

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

AMP pre-insulated PLASTI-GRIP solderless terminals and splices have been designed specifically to answer the need for inexpensive, insulated electrical terminations.

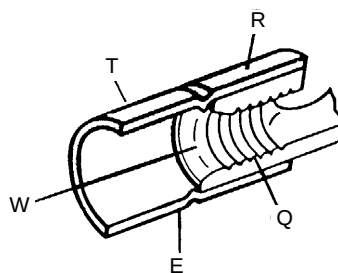
The PLASTI-GRIP products described in this catalogue accommodate wire size ranges from 0,25 to 6,6 mm² or AWG 22 to 10.

The appeal of PLASTI-GRIP products lies in their broad range of wire sizes, built-in pre-insulation, ease and speed of application, uniform reliability and low in-stalled cost.

They can be used in almost every type of industrial or commercial application.

Advantages

- Basic terminal is made of high conductivity copper, electro tin plated for improved corrosion resistance.
- Applicable wire size is marked on the tongue.
- Serrated inner wire barrel provides maximum electrical contact and tensile strength after crimping.
- Conical entry of the wire barrel allows easier insertion of the stripped wire.
- Expanded vinyl insulation sleeve to accept a wide range of wire insulation diameters.
- Insulation sleeves and corresponding tooling are colour-coded by wire range for easier identification.



- Q Serrations inside barrel for maximum contact and tensile strength.
- W Conical entry for easy wire insertion.
- E PVC sleeve to support wire insulation.

- R PVC sleeve for high dielectric strength. Colour-coded by wire size.
- T Expanded sleeve, accepts wide range of wire insulation.

Tooling

A wide range of professional handtools are available. They have a patented ratchet device to ensure the crimp cycle is completed before releasing.

The insulation sleeve is dot coded during crimp. In combination with the wire size on the tongue and the sleeve color it offers a built-in quality factor.

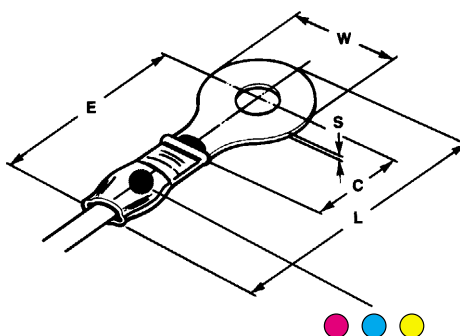
For large production runs pneumatic or electrical tooling is available. A range of service tools completes the AMP Tooling program.

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

Ring Tongues

0,25/6,6 mm²

- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	2,2	2,3	0,8	5,5	4,0	17,4	14,5	3,5	34140-0	line 2
●	2,6	3,0	0,8	5,5	4,0	17,4	14,5	3,5	34141-0	
●	3-3,5	3,6	0,8	5,5	4,0	17,4	14,5	3,5	34142-0	
●	4	4,3	0,8	7,9	7,1	21,7	17,7	3,5	34148-0	
●	5	5,5	0,8	8,0	6,8	21,0	16,9	3,5	130014-0	
●	6	6,6	0,8	11,9	11,1	27,7	21,7	3,5	34150-0	
●	8	8,3	0,8	11,9	11,1	27,7	21,7	3,5	34151-0	

1,0/2,6 mm², AWG 16-14

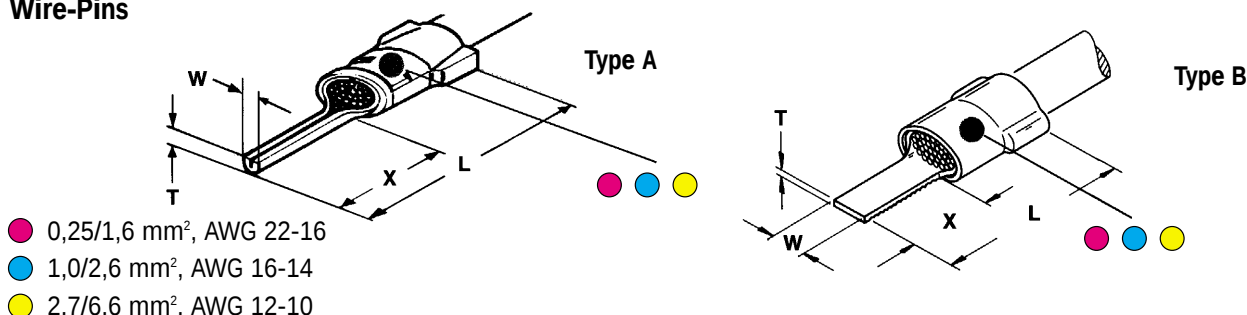
	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	2,6	3,0	0,8	6,4	4,3	18,2	14,9	4,3	34157-0	line 3
●	3-3,5	3,6	0,8	6,4	4,3	18,2	14,9	4,3	34158-0	
●	4	4,3	0,8	8,7	7,1	22,1	17,7	4,3	34160-0	
●	5	5,5	0,8	8,7	6,8	21,4	17,0	4,3	130102-0	
●	6	6,6	0,8	11,9	11,1	27,7	21,7	4,3	34162-0	
●	8	8,2	0,8	11,9	11,1	27,7	21,7	4,3	34163-0	
●	10	10,5	0,8	16,7	13,2	32,2	24,0	4,3	160136-0	

2,7/6,6 mm², AWG 12-10

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	4	4,3	1,0	9,5	7,7	27,5	22,7	6,4	34853-0	line 4
●	5	5,5	1,0	9,5	7,7	27,4	22,7	6,4	160292-0	
●	6	6,6	1,0	13,4	11,9	33,6	26,9	6,4	160294-0	
●	8	8,2	1,0	12,7	8,7	30,1	23,6	6,4	160296-0	
●	10	10,5	1,0	15,1	13,0	36,0	28,4	6,4	160300-0	

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

Wire-Pins



● 0,25/1,6 mm², AWG 22-16

● 1,0/2,6 mm², AWG 16-14

● 2,7/6,6 mm², AWG 12-10

0,25/6,6 mm², AWG 22-10

Type	Wire Size Range		Insulation Diameter max. (mm)	Dimensions (mm)				Part Number	Tooling See p. : A 7
	(mm ²)	AWG		X	W	T	L		
● A	0,25-1,6	22-16	3,7	6,7	1,8	1,8	20,5	165143-0	line 2
● A	0,25-1,6	22-16	3,7	9,9	1,8	1,8	23,8	165167-0	
● B	0,25-1,6	22-16	3,6	11,0	2,9	0,8	22,2	131443-0	
● A	1,0-2,6	16-14	4,9	6,7	1,8	1,8	20,7	9-165075-0	line 3
● A	1,0-2,6	16-14	4,9	9,9	1,8	1,8	23,7	9-165171-0	
● B	1,0-2,6	16-14	4,3	11,0	2,9	0,8	22,2	131444-0	
● A	2,7-6,6	12-10	6,4	9,9	2,6	2,6	29,2	165085-0	line 4
● B	2,7-6,6	12-10	6,3	12,4	4,1	1,0	29,1	131445-0	

6,6/42,4 mm², AWG 8-2

Type	Wire Size (mm ²)	Wire Size Range		Insulation Diameter max. (mm)	Dimensions (mm)				Part Number	Hand Tool See p. : A 7 line 5
		(mm ²)	AWG		X	W	T	L		
A	10	6,6-10,5	8	6,6	18,0	2,6	2,6	36,7	790368-1	601075
A	16	10,6-16,7	6	8,0	18,0	4,3	4,3	39,2	736066-0	601075
A	25	16,8-26,6	4	9,7	20,0	5,0	5,0	43,8	736067-0	601075
A	35	26,7-42,4	2	12,0	22,0	5,0	5,0	52,5	736068-0	601075

Colour : natural Insulation Sleeve : Nylon

Closed End Splices



Type A : ! Insulation : PVC
Sleeve : Copper, tin plated

Type B : @ Insulation : Nylon
Sleeve : Steel, tin plated ▲
Copper, tin plated ▲

0,25/10 mm², AWG 22-8

Type	Wire Size Range		Insulation Diameter (mm)	Dimension (mm)		Part Number	Tooling See p. : A 7
	(mm ²)	AWG		L max. (mm)			
○* B	0,25-2,6	22-14	6,4	16,0		35115-0 ▲	line 6
● A	0,25-2,6	22-14	4,7	19,7		130419-0 ▲	line 6
●** A	1,0-6,6	16-10	7,9	26,0		36965-0 ▲	line 6
○* B	1,6-6,6	16-10	5,2	18,0		328730-0 ▲	line 7
○* B	1,6-6,6	16-10	5,2	18,0		165198-0 △	line 7
○* B	10,0	8	11,9	34,0		825036-0 △	line 8

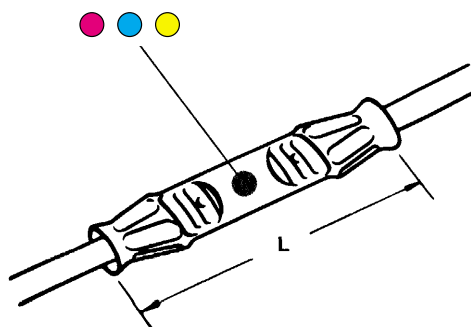
* Colour : natural

** Colour : purple

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

Butt Splices, 0,1/6,6 mm²

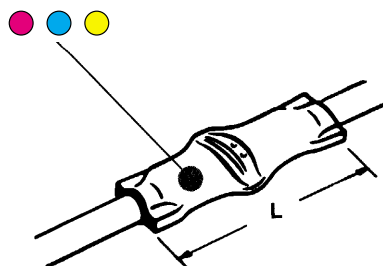
- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



0,14/6,6 mm², AWG 26-10

Wire Size Range		Insulation Diameter (mm)	Dimension L (mm)	Part Number	Hand Tool See p. : A 7
(mm ²)	AWG				
● 0,14-0,4	26-22	2,0	15,7	321026-0	line 1
● 0,25-1,6	22-16	3,5	27,3	34070-0	line 2
● 1,0-2,6	16-14	4,3	27,1	34071-0	line 3
● 2,7-6,6	12-10	5,8	29,5	34072-0	line 4

Parallel Splices, 0,25/6,6 mm²



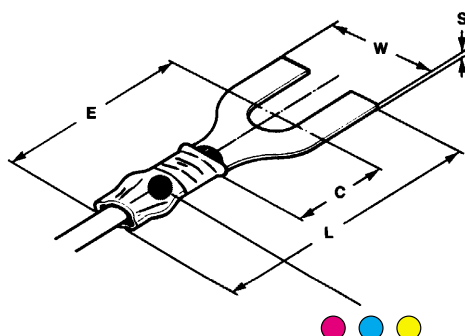
0,25/6,6 mm², AWG 22-10

Wire Size Range		Insulation Diameter (mm)	Dimension L (mm)	Part Number	Hand Tool See p. : A 7
(mm ²)	AWG				
● 0,25-1,6	22-16	3,5	19,0	34132-0	line 2
● 1,0-2,6	16-14	4,3	19,0	34134-0	line 3
● 2,7-6,6	12-10	5,8	21,0	34136-0	line 4

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

Spades, 0,25/6,6 mm²

- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	2,6	3,0	0,8	5,5	6,8	19,9	17,1	3,5	165004-0	line 2
●	3-3,5	3,6	0,8	6,4	7,9	21,8	18,5	3,5	327043-0	
●	3-3,5	3,6	0,8	7,5	5,2	19,4	15,7	3,5	320665-0	
●	3-3,5	3,6	0,8	9,5	7,9	23,4	18,5	3,5	34154-0	
●	4	4,3	0,8	7,1	6,1	19,8	16,1	3,5	165008-0	
●	4	4,3	0,8	9,5	7,9	23,4	18,5	3,5	34155-0	
●	5	5,5	0,8	9,5	7,9	23,4	15,7	3,5	34156-0	

1,0/2,6 mm², AWG 16-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	2,6	3,3	0,8	6,4	6,9	19,9	16,9	4,3	165010-0	line 3
●	3-3,5	3,6	0,8	5,6	6,8	20,7	16,9		106730-0	
●	3-3,5	3,6	0,8	7,5	5,2	19,4	15,7	3,6	322994-0	
●	3-3,5	3,6	0,8	9,8	7,6	22,6	17,7	4,3	34165-0	
●	4	4,3	0,8	6,4	7,1	20,0	16,9	4,9	165012-0	
●	4	4,3	0,8	7,5	5,2	19,4	15,7	4,3	326741-0	
●	4	4,3	0,8	9,8	7,9	23,4	18,5	4,3	34166-0	
●	5	5,5	0,8	9,8	7,7	22,5	17,8	4,9	160171-0	
●	6	6,6	0,8	12,0	11,0	26,9	20,9	4,3	130568-0	

