6	4.2	27.8	13.6				
	51194R2NR	8.5	34	2.2	4.2	27.8	13.6			7-847-5365	
1 - 2.5 ●	51194RR2NR	8.5	31	2.2	4.2	25.5	10	2.8	8.8		TH3-2
	51195-2NR	11	34	1.6	5.2	27.8	13.6			7-847-7034	
	51195R2NR	8.5	34	2.2	5.2	27.8	13.6			7-847-5363	
	51195RR2NR	8.5	31	2.2	5.2	25.5	10				
	51196-2NR	11	34	1.6	6.4	27.8	13.6			7-847-5362	
	51198-2NR	12.5	34	1.0	8.4	27.8	14			7-847-5364	

Cross section (mm²) — SNCF code — Crimping tool

Unless otherwise stated, all dimensions are in milimeters

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ Suitable for copper cables according NFF or EN standards
- ✔ SNCF drawing : 10-5102-963
- ✔ RATP drawing : MR-3-52969

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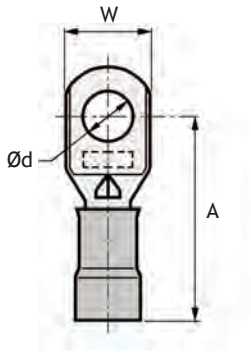
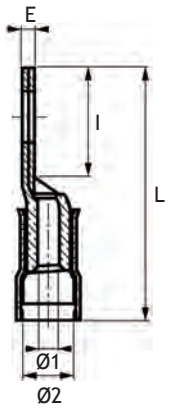




C3P+ series

mm²	p/n	W	L	E	Ø d	A	I	Ø 1	Ø 2	SNCF	
	C3P40-4J	11	32	1.2	4.2	25.8	13.6			7-847-4955	
	C3P40R4J	8,5	32	1.5	4.2	25.8	13.6				
	C3P40RR4J	8.5	28	1.5	4.2	24	10				
	C3P40RRS4J	7.5	32	1.9	4.2	27.8	14				
2.6 - 6 ●	C3P50-4J	11	32	1.2	5.2	25.8	13.6	3.5	6.8	7-847-4956	TH3
	C3P50R4J	8.5	32	1.5	5.2	25.8	13.6				
	C3P50RR4J	8.5	28	1.5	5.2	22.8	10				
	C3P60-4J	11	32	1.2	6.4	25.8	13.6			7-847-4957	
	C3P80-4J	12.5	32	1.2	8.4	25.8	13.6				
	C3P40-2JN	11	34	1.2	4.2	27.8	13.6			7-847-5485	
	C3P40R2JN	8.5	34	1.5	4.2	27.8	13.6				
	C3P40RR2JN	8.5	28	1.5	4.2	24	10				
	C3P50-2JN	11	34	1.2	5.2	27.8	13.6			7-847-5486	
2.6 - 6 ●	C3P50R2JN	8.5	34	1.5	5.2	27.8	13.6	3.5	8.8		TH3-2
	C3P50RR2JN	8.5	28	1.5	5.2	22.8	10				
	C3P60-2JN	11	34	1.2	6.4	27.8	13.6			7-847-5487	
	C3P80-2JN	12.5	34	1.2	8.4	27.8	13.6				

Cross section (mm²) | SNCF code | Crimping tool | Unless otherwise stated, all dimensions are in milimeters

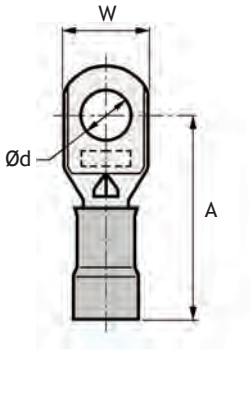
Copper tubular lugs

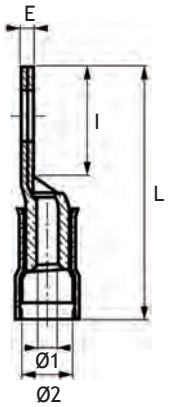
Medium power preinsulated copper tubular lugs

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ Comply with NFF 00363
- ✔ Suitable for copper cables according NFF or EN standards
- ✔ SNCF drawing : 10-5050-317
- ✔ RATP drawing : MR-3-52971

see page 45





ELP series | **FLP series** | **NP series**

mm²	p/n	W	L	E	Ød	A	I	Ø1	Ø2	SNCF
10 ●	ELP40	14	42	2.5	4.2	34	17	5	11.2	7-847-5044
	ELP50	14	42	2.5	5.2	34	17	5	11.2	7-847-4963
	ELP60	14	42	2.5	6.3	34	17	5	11.2	7-847-4964
	ELP80	14	42	2.5	8.3	34	17	5	11.2	7-847-4965
	ELP100	16.5	44	2.0	10.3	36	20	5	11.2	7-847-4966
	ELP120	16.5	44	2.0	12.8	36	20	5	11.2	
	ELPU40	10	42	3.3	4.2	32	17	5	11.2	
	ELPU50	10	42	3.3	5.2	32	17	5	11.2	
	ESPU50	13	42	2.3	5.2	34	17	5	11.2	
16 ●	FLP50	15	46	2.5	5.2	38	20	6	13	7-847-5734
	FLP60	15	46	2.5	6.3	38	20	6	13	7-847-4969
	FLP80	15	46	2.5	8.3	38	20	6	13	7-847-4970
	FLP100	18	46	2	10.3	38	21	6	13	7-847-4971
	FLP120	18	46	2	12.6	38	21	6	13	
	FLPU50	12.5	46	3.0	5.2	38	20	6	13	
25 ●	NP50	15	53	2.5	5.2	43	23	7.7	13.8	7-847-5491
	NP60	15	53	2.5	6.3	43	23	7.7	13.8	7-847-4974
	NP80	15	53	2.5	8.3	43	23	7.7	13.8	7-847-4975
	NP100	17.5	53	2.2	10.3	43	23	7.7	13.8	7-847-5589
	NP120	17.5	53	2.2	12.8	43	23	7.7	13.8	

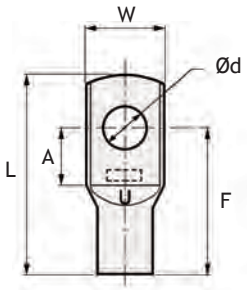
Cross section (mm²) | SNCF SNCF code | Crimping tool

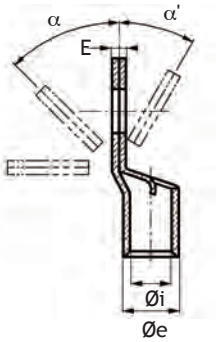
Unless otherwise stated, all dimensions are in milimeters

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363, BS 4579 pt2, RSE/STD/024 pt7
- ✔ Suitable for copper cables according NFF and EN standard
- ✔ For bent terminals, specify α or α' (α max. 90° - α' maxi 45°)
- ✔ SNCF drawing : 10-5050-311
- ✔ RATP drawing : MR-3-52966

see page 45





ELS and FLS series

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
10	ELS40	14	34	2.5	4.2	9	26	5	8	7-847-7211
	ELS50	14	34	2.5	5.2	9	26	5	8	7-847-7212
	ELS60	14	34	2.5	6.4	9	26	5	8	7-847-7213
	ELS80	14	34	2.5	8.3	9	26	5	8	7-847-7214
	ELS100	16.5	36	2	10.3	12	28	5	8	7-847-7215
	ELS120	16.5	36	2	12.8	12	28	5	8	7-847-7216
	ELSU40	10	34	3.3	4.2	12	25	5	8	
16	FLS50	15	37	2.5	5.2	12	29	6	9	
	FLS60	15	37	2.5	6.4	12	29	6	9	7-847-7217
	FLS80	15	37	2.5	8.3	12	29	6	9	7-847-7218
	FLS100	17	38	2	10.3	13	30	6	9	7-847-7219
	FLS120	17	38	2	12.8	13	30	6	9	7-847-7220
	FLSU50	12.5	37	3	5.2	13	29	6	9	

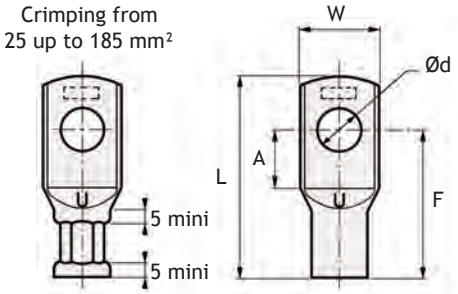
Cross section (mm²) | SNCF SNCF code | Crimping tool | Unless otherwise stated, all dimensions are in milimeters

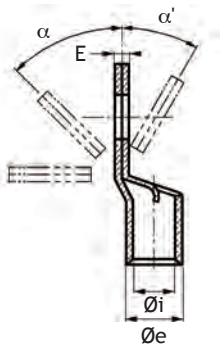
Copper tubular lugs

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363, BS 4579 pt2, RSE/STD/024 pt7
- ✔ Suitable for copper cables according NFF and EN standard
- ✔ For bent terminals, specify α or α' (α max. 90° - α' maxi 45°)
  - from 25 up to 185 mm² : only one crimping
  - from 240 up to 300 mm² : two crimping
- ✔ SNCF drawing : 10-5050-311
- ✔ RATP drawing : MR-3-52966

see page 45





TN series

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
25	TN25-5	15	45	2.5	5.2	13	35	7.7	10.5	7-847-5853
	TN25-6	15	45	2.5	6.4	13	35	7.7	10.5	7-847-5854
	TN25-8	15	45	2.5	8.3	13	35	7.7	10.5	7-847-5855
	TN25-10	17.5	45	2.2	10.3	13	35	7.7	10.5	7-847-4147
35	TN35-6	18	50	3.0	6.4	13	39	9.0	12	7-847-7222
	TN35-8	18	50	3.0	8.3	13	39	9.0	12	7-847-7223
	TN35-10	18	50	3.0	10.3	13	39	9.0	12	7-847-7224
50	TN50-6	21	58	3.0	6.4	14	46	10.8	14	7-847-5860
	TN50-8	21	58	3.0	8.3	14	46	10.8	14	7-847-5861
	TN50-10	21	58	3.0	10.3	14	46	10.8	14	7-847-5862
	TN50-12	21	58	3.0	12.8	14	46	10.8	14	7-847-5863
60	TN60-8	22	60	3.2	8.3	14	42	11.8	15	
	TN60-10	22	60	3.2	10.3	14	42	11.8	15	
	TN60-12	22	60	3.2	12.8	14	42	11.8	15	
70	TN70-8	23	66	3.5	8.3	17	51	12.5	16	7-847-5864
	TN70-10	23	66	3.5	10.3	17	51	12.5	16	7-847-5865
	TN70-12	23	66	3.5	12.8	17	51	12.5	16	7-847-5866
95	TN95-10	27	73	4.0	10.3	18	56.5	14.5	18.5	7-847-5868
	TN95-12	27	73	4.0	12.8	18	56.5	14.5	18.5	7-847-5869
	TN95-14	27	73	4.0	14.5	18	56.5	14.5	18.5	7-847-5870

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363, BS 4579 pt2, RSE/STD/024 pt7
- ✔ Suitable for copper cables according NFF and EN standard
- ✔ For bent terminals, specify α or α' (α max. 90° - α' maxi 45°)
  - from 25 up to 185 mm² : only one crimping
  - from 240 up to 300 mm² : two crimping
- ✔ SNCF drawing : 10-5050-311
- ✔ RATP drawing : MR-3-52966

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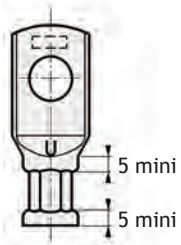
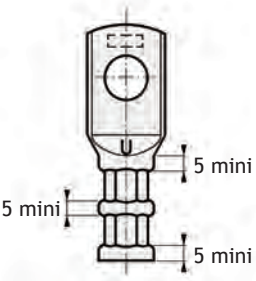
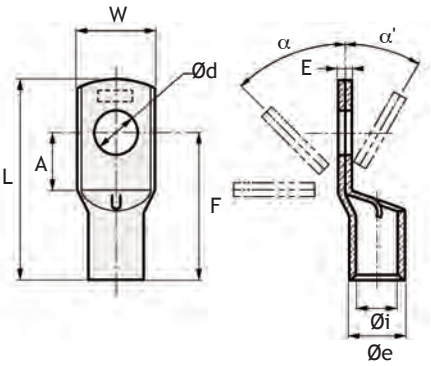
Crimping from 25 up to 185 mm²