2,7/6,6 mm², AWG 12-10

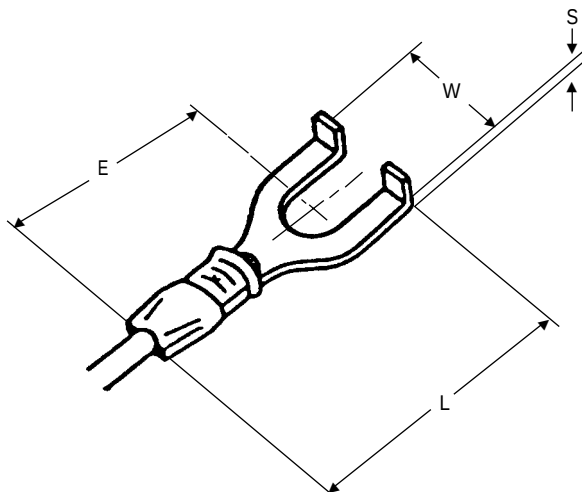
	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	C min.	L	E			
●	4	4,3	1,0	8,0	11,7	31,0	27,0	6,4	165015-0	line 4
●	5	5,2	1,0	13,5	10,8	32,6	26,0	6,4	165017-0	
●	6	6,3	1,0	13,5	10,8	32,6	26,0	6,4	165019-0	

PLASTI-GRIP Pre-Insulated Terminals and Splices 0,25-6,6 mm²

Flanged Spade

0,25/6,6 mm²

- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)				Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	L	E			
●	3-3,5	3,6	0,8	7,5	18,2	15,1	3,5	322249-0	line 2
●	4	4,3	0,8	10,6	20,6	16,2	3,5	324169-0	
●	5	5,1	0,8	7,5	18,2	15,0	3,5	328516-0	

1,0/2,6 mm², AWG 16-14

	Stud M	Stud Hole (mm)	Dimensions (mm)				Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	L	E			
●	3-3,5	3,6	0,8	7,5	19,7	15,7	4,8	324165-0	line 3
●	4	4,3	0,8	7,4	18,1	14,9	4,8	160212-0	
●	5		0,8	7,4	18,1	14,9	4,8	160213-0	

2,7/6,6 mm², AWG 12-10

	Stud M	Stud Hole (mm)	Dimensions (mm)				Insulation Diameter max. (mm)	Part Number	Tooling See p. : A 7
			S	W	L	E			
●	4	4,3	1,0	10,6	25,8	21,4	5,8	324172-0	line 4
●	5	5,1	1,0	10,6	26,9	22,2	5,8	165134-0	

PLASTI-GRIP Application Tools

Cable cutter



Part Number : 604008-1

Stripping Tool



Part Number : 734185-1
0,14 to 6,6 mm²
Set of stripping blades :
PN : 1.0601827-2

Crimping Tools



PRO-CRIMPER II
PN FRAME
354940-1



CERTI-CRIMP Type A



CERTI-CRIMP Type B



CERTI-LOK
PN FRAME : 169400-0



CRIMPAC



SUPER CHAMP



MINI CHAMP



ROTA-CRIMP

For PLASTI-GRIP Terminals and Butt and Parallels Splices

Line	Wire Size mm ²	Colour Code	CERTI-CRIMP*		CERTI-LOK Die set	PRO-CRIMPER II Complete Tool	CRIMPAC	SUPER CHAMP	ROTA-CRIMP
			A	B					
1 →	0,14-0,4	Yellow	169485-0						MINI CHAMP → 576736-0
2 →	0,25-1,6	Red	47386-0*		169404-0	58433-3	825508-5	169060-8	
3 →	1-2,6	Blue	47387-7*		169404-0	58433-3	825508-5	169060-8	
4 →	2,7-6,6	Yellow		59239-4	169404-0	58433-3	825508-5	169060-8	
5 →	10-35	Natural							601075-0

* Remove locator before crimping Butt and Parallel Splices

For CLOSED END SPLICES

Line	Wire Size mm ²	CERTI-CRIMP			Product 130419-0 only	SUPER CHAMP for all products
		PVC	NYLON	PVC all wire sizes		
6 →	0,25-2,6		45216-2		48087-0	169060-8
7 →	1,6-6,6	45219-0	45219-0	69335-0		169060-8
8 →	10		576708-0			169060-8

Engineering Notes

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

AMP PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices are designed for complete and uniform reliability.

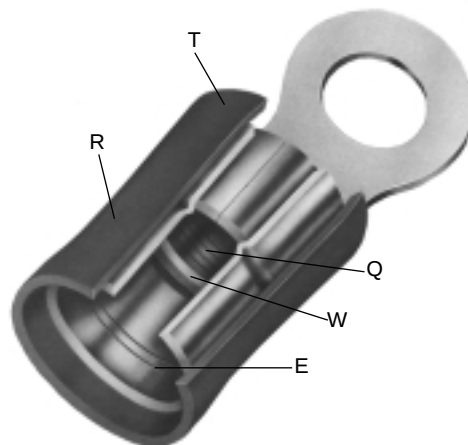
The pre-insulated termination ensures a vibration safe connection of maximum conductivity, and its tensile strength approaches that of the wire itself.

Each PIDG Terminal consists of a tin plated copper body, with a specially designed copper sleeve and insulation sleeve fitted over the terminal barrel.

PIDG products are available in a wide range of 0,14 mm² to 6,6 mm² or AWG 22 to 10.

Advantages

- Basic terminal is made of high conductivity copper, electro tin plated for improved corrosion resistance.
- Applicable wire size is marked on the tongue.
- Serrated inner wire barrel provides maximum electrical contact and tensile strength after conical entry of the wire barrel allows easier insertion of the stripped wire.
- Copper sleeve provides circumferential insulation support to the wire and allows the wire to be bent in any direction without damaging the wire insulation or conductors.
- Insulation sleeves and corresponding tooling are colour-coded by wire size for easier identification.
- AMP PIDG Terminals and



- Q Serrations inside barrel for maximum contact and tensile strength.
- W Conical entry for easy wire insertion.
- E Copper sleeve to crimp wire insulation.

- R Polyamide sleeve for high dielectric strength.
- T Colour-coded by wire size.

Tooling

A wide range of professional handtools are available. They have a patented ratchet device to ensure the crimp cycle is completed before releasing.

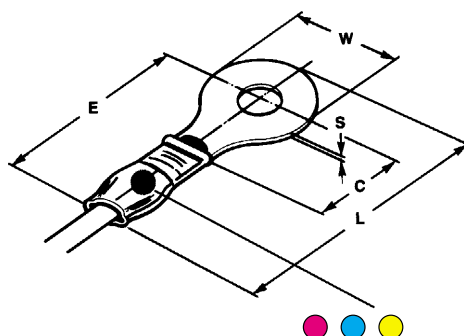
The insulation sleeve is dot coded during crimp. In combination with the wire size on the tongue and the sleeve color it offers a built-in quality factor.

For large production runs pneumatic or electrical tooling is available. A range of service tools completes the AMP Tooling program.

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

Ring Tongues,
vibration resistant
0,1/6,6 mm²

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



Terminal Material :
Copper, tin plated
Insulation Sleeve :
Polyamide

0,1/0,4 mm², AWG 26-22

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2	2,3	0,5	5,2	5,4	16,4	13,5	2,1	323913-0	line 1
●	2,6	3,0	0,5	5,2	5,4	16,4	13,5	2,1	323914-0	
●	3-3,5	3,6	0,5	5,2	5,4	16,4	13,5	2,1	323915-0	
●	4	4,3	0,5	6,4	7,1	18,8	15,3	2,1	323916-0	

0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2,6	3,0	0,8	5,5	4,0	17,1	13,8	3,5	31880-0	line 2
●	3-3,5	3,6	0,8	5,5	4,0	17,1	14,2	3,5	36150-0	
●	4	4,3	0,8	7,9	7,1	21,4	17,4	3,5	31890-0	
●	5	5,5	0,8	7,9	7,1	21,6	16,7	3,5	130008-0	
●	6	6,6	0,8	11,9	11,1	27,4	21,4	3,5	31894-0	

1,0/2,6 mm², AWG 16-14

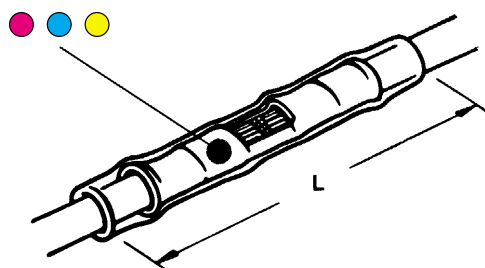
	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2,6	3,0	0,8	6,4	4,3	17,9	14,6	4,3	328996-0	line 3
●	3-3,5	3,6	0,8	6,4	4,3	17,9	14,6	4,3	320619-0	
●	4	4,3	0,8	8,7	7,1	21,8	16,9	4,3	320565-0	
●	5	5,5	0,8	8,7	7,1	27,0	17,4	4,3	130094-0	
●	6	6,6	0,8	11,9	11,1	27,4	21,4	4,3	321045-0	
●	8	8,2	0,8	11,9	11,1	27,4	21,4	4,3	328998-0	

2,7/6,6 mm², AWG 12-10

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	4	4,3	1,0	9,5	7,7	27,5	22,0	6,4	35108-0	line 4
●	5	5,5	1,0	9,5	7,7	27,7	22,9	6,4	130171-0	
●	6	6,8	1,0	12,7	8,7	29,9	23,5	6,4	165034-0	
●	8	8,2	1,0	12,7	8,7	30,2	23,5	6,4	160298-0	
●	10	10,3	1,0	13,5	11,6	33,1	26,5	6,4	130207-0	

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

**Butt Splices
with Inspection Window,
vibration resistant
0,1/6,6 mm²**



Terminal Material :
Copper, tin plated
Insulation Sleeve :
Polyamide

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10

0,1/6,6 mm², AWG 26-10

	Wire Size Range		Insulation Diameter max. (mm)	Dimensions L (mm)	Part Number	Tooling See p. : B 7
	(mm ²)	AWG				
●	0,1-0,4	26-22	2,0	22,6	323994-0	line 1
* ○	0,2-0,6	24-20	2,5	26,3	323975-0*	▲
●	0,25-1,6	22-16	3,1	32,1	320559-0	line 2
●	1,0-2,6	16-14	3,8	32,1	320562-0	line 3
●	2,7-6,6	12-10	5,5	42,1	320570-0	line 4

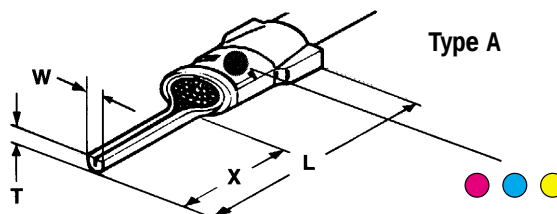
* Colour : natural.

▲ SUPER CHAMP or PRO-CRIMPER II only.

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

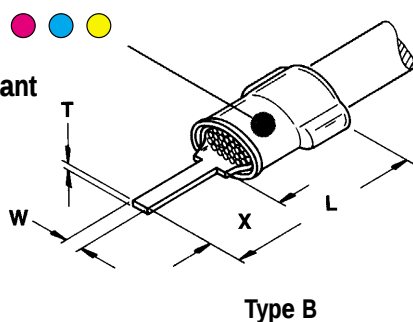
Wire Pins, solid pin vibration resistant 0,1/6,6 mm²

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10

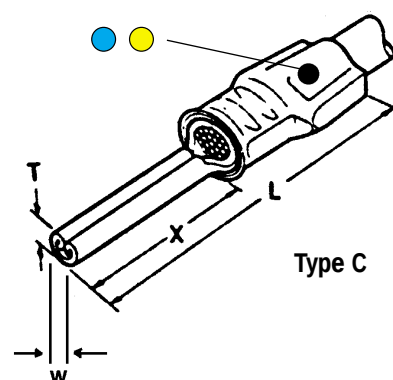


Terminal Material :
Copper, tin plated
Insulation Sleeve :
Polyamide

Wire Pins, Flat Ribbed vibration resistant 0,25/6,6 mm²



Wire Pins, Spring Type



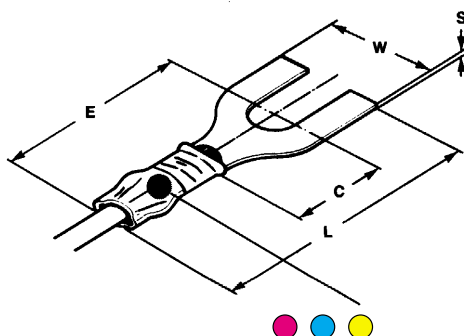
0,14/6,6 mm², AWG 26-10

Type	Wire Size Range		Insulation Diameter max. (mm)	Dimensions (mm)				Part Number	Hand Tool* See p. : B 7
	(mm ²)	AWG		X	W	T	L		
● A	0,14-0,4	26-22	2,1	6,7	1,1	1,1	18,2	165514-1	line 1
● A	0,25-1,6	22-16	3,6	6,7	1,8	1,8	19,7	165142-0	line 2
● A	0,25-1,6	22-16	3,6	9,9	1,9	1,8	22,9	165168-0	
● B	0,25-1,6	22-16	3,6	11,0	3,0	0,8	23,0	131331-0	
● A	1,0-2,6	16-14	4,3	6,7	1,8	1,8	20,3	165046-0	line 3
● A	1,0-2,6	16-14	4,3	9,9	1,8	1,8	23,6	165172-0	line 3
● C	1,0-2,6	16-14	4,3	15,2	2,7	2,3	29,1	9-160402-2	line 6
● B	1,0-2,6	16-14	4,3	11,0	3,0	0,8	23,0	131330-0	line 3
● A	2,7-6,6	12-10	6,4	9,9	2,6	2,6	28,5	165049-0	line 4
● C	2,7-6,6	12-10	6,2	15,2	3,5	2,7	31,4	160404-2	line 7
● B	2,7-6,6	12-10	6,3	12,4	4,0	1,0	27,7	131332-0	line 4

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

**Spades,
vibration resistant,
0,1/6,6 mm²**

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



Terminal Material :
Copper, tin plated
Insulation Sleeve :
Polyamide

0,14/0,4 mm², AWG 26-22

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2,6	3,0	0,5	5,2	5,4	15,5	13,1	2,1	321035-0	line 1
●	3-3,5	3,6	0,5	6,4	7,1	17,9	11,4	2,1	323011-0	

0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2,6	3,0	0,8	5,5	6,4	19,6	16,8	3,5	130522-0	line 2
●	3-3,5	3,6	0,8	6,4	7,9	21,0	17,1	3,5	34541-0	
●	3-3,5	3,6	0,8	7,5	5,2	18,7	15,1	3,5	326861-0	
●	3-3,5	3,6	0,8	8,7	5,5	19,6	15,7	3,5	32404-0	
●	4	4,3	0,8	7,1	6,4	20,1	16,2	3,5	130517-0	
●	4	4,3	0,8	9,5	7,9	22,5	17,8	3,5	32053-0	
●	5	5,5	0,8	9,5	7,9	22,5	17,8	3,5	32054-0	

1,0/2,6 mm², AWG 16-14

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	2,6	3,0	0,8	6,4	7,1	20,4	17,2	3,8	130526-0	line 3
●	3-3,5	3,6	0,8	7,5	5,2	18,6	15,0	4,3	35559-0	
●	3-3,5	3,6	0,8	9,5	7,9	22,5	17,8	4,3	32058-0	
●	4	4,3	0,8	6,4	7,1	20,4	17,3	4,3	130532-0	
●	4	4,3	0,8	7,5	5,2	18,7	15,1	4,3	321233-0	
●	4	4,3	0,8	9,5	7,9	22,5	17,8	4,3	32059-0	
●	5	5,5	0,8	9,8	7,9	22,6	17,9	4,3	160170-0	
●	6	6,6	0,8	12,1	11,1	27,3	21,3	4,3	130537-0	

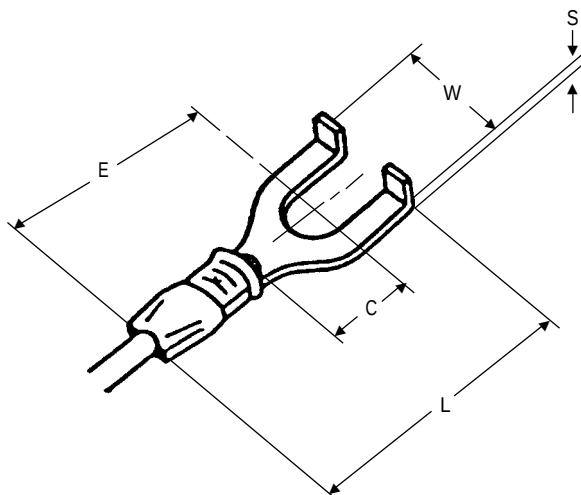
2,7/6,6 mm², AWG 12-10

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C	L max.	E			
●	4	4,3	1,0	8,0	12,0	31,0	27,0	6,4	130496-0	line 4
●	5	5,5	1,0	13,5	11,2	32,6	26,0	6,4	130620-0	
●	6	6,6	1,0	13,5	11,9	32,2	26,3	6,4	130625-0	

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

**Flanged Spade,
vibration resistant,
0,1/6,6 mm²**

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



0,1/0,4 mm², AWG 26-22

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C min.	L	E			
●	2	2,3	0,5	4,6	5,2	16,1	13,3	2,1	324597-0	line 1

0,25/1,6 mm², AWG 22-16

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C min.	L	E			
●	3-3,5	3,6	0,8	7,5	5,2	18,2	15,0	3,5	32562-0	line 2
●	4	4,3	0,8	10,6	6,4	20,6	16,3	3,5	32498-0	

1,0/2,6 mm², AWG 16-14

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C min.	L	E			
●	3-3,5	3,6	0,8	7,5	5,2	18,3	15,1	4,3	320861-0	line 3
●	4	4,3	0,8	7,5	5,2	18,3	15,1	4,3	320862-0	
●	5	5,5	0,8	7,5	5,2	18,3	15,1	4,3	320863-0	

2,7/6,6 mm², AWG 12-10

	Stud M	Stud Hole (mm)	Dimensions (mm)					Insulation Diameter max. (mm)	Part Number	Tooling See p. : B 7
			S	W	C min.	L	E			
●	4	4,3	1,0	10,7	6,4	25,3	20,9	5,8	32510-0	line 4
●	5	5,5	1,0	10,6	6,4	25,1	20,3	5,8	326865-0	

PIDG Pre-Insulated DIAMOND GRIP Terminals and Splices

Cable cutter



Part Number : 604008-1

Stripping Tool



Part Number : 734185-1
0,14 to 6,6 mm²
Set of stripper blades :
PN : 1-0601827-2

Crimping tools



CERTI-CRIMP Type A



CERTI-CRIMP Type B



CERTI-LOK
PN FRAME
169400-0



PRO-CRIMPER II
PN FRAME
354940-1



CRIMPAC



SUPER CHAMP



MINI CHAMP

For PIDG TERMINAL AND SPLICES

Line	Wire Size mm ²	Colour Code	CERTI-CRIMP		CERTI-LOK Die Set	PRO-CRIMPER II Complete Tool	CRIMPAC	SUPER CHAMP
			A	B				
1 →	0,14-0,4	Yellow	169485-0					MINI CHAMP → 576736-0
2 →	0,25-1,6	Red	47386-0		169404-0	58433-3	825508-5	169060-8
3 →	1,0-2,6	Blue	47387-7		169404-0	58433-3	825508-5	169060-8
4 →	2,7-6,6	Yellow		59239-4	169404-0	58433-3	825508-5	169060-8

PIDG WIRE PIN SPRING TYPE

Line	Wire Size mm ²	Colour Code	CERTI-CRIMP		CERTI-LOK	PRO CRIMPER II	CRIMPAC	SUPER CHAMP
			A	B				
5 →	1,0-2,6	Blue	90009-8					169060-8
6 →	2,7-6,6	Yellow		90276-2				169060-8

Engineering Notes

PIDG FASTON, FASTIN-FASTON

Pre-Insulated Terminals and Accessories

from 0,14-6,6 mm² or
AWG 26 to 10

Speed of application —uniform reliability— low cost per line : these advantages have made AMP FASTON products the number one choice for industries requiring large scale production of wiring systems.

AMP Pre-Insulated DIAMOND GRIP solderless FASTON Receptacle and Tabs combine both : the unique AMP FASTON Concept and the unmatched PIDG Crimp Technique. They are designed to answer these demands.

The pre-insulated termination ensures a vibration-safe connection of maximum conductivity.

Each PIDG FASTON Terminal consists of a tin plated brass or phosphorbronze body, with a specially designed copper sleeve and Insulation sleeve fitted over the terminal body.

Advantages

- Conical entry of the wire barrel allows easier insertion of the stripped wire.
- Copper sleeve provides circumferential insulation support to the wire insulation or conductors.
- Insulation sleeves and corresponding tooling are colour coded by wire range for easier identification.

FASTIN FASTON Multiple Connectors

Multiple Connector System for 1 to 8 positions

FASTIN FASTON connectors offer the advantage of the FASTON Technology in multiple applications. In wiring harnesses, they are mainly used as multi-position and coupling connectors.

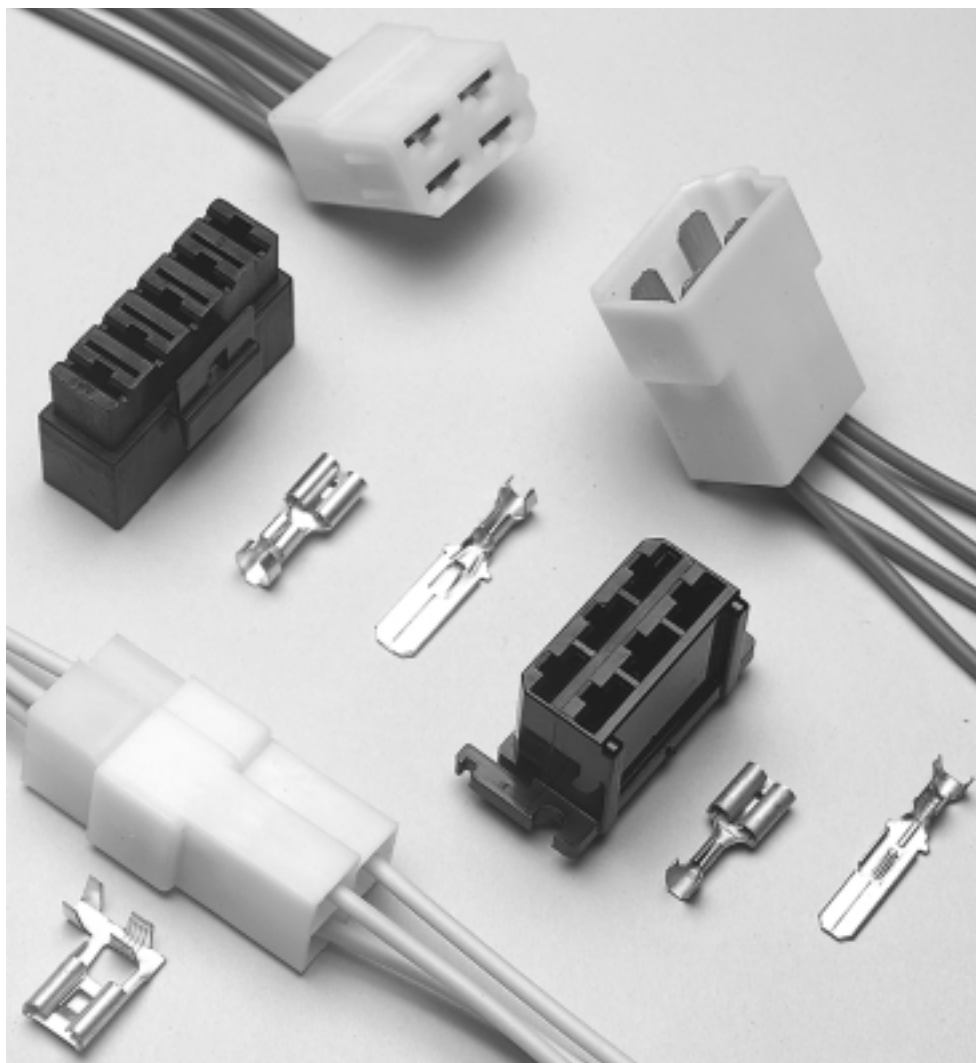


Tooling

A wide range of professional handtools are available. They have a patented ratchet device to ensure the crimp cycle is completed before releasing.