Crimping from 240 up to 300 mm²





TN series

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
120	TN120-10	30	83.5	4.5	10.3	21	66	16.5	21	
	TN120-12	30	83.5	4.5	12.8	21	66	16.5	21	7-847-5871
	TN120-14	30	83.5	4.5	14.5	21	66	16.5	21	7-847-5872
	TN120-16	30	83.5	4.5	16.5	21	66	16.5	21	7-847-5873
150	TN150-10	32	90	4.5	10.3	23	71	18	23	
	TN150-12	32	90	4.5	12.8	23	71	18	23	7-847-5620
	TN150-14	32	90	4.5	14.5	23	71	18	23	7-847-5874
	TN150-16	32	90	4.5	16.5	23	71	18	23	7-847-5875
	TN150-18	32	90	4.5	18.8	23	71	18	23	7-847-5876
185	TN185-12	38	102	5.5	12.8	23	78	20.5	26	7-847-5877
	TN185-14	38	102	5.5	14.5	23	78	20.5	26	7-847-5878
	TN185-16	38	102	5.5	16.5	23	78	20.5	26	7-847-5879
	TN185-18	38	102	5.5	18.8	23	78	20.5	26	7-847-5880
240	TN240-14	42	110	6	14.5	28	86	23	29	7-847-5881
	TN240-16	42	110	6	16.5	28	86	23	29	7-847-5882
	TN240-18	42	110	6	18.8	28	86	23	29	7-847-5883
	TN240-20	42	110	6	21	28	86	23	29	
300	TN300-16	48	123	7	16.5	32	97	26	33	7-847-4146
	TN300-18	48	123	7	18.8	32	97	26	33	7-847-5884
	TN300-20	48	123	7	21	32	97	26	33	
	TN300-22	48	123	7	22.9	32	97	26	33	7-847-5885

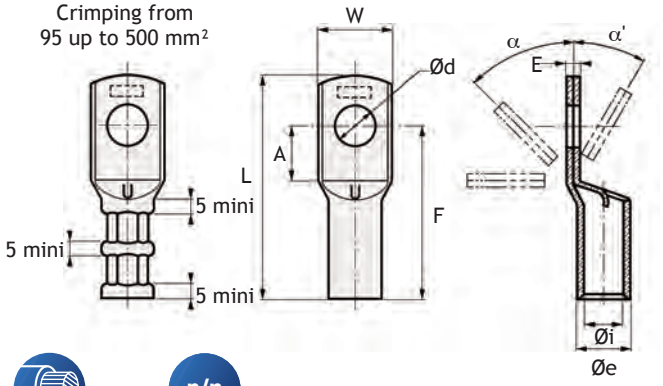
Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

Copper tubular lugs

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363, BS 4579 pt2, RSE/STD/024 pt7
- ✔ Suitable for copper cables according NFF and EN standard
- ✔ For bent terminals, specify α or α' (α max. 90° - α' maxi 45°)
  - from 25 up to 185 mm² : only one crimping
  - from 240 up to 300 mm² : two crimping
- ✔ SNCF drawing : 10-5050-312
- ✔ RATP drawing : MR-3-52967

see page 45



TR series

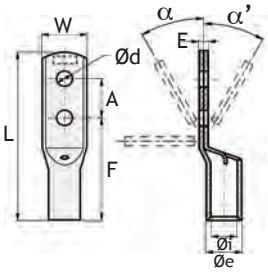
mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
95	TR95-10	30.5	80	6	10.3	18.3	64	15.5	21.5	
	TR95-12	30.5	80	6	12.8	18.3	64	15.5	21.5	
	TR95-14	30.5	80	6	14.5	18.3	64	15.5	21.5	
	TR95-16	30.5	80	6	16.5	18.3	64	15.5	21.5	
	TR95-18	30.5	80	6	18.8	18.3	64	15.5	21.5	
120	TR120-10	34	88.5	6.6	10.3	24	70.5	17.6	24.5	
	TR120-12	34	88.5	6.6	12.8	24	70.5	17.6	24.5	
	TR120-14	34	88.5	6.6	14.5	24	70.5	17.6	24.5	
	TR120-16	34	88.5	6.6	16.5	24	70.5	17.6	24.5	
	TR120-18	34	88.5	6.6	18.8	24	70.5	17.6	24.5	
150	TR150-10	37	96	7	10.3	21	75	19	26	
	TR150-12	37	96	7	12.8	21	75	19	26	
	TR150-14	37	96	7	14.5	21	75	19	26	
	TR150-16	37	96	7	16.5	21	75	19	26	
	TR150-18	37	96	7	18.8	21	75	19	26	
	TR150-20	37	96	7	21	21	75	19	26	
185	TR185-12	40	104.5	7	12.8	27	82.5	21	28	
	TR185-14	40	104.5	7	14.5	27	82.5	21	28	
	TR185-16	40	104.5	7	16.5	27	82.5	21	28	
	TR185-18	40	104.5	7	18.8	27	82.5	21	28	
	TR185-20	40	104.5	7	21	27	82.5	21	28	
	TR185-22	40	104.5	7	22.9	27	82.5	21	28	
240	TR240-16	44	112	7	16.5	27	88	24	31	
	TR240-18	44	112	7	18.8	27	88	24	31	
	TR240-20	44	112	7	21	27	88	24	31	
	TR240-22	44	112	7	22.9	27	88	24	31	
300	TR300-16	50	130	8.5	16.5	28	103	26.5	35	
	TR300-18	50	130	8.5	18.8	28	103	26.5	35	
	TR300-20	50	130	8.5	21	28	103	26.5	35	
	TR300-22	50	130	8.5	22.9	28	103	26.5	35	
	TR300-24	50	130	8.5	25	28	103	26.5	35	
400	TR400-24	60.5	130	9	24.9	28	100	33	42	
500	TR500-30	72	140	10	30.9	32	110	40	50	

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363
- ✔ For bent terminals, specify α or α' (α max. 90° - α' maxi 45°)
- ✔ Note : for TN series : two hexagonal crimping from 240 mm² for TRS series : two hexagonal crimping

see page 45

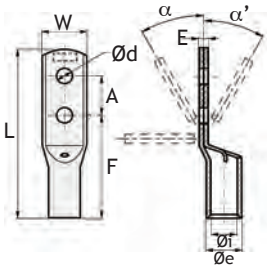


TRS series

TN series

Two hole and narrow palm terminal

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
185	TRS185	34.5	151	7	12.8	40	90	21.8	28.5	
240	TRS240	34.5	150	7	12.8	40	90	24	30.6	
400	TRS400	49.5	180	9	14.8	50	105	26.5	35	



Two hole foolproofing lugs for motor terminal box

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
50	TN50-10-24	20	86	3	10.3	24	47	10.8	14	
	TN50-10-29	20	91	3	10.3	29	47	10.8	14	
	TN50-10-34	20	96	3	10.3	34	47	10.8	14	
70	TN70-10-24	23	87	3.5	10.3	24	51	12.5	16	
	TN70-10-29	23	94	3.5	10.3	29	51	12.5	16	
	TN70-10-34	23	99	3.5	10.3	34	51	12.5	16	
95	TN95-10-24	27.5	93	4	10.3	24	56.5	14.5	18.5	
	TN95-10-29	27.5	98	4	10.3	29	56.5	14.5	18.5	
	TN95-10-34	27.5	103	4	10.3	34	56.5	14.5	18.5	
120	TN120-10-24	30	105	4.5	10.3	24	68	16.5	21	
	TN120-10-29	30	105	4.5	10.3	29	63	16.5	21	
	TN120-10-34	30	105	4.5	10.3	34	58	16.5	21	

Two hole terminals - NEMA space (25.4 mm)

70	TN70-10-25,4	23	87	3.5	10.3	25.4	49.5	12.5	16	
95	TN95-10-25,4	26.5	94	4	10.3	25.4	53.5	14.5	18.5	
120	TN120-10-25,4	30	102	4.5	10.3	25.4	61.5	16.5	21	
150	TN150-10-25,4	33	109	5	10.3	25.4	67.5	18	23	
240	TN240-10-25,4	42	113.5	6	10.3	25.4	73	23	29	

Cross section (mm²) — SNCF code

Unless otherwise stated, all dimensions are in milimeters

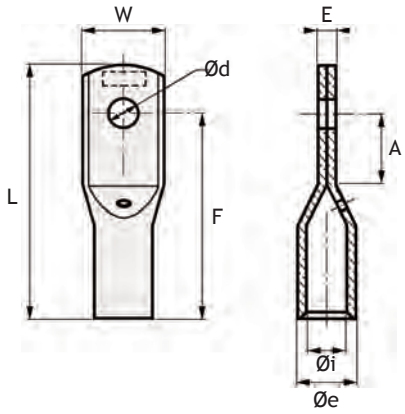
Copper tubular lugs

Copper tubular lugs with axial palm and narrow palm, especially suitable to go through cable glands

General features

- ✔ Material : tin-plated copper
- ✔ According to NFF 00363
- ✔ Note : two hexagonal crimping from 185 mm²
- ✔ SNCF drawing : 10-5050-313
- ✔ RATP drawing : MR-3-52968

see page 45



TRS series

mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF	Comments
95	TRS95-10	24	82	6	10.3	30	67	15.5	21.5		Narrow palm
	TRS95-12	24	82	6	12.8	30	67	15.5	21.5		
120	TRS446-10	23	73	6	10.3	18	56	16.5	22.5		Narrow palm
	TRS446-12	23	73	6	12.8	18	56	16.5	22.5	0-847-6109	
	TRS446-14	23	73	6	14.5	18	56	16.5	22.5	0-847-6107	
	TRS448-10	23	86	6	10.3	28	67	16.5	22.5		
	TRS448-12	23	86	6	12.8	28	67	16.5	22.5		
	TRS448-14	23	86	6	14.5	28	67	16.5	22.5		
150	TRS450	30	90	6	12.8	27	71	18.5	24.5		Narrow palm
	TRS450-14	30	90	6	14.5	27	71	18.5	24.5		
185	TRS452-12	32	107	7	12.8	40	87	21	27		Narrow palm
	TRS452	32	107	7	14.5	40	87	21	27		
	TRS452-16	32	107	7	16.5	40	87	21	27		
	TRS452OBL	32	107	7	17/19	40	87	21	27		Oblong hole
240	TRS455	32	107	8	14.5	28	86	23	29		Machining lug drawing 10-5091834
	TRS455-12PE	29.5	107	8	12.8	28	86	23	29		Machining lug with narrow palm

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

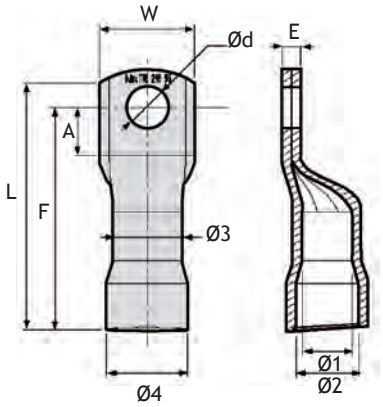
Copper tubular lugs

Copper tubular lugs for flexible copper cables with insulation crimping

General features

- ✔ Tin plated copper
- ✔ "B" crimp one wire
- ✔ hexagonal crimping for insulation

see page 45



mm²	p/n	W	L	E	Ø d	A	F	Ø 1	Ø 2	Ø 3	Ø 4	Dies: Wire crimping	Dies: Insulation crimping
35	TRS243-8	20	71	3.8	8.3	10	61	10	13.5	14	17.5	C12TRS243BS	C12TRS243FH
	TRS243-10	20	71	3.8	10.3	10	61	10	13.5	14	17.5		
	TRS243-8EXP	20	70	3.8	8.3	10	60	10	14.5	14	18.5		C12TRS243EXPFH
	TRS243-10EXP	20	70	3.8	10.3	10	60	10	14.5	14	18.5		
50	TRS244-10	23	79	6	10.3	13	67	11	16	17	22	C12TRS244BS	C12TRS244FH
	TRS244-12	23	79	6	12.3	13	67	11	16	17	22		
	TRS244-10EXP	23	78	6	10.3	13	66	11	17	17	23		C12TRS244EXPFH
	TRS244-12EXP	23	78	6	12.3	13	66	11	17	17	23		
70	TRS245-10	26	82	4.4	10.3	13	70	13.5	17.5	18	22	C12TRS245BS	C12TRS245FH
	TRS245-12	26	82	4.4	12.8	13	70	13.5	17.5	18	22		
	TRS245-10EXP	26	81	4.4	10.3	13	69	13.5	18.5	18	23		C12TRS245EXPFH
	TRS245-12EXP	26	81	4.4	12.8	13	69	13.5	18.5	18	23		
95	TRS246-10	30	82	6	10.3	15	70	15.5	19.5	21.5	25.5	C12TRS246BS	C12TRS246FH
	TRS246	30	82	6	12.8	15	70	15.5	19.5	21.5	25.5		
	TRS246-10EXP	30	81.5	6	10.3	15	69.5	15.5	20.5	21.5	26.5		C12TRS246EXPFH
	TRS246EXP	30	81.5	6	12.8	15	69.5	15.5	20.5	21.5	26.5		