The insulation sleeve is dot coded during crimp. In combination with the sleeve color it offers a built-in quality factor.

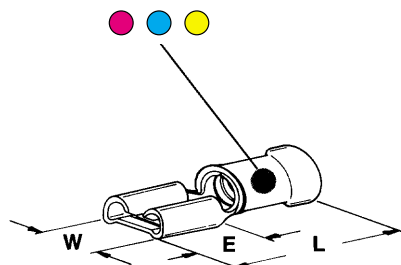
For large production runs pneumatic or electrical tooling is available. A range of service tools completes the AMP Tooling program.



PIDG - FASTON Pre-Insulated receptacles

Pre-Insulated
Receptacles
with Insulation Support

- 0,14/0,4 mm², AWG 26-22
- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



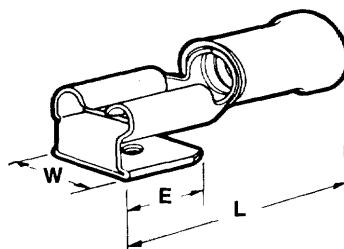
Insulation Sleeve :
Polyamide

	For Tab (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)			Part Numbers		Tooling See p. : C 11
				W	L	E	Brass, tin plated	Phosphor Bronze, tin plated	
●	2,8 x 0,3	0,3-1,5	3,5	3,7	19,8	6,3	165563-1	-	line 2
●	2,8 x 0,3	1,5-2,5	4,3	3,7	19,8	6,3	165614-2	-	line 3
●	2,8 x 0,4	0,3-1,5	3,5	3,7	19,8	6,3	165564-1	-	line 2
●	2,8 x 0,4	1,5-2,5	4,3	3,7	19,8	6,3	165615-2	-	line 3
●	2,8 x 0,5	0,3-1,5	3,5	3,7	19,8	6,3	165565-1	165565-2	line 2
●	2,8 x 0,5	1,5-2,5	4,3	3,7	18,6	6,3	165616-2	165616-5	line 3
●	2,8 x 0,8	0,14-0,4	2,1	3,7	17,4	6,3	165619-2	165619-5	line 1
●	2,8 x 0,8	0,3-1,5	3,5	3,7	19,8	6,3	165566-1	165566-2	line 2
●	2,8 x 0,8	1,5-2,5	4,3	3,7	19,8	6,3	165617-2	165617-5	line 3
●	4,8 x 0,5	0,3-1,5	3,5	5,6	21,0	6,3	9-160481-1	9-160481-5	line 2
●	4,8 x 0,5	1,0-2,5	4,3	5,7	21,9	6,4	9-160477-2	9-160477-5	line 3
●	4,8 x 0,8	0,3-1,5	3,5	5,6	21,0	6,3	9-160483-1	9-160483-5	line 2
●	4,8 x 0,8	1,0-2,5	4,3	5,7	21,9	6,4	9-160479-2	9-160479-5	line 3
●	5,0 x 0,8	0,3-1,0	3,3	6,3	21,6	7,9	140805-2	140948-1	line 5
●	5,0 x 0,8	1,0-2,5	4,0	6,3	21,6	7,9	140802-2	140950-1	line 6
●	6,3 x 0,8	0,3-1,5	3,5	7,6	22,2	7,7	9-160583-2	9-160583-5	line 2
●	6,3 x 0,8	1,0-2,5	4,3	7,6	23,2	7,7	9-160313-2	9-160313-5	line 3
●	6,3 x 0,8	4,0-6,0	6,3	7,6	27,2	7,7	160314-2	160314-5	line 7
●	8,0 x 0,75	1,0-2,5	4,3	9,0	24,4	14,6	9-0160326-2	-	line 3
●	9,5 x 1,2	4,0-6,0	6,3	11,0	30,7	11,9	160524-2	-	line 7

PIDG-FASTON Pre-Insulated receptacles

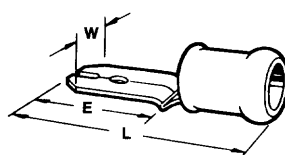
Receptacle and Tab Combination "Piggy-Back"

- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14
- 2,7/6,6 mm², AWG 12-10



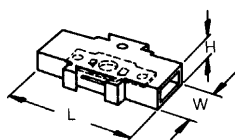
	For Tab (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)			Part Numbers		Tooling See p. : C 11
				W	L	E	Brass, tin plated	Phosphor Bronze, tin plated	
●	6,3 x 0,8	0,3-1,5	3,5	7,6	23,4	7,7	160834-2	160834-5	line 2
●	6,3 x 0,8	1,0-2,5	4,3	7,6	23,4	7,7	9-160463-2	9-160463-5	line 3

Tab

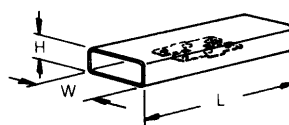


	For Receptacle (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)			Part Numbers		Tooling See p. : C 11
				W	L	E	Brass, tin plated	Phosphor Bronze, tin plated	
●	6,3 x 0,8	0,5-1,0	3,3	6,3	23,5	9,4	140896-2	-	line 5
●	6,3 x 0,8	1,0-2,5	3,9	6,3	23,5	9,4	140971-2	-	line 6
●	6,3 x 0,8	4,0-6,0	5,7	6,3	28,0	9,4	141085-2	-	line 7

In-line splice



A



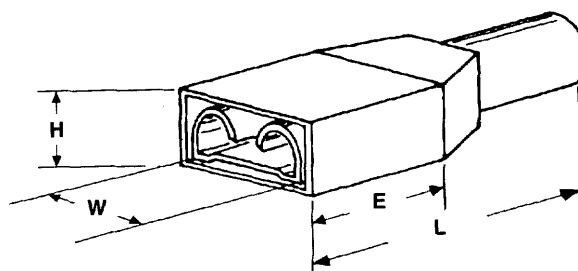
B

Insulation Sleeve :
Polyamide

TAB			Type	Dimensions (mm)			Part Number Brass, tin plated
				W	L	H	
○	white 6,3 x 0,8	PVC	A	20,7	58,2	8,8	0163179-1
○	white 2 x 6,3 x 0,8	PA 6-6	B	19,5	63,5	7,3	0180909-0

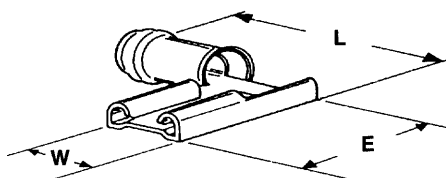
PIDG-FASTON Pre-Insulated receptacles
Fully Insulated Receptacles

- 0,25/1,6 mm², AWG 22-16
- 1,0/2,6 mm², AWG 16-14



Insulation Material :
Polyamide

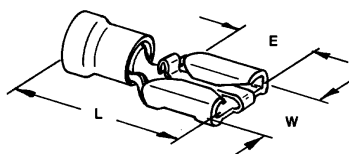
	For Tab (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)				Part Numbers		Tooling See p. : C 11
				W	L	E	H	Brass, tin plated	Phosphor Bronze, tin plated	
●	6,3 x 0,8	0,3-1,5	3,3	9,2	21,6	7,8	5,3	735278-0	735278-1	line 5
●	6,3 x 0,8	1,0-2,5	4,0	9,2	21,6	7,8	5,3	735160-0	-	line 6

PIDG Flag-FASTON Receptacle


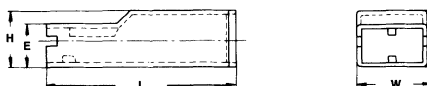
	For Tab (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)			Part Numbers		Tooling See p. : C 11
				W	L	E	Brass, tin plated	Phosphor Bronze, tin plated	
●	6,3 x 0,8	0,3-1,5	3,4	7,6	18,3	15,5	156667-1	-	line 5
●	6,3 x 0,8	1,0-2,5	3,4	7,6	18,3	15,5	156666-1	-	line 6

Positive Lock Receptacle

**Low Insertion Force
with Locking Device
and Vibration Resistance**



**Housing for
Full Protection
and Easy Release**

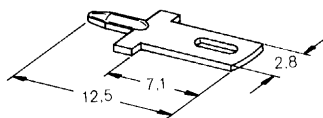


	For Tab (mm)	Wire Size Range (mm ²)	Insulation Diameter max. (mm)	Dimensions (mm)				Part Numbers		Tooling See p. : C 11
				W	L	E	H	Brass, tin plated	Phosphor Bronze, tin plated	
●	6,3 x 0,8	1,5-2,5	4,8	9,2	21,6	8,0	-	165536-1	165536-2	line 3
	Housing Colour : natural			9,8	24,3	5,7	7,2	154719-0	-	
	Housing Colour : black			9,8	24,3	5,7	7,2	154719-1	-	

FASTON Tabs

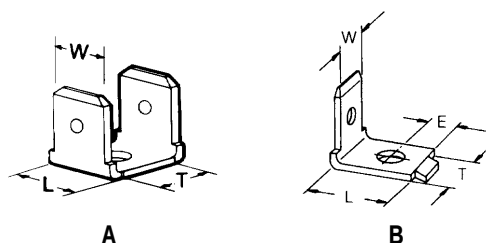
Size 2,8
FASTON Tabs
for PC Boards

Material :
Brass, tin plated



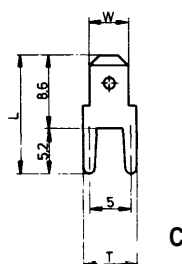
	Fits Tab (mm)	PC Board Bore Hole diameter (mm)	Part Number
Long Hole	0,5	$1,4 \pm 0,04$	735187-2

Size 4,8
FASTON Tabs



Type	Bore Hole Diameter (mm)	Fits Tab (mm)	Dimensions (mm)				Part Number
			W	L	E	T	
A	3,3	0,5	4,8	7,0	-	6,7	170001-2
B	3,3	0,5	4,8	7,3	3,1	6,7	170001-3

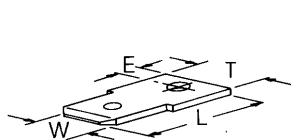
PC Board Version



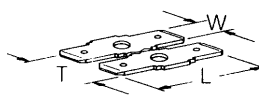
PC Board Bore Hole Diameter mm	Type	Fits Tab (mm)	Dimensions (mm)			Part Number
			W	L	T	
$1,3 \pm 0,05$	C	0,5	4,8	14,0	6,4	726388-2
$1,4 \pm 0,02$		0,8				1-726388-2

FASTON Tabs (continued)

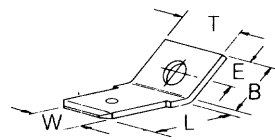
Size 6,3 Faston Tabs



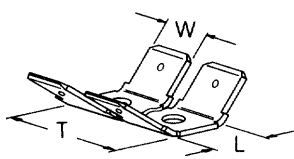
F



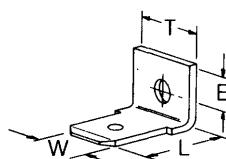
G



I



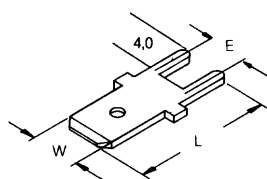
J



L

Type	Bore Hole Diameter (mm)	Dimensions (mm)					Part Numbers	
		B	W	L	E	T	Brass	Brass, tin plated
I	4,1	9,0	6,3	8,9	4,0	8,0	140814-1	
L	4,1	-	6,3	10,1	4,0	8,0	141879-1	
F	4,1	-	6,3	19,1	4,0	8,0	140734-1	
J	4,1	-	6,3	10,5	-	8,0	142241-1	
G	4,1	-	6,3	30,0	-	8,0	140736-1	
I	5,2	9,0	6,3	8,9	4,0	8,0	181948-1*	
I	5,2	9,0	6,3	8,9	4,0	8,0	140665-0	
L	5,2	9,0	6,3	10,1	4,0	8,0		180399-2

PC Board Version



PC Board Bore Hole Diameter (mm)	Dimensions (mm)			Part Number Brass, tin plated
	W	L	E	
1,5 ^{+0.1}	6,3	17,0	3,5	725964-2

Tabs with hole are required for Positive Lock

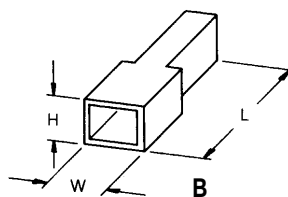
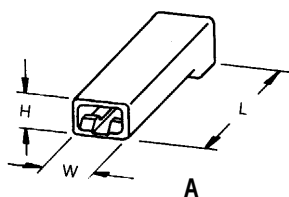
* with hole for Positive Lock Receptacle.