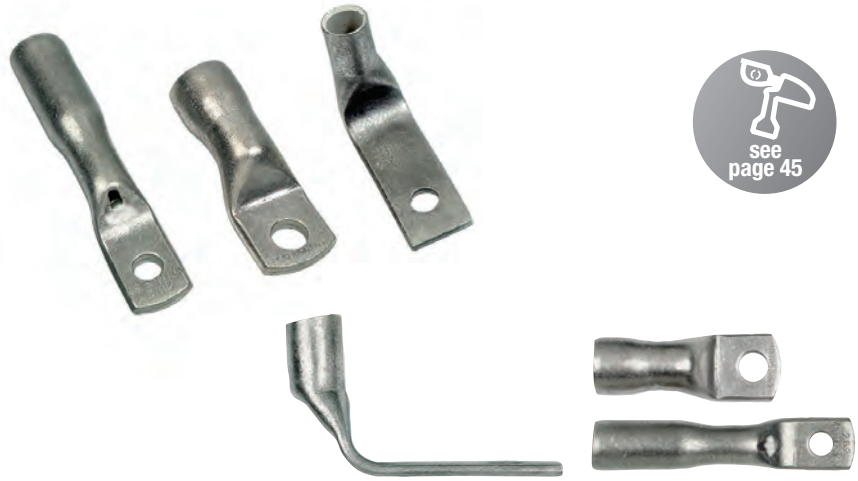
Cross section (mm²)

Unless otherwise stated, all dimensions are in milimeters

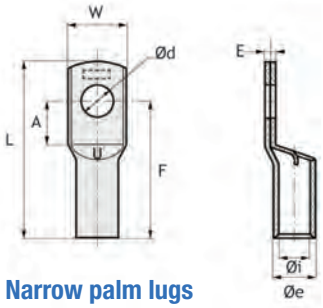
Copper tubular lugs
Special copper tubular lugs

General features

- ✔ Material : tin plated copper
- ✔ According to NFF 00363



see page 45

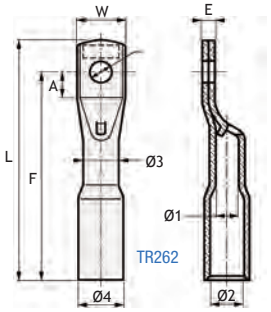


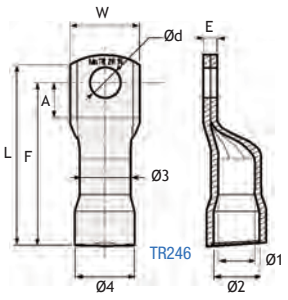
Narrow palm lugs

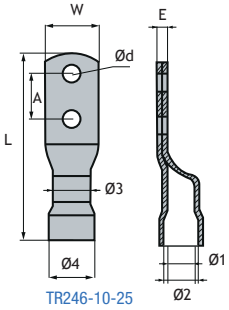
mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	Comments
185	TRS185-1B	34.5	111	7	12.8	20.5	92	21.8	28.5	Die TRS185, 2 crimps
240	TRS240-1B	34.5	110	7	12.8	21.5	90.5	24	30.6	Die TRS240, 2 crimps
	TRS242-12	38	110	6	12.8	28	86	23	30	Die TRS258, 2 crimps

Back traction copper lugs with insulation crimping

TRS262 : SNCF code 7-847-7035
SNCF drawing 10-5050-314
RATP drawing : MR-3-53174

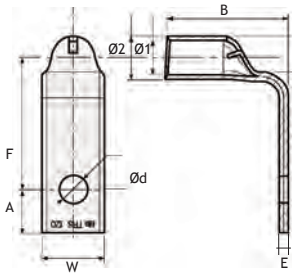






mm²	p/n	W	L	E	Ø d	A	F	Ø 1	Ø 2	Ø 3	Ø 4	Comments
50	TRS262	23.3	115	6	10.6	13	100.5	10.6	16.2	17	21.5	1 wire crimping + 1 insulation crimping
95	TRS246	30	82	6	12.8	15	70	15.5	19.5	21.5	25.5	
	TRS246-10-25	30	107	6	10.3	25.2	70	15.5	19.5	21.5	25.5	
120	TRS247	30	92	6.9	12.8	15	80	17.5	22.3	24.5	29.3	

Specific bent lugs



mm²	p/n	W	B	E	Ø d	A	F	Ø 1	Ø 2	Comments
95	TRS95-12-90E	26.5	44	3.6	12.8	16	76	14.5	18.5	Die TN95, 1 crimping
	TRS95-16-90E	18.5	44	3.6	16.5	16	76	14.5	18.5	
120	TRS120-12-90E	30.2	60	4.5	12.8	16	65	16.5	21	Die TN120, 1 crimping
150	TRS150-12-90E	33	60	5	12.8	19	65	18	23	Die TN150, 1 crimping
	TRS150-16-90E	33	60	5	16.5	16	65	18	23	
185	TRS185-12-90E	37.5	76	5.5	12.8	24	70	20.6	26	Die TN185, 1 crimping
240	TRS240-16-90E	42	81	6	16.5	24	75	23	29	Die TN240, 2 crimps

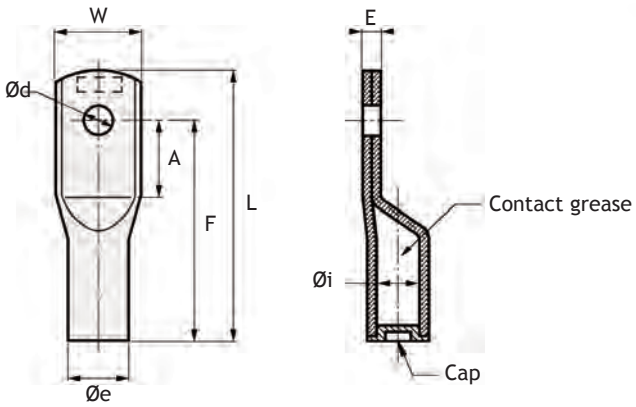
Cross section (mm²)

Unless otherwise stated, all dimensions are in milimeters

General features

- ✔ Material : tin plated aluminium
- ✔ According to NFF 00363
- ✔ SNCF drawing : 10-5089-290
- ✔ RATP drawing : MR-3-53175
- ✔ Note : from 50 up to 150 mm² : two hexagonal crimping

see page 45



mm²	p/n	W	L	E	Ø d	A	F	Ø i	Ø e	SNCF
50	AL50-6	20.6	65	5	6.4	17	52	10.8	15.8	
	AL50-8	20.6	65	5	8.3	17	52	10.8	15.8	
	AL50-10	20.6	65	5	10.3	17	52	10.8	15.8	
	AL50-12	20.6	65	5	12.8	17	52	10.8	15.8	
60	AL60-8	20.6	69	5	8.3	20	56	11.6	16.3	
	AL60-10	20.6	69	5	10.3	20	56	11.6	16.3	7-847-4595
70	AL70-8	21	82	4.6	8.3	22.5	65	12.5	17	
	AL70-10	21	82	4.6	10.3	22.5	65	12.5	17	
	AL70-12	21	82	4.6	12.8	22.5	65	12.5	17	
95	AL95-8	28	87	6	8.3	24.5	70.5	14	20	
	AL95-10	28	87	6	10.3	24.5	70.5	14	20	
	AL95-12	28	87	6	12.8	24.5	70.5	14	20	
	AL95-14	28	87	6	14.5	24.5	70.5	14	20	
120	AL120-10	28	87	6	10.3	24.5	70.5	16.5	22	
	AL120-12	28	87	6	12.8	24.5	70.5	16.5	22	
	AL120-14	28	87	6	14.5	24.5	70.5	16.5	22	
150	AL150-10	28.5	95	6	10.3	28	82	18.5	24	
	AL150-12	28.5	95	6	12.8	28	82	18.5	24	
	AL150-14	28.5	95	6	14.5	28	82	18.5	24	
	AL150-16	28.5	95	6	16.5	28	82	18.5	24	
	AL150 B-14	28.5	110	6	14.5	25.5	90	18.5	24	7-847-8251
	AL150 B-16	28.5	110	6	16.5	25.5	90	18.5	24	
	AL150 B-18	28.5	110	6	18.8	25.5	90	18.5	24	

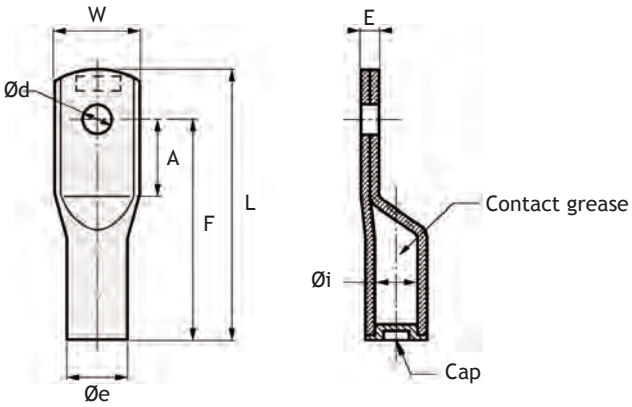
Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

Aluminium tubular lugs

General features

- ✔ Material : tin plated aluminium
- ✔ According to NFF 00363
- ✔ SNCF drawing : 10-5089-290
- ✔ RATP drawing : MR-3-53175
- ✔ Note : from 185 up to 460 mm² : two hexagonal crimping