FASTIN-FASTON Multiple Position Connectors

• 250 Series Housings.

Receptacle Housing, 1 Position.

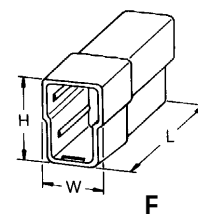
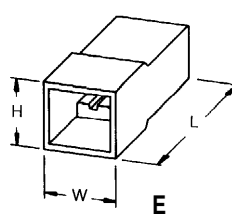
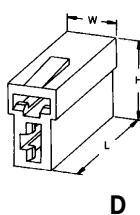
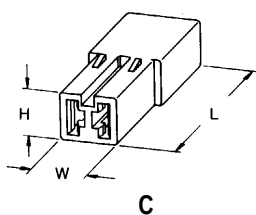
Tab Housing, 1 Position.



Type	Material	Colour	Dimensions (mm)			Part number
			W	L	H	
A	Polyamide	natural	10,0	24,0	6,6	180905-0
B	Polyamide	natural	12,5	31,8	8,9	180916-0

Receptacle Housing, 2 Positions.

Tab Housing, 2 Positions.



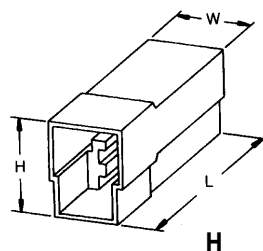
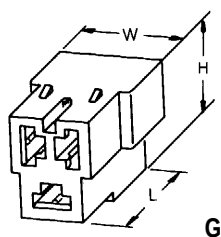
Type	Material	Colour	Dimensions (mm)			Part number
			W	L	H	
C	Polyamide	natural	12,5	22,9	10,0	180923-0
D	Polyamide	natural	10,2	22,9	16,4	180907-0
E	Polyamide	natural	15,2	31,8	13,2	180924-0
F	Polyamide	natural	14,0	31,5	20,1	180908-0

FASTIN-FASTON Multiple Position Connectors

• 250 Series Housings.

Receptacle Housing, 3 Positions.

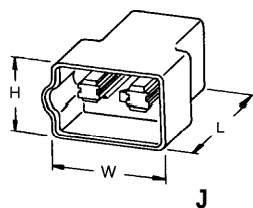
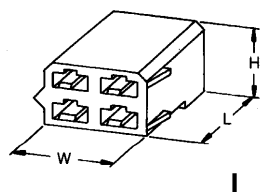
Tab Housing, 3 Positions.



Type	Material	Colour	Dimensions (mm)			Part number
			W	L	H	
G	Polyamide	natural	15,2	22,9	17,9	180941-0
H	Polyamide	natural	15,2	31,8	19,9	180940-0

Receptacle Housing, 4 Positions.

Tab Housing, 4 Positions.

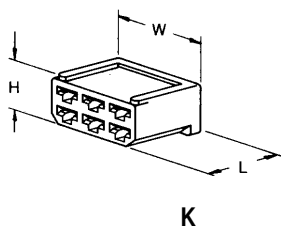


Type	Material	Colour	Dimensions (mm)			Part number
			W	L	H	
I	Polyamide	natural	23,0	24,1	15,5	180900-0
J	Polyamide	natural	26,2	31,5	16,5	180901-0

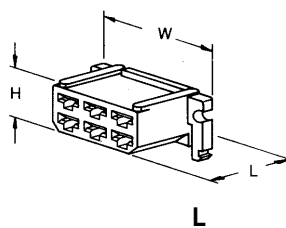
FASTIN-FASTON Multiple Position Connectors

• 250 Series Housings.

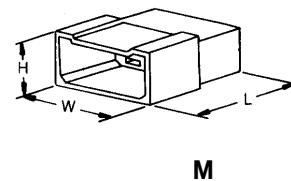
Receptacle Housing, 6 Positions.



Receptacle Housing, 6 Positions with mounting ears.

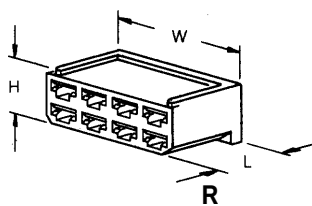


Tab Housing, 6 Positions.

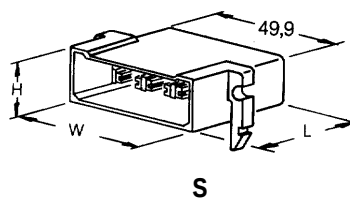


Type	Material	Colour	Dimensions (mm)			Part Number
			W	L	H	
K	Polyamide	natural	28,6	24,3	16,8	925276-0
L	Polyamide	natural	37,2	24,3	13,8	180904-0
M	Polyamide	natural	31,4	32,4	18,0	180906-0

Receptacle Housing, 8 Positions.



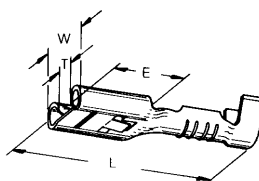
Tab Housing, 8 Positions.



Type	Material	Colour	Dimensions (mm)			Part number
			W	L	H	
R	Polyamide	natural	37,7	24,1	16,6	163007-0
S	Polyamide	natural	49,9	32,6	18,3	163008-0

FASTIN-FASTON Crimp Contacts

• 250 Series RECEPTACLES with Insulation Support.



A

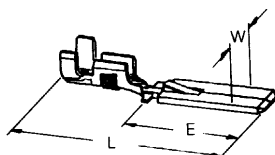
Type	Tab Size 6,3 x (mm)	Wire Size Range (mm ²)	Insulation Diameter (mm)	Stock Thickness (mm)	Part Number Brass, tin plated	Dimensions (mm)				Tooling See p. : C 11
						W	L	E	T	
A	0,8	0,3-0,8	2,2-3,2	0,32	60838-1	7,4	19,2	7,7	0,89	line 8
A	0,8	0,75-2,5	3,1-4,1	0,32	42238-2	7,4	19,2	7,7	0,89	
A+*	0,8	4,0-6,0	3,4-5,1	0,32	180384-2	7,4	19,2	7,7	0,89	

* according to DIN 46340, Part 3

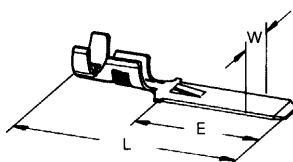
+ chamfered

Extraction Tool : Part No. **725864-1**

Tabs with Insulation Support.



B



C

Type	Wire Size Range (mm ²)	Insulation Diameter (mm ²)	Tab Thickness (mm)	Stock Thickness (mm)	Part Number Brass, tin plated	Dimensions (mm)			Tooling See p. : C 11
						W	L	E	
B*	0,3-0,8	2,2-3,2	0,8	0,4	61316-1	6,3	28	15,7	line 8
B*	0,8-2,1	3,1-4,1	0,8	0,4	42241-2	6,3	28	15,7	
Cx	0,8-2,1	3,1-4,1	0,4	0,4	42242-2	6,3	28	15,6	
B	4,0-6,0	3,4-5,1	0,8	0,4	180409-2	6,3	28	15,7	

* according to DIN 46340, except Wire Size Range

x for Back-to-Back Mounting

Extraction Tool : Part No. **725864-1**

FASTON Products, Application Tools and Tooling

Cable cutter



Part Number : 604008-1

Stripping Tool



Part Number : 734185-1
0,14 to 6,6 mm²
Set of stripping blades :
PN : 1.0601827-2

Crimping tool



PRO-CRIMPER II
PN Frame
354940-1



CERTI-CRIMP Type A



CERTI-CRIMP Type B



CERTI-LOK
PN Frame : 169400



CRIMPAC



SUPER CHAMP



MINI CHAMP

For Standard PIDG-FASTON Receptacles and Tabs

Line	Wire Size mm ²	Colour Code	CERTI-CRIMP		CERTI-LOK Die Set	PRO-CRIMPER II Complete Tool	CRIMPAC	SUPER CHAMP
			A	B				
1 →	0,14-0,4	Yellow	169485-0					MINI CHAMP → 576736-0
2 →	0,25-1,6	Red	47386-4		169404-0	58433-3	825508-5	169060-8
3 →	1,0-2,6	Blue	47387-7		169404-0	58433-3	825508-5	169060-8
4 →	2,7-6,6	Yellow		59239-4	169404-0	58433-3	825508-5	169060-8

For PIDG-FASTON Receptacles and Tabs requiring TIGHT CRIMP

Line	Wire Size mm ²	Colour Code	CERTI-CRIMP			SUPER CHAMP
			A	B		
5 →	0,25-1,6	Red	90035-3			169060-8
6 →	1,0-2,6	Blue	90009-8			169060-8
7 →	2,7-6,6	Yellow		90276-2		169060-8

For FASTIN-FASTON Contacts (See p. : C 10)

Line	Wire Size mm ²		CRIMPAC	SUPER CHAMP
8 →	0,3-6		825514-1	169111-1 or 90287-1

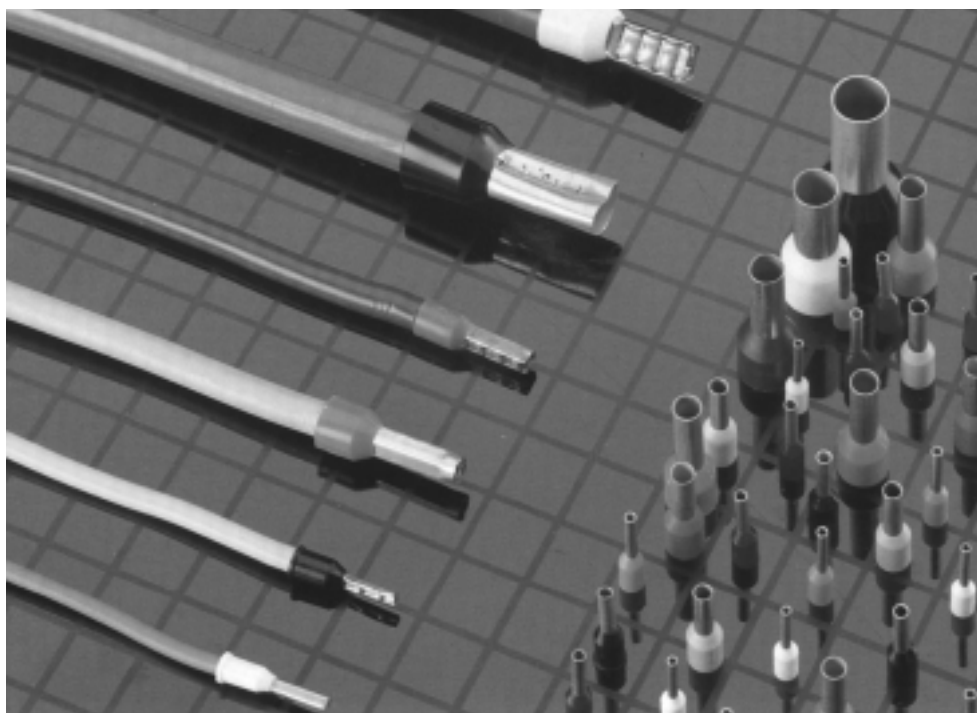
Engineering Notes

Wire end ferrules

AMP Wire End Ferrules allow the easy and reliable connection of flexible leads from 0,14 -150 mm² with screws or spring clamps.

The flexible strands of the wire are held together in the Wire End Ferrule and are crimped with AMP precision tooling. The colour coded insulation protects the flexible wire from nicking and eventually break.

All of the technical parameters of the Wire End Ferrules such as dimension, material, surface and colour coding of the insulation are conform DIN Specification 46228, part 4.



Program :

AMP Wire End Ferrules are available for single or double wire.

They are Colour Coded conform to the Colour System W, T and DIN.

The AMP Wire End Ferrules are available in several pin length, to meet almost all requirements of technical standards.