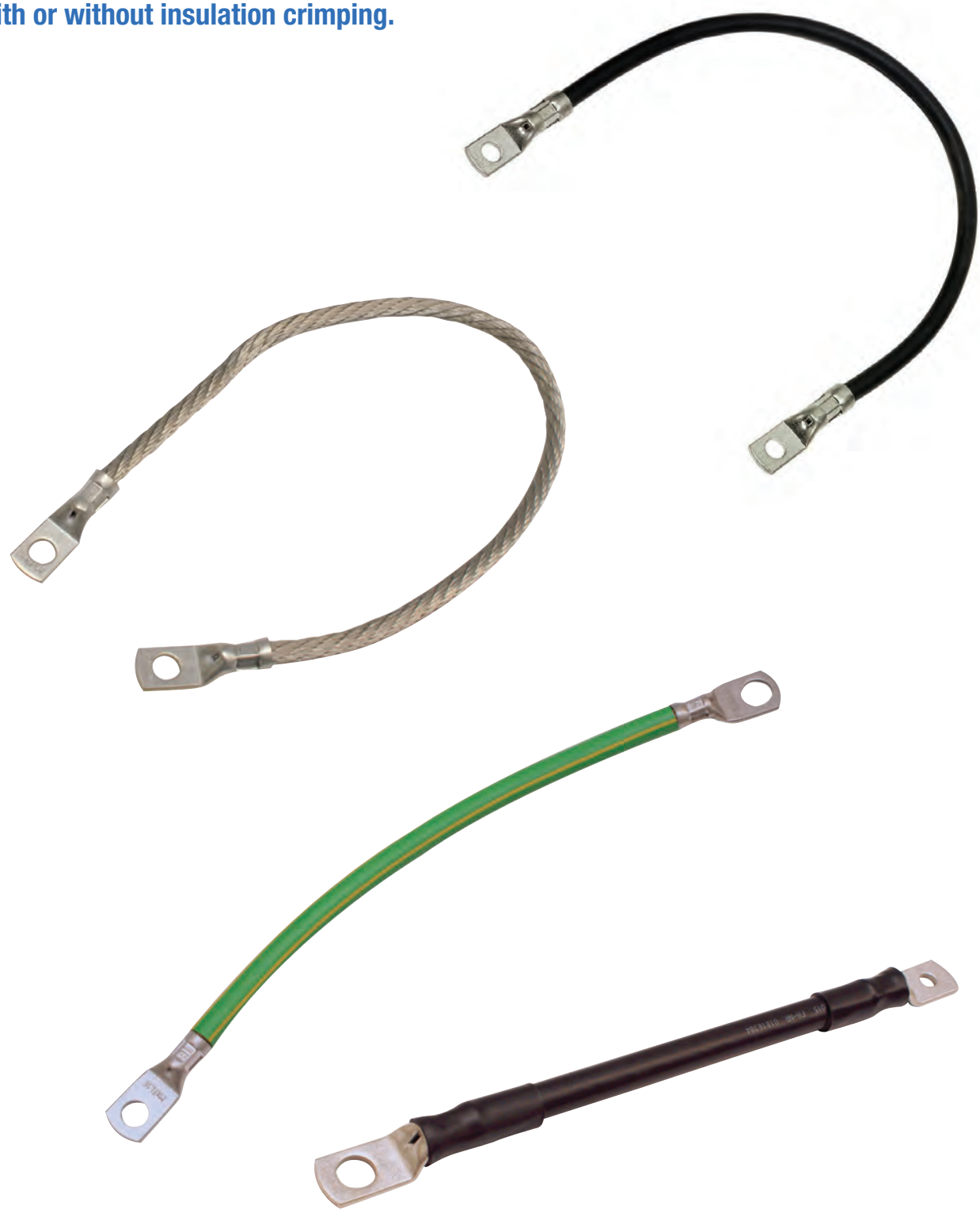
see page 45



mm²	p/n	W	L	E	Ød	A	F	Øi	Øe	SNCF
185	AL185-10	34	130	6	10.3	25.5	110	21	27	
	AL185-12	34	130	6	12.8	25.5	110	21	27	
	AL185-14	34	130	6	14.5	25.5	110	21	27	
	AL185-16	34	130	6	16.5	25.5	110	21	27	
240	AL240-12	41	130	6.5	12.8	28	110	23	30	
	AL240-14	41	130	6.5	14.5	28	110	23	30	7-847-7355
	AL240-16	41	130	6.5	16.5	28	110	23	30	
	AL240-18	41	130	6.5	18.8	28	110	23	30	
	AL240-20	41	130	6.5	21	28	110	23	30	
260	AL260-14	38.5	114	6.5	14.5	29	94	25.5	32	
	AL260-16	38.5	114	6.5	16.5	29	94	25.5	32	
	AL260-18	38.5	114	6.5	18.8	29	94	25.5	32	
300	AL300-14	46	136	8.8	14.5	30	113	27	34.6	
	AL300-16	46	136	8.8	16.5	30	113	27	34.6	
	AL300-18	46	136	8.8	18.8	30	113	27	34.6	
	AL300-20	46	136	8.8	21	30	113	27	34.6	
460	AL460-16	52	150	10	16.5	35	125	32.5	42	
	AL460-18	52	150	10	18.8	35	125	32.5	42	
	AL460-20	52	150	10	21	35	125	32.5	42	
	AL460-22	52	150	10	23	35	125	32.5	42	
	AL460-24	52	150	10	25	35	125	32.5	42	

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

Shunt manufacturing on request or drawing (insulated or non-insulated cables, braids) with or without insulation crimping.



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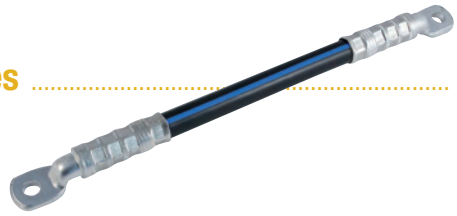
38 Forged lugs for insulated aluminium cables



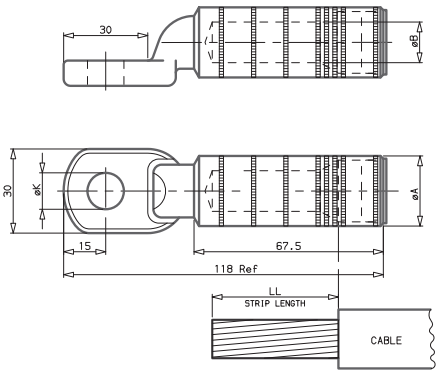
Forged lugs for insulated aluminium cables

General features

DEUTSCHE BANN APPROUVED

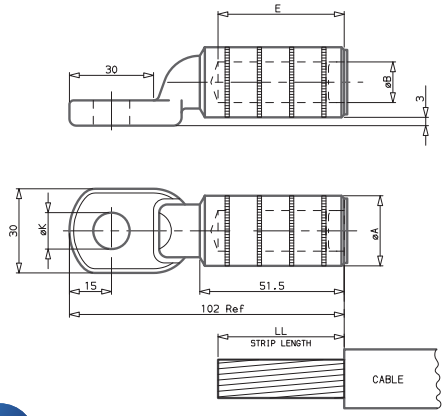
- ✔ Material : Aluminium 99.5%
- ✔ Tin-plated : 15 µm
- ✔ Crimping position
- ✔ Short cut current :
  * 75 mm² = 25 KA ms
  * 110 mm² = 40 KA 100 ms
- ✔ Tightening torque tested to 80 Nm which guarantee a perfect installation same with high vibration level

Long barrel terminal for rail connection with wire and insulation crimping



mm²	p/n	Ø K	Ø A	Ø B	Ø mm	Type of cables	Die
110/100	Y4CA110A22M12HTN15	13	25	14.5	22	(N)AYY-0 1x110 RM 0.6/1KV ALMG (N)A(ST)YY-0 1x110 RM 0.6/1KV ALMGST (N)A(ST)YY-0 1x100 RM 0.6/1KV ALMGST	U215BGE5T (3 crimps) with 60 KN tool
	Y4CA110A22M16HTN15	17	25	14.5	22		
75	Y4CA075A22M12HTN15	13	25	12	20	(N)A(ST)YY-0 1x75 RM 0.6/1KV ALMGST	
	Y4CA075A22M16HTN15	17	25	12	20		

Short barrel terminal for noise protection wall grounding



mm²	p/n	Ø K	Ø A	Ø mm	Type of cables	Die
110/100	Y4CA110A22M12TN15	13	25	14.5	(N)AYY-0 1x110 RM 0.6/1KV ALMG (N)A(ST)YY-0 1x110 RM 0.6/1KV ALMGST (N)A(ST)YY-0 1x100 RM 0.6/1KV ALMGST	U215BGE5T (3 crimps) with 60 KN tool
	Y4CA110A22M16TN15	17	25	14.5		
75	Y4CA075A22M12TN15	13	25	12	(N)A(ST)YY-0 1x75 RM 0.6/1KV ALMGST	
	Y4CA075A22M16TN15	17	25	12		

Cross section (mm²) — Insulation Ø Ø mm

Unless otherwise stated, all dimensions are in milimeters

Signalling and stationary equipment products

40 Preinsulated terminals

42 Preinsulated terminals, blade and pins

43 Preinsulated butt connectors with inspection window

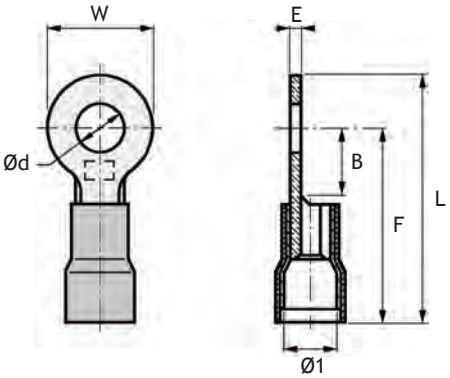
44 Copper tubular lugs and butt connectors

Preinsulated ring terminals

General features

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ SNCF drawing : 10-5050-309
- ✔ RATP drawing : MR-3-52964

see page 45



mm²	p/n	SNCF	W	L	E	Ø d	F	B	Ø 1	SNCF	
0.34 - 1.5 ●	51143-2	7-847-4839	5.6	17.3	0.8	3.2	14.5	3.5	3.6	0-0391-6840	TH1S
	51154-2	7-847-5028	8	21	0.8	4.2	17	6	3.6		
	51155-2	7-847-1112	8	21	0.8	5.2	17	6	3.6		
	51136-2	7-847-4251	12.5	27	0.8	6.3	20.7	6.5	3.6		
0.34 - 1.5 ○	51143-2BC	7-847-5369	5.6	17.3	0.8	3.2	14.5	3.5	3.6	0-0391-6840	TH1S
	51154-2BC	7-847-5368	8	21	0.8	4.2	17	6	3.6		
	51135-2BC	7-847-4984	12.5	27	0.8	5.2	20.7	6.5	3.6		
	51136-2BC	7-847-5367	12.5	27	0.8	6.3	20.7	6.5	3.6		
1 - 2.5 ●	51183-2	7-847-5237	8.6	21	0.8	3.2	16.7	6	4.8	7-847-7141	TH2S
	51184-2	7-847-5532	8.6	21	0.8	4.2	16.7	6	4.8		
	51185-2	7-847-5483	8.6	21	0.8	5.2	16.7	6	4.8		
	51176-2	7-847-5484	12.5	27	0.8	6.3	20.7	6	4.8		
	51178-2	7-847-4678	12.5	27	0.8	8.4	20.7	6	4.8		
2.6 - 6 ●	STC 1-4-2JN	7-847-5389	9.6	29.5	1	4.2	24.7	7	8.8	0-391-6837	TH3-2
	STC 1-5-2JN	7-847-4679	9.6	29.5	1	5.2	24.7	7	8.8		
	STC 1-6-2JN	7-847-4216	9.6	29.5	1	6.3	24.7	7	8.8		
	STC 2-8-2JN	7-847-4363	13.8	35	1	8.4	28.1	8	8.8		
	STC 2-10-2JN	7-847-5390	13.8	35	1	10.3	28.1	8	8.8		
	STC 2-12-2JN	7-847-4886	19	42	1	12.8	32.5	14	8.8		

Cross section (mm²) — SNCF code — Crimping tool

Unless otherwise stated, all dimensions are in milimeters

General features

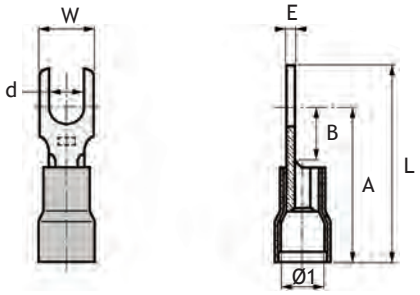
Preinsulated fork terminals

- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ According to NFF 00363
- ✔ SNCF drawing : VZA 17692/000002

Preinsulated tubular lugs

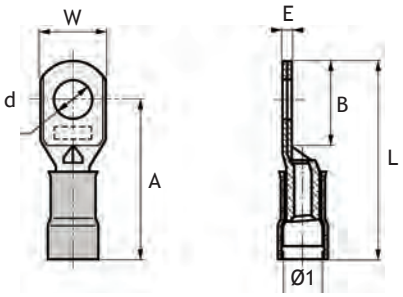
- ✔ Material : tin-plated copper
- ✔ Insulation according to EN 45545
- ✔ According to NFF 00363
- ✔ SNCF drawing : VZA 17692/00

see page 45



Preinsulated fork terminals

mm²	p/n	SNCF	W	L	E	Ø d	A	B	Ø 1	SNCF	
0.34 - 1.5 ●	STRGFA1-3-2	7-847-5750	5.5	20	0.8	3.2	16.3	6	3.6	0-391-6840	TH1S
	STRGFA2-4-2	7-847-5006	8	20	0.8	4.2	16.4	6	3.6		
	STRGFA2-5-2	7-847-5007	8	20	0.8	5.3	16.4	6	3.6		
0.34 - 1.5 ○	STRGFA2-4-2BC	7-847-5005	8	20	0.8	4.2	16.4	6	3.6	0-391-6840	TH1S
1 - 2.5 ●	STRGFB1-3-2	7-847-4682	7.9	20.5	0.8	3.2	16.5	6	4.8	7-847-7141	TH2S
	STRGFB1-4-2	7-847-4683	7.9	20.5	0.8	4.2	16.5	6	4.8		
	STRGFB2-5-2	7-847-4684	9.5	23	0.8	5.3	18.8	8	4.8		
2.6 - 6 ●	STRGFC1-4-2JN	7-847-5391	9.5	29	1	4.2	24.2	4.5	8.8	0-391-6837	TH3-2
	STRGFC1-5-2JN	7-847-5392	9.5	29	1	5.2	24.2	4.5	8.8		
	STRGFC1-6-2JN	7-847-5119	9.5	29	1	6.2	24.2	4.5	8.8		