Packing :

AMP Wire End Ferrules are available in :

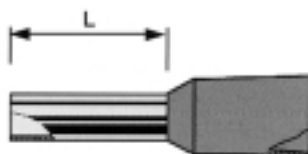
- Distribution Packing in bags 10 x 100 pieces, and on request
- Bulk Packing in a plastic bag of mostly 500 pieces.
- Strips for application in strip-loaded tooling.
- Reel Packing for application on (semi) Automatic Machines and reel-feed handtooling.

Tooling

AMP offers precision ratcheted tooling to meet high electrical, mechanical and ergonomical

Wire end ferrules

Single-Wire


Material :

Ferrule : E Cu tin plated

Insulation Sleeve :

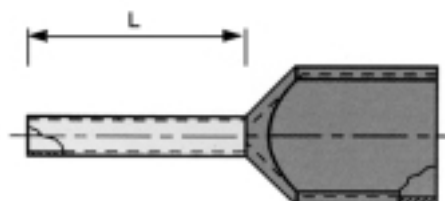
PP 105° C max.

Wire mm ²	L mm	T-TYPE		W-TYPE		DIN-TYPE		Tool See p. : D 4
		Colour	Part Number	Colour	Part Number	Colour	Part Number	
0,14	6	Brown	0-966293-1	Grey	0-966284-5			
	8		0-966293-2		1-966284-6			
0,25	6	Yellow	0-966293-3	Light blue	0-966284-1			
	8		0-966293-4		0-966284-2			
0,34	6	Green	0-966293-5	Turquoise	0-966284-3			
	8		0-966293-6		0-966284-4			
0,50	6	White	0-966293-7	Orange	1-966284-7	White	0-966288-1	
	8		0-966293-8		0-966284-7		0-966288-2	
	10		0-966293-9		1-966284-8		0-966288-3	
0,75	6	Blue	1-966293-0	White	1-966284-9	Grey	0-966288-4	
	8		1-966293-1		0-966284-9		0-966288-5	
	10		1-966293-2		2-966284-0		0-966288-6	
	12		1-966293-3		2-966284-1		0-966288-7	
1,00	6	Red	1-966293-4	Yellow	2-966284-2	Red	0-966288-8	
	8		1-966293-5		1-966284-0		0-966288-9	
	10		1-966293-6		2-966284-3		1-966288-0	
	12		1-966293-7		2-966284-4		1-966288-1	
1,50	8	Black	1-966293-8	Red	2-966284-5	Black	1-966288-2	
	10		1-966293-9		1-966284-1		1-966288-3	
	12						1-966288-4	
	18		2-966293-0		2-966284-6		1-966288-5	
2,50	8	Grey	2-966293-1	Blue	2-966284-7	Blue	1-966288-6	
	12		2-966293-2		2-966284-8		1-966288-7	
	18		2-966293-3		2-966284-9		1-966288-8	
4,00	9	Orange	2-966293-4	Grey	3-966284-0	Grey	1-966288-9	
	12		2-966293-5		3-966284-1		2-966288-0	
	18		2-966293-6		3-966284-2		2-966288-1	
6,00	12	Green	2-966292-7	Black	1-966066-5	Yellow	2-966067-2	
	18		2-966292-8		3-966066-3		2-966067-3	
10,00	12	Brown	2-966292-9	Ivory	3-966066-4	Red	2-966067-4	
	18		3-966292-0		3-966066-5		2-966067-5	
16,00	12	Ivory	3-966292-1	Green	3-966066-6	Blue	2-966067-6	
	18		3-966292-2		3-966066-7		2-966067-7	

Packing : in plastic bags of 100 pieces.

Wire end ferrules

Two-Wires


Material :

Ferrule : E Cu tin plated

Insulation Sleeve :

PP 105° C max.

Wire mm ²	Type	Colour mm	L	Part Number	Tool See p. : D 4
2 x 0,50	DIN/T	White	8	0-966289-1	
	W	Orange	8	1-966289-4	
2 x 0,75	DIN/T	Gray	8	0-966289-2	
	T	Blue	8	1-966289-5	
	W	White	8	1-966289-6	
	DIN	Grey	10	0-966289-3	
	T	Blue	10	1-966289-7	
	W	White	10	1-966289-8	
2 x 1,00	DIN/T	Red	8	0-966289-4	
	W	Yellow	8	1-966289-9	
	DIN/T	Red	10	0-966289-5	
	W	Yellow	10	2-966289-0	
2 x 1,50	DIN/T	Black	8	0-966289-6	
	W	Red	8	2-966289-1	
	DIN/T	Black	12	0-966289-7	
	W	Red	12	2-966289-2	
2 x 2,50	DIN/W	Blue	10	0-966289-8	
	T	Grey	10	2-966289-3	
	DIN/W	Blue	13	0-933289-9	
	T	Grey	13	2-966289-4	

Packed in plastic bags of 100 pieces

Wire end ferrules

Application Tooling

Technical Features

- Crimp profile for easy handling
- Integrated constraining stop enables complete crimping
- Strained parts are specially coated

Technical Data

Material :

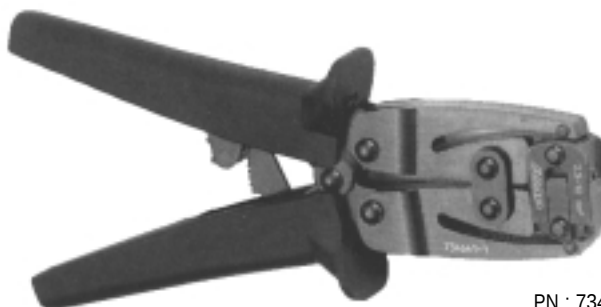
high-strength special steel

Finish :

gun metal finish

Crimp Form :

according DIN 46228, Part 1



PN : 734641



PN : 790081-1
or PN : 790081-2

Wire Size Range (mm ²)	Part Number
0,14-6,00	734641-2
0,5-4,00	790081-1
6-16,00	790081-2

Electro-Tap

Tap connector

The AMP ELECTRO-TAP splice is an economic method of joining branch and tap wire to solid or stranded wire for a variety of wire ranges.

The splice has insulation displacement contacts for faster and easier tapping than other types of splices.

Housings are colour-coded covering a wire range 0,5-6,0 mm² with a maximum insulation diameter of 5,0 mm.

Application tooling : only normal pliers are required.

Features

- No stripping required.
- Limited outside dimensions.
- Easy two step wire by wire termination.
- No third hand required.
- Application short circuit free as nylon cover protects the wire during termination.
- Excellent double locking.

Technical Data

Housing Material :

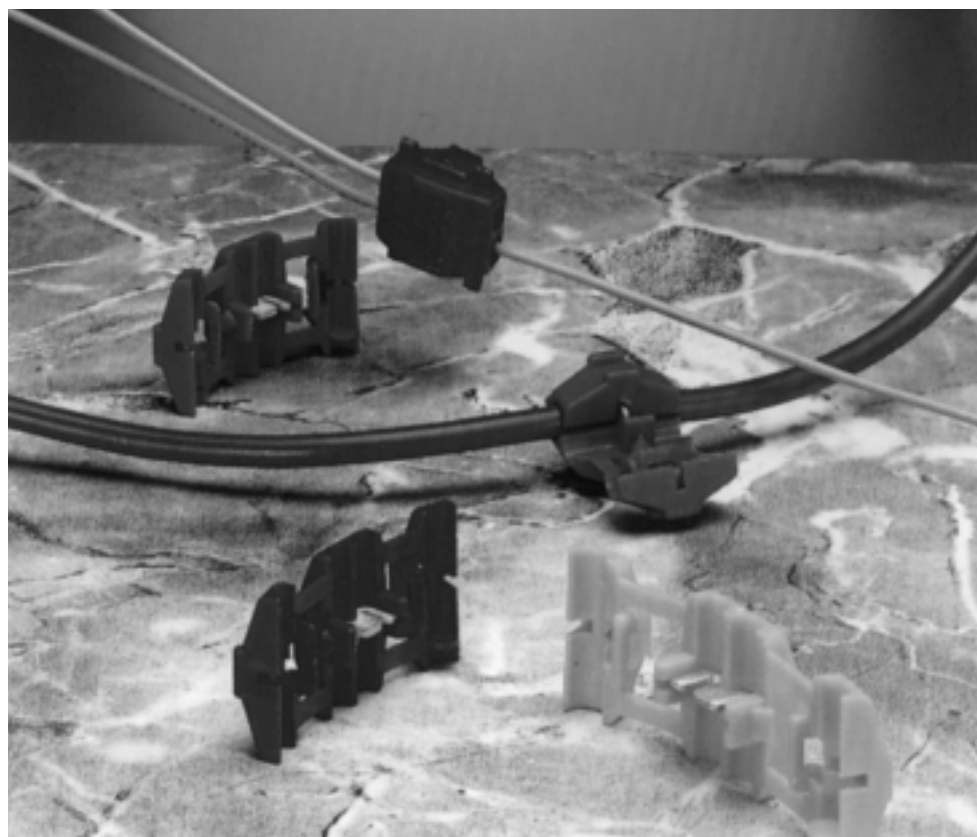
Nylon, colour-coded

Contact Material :

Brass, tin plated

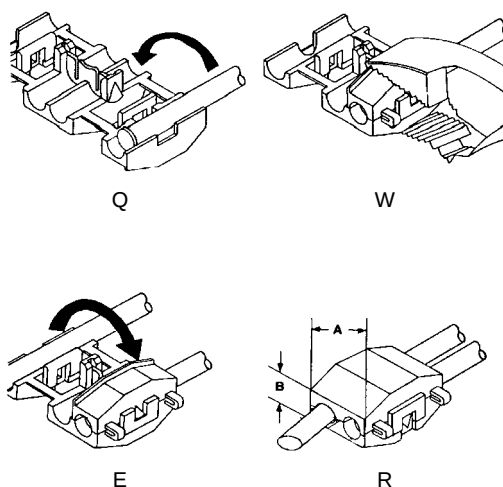
Carrying Capacity :

according wire cross section



Wire Size Range (mm ²)	Tab Wire (mm ²)	Insulation Diameter mm (max.)	Dimensions (mm)		Colour	Part Number
			A	B		
0,5-0,75	0,5-0,75	4,0	12,5	7,0	red	735410-0
1-2,5	1,0-2,5	4,0	12,5	7,0	blue	735398-0*
4-6	4,0-6,0	5,0	16,2	11,8	yellow	735411-0

* PTT Approval No. K-736810301 (only for Germany)



Assembly

- Q Insert wire in cover.
For installation of two through wires, remove wire stop.
- W Close cover, keep wire in position and squeeze with pliers until cover is locked.
- E Repeat step one for second wire.
- R Repeat step two.

Engineering Notes

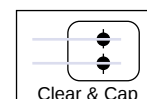
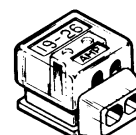
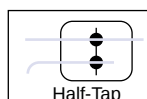
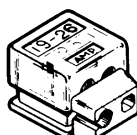
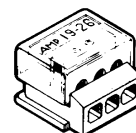
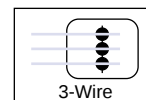
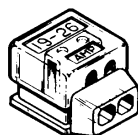
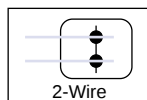
Tel-Splice Connectors

Product Facts

- Used to splice telephone cable conductors.
- 26-19 AWG (0,4-0,9 mm) solid copper conductors.
- No prestripping required.
- Gas-tight connections.
- Used with PVC, PE, PP or filled cable.
- Housings highly resistant to chemicals and moisture.

Typical Applications

- Load coils.
- Stub cables.
- Ready access terminals.
- Trunk and toll cables.



Loose Piece Connectors

Description		Connectors			Loose Piece Part Numbers*		
		Style	Housing Colour	Max.Ins. Outside Dia.	100/Box	500/Tub	1,000/Tub
2-Wire Splice	Filled	–	Translucent	2.03	1-552795-2	–	552795-2 [†]
		–	Yellow	2.03	1-552795-4	–	552795-4 [†]
	Unfilled	–	Clear (Flame Retardant)	2.03	1-553395-1 ^{††}	–	553395-1 ^{††}
3-Wire Splice	Filled	–	Translucent	2.03	1-552678-2	552678-2 [†]	–
		–	Yellow	2.03	1-552678-4	552678-4 [†]	–
	Unfilled	–	Clear (Flame Retardant)	2.03	1-553759-1 ^{††}	–	–
Half-Tap	Filled	–	Translucent Blue	2.03	1-553017-2	–	553017-2 [†]
		–	Translucent Blue (with yellow dot)	2.03	1-553017-4	–	553017-4 [†]
	Unfilled	–	Clear (Flame Retardant)	2.03	1-553397-1 ^{††}	–	553397-1 ^{††}
Clear & Cap	Filled	–	Green	2.03	5-554374-1	–	5-554374-3
		–	Green	2.03	5-554374-2	–	5-554374-4
	Unfilled		(with yellow dot)				

* Must be ordered in multiples of 1,000 connectors.