Preinsulated tubular lugs

mm²	p/n	SNCF	W	L	E	Ø d	A	B	Ø 1	SNCF	
1 - 3.18 ●	51193R-2NR	7-847-5366	8.1	34	2.2	3.2	27.8	7.4	8.8	0-391-6837	TH3-2
	51194R-2NR	7-847-5365	8.1	34	2.2	4.2	27.8	7.4	8.8		
	51195R-2NR	7-847-5363	8.1	34	2.2	5.2	27.8	7.4	8.8		
	51196-2NR	7-847-5362	10.6	34	1.6	6.4	27.8	7.4	8.8		
	51198-2NR	7-847-5364	11.6	34	1	8.4	27.8	7.4	8.8		
7.40 ●	C4P60-2G	7-847-5361	10.6	34	1.2	6.4	25.8	7.4	8.8	0-391-6837	TH3-2
	C4P80-2G	7-847-5661	11.6	34	1.2	8.4	22.8	7.4	8.8		

Cross section (mm²) — SNCF code — Crimping tool

Unless otherwise stated, all dimensions are in milimeters

Preinsulated disconnects 2.8 - 5 - 6.35 mm
Preinsulated blade and pins terminals

General features

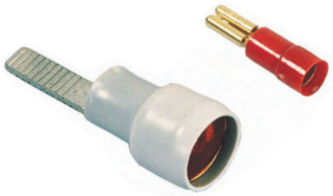
Preinsulated disconnects 2.8 - 5 6 - 35 mm

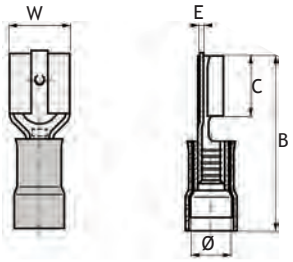
- ✔ Material : tin plated phophorous bronze
- ✔ Insulation according to EN 45545
- ✔ According to NFF 00363
- ✔ SNCF drawing : VZA 17692/000001

Preinsulated blade and pins terminals

- ✔ Material : tin -plated copper
- ✔ Insulation according to EN 45545
- ✔ SNCF drawing : VZA 17692/000003

see page 45





Preinsulated disconnects 2.8 - 5 6 - 35 mm

mm²	p/n	SNCF			W	B	C	E	Ø	SNCF	
0.34 - 1.5 ●	51027	7-847-1902	Gold	2.8 x 0.5	3.8	19.5	6.5	0.25	3.6	0-391-6844	TH1-90
	51081-2	7-847-4728	Tin	5 x 0.8	6.4	21	7.7	0.5	3.6	0-391-6840	TH1S
	51181-2	7-847-4700	Tin	6.35 x 0.8	7.7	21	7.7	0.5	3.6		
0.34 - 1.5 ○	51328	7-847-1900	Gold	2.8 x 0.3	3.8	19.5	6.5	0.25	3.6	0-391-6844	TH1-90
	51028	7-847-1901	Gold	2.8 x 0.5	3.8	19.5	6.5	0.25	3.6		
1 - 2.5 ●	51131-2	7-847-4999	Tin	5 x 0.8	7.7	21	7.7	0.5	4.8	7-847-7141	TH2-S
	51231-2	7-847-4797	Tin	6.35 x 0.8	7.7	20.2	7.7	0.5	4.8	7-847-7141	TH1-S
1 - 3.18 ●	51261-2NR	7-847-6798	Tin	6.35 x 0.8	7.7	27.5	7.7	0.5	8.8	0-391-6837	TH3-2

Pin terminals

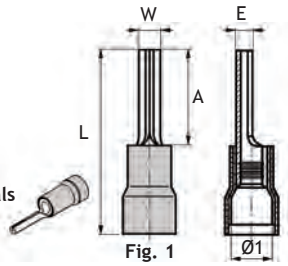


Fig. 1

Notched blade terminal

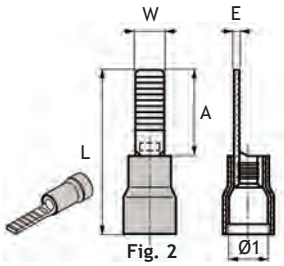


Fig. 2

Preinsulated blade and pins terminals

mm²	p/n	SNCF		W	A	L	Ø 1	E	SNCF	
0.34 - 1.5 ●	51220-2	7-847-5051	Fig. 1	1.9	10	22.5	3.6	1.9	0-391-6840	TH1S
	51225-2	7-847-5556	Fig. 2	2.9	10.2	21	3.6	0.8		TH1S*
0.34 - 1.5 ○	51220-2 BC	7-847-5359	Fig. 1	1.9	10	22.5	3.6	1.9	0-391-6840	TH1S
	51225-2 BC	7-847-5890	Fig. 2	2.9	10.2	21	3.6	0.8		TH1S*
1 - 2.5 ●	51222-2	7-847-5002	Fig. 1	1.8	10	22	4.8	1.8	7-847-7141	TH2S
	51226-2	7-847-5555	Fig. 2	3.9	11.5	22	4.8	0.8		
1 - 3.18 ●	53226-2 R	7-847-6038	Fig. 2	3.9	14	30	8.8	0.9	0-391-6837	TH3-2
1 - 3.18 ●	53226-2 NR	7-847-6037	Fig. 2	3.9	14	30	8.8	0.9	0-391-6837	TH3-2
2.6 - 6 ●	51223-2 JN	7-847-5393	Fig. 1	2.5	12	28	8.8	2.5	0-391-6837	TH3-2
	51227-2 JN	7-847-5370	Fig. 2	3.9	12	30.5	8.8	1.0		
7.40 ●	51227-2G	7-847-6352	Fig. 2	3.9	16	32	8.8	1.2	0-391-6837	TH3-2

For on edge crimping, use TH1-90 tool.

Cross section (mm²) · SNCF code · Crimping tool · Languettes · Coating

Unless otherwise stated, all dimensions are in milimeters

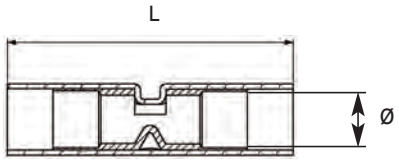
Preinsulated butt connectors with inspection window

General features

Preinsulated butt connectors with inspection window

- ✔ Material : tin-plated copper
- ✔ Insulation according EN 45545
- ✔ According to NFF 00363
- ✔ SNCF drawing : VZA 17692/000004

see page 45



mm²	p/n	SNCF	L	Ø	SNCF	
0.34 - 1.5 ●	51391	7-847-4323	32	3.6	0-391-6840	TH1S
1 - 2.5 ●	51402	7-847-4344	32	4	7-847-7141	TH2S
2.6 - 6 ●	51413	7-847-4120	41.5	5.5	0-391-6837	TH3-2

Cross section (mm²) | SNCF code | Crimping tool

Unless otherwise stated, all dimensions are in milimeters

Copper tubular lugs and butt connectors

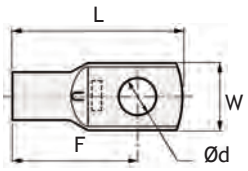
General features

Copper tubular lugs
- ✔ Material : tin-plated copper
- ✔ According to NFF 00363
- ✔ SNCF drawing : VZA 17692/000006

Copper butt connectors
- ✔ Material : tin -plated copper
- ✔ SNCF drawing VZA 17692/000005

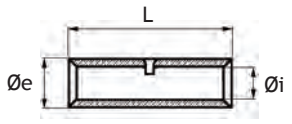
see page 45

Copper tubular lugs



mm²	p/n	SNCF	W	L	Ø d	F	SNCF code Tools
6.6 - 10	ELS40	7-847-7211	14	34	4.2	26	0-391-6832 ou 0-391-6850 + 0-391-6851
	ELS50	7-847-7212	14	34	5.2	26	
	ELS60	7-847-7213	14	34	6.4	26	
	ELS80	7-847-7214	14	34	8.3	26	
	ELS100	7-847-7215	16.5	36	10.3	28	
	ELS120	7-847-7216	16.5	36	12.8	28	
16	FLS60	7-847-7217	15	37	6.4	29	0-391-6832 ou 0-391-6850 + 0-391-6852
	FLS80	7-847-7218	15	37	8.3	29	
	FLS100	7-847-7219	17	38	10.3	30	
	FLS120	7-847-7220	17	38	12.8	30	
25	TN25-5	7-847-5853	14.3	45	5.2	35	0-391-6832 ou 0-391-6850 + 0-391-6853
	TN25-6	7-847-5854	14.3	45	6.4	35	
	TN25-8	7-847-5855	14.3	45	8.3	35	
	TN25-10	7-847-4147	17	45	10.3	35	
	TN25-12	7-847-7221	17	45	12.8	35	
35	TN35-6	7-847-7222	18	50	6.4	39	0-391-6832 ou 0-391-6850 + 0-391-6851
	TN35-8	7-847-7223	18	50	8.3	39	
	TN35-10	7-847-7224	18	50	10.3	39	
	TN35-12	7-847-7225	18	50	12.8	39	
50	TN50-6	7-847-5860	19	58	6.4	46	0-391-6850 + 0-391-6852
	TN50-8	7-847-5861	19	58	8.3	46	
	TN50-10	7-847-5862	19	58	10.3	46	
	TN50-12	7-847-5863	19	58	12.8	46	
70	TN70-8	7-847-5864	22	66	8.3	51	0-391-6850 + 0-391-6853
	TN70-10	7-847-5865	22	66	10.3	51	
	TN70-12	7-847-5866	22	66	12.8	51	

Copper butt connectors



mm²	p/n	SNCF	L	Ø i	Ø e	SNCF code Tools
0.3 - 1.5	MJ1,5	7-847-4598	14.5	1.7	3.2	7-931-0114
1 - 2.5	MJ2,5	7-847-5358	14.5	2.2	3.9	7-931-0114
2.6 - 6	MJ3S	7-847-5357	14.5	3.2	4.9	7-931-0114
6.6 - 10	MJ10SH	7-847-7200	30	4.7	8	0-391-6832 ou 0-391-6850 + 0-391-6851
16	MJ16SH	7-847-7201	35	5.6	9	0-391-6832 ou 0-391-6850 + 0-391-6852
25	MJ25SH	7-847-7202	35	7.4	10.4	0-391-6832 ou 0-391-6850 + 0-391-6853
35	MJ35SH	7-847-7203	35	8.6	11.9	0-391-6832 ou 0-391-6850 + 0-391-6851
50	MJ50SH	7-847-7204	45	10.4	13.9	0-391-6850 + 0-391-6852
70	MJ70SH	7-847-7205	50	12.1	15.9	0-391-6850 + 0-391-6853

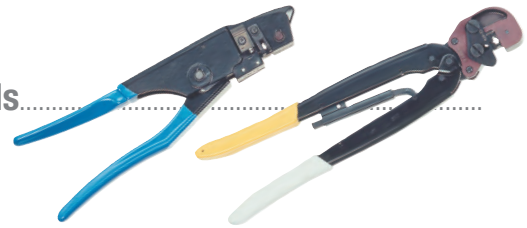
Cross section (mm²) — SNCF code

Unless otherwise stated, all dimensions are in milimeters

Tooling

46 Selection table

48 Crimping tools for preinsulated terminals



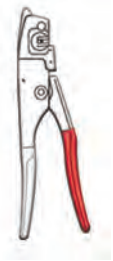
51 Crimping tools for copper tubular lugs and butt connectors

57 Hydraulic pumps and sets

61 Cutting pliers, plug in plier, plug out plier and cable-cutters

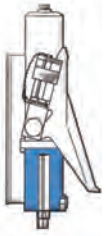
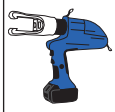
Selection table

Hand crimping tools and pneumatic crimping tool

	Hand crimping tools					
	Hand crimping tools					Pneumatic crimping tool
	TH1-TH1S	TH1-90	TH2-TH2S	TH3	TH3-2	AT 200 AT33...
						
Preinsulated terminals	Page 48	Page 48	Page 49	Page 49	Page 49	Page 50
Preinsulated treminals, disconnects, pins and butt connectors with inspection window	0.34 to 1.5 mm²		1 to 2.5 mm²			0.34 to 6 mm²
Gilded disconnects 2.8 mm and blade terminals (on edge crimping)		0.34 to 1.5 mm²				
Terminals 51190+ series and white disconnects (max. insulating Ø : 6.8 mm)				1 to 2.5 mm²		1 to 2.5 mm²
Terminals C3P+ series and yellow disconnects (max. insulating Ø : 6.8 mm)				2.6 to 6 mm²		2.6 to 6 mm²
Terminals 51190+ series and black disconnects (max. insulating Ø : 8.8 mm)					1 to 2.5 mm²	1 to 2.5 mm²
Terminals C3P+ series, pins and disconnects yellow striped black (max. insulating Ø : 8.8 mm)					2.6 to 6 mm²	2.6 to 6 mm²

Selection table

Mechanical, hydraulic, electro-hydraulic and hydraulic sets

Hydraulic pumps and sets 700 bars									
Hydraulic sets									
P39 K	SPM 4095K	PA 133 K	SPT 20-586 KCM						
									
Page 59	Page 59	Page 59	Page 60						
				Hydraulic compression heads					
	Mechanical tools	Hydraulic and electro-hydraulic tools							
	PMM1CF	ESD50	ESU137	TR1461	TR1462	SU130K	VF130K	SU210K	VF210K
									
Tubular lugs and connectors	Page 51	Page 52	Page 54	Page 56	Page 56	Page 57	Page 57	Page 58	Page 58
Medium power preinsulated copper tubular lugs ELP-FLP - NP series			10 to 25 mm²	10 to 25 mm²	10 to 25 mm²				
Copper tubular lugs ELS 6 FLS - TN series	10 to 70 mm²	10 to 70 mm²	10 to 240 mm2	10 to 70 mm²	10 to 95 mm²	10 to 150 mm²	10 to 150 mm²	10 to 300 mm²	10 to 300 mm²
Copper tubular lugs TR series								95 to 500 mm²	95 to 500 mm²
Copper tubular lugs TRS series						95 to 120 mm²	95 to 120 mm²	95 to 400 mm²	95 to 400 mm²
Aluminium tubular lugs AL series						50 to 95 mm²	50 to 95 mm²	50 to 460 mm²	50 to 460 mm²

Hand crimping tools for preinsualted terminals, disconnects, pins, blades and butt connectors

Hand crimping tool for preinsulated products

0.34 to 1.5 mm²

- ✔ Crimping of red perinsulated terminals, disconnects, pins, blades and window butt connectors from 0.34 to 1.5 mm²
- ✔ Aluminium body
- ✔ Exceptional low gearing
- ✔ High quality crimping by linear movement of dies
- ✔ Adjustable crimping of cable insulation by eccentric
- ✔ Safety ratchet.
- ✔ Positioner stopper
- ✔ Crimping dies identification reference mark : 1 dash

Delivered in individual box with control and instruction leaflet

- ✔ Length : 290 m.
- ✔ Weight : 0.490 Kg

TH 1 : delivered with stopper HD20 for terminals, disconnects and pins.

p/n TH1 SNCF 7-847-7140

TH 1 S : delivered with stopper HF20 for terminals, disconnects, pins and butt connectors

p/n TH1S SNCF 0-391-6840

Complementary accessory :

- ✔ PG1 : go-no go gauge.

Hand tool for crimping on edge of preinsulated disconnects and blades

0.34 to 1.5 mm²

- ✔ Crimping on edge of 2.8 perinsulated disconnects and blade from 0.34 to 1.5 mm²
- ✔ Aluminium body
- ✔ Exceptional low gearing
- ✔ High quality crimping by linear movement of dies
- ✔ Adjustable crimping of cable insulation by eccentric
- ✔ Safety ratchet
- ✔ Positioner stopper
- ✔ Crimping dies identification reference mark : 1 dash

Delivered in individual box with control and instruction leaflet

- ✔ Length : 290 mm
- ✔ Weight : 0.490 Kg
- ✔ Delivered with stopper HD28-90

p/n TH1-90 SNCF 0-391-6844

Complementary accessory :

- ✔ PG1 : go-no go gauge

Hand crimping tool for preinsulated products

1 to 2.5 mm²

- ✔ Crimping of blue perinsulated terminals, disconnects, pins, blades and window butt connectors from 1.0 to 2.5 mm²
- ✔ Aluminium body
- ✔ Exceptional low gearing
- ✔ High quality crimping by linear movement of dies
- ✔ Adjustable crimping of cable insulation by eccentric
- ✔ Safety ratchet
- ✔ Positioner stopper
- ✔ Crimping dies identification reference mark : 2 dashes

Delivered in individual box with control and instruction leaflet

- ✔ Length : 290 mm
- ✔ Weight : 0.490 Kg

TH 2 : delivered with stopper HF20 for terminals, disconnects, pins and blade terminals

p/n TH2 SNCF 7-847-7141

TH 2 S : delivered with stopper HF20 for terminals, disconnects, pins and butt connectors

p/n TH2S SNCF 7-847-7141

Complementary accessory :

- ✔ PG 2 : go-no go gauge

Hand crimping tool for preinsulated products

1 to 6 mm²

- ✔ Strong and practical steel tools
- ✔ High quality crimping by linear movement of dies
- ✔ Adjustable crimping of cable insulation by a pin
- ✔ Safety ratchet
- ✔ Positioner stopper ATH23
- ✔ Crimping dies identification reference mark : 3 dots

Delivered in individual box with control and instruction leaflet

- ✔ Length : 290 mm - Weight : 0.905 Kg.
- ✔ Handles colour : TH3 = 1 yellow and one white - TH3-2 : one yellow and one black

TH3 : max. insulating diameter : 6.8 mm

- ✔ Crimping of white terminals 51190 series and disconnects from 1 to 2.5 mm²
- ✔ Crimping of yellow terminals C3P serties and disconnects from 2.6 to 6 mm²

p/n TH3 SNCF 7-847-7142

TH3 : max. insulating diameter : 8.8 mm

- ✔ Crimping of black terminals 51190 series and disconnects from 1 to 2.5 mm²
- ✔ Crimping of yellow black stripped terminals C3P serties and disconnects from 2.6 to 6 mm²

p/n TH3-2 SNCF 7-847-7143 ou 0-391-6837

Complementary accessory :

- ✔ PGH3 : go-no go gauge

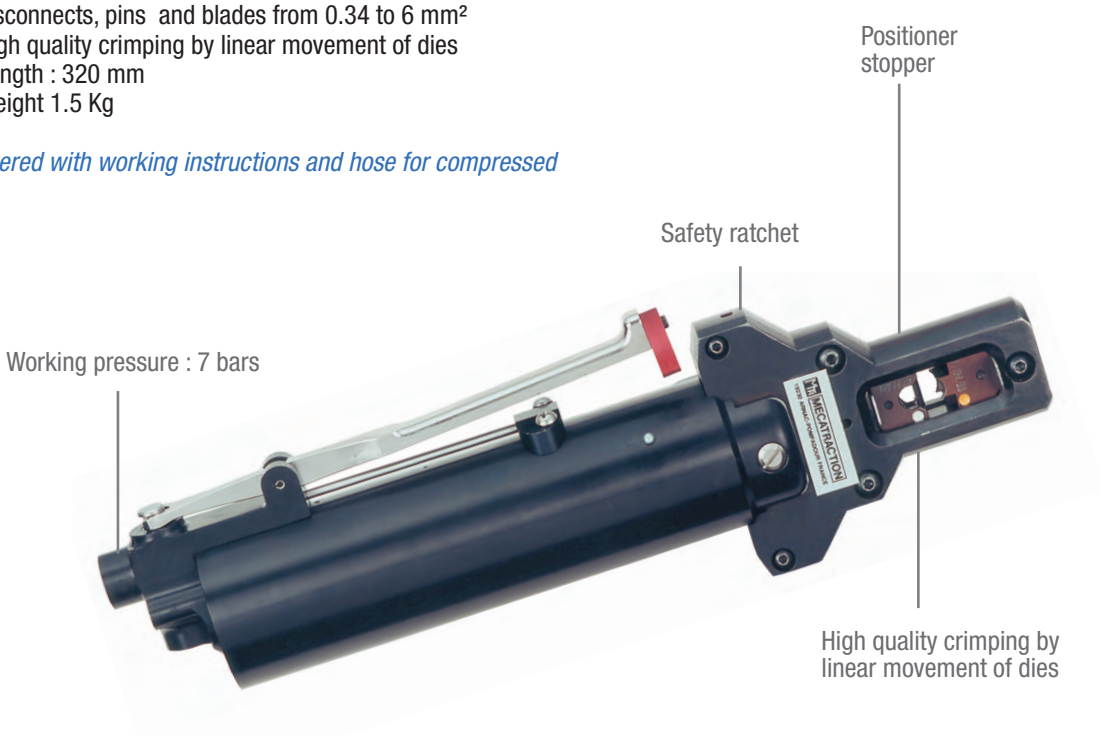
Pneumatic Crimping tool
for preinsulated terminals, disconnects pins and blades

Pneumatic crimping tool for preinsulated products

0.34 to 6 mm²

- ✔ Accurated and powerful crimping for preinsulated terminals, disconnects, pins and blades from 0.34 to 6 mm²
- ✔ High quality crimping by linear movement of dies
- ✔ Length : 320 mm
- ✔ Weight 1.5 Kg

Delivered with working instructions and hose for compressed air.



Pneumatic set = 1 cylinder + 1 crimping head

- ✔ One pneumatic cylinder

p/n AT201

- ✔ Crimping head for red insulated products from 0.34 to 1.5 mm².

p/n AT331

- ✔ Crimping head for blue insulated products from 1.0 to 2.5 mm²

p/n AT332

Crimping head for:
- ✔ for yellow 51190 series terminals from 1.0 to 2.5 mm²
- ✔ for white C3P series terminals from 2.6 to 6 mm²
- ✔ Max; insulating diameter 6.8 mm

p/n AT333

Crimping head for:
- ✔ for black 51190 series terminals from 1.0 to 2.5 mm²
- ✔ for yellow insulatinng black stripped C3P series terminals from 2.6 to 6 mm²
- ✔ Max. insulating diameter 8.8 mm

p/n AT333-2

Complementary accessories :

- ✔ Go - no go gauge for AT331

p/n PG1

- ✔ Go - no go gauge for AT332

p/n PG2

- ✔ Go - no go gauge for AT333 and AT333-2

p/n PGH3

- ✔ Specific stopper for thin insulation wire

p/n ATBK30 ((terminals crimping)

p/n ATBK21-2,8/ATBK21-5/ATBK21-6,35 (disonnects crimping)

- ✔ Standard stopper.

p/n ATB30 (AT 331 & AT 332) p/n ATB33 (AT 331 & AT 332)

- ✔ Set for fixed-place work with foot control

p/n ATBA

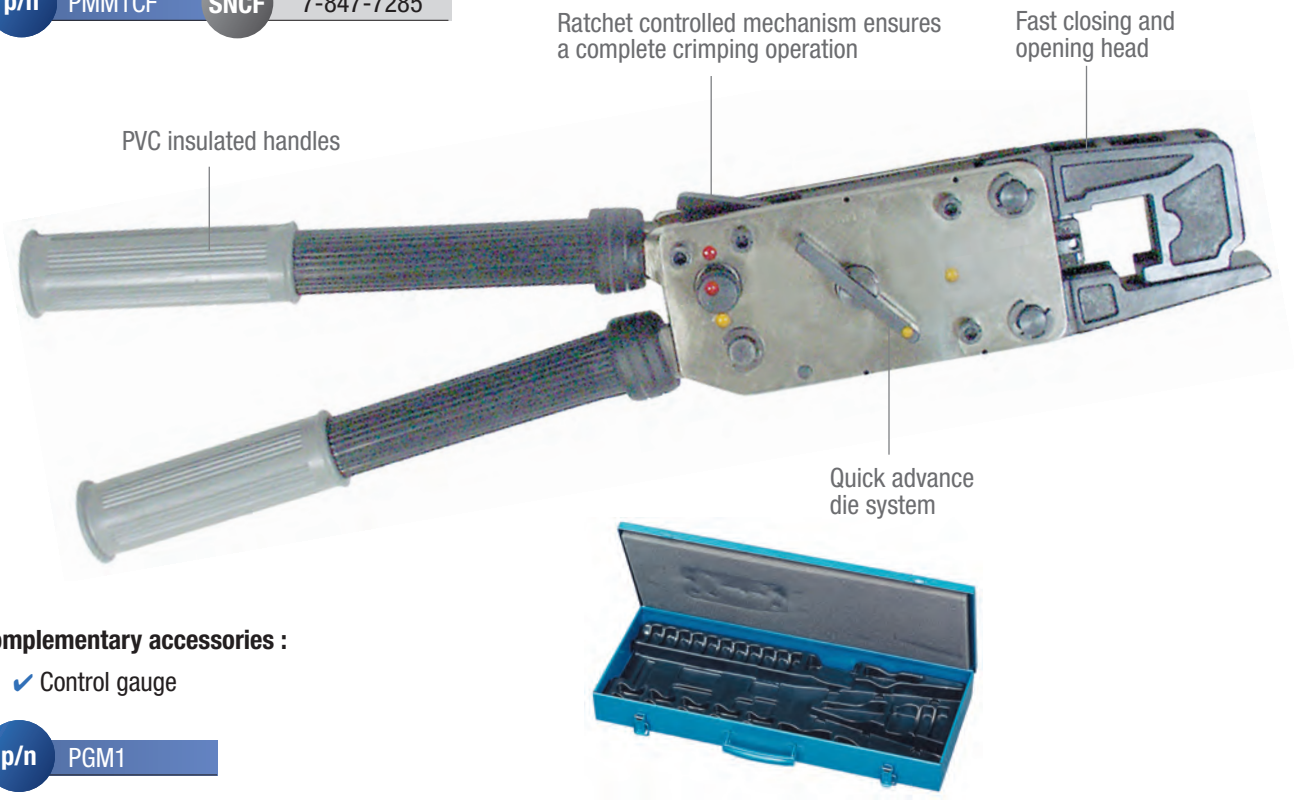
PMM1CF
hand crimping tool

POWER 50 kN

- ✔ Hand crimping tool with reversible dies
- ✔ Length : 420 mm
- ✔ Weight : 2 Kg