Approvals [†]REA Listed

^{††}UL Listed, File No. E81956.



AMP/and PRO-CRIMPER are trademarks

All specifications are subject to change. Consult AMP for latest designs specification

Tel-Splice Connectors (continued)

Description		Style	Connector Housing Color	Max. Ins. Outside Dia.	Cartridge Part Numbers**		
					14/Cartridge ¹	56/Cartridge	72/Cartridge
2-Wire Splice	Filled	-	Translucent	.080 2.03	555790-1	-	552966-2
	Unfilled	-	Yellow	.080 2.03	555790-2	-	552966-4
3-Wire Splice	Filled	-	Translucent	.080 2.03	555791-1	552965-2	-
	Unfilled	-	Yellow	.080 2.03	555791-2	552965-4	-
Clear & Cap	Filled	-	Green	.080 2.03	555792-1	-	554897-1
	Unfilled	-	Green (with yellow dot)	.080 2.03	555792-2	-	554897-2

** Must be ordered in multiples of 10 cartridges.

¹ For use in 3M's E-9C Cartridge Tool.

Approvals UL Listed, File No. E81956.



Technical Documents

Product Specifications

108-3050 (3-Wire)
108-6020 (3-Wire and Half-Tap)
108-6021 (2- and 3-Wire, Half-Tap)

Application Specifications

114-21003 (2-Wire)
114-6010 (TS-2, Half-Tap)

Hand Tools for Loose Piece Application

Loose Piece Base Part Numbers	Economy Hand Tool (E.T.) Part Numbers	PRO-CRIMPER II Hand Tool Part Numbers	Crimp Height Gage Part Number
552678	231839-1	58610-1	230495-1
552795	231839-1	58610-1	230495-1
553017	231839-1	58610-1	230495-1
553395	231839-1	58610-1	230495-1
553397	231839-1	58610-1	230495-1
553759	231839-1	58610-1	230495-1
554374	231839-1	58610-1	230495-1

Hand Tools for Loose Piece Application

Cartridge Base Part Numbers	Cartridge Hand Tool Part Number
552965	230722-1
552966	230722-1
554897	230722-1

Hand Tools for Loose-Piece Application



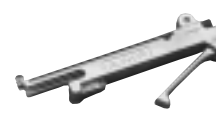
Economy (E.T.) Tool
Part Number 231839-1
IS 408-3183



Crimp Height Gage
Part Number 230495-1
IS 408-3183, 408-6502, 408-6506



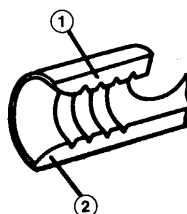
PRO-CRIMPER II Tool
Part Number 58610-1
IS 408-4235



Cartridge Tool
Part Number 230722-1
IS 408-6506
Tool has built-in gage slots to check crimp height.
Note : Single track cartridges (14/cartridge) fit 3M E-9C Tool.

SOLISTRAND Uninsulated Terminals and Splices

- The proven SOLISTRAND line includes rings, spade, parallel and butt splices in wire ranges from 0,25 to 300 mm², regardless the stranding of the wire. That clearly means reduced inventory needs.
- SOLISTRAND terminals are made of high conductivity copper, electro tinned for improved corrosion resistance. The completely closed barrel with serration's inside provides an optimum tensile strength and maximum electrical contact after crimping. The barrel has a conical entry for easy wire insertion. In the AMP matching tooling system a large number of tools are available to meet virtually every market need.
- The SOLISTRAND Terminals and Splices in combination with the AMP "W" Crimp create termination's of optimum electrical properties and are completely reliable : giving long service in hard environment. Crimp tooling with the "W" crimp range from easy to handle and lightweight ratchet controlled handtools up to hydraulic powered units.
- The SOLISTRAND Terminals and Splices crimped with the ROTA-CRIMP handtools, producing the famous square-crimp, provide a termination matching highest standards combined with easy to handle light weight tooling.



Q Inner Serrations for optimum Tensile Strength and maximum Electrical Contact.

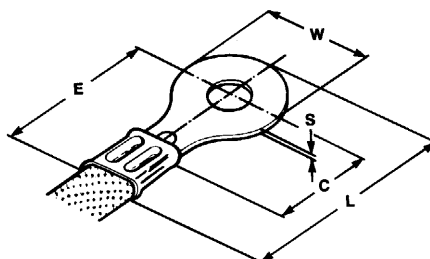
W Conical Entry for easy Wire Insertion.

crimping



SOLISTRAND Uninsulated Terminals and Splices

Ring Tongues, 0,25 - 6,6 mm²



From 0,25 to 1,6 mm², AWG 22-16

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L max.	E		
2,6	3,0	0,8	5,5	4,0	11,4	8,6	34104-0	line 1
3-3,5	3,6	0,8	5,5	4,0	11,4	8,6	34105-0	
4	4,3	0,8	7,9	7,1	15,8	11,8	34111-0	
5	5,5	0,8	7,9	7,1	15,8	11,8	130017-0	
6	6,4	0,8	11,9	11,1	21,7	15,7	34113-0	

From 1,0 to 2,6 mm², AWG 16-14

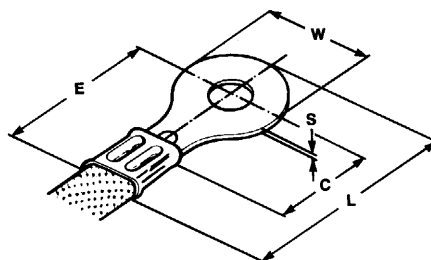
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L	E		
3	3,6	0,8	6,4	4,3	12,2	9,0	34120-0	line 1
4	4,3	0,8	8,7	7,1	16,2	11,8	34122-0	
5	5,5	0,8	8,7	7,1	16,2	11,8	130106-0	
6	6,6	0,8	11,9	11,1	21,7	15,8	34124-0	
8	8,2	0,8	11,9	11,1	21,7	15,8	34125-0	
10	10,5	0,8	16,7	13,5	25,0	18,2	160140-0	

From 2,7 to 6,6 mm², AWG 12-10

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L	E		
4	4,3	1,0	9,5	7,7	19,1	14,3	32994-0	line 1
5	5,5	1,0	9,5	7,7	19,1	14,3	130191-0	
6	6,6	1,0	12,7	8,7	21,7	15,4	35772-0	
8	8,2	1,0	12,7	8,7	21,7	15,4	35773-0	
10	10,5	1,0	15,4	13,5	27,8	20,2	160121-0	

SOLISTRAND Uninsulated Terminals and Splices

Ring Tongues, 10 - 35 mm²



10 mm², for wire size 6,7 to 10,5 mm², AWG 8

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
4	4,3	1,3	11,9	9,1	23,7	17,8	32996-0	line 2 - 11
5	5,5	1,3	11,9	9,1	23,7	17,8	160013-0	
6	6,6	1,3	11,9	9,1	23,7	17,8	33461-0	
8	8,2	1,3	15,1	13,5	29,6	22,1	33462-0	
10	10,5	1,3	15,1	13,5	29,6	22,1	160056-0	

16 mm², for wire size 10,6 to 16,7 mm², AWG 6

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
5	5,5	1,5	11,9	13,5	29,7	23,7	130552-0	line 3 - 12
6	6,6	1,5	15,9	13,5	31,6	23,7	33465-0	
8	8,2	1,5	15,9	13,5	31,6	23,7	33466-0	
10	10,5	1,5	15,9	13,5	31,6	23,7	160032-0	

25 mm², for wire size 16,8 to 26,6 mm², AWG 4

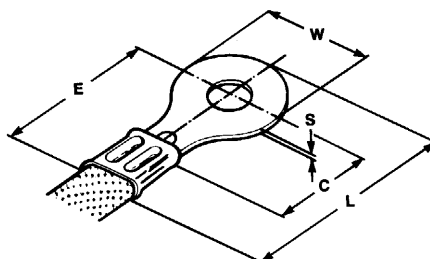
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
5	5,5	1,9	16,7	13,1	33,3	25,0	160119-0	line 3 - 13
6	6,6	1,9	12,7	11,1	33,3	25,0	33469-0	
8	8,2	1,9	16,7	13,1	33,3	25,0	33470-0	
10	10,5	1,9	16,7	13,1	33,3	25,0	160075-0	
12	12,9	1,9	22,2	25,4	48,3	37,2	327175-0	

35 mm², for wire size 26,7 to 42 mm², AWG 2

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
6	6,6	1,9	15,8	17,4	38,8	30,9	320383-0	line 3 - 14
8	8,2	1,9	15,8	17,4	38,8	30,9	322870-0	
10	10,5	1,9	22,2	17,4	42,0	30,9	160002-0	
12	12,9	1,9	22,2	17,4	42,0	30,9	35185-0	

SOLISTRAND Uninsulated Terminals and Splices

Ring Tongues, 50 - 120 mm²



50 mm², for wire size 42,5 to 62,5 mm², AWG 1/0

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
8	8,3	1,9	22,2	18,8	49,7	38,5	36916-0	line 4 - 15
10	10,5	1,9	22,2	18,8	49,7	38,5	160000-0	
12	13,0	1,9	22,2	18,8	49,7	38,5	36919-0	

70 mm², for wire size 60,6 to 76,2 mm², AWG 2/0

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
8	8,3	2,1	23,6	19,0	50,8	39,0	36922-0	line 5 - 16
10	10,5	2,1	23,6	19,0	50,8	39,0	160001-0	
12	13,0	2,1	23,6	19,0	50,8	39,0	36925-0	
16	16,6	2,1	23,6	19,0	50,8	39,0	36926-0	

95 mm², for wire size 76,3 to 97 mm², AWG 3/0

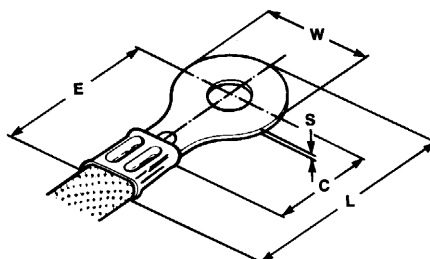
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
10	10,5	2,4	27,0	20,7	54,4	41,7	160003-0	line 5 - 17
12	13,0	2,4	27,0	15,9	54,4	41,7	36929-0	
16	16,6	2,4	27,0		54,4	41,7	36930-0	

120 mm², for wire size 98 to 120 mm², AWG 4/0

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10 - G 11
		S	W	C min.	L	E		
10	10,5	2,7	28,6	21,0	56,0	41,7	160129-0	line 5 - 18
12	13,0	2,7	28,6	15,9	56,0	41,7	36934-0	
16	16,6	2,7	28,6	21,0	56,0	41,7	36935-0	

SOLISTRAND Uninsulated Terminals and Splices

Ring Tongues, 150 - 300 mm²



150 mm², for wire size 121 to 151 mm², 250-300 MCM

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 11
		S	W	C min.	L	E		
12	13,0	3,3	35,7	19,0	66,1	50,2	322254-0	line 19
16	16,6	3,3	35,7	19,0	66,1	50,2	323050-0	

185 mm², for wire size 152 to 192 mm², 300-500 MCM

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 11
		S	W	C min.	L	E		
12	13,0	3,6	38,5	21,0	67,7	51,8	322259-0	line 20
16	16,6	3,6	38,5	21,0	67,7	51,8	324105-0	

240 mm², for wire size 193 to 242 mm², 400 MCM

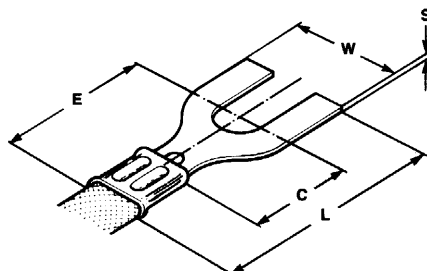
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 11
		S	W	C min.	L	E		
12	13,0	4,0	43,6	21,0	70,8	54,9	322264-0	line 21
16	16,6	4,0	43,6	21,0	70,8	54,9	324202-0	
22	21,5	4,0	43,6	36,7	92,6	70,8	160266-0	