Delivered in metal boxe with working leaflet.

p/n PMM1CF SNCF 7-847-7285



Complementary accessories :

- ✔ Control gauge

p/n PGM1

Crimping dies

Dies	mm²	Terminals series	p/n	SNCF
	10	ELS	H1-10-35F	7.847.7286
	16	FLS	H1-16-50F	7.847.7287
	25	TN25	H1-25-70F	7.847.7288
	35	TN35	H1-10-35F	7.847.7286
	50	TN50	H1-16-50F	7.847.7287
	70	TN70	H1-25-70F	7.847.7288

Note :
in yellow: side of die to be used.

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

50 kN Cordless Electro-hydraulic Compression Tool
to Crimp Tubular Lugs, Splices and other Connectors

ESD50 electro-hydraulic compression tool

POWER 50 kN

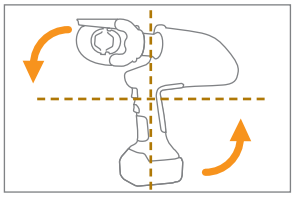
- ✔ Output force: 50 kN
- ✔ Stroke: 13 mm
- ✔ Autonomy: 200 to 500 crimping operations with battery 4.0 Ah
- ✔ Cycle time: 2 to 4 s depending on the section
- ✔ Dimensions: 350 x 310 x 72 mm
- ✔ Weight: 4.0 kg (including the battery)

New features:

- ✔ Electronic control of the cycle
- ✔ Return programming according to the user, either automatic or manual
- ✔ Automatic or manual return stroke
- ✔ Automatic stop at the end of the cycle
- ✔ 2-stage hydraulic pump with pilot-operated valve which increases efficiency between 20 and 40%
- ✔ Return sound signal
- ✔ New PC software for diagnosis and analysis of data

BE2 BLUE EXPERT 2

THE TOOL POWER 2

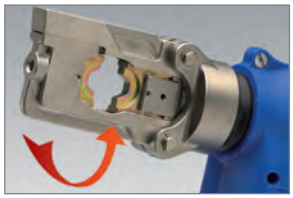


Optimum ergonomics thanks to the balance of the tool. Can be used by right or left-handed people.

Comfortable and accurate handling thanks to the shape and the materials used in the handle.

Electronic controlled function parameters, warning lights and USB interface.

Service indicator lights informing about the battery charge level and service control if necessary.



180° swiveling nickel-plated head.

Easy head opening.

With this software, it is possible to configure the tool, record the crimping data and analyze the cycles already done.

Lithium-ion 18 V battery with increased life expectancy and without any memory effect.

50 kN Cordless Electro-hydraulic Compression Tool
to Crimp Tubular Lugs, Splices and other Connectors

ESD50 electro-hydraulic compression tool kit

Kit composition

✔ Crimping tool	**PN : ESD50**
✔ 2 batteries 18 V / 4 Ah	**PN : BL1840**
✔ Charger 220 V	**PN : CLM1890HC**
✔ Metallic carry case	**PN : CMESD50**

p/n ESD50K1BLCM

Metallic carry case

✔ Ideal for transport and storage.
✔ Adapted to each model.

p/n CMESD50

Additional equipment for ESD50:

Fast charger

Charger with display which identifies the state of the battery and the conditions of load.
✔ Charging time: 36 min
✔ Weight: 0.85 Kg
✔ Voltage: 220-240 V AC
✔ Plug: Standard EU, others on request

p/n CLM1890HC

Battery

Li-Ion technology without memory effect.
✔ Voltage: 18 V
✔ Capacity: 4.0 Ah
✔ Weight: 0.64 Kg

p/n BL1840

Crimping dies

Dies	mm²	Terminals series	p/n	SNCF
	10	ELS	H1-10-35F	7.847.7286
	16	FLS	H1-16-50F	7.847.7287
	25	TN25	H1-25-70F	7.847.7288
	35	TN35	H1-10-35F	7.847.7286
	50	TN50	H1-16-50F	7.847.7287
	70	TN70	H1-25-70F	7.847.7288

Note :
in yellow: side of die to be used.

Cross section (mm²) — SNCF code

Unless otherwise stated, all dimensions are in milimeters

120 kN Cordless Electro-hydraulic Compression Tool
to Crimp Tubular Lugs, Al/Cu Lugs, Splices and other Connectors

ESU137 electro-hydraulic compression tool

POWER 120 KN

- ✔ Output force: 120 kN
- ✔ Stroke: 27 mm
- ✔ Autonomy: - 50 to 100 indent crimping operations with battery 4.0 Ah
  - 100 to 220 crimping operations with battery 4.0 Ah
- ✔ Cycle time: 7 to 12 s depending on the section
- ✔ Dimensions: 400 x 310 x 72 mm
- ✔ Weight: 5.9 kg (including the battery)

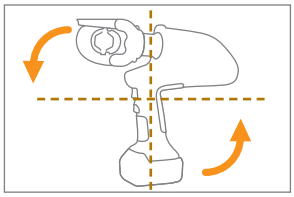
New features:

- ✔ Electronic control of the cycle
- ✔ Return programming according to the user, either automatic or manual
- ✔ Automatic or manual return stroke
- ✔ Automatic stop at the end of the cycle
- ✔ 2-stage hydraulic pump with pilot-operated valve which increases efficiency between 20 and 40%
- ✔ Return sound signal
- ✔ New PC software for diagnosis and analysis of data

Faster and longer

BLUE EXPERT 2

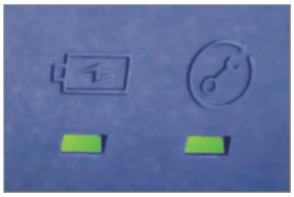
THE TOOL POWER 2



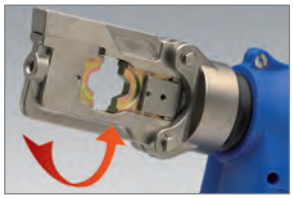
Optimum ergonomics thanks to the balance of the tool. Can be used by right or left-handed people.

Comfortable and accurate handling thanks to the shape and the materials used in the handle.

Electronic controlled function parameters, warning lights and USB interface.



Service indicator lights informing about the battery charge level and service control if necessary.



180° swiveling nickel-plated head

With this software, it is possible to configure the tool, record the crimping data and analyze the cycles already done.

Lithium-ion 18 V battery with increased life expectancy and without any memory effect.

120 kN Cordless Electro-hydraulic Compression Tool
to Crimp Tubular Lugs, Al/Cu Lugs, Splices and other Connectors

ESU137 electro-hydraulic compression tool kit

Kit composition

- ✔ Crimping tool — **PN : ESU137**
- ✔ 2 batteries 18 V / 4 Ah — **PN : BL1840**
- ✔ Charger 220 V — **PN : CLM1890HC**
- ✔ Metallic carry case (Space 22 sets C12) — **PN : CMESU137**

p/n ESU137K1BLCM

Additional equipment for ESU137:

Fast charger

Charger with display which identifies the state of the battery and the conditions of load.

- ✔ Charging time: 36 min
- ✔ Weight: 0.85 Kg
- ✔ Voltage: 220-240 V AC
- ✔ Plug: Standard EU, others on request

p/n CLM1890HC

Battery

Li-Ion technology without memory effect.

- ✔ Voltage: 18 V
- ✔ Capacity: 4.0 Ah
- ✔ Weight: 0.64 Kg

p/n BL1840

Metallic carry case

- ✔ Ideal for transport and storage.
- ✔ Adapted to each model.

p/n CMESU137

Crimping dies:

Dies	mm²	Terminals series	Dies (p/n)	Adapters
	10	preinsulated ELP series	ELP460	U137-460
	16	preinsulated FLP series	FLP460	U137-460
	25	preinsulated NP series	NP460	U137-160
	10	non insulated ELS series	ELS460 or C12 ELS	U137-460 or U137C12
	16	non insulated FLS series	FLS460 or C12 FLS	U137-460 or U137C12
	25	non insulated TN 25 series	C12TN25	U137C12
	35	non insulated TN35 series	C12TN35	U137C12
	50	non insulated TN 50 series	C12TN50	U137C12
	70	non insulated TN70 series	C12TN70	U137C12
	95	non insulated TN95 series	C12TN95	U137C12
	120	non insulated TN120 series	C12TN120	U137C12
	150	non insulated TN150 series	C12TN150	U137C12
	185	non insulated TN185 series	C12TN185	U137C12
	240	non insulated TN240 series	C12TN240	U137C12

Cross section (mm²)

Unless otherwise stated, all dimensions are in milimeters

Hydraulic hand crimping tool and connectable hydraulic compression heads for terminals

Hand crimping tool

10 to 70 mm²

- ✔ Hand crimping tool
- ✔ Power : 54 KN
- ✔ Crimping from 10 to 70 mm²
- ✔ Two pressure level
- ✔ Automatic release
- ✔ Die lock system
- ✔ Head tilting on 180°

Delivered in box with working leaflet

p/n TR1461 SNCF 7-847-7296

Connectable hydraulic compression head

10 to 95 mm²

- ✔ Connectable hydraulic compression head
- ✔ Power : 100 KN
- ✔ Crimping from 10 to 95 mm²
- ✔ anti-corrosion coating (nickel)
- ✔ Die loching system
- ✔ To be connected to 700 bars hydraulic pump or sets (see page : 59)
- ✔ Delivered with female semi-coupler p/n : RKFM38NPT

p/n TR1462

Crimping dies

Dies	mm²	Terminals series	p/n	SNCF
	10	preinsulated ELP series	ELP460	7.847.7303
	16	preinsulated FLP series	FLP460	7.847.7304
	25	preinsulated NP series	NP460	7.847.7305
	10	non insulated ELS series	ELS460	7.847.7297
	16	non insulated FLS series	FLS460	7.847.7298
	25	non insulated TN 25 series	TN25-460	7.847.7299
	35	non insulated TN35 series	TN35-460	7.847.7300
	50	non insulated TN 50 series	TN50-460	7.847.7301
	70	non insulated TN70 series	TN70-460	7.847.7302
	95*	non insulated TN95 series	TN95-460	

* only with TR1462 tool.

Connectable hydraulic compression head SU130K

POWER 130 kN

- ✔ To be connected to 700 bars hydraulic pump or sets (see page : 59)
- ✔ Crimping of non insulated terminals from 10 to 150 mm²
- ✔ Anti-corrosion coating (nickel)
- ✔ Length : 215 mm
- ✔ Weight : 3.200 kg

p/n SU130K

Connectable hydraulic compression head VF130K with closed head

POWER 130 kN

- ✔ To be connected to 700 bars hydraulic pump or sets (see page : 59)
- ✔ Crimping of non insulated terminals from 10 to 150 mm²
- ✔ Anti-corrosion coating (nickel)
- ✔ Length : 220 mm
- ✔ Weight : 3.400 kg

p/n VF130K

Crimping dies

Dies	mm²	Terminals series	p/n
	For ELS / FLS series		
	10	ELS	ELSV13
	16	FLS	FLSV13
	For TN series		
	25	TN25	TN25V13
	35	TN35	TN35V13
	50	TN50	TN50V13
	70	TN70	TN70V13
	95	TN95	TN95V13
	120	TN120	TN120V13
	150	TN150	TN150V13
	For TRS series		
	95	TRS95	TRS95V13
	120	TRS446	TRS446V13
	120	TRS448	TRS448V13
	For AL series		
	50	AL50	AL50V13
	60	AL60	AL60V13
	70	AL70	AL70V13
	95	AL95	AL95V13

Cross section (mm²) — SNCF code — Unless otherwise stated, all dimensions are in milimeters

Connectable hydraulic compression head
for non insulated terminals

Connectable hydraulic compression head SU210K

POWER 200 kN

- ✔ To be connected to 700 bars hydraulic pump or sets (see page : 59)
- ✔ Anti-corrosion coating (nickel)
- ✔ Crimping of non insulated terminals from 10 to 150 mm²
- ✔ Length : 260 mm
- ✔ Weight : 5.800 Kg

Accessories
Die holder **S21**.

p/n SU210K

Connectable hydraulic compression head VF210K with closed head

POWER 200 kN

- ✔ To be connected to 700 bars hydraulic pump or sets (see page : 59)
- ✔ Anti-corrosion coating (nickel)
- ✔ Length : 275 mm
- ✔ Weight : 6.200 Kg

Accessories
Die holder **S21**.

p/n VF210K

Crimping dies:

Dies	mm²	Terminals series	Dies p/n SU210K/VF210K + S21 die holder
		ELS/FLS series	
	10	ELS	ELSV20
	16	FLS	FLSV20
		TN serie	
	25	TN25	TN25V20
	35	TN35	TN35V20
	50	TN50	TN50V20
	70	TN70	TN70V20
	95	TN95	TN95V20
	120	TN120	TN120V20
	150	TN150	TN150V20
	185	TN185	TN185V20
	240	TN240	TN240V20
	300	TN300	TN300V20
		TR serie	
	95	TR95	TR95V20
	120	TR120	TR120V20
	150	TR150	TR150V20
	185	TR185	TR185V20
	240	TR240	TR240V20
	300	TR300	TR300V20
	400	TR400	TR400V20
	500	TR500	TR500V20

mm²	Terminals series	Dies p/n SU210K/VF210K + S21 die holder
	TRS serie	
95	TRS95	TRS95V20
120	TRS446	TRS446V20
120	TRS448	TRS448V20
150	TRS450	TRS450V20
185	TRS452	TRS452V20
240	TRS455	TRS455V20
240	TRS453	TRS453V20
400	TRS456	TRS456V20
185	TRS185 - TRS185-1B	TRS185V20
240	TRS240 - TRS240-1B	TRS240V20
240	TRS242-12	TRS258V20
400	TRS400	TRS400V20
50	TRS262	TRS262V20S (for wire crimping)
		TRS262V20F (for insulation crimping)
95	TRS246	TRS246SV20 (for wire crimping)
		TRS246FV20 (for insulation crimping)

mm²	Terminals series	Dies p/n SU210K/VF210K + S21 die holder
	AL serie	
50	AL50	AL50V20
60	AL60	AL60V20
70	AL70	AL70V20
95	AL95	AL95V20
120	AL120	AL120V20
150	AL150 - AL150B	AL150V20
185	AL185	AL185V20
240	AL240	AL240V20
300	AL300	AL300V20
460	AL460	AL460V20

Cross section (mm²) — SNCF SNCF code

Unless otherwise stated, all dimensions are in milimeters

P39 hydraulic pump

- ✔ Length : 400 mm
- ✔ Weight : 4.900 Kg
- ✔ Delivered with a 1.8 m hydraulic hose and semi coupler RMKF38NPT

Box on request : VAL 29

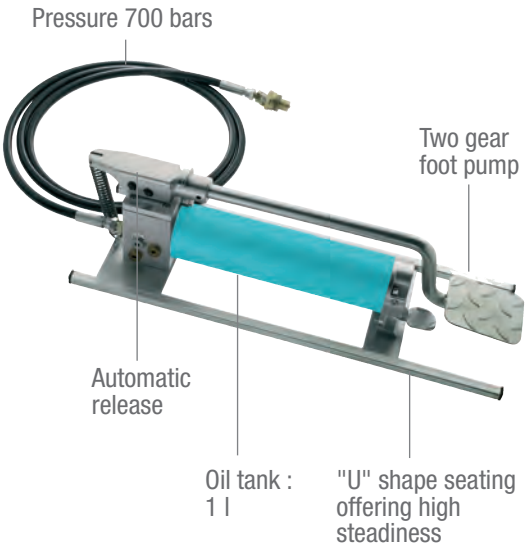
p/n P39K

SPM4095 hydraulic pump

- ✔ Length : 700 mm
- ✔ Weight ; 12.900 Kg
- ✔ Delivered with a 3 m hydraulic hose and semi coupler RMKF38NPT

Box on request : VAL 22CR

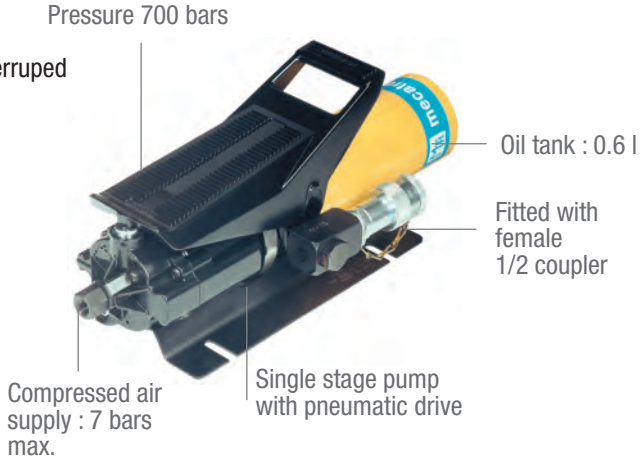
p/n SPM4095K



PA133 Hydro-pneumatic pump

- ✔ Length : 400 mm
- ✔ Weight 4.900 Kg
- ✔ Three ways distributors mainting pressure when air supply is interruped
- ✔ Delivered with a semi coupler RMKF38NPT
- ✔ Hydraulic hoses (see page 60)

p/n PA133K



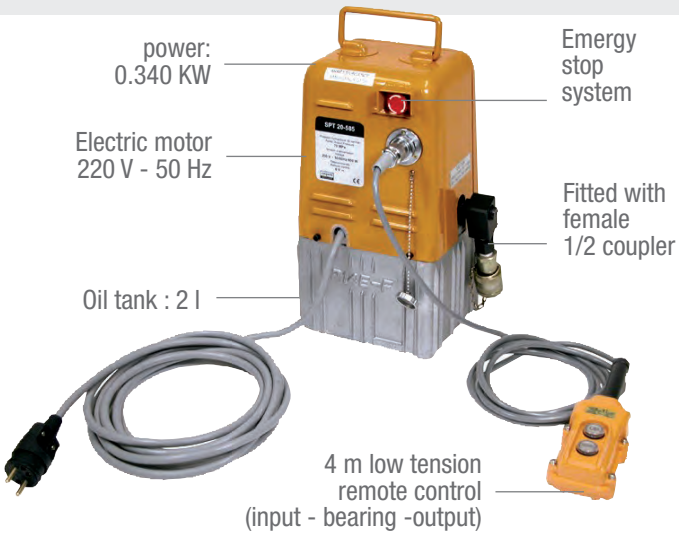
Electro-hydraulic set

Portable and compact electro-hydraulic set SPT20-586KCM

- ✔ Dimensions : 186 x 160 x 350 mm
- ✔ Weight : 15.500 Kg
- ✔ Flow : 0 - 20 bars : 2.60 l/mn
  20 - 700 bars : 0.32 l/mn
- ✔ Delivered with a semi coupler RMKF38NPT
- ✔ Hydraulic hoses (see page 60)

Delivered on metalic box

p/n SPT20-586KCM



Hydraulic couplers

✔ Standard equipments of our hydraulic toolings

Type K

Pump — RF — RM — RM — RF — Crompression tool

Type of couplers when ordering

	Type	p/n	Dimensions (threading in '')	Description
	K	RMKF38NPT RFKM38NPT	3/8 - 18 NPT 3/8 - 18 NPT	✔ Male coupler assembly through 3/8 NPT threaded hole ✔ Raccord femelle, montage par embout mâle fileté 3/8 NPT

Hydraulic hoses with 3/8 NPT couplers

Item code	p/n	Dimensions
7510021	F4622K	1,80 m
7510031	F4623K	3,00 m
7510041	F4626K	6,00 m

Autres dimensions sur demande.

Hydraulic oils

Item code	p/n	Applications	Capacity
7516220	HF95X	PA133 et P39	1 L
7516230	B2XV32	Other tools	2 L

Cutting plier, plug-in plier, plug-out plier

Cutting plier HS6000

The HS6000 cutting plier has been designed for an easy and precised cut thanks to its blades micro-serrated and its robustness. Handles and the general form of this pliers enables excellent handling.

Cannot cut stell.
✔ Length : 150 mm
✔ Weight : 0.09 kg

p/n HS6000

Plug-in plier MO-66105

The plier MO-66105 allows the easy plug in red and blue disconnects terminals of 2.8, 4.8, 5 and 6.35 mm.
✔ Chrome-vanadium steel body
✔ Insulated handles up to 1000 V

IINSULATION COMPLIANT WITH IEC-60900
✔ Length : 210 mm
✔ Weight : 0.190 Kg

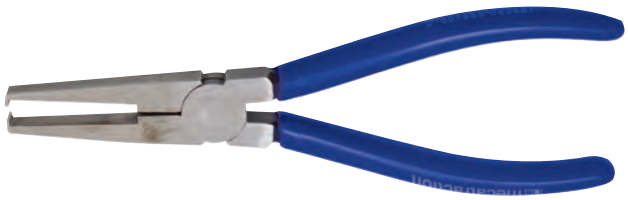
p/n MO-66105

Plug-out plier MO66200

The plier MO-66200 allows the easy plug-out red and blue disconnects terminals of 2.8, 4.7, 5 and 6.35 mm. The specific design of the noses allows plug-out same in difficult area or limited space. It avoid all risk of damage on disconnects.

✔ Polished steel body
✔ PVC insulated handles
✔ Length : 170 mm
✔ Weight : 0.150 kg

p/n MO66200



EK50P integrated electric motor cable-cutter

EK50P integrated electric motor cable-cutter

- ✔ New powerful motor with high torque offers superior performances
- ✔ New ergonomy for ease of operation during cable cutting. The new handle orientation gives a better arm position
- ✔ New circuit board which shuts down for overloading protection
- ✔ Cutting capacity up to Ø 50 mm:
  - Cutting capacity Cu: 500 mm²
  - Cutting capacity Al: 800 mm²
  - Cutting capacity Cu hard, AAAC: 150 mm²
- ✔ Cycle time: 3 to 6 s depending on cable
- ✔ Autonomy: 60 to 75 cuts with 3.0 Ah

Never use to cut cables with protective steel strip or cables with steel core.

- ✔ Dimensions (battery included): 380 x 150 x 110 mm
- ✔ Weight (battery included): 2.950 Kg

p/n EK50PK1CM

Kit composition :
- ✔ 1cable-cutter
- ✔ 2 batteries 14.4V - 3.0 Ah
- ✔ 1 charger 220V
- ✔ metallic box

Additional equipment:

Battery

- ✔ Li-Ion battery: 14.4 V - 3 Ah
- ✔ Battery equipped with an integrated electronic circuit associated with 3 LED indicating power load
- ✔ Li-Ion technology without memory effect
- ✔ Weight: 0.570 kg

p/n BC1430X

Fast charger

Charger tri-technologies : charges BA1420, BA1420X, BB1430, BC1430X batteries.
- ✔ Voltage: 14.4 V
- ✔ Technology: NiCd - NiMh - Li-Ion
- ✔ Charging current : 3.0 Ah
- ✔ Charging time BA1420 / BA1420X: 2.0 Ah - 40 min
- ✔ Charging time BB1430 / BC1430X: 3.0 Ah - 60 min
- ✔ Weight: 0.670 kg
- ✔ Voltage: 220 V AC
- ✔ Main plug: EU - Other plugs: on request

p/n CL1430HC

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Items represented are proposed while stock lasts.
MECATRACTION SA reserve the right to discontinue a product
or modify specifications without prior notice.

- Non contractual pictures -

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Railway connections

www.mecatraction.fr

mecatraction

B.P.N°8 - 19231 Pompadour CEDEX - FRANCE

Phone: +33 (0)5 55 73 89 89 - Fax: +33 (0)5 55 73 32 21

Email: commercial@mecatraction.fr