300 mm², for wire size 243 to 304 mm², 500-600 MCM

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 11
		S	W	C min.	L	E		
12	13,0	4,6	50,4	23,2	80,8	61,7	322269-0	line 22
16	16,6	4,6	50,4	23,2	80,8	61,7	322270-0	

SOLISTRAND Uninsulated Terminals and Splices

Spades,
0,25 - 6,6 mm²



From 0,25 to 1,6 mm², AWG 22-16

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L	E		
2,6	3,0	0,8	5,5	6,4	14,1	11,3	130524-0	line 1
3-3,5	3,6	0,8	6,4	7,9	15,8	12,4	323127-0	
3-3,5	3,6	0,8	7,5	5,2	13,4	9,9	36195-0	
4	4,3	0,8	7,1	6,3	15,0	11,1	130519-0	
4	4,3	0,8	9,5	7,9	17,4	12,6	34117-0	
5	5,5	0,8	9,5	7,5	17,4	12,6	34118-0	

From 1,0 to 2,6 mm², AWG 16-14

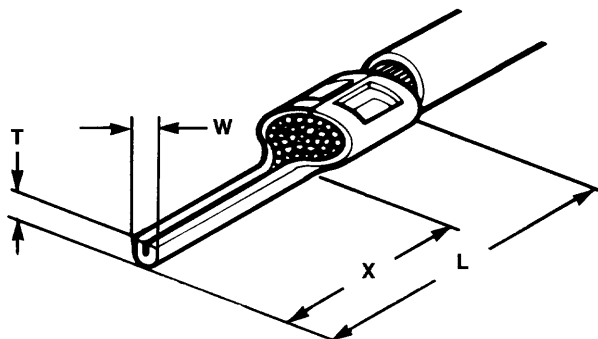
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L	E		
3-3,5	3,6	0,8	7,5	5,1	13,5	9,9	322996-0	line 1
4	4,3	0,8	6,4	7,1	14,9	11,8	130534-0	
4	4,3	0,8	7,5	5,1	13,5	9,9	36880-0	
5	5,5	0,8	9,8	7,9	17,4	12,6	160127-0	

From 2,7 to 6,6 mm², AWG 12-10

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling See p. : G 10
		S	W	C min.	L	E		
4	4,3	1,0	8,0	12,0	22,8	18,7	130499-0	line 1
6	6,6	1,0	13,5	11,2	24,5	17,9	130624-0	

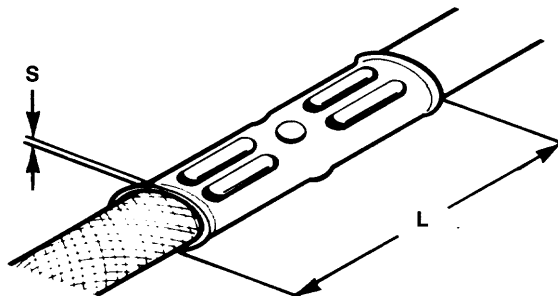
SOLISTRAND Uninsulated Terminals and Splices

Wire Pins, 0,25 - 25 mm²



Wire Size Range		Dimensions (mm)				Part Number	Tooling See p. : G 10 - G 11
(mm ²)	AWG	X	W	T	L		
0,25-1,6	22-16	6,7	1,8	1,8	14,4	165140-0	line 1
0,25-1,6	22-16	9,9	1,8	1,8	17,6	165166-0	
1,0-2,6	16-14	6,7	1,8	1,8	14,4	165045-0	
1,0-2,6	16-14	9,9	1,8	1,8	17,6	165170-0	
2,7-6,6	12-10	9,9	2,6	2,6	20,6	165048-0	
6,7-10,5	8	10,7	2,6	2,6	21,2	180599-0	line 2 - 11
10,6-16,7	6	18,0	4,3	4,3	31,4	736013-0	line 3 - 12
16,8-26,6	4	20,0	5,0	5,0	35,5	736014-0	line 3 - 13

SOLISTRAND Uninsulated Terminals and Splices

Butt Splices,
0,25 - 300 mm²0,25 to 6,6 mm², AWG 22-10

Wire size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10
	(mm ²)	Code	L	S		
1,5	0,25-1,6	AWG 22-16	14,3	0,8	31818-0	line 1
2,5	1,0-2,6	AWG 16-14	14,4	0,8	31819-0	
6	2,7-6,6	AWG 12-10	14,4	1,0	32151-0	

10 to 35 mm², AWG 8-2

Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10 - G 11
	(mm ²)	Code	L	S		
10	6,7-10,5	AWG 8	21,0	1,20	34321-0	line 2 - 11
16	10,6-16,7	AWG 6	25,8	1,45	34322-0	line 3 - 12
25	16,8-26,6	AWG 4	28,6	1,80	34323-0	line 3 - 13
35	26,7-42,4	AWG 2	32,1	1,80	35189-0	line 3 - 14

50 to 120 mm², AWG 1/0-4/0

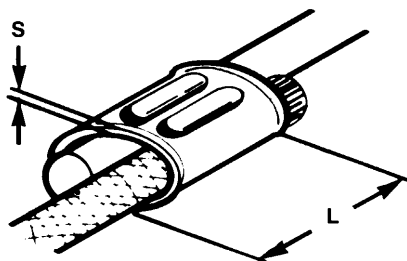
Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10 - G 11
	(mm ²)	Code	L	S		
50	42,5-60,5	AWG 1/0	36,1	1,80	36957-0	line 4 - 15
70	60,6-76,2	AWG 2/0	36,5	2,00	36958-0	line 5 - 16
95	76,3-97	AWG 3/0	37,3	2,30	36959-0	line 5 - 17
120	98-120	AWG 4/0	37,7	2,60	36960-0	line 5 - 18

150 to 300 mm², 300-600 MCM

Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 11
	(mm ²)	Code	L	S		
150	121-151	250/300 MCM	52,4	3,20	322279-0	line 19
185	152-192	300/350 MCM	55,5	3,45	322280-0	line 20
240	193-242	400 MCM	61,9	3,90	322281-0	line 21
300	243-304	500/600 MCM	70,6	4,50	322282-0	line 22

SOLISTRAND Uninsulated Terminals and Splices

Parallel Splices, 0,25 - 120 mm²



0,25 to 6,6 mm², AWG 22-10

Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10
	(mm ²)	Code	L	S		
1,5	0,25-1,6	AWG 22-16	7,6	0,8	34130-0	line 1
2,5	1,0-2,6	AWG 16-14	7,6	0,8	34137-0	
6	2,7-6,6	AWG 12-10	8,7	1,0	34138-0	

10 to 35 mm², AWG 8-2

Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10 - G 11
	(mm ²)	Code	L	S		
10	6,7-10,5	AWG 8	9,5	1,20	34318-0	line 2 - 11
16	10,6-16,7	AWG 6	11,1	1,45	34319-0	line 3 - 12
25	16,8-26,6	AWG 4	13,5	1,80	34320-0	line 3 - 13
35	26,7-42,4	AWG 2	16,3	1,80	35187-0	line 3 - 14

50 to 120 mm², AWG 1/0-4/0

Wire Size (mm ²)	Wire Size Range		Dimensions max. (mm)		Part Number	Tooling See p. : G 10 - G 11
	(mm ²)	Code	L	S		
50	42,5-60,5	AWG 1/0	18,6	1,80	36946-0	line 4 - 15
70	60,6-76,2	AWG 2/0	18,6	2,00	36948-0	line 5 - 16
95	76,3-97,0	AWG 3/0	19,0	2,30	36909-0	line 5 - 17
120	98,0-120,0	AWG 4/0	19,4	2,60	36951-0	line 5 - 18

SOLISTRAND Application Tools and Tooling

Cable cutter



Part Number : 604008-1



Cu and Al up to Ø 32
Part Number : 708726-1



Cu and Al up to Ø 52
Part Number : 708728-1

Stripping Tool



Part Number : 734185-1
0,14 to 6,6 mm²
Set of stripper blades :
PN : 1.0601827-2

Crimping hand tool



SUPER CHAMP



PRO-CRIMPER II
PN Frame
954940-1



CERTI-LOK
PN Frame
169400-0



CERTI-CRIMP Type A



CERTI-CRIMP Type B



ROTACRIMP



HYDRAULIC HAND TOOL
59975-1

For STANDARD TERMINALS AND SPLICES

Line	Wire Size mm ²	SUPER CHAMP	PRO-CRIMPER II (Including dies)	Die set for CERTILOK (frame : 169400-0)	CERTI-CRIMP		ROTACRIMP	HYDRAULIC Hand Tool (Including dies)
					Type A	Type B		
1 →	0,25-6,6	169060-8	58546-1	169409-0	49935-0			
2 →	10					69355-0	601075-0	
3 →	16-25-35						or	59975-1
4 →	50						600850-0	
5 →	70-95-120						600850-0	

SOLISTRAND Application Tools and Tooling

HEADS with Interchangeable Dies

Latch Head
69065-0



"C" Head
69099-0



"C" Head
69082-0



STANDARD TERMINALS AND SPLICES



Line	Wire Size mm ²	Part Number		Part Number	Part Number
		Nest	Indent		
11 →	10	48126-0	48335-0	69216-0	
12 →	16	48128-0		69217-0	
13 →	25	48129-0	48127-0	69218-0	
14 →	35	48130-0		45433-0	
15 →	50	48132-0		45436-0	
16 →	70	48133-0	48131-0	45439-0	
17 →	95	48134-0		45442-0	
18 →	120	300430-0		45445-0	
19 →	150				69911-0
20 →	185				69912-0
21 →	240				69913-0
22 →	300				69914-0

Recommended for use only with Hydraulic Hand pump, Part Number 314979-1, with quick coupling, working pressure 585 bar.
For additional information, see catalog 65505, p. 52.

Engineering Notes

STRATO-THERM Terminals and Splices for High Temperature Application

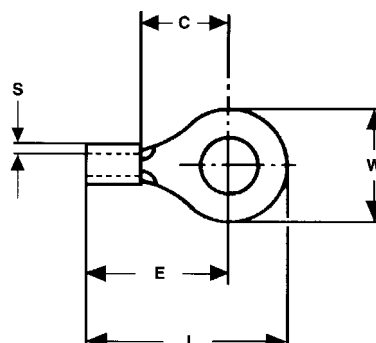
Heat... extreme heat...
serving temperatures up
to 650° C.

This is one of the most
challenging environment
that electrical/electronically
circuits has ever entered.
If heat is an unavoidable
dimension in your circuit
design and production, this
product is an important ally.
In this AMP line of
STRATO-THERM Terminals
and Splices, you'll find high
temperature circuit
hardware.

Uninsulated Terminals and
Splices from 0,25 - 6 mm²
supplied in two
temperature ranges... up to
350° C and up to 650° C
are part of this selection.

The AMP line of
STRATO-THERM Terminals
and Splices is much larger
as possibly can be shown
in this confined catalogue.

Request for catalogue
82011 to show the full
range of uninsulated and
insulated products.

**650° C
Maximum Temperature
Ring Tongues.**


Contact Material :
Nickel

0,25/1,6 mm², AWG 22-16

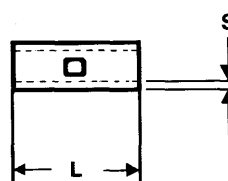
Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
3-3,5	3,6	0,8	7,1	6,3	18,5	14,9	321889-0	CERTI-CRIMP 46447-0
4	4,3	0,8	7,1	6,3	18,5	14,9	321890-0	
5	5,5	0,8	7,1	6,3	18,5	14,9	321891-0	

1,0/2,6 mm², AWG 16-14

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
3-3,5	3,6	0,8	8,7	7,1	20,3	15,9	322333-0	CERTI-CRIMP 46447-0
4	4,3	0,8	8,7	7,1	20,3	15,9	322334-0	
5	5,5	0,8	8,7	7,1	20,3	15,9	322335-0	
6	6,4	0,8	11,9	11,1	25,9	19,9	322339-0	

2,7/6,6 mm², AWG 12-10

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
4	4,3	1,0	9,5	7,1	25,0	20,2	323745-0	CERTI-CRIMP 46447-0
5	5,5	1,0	9,5	7,1	25,0	20,2	323680-0	
6	6,4	1,0	13,5	11,9	31,8	25,0	323683-0	
8	8,3	1,0	13,5	11,9	31,8	25,0	323746-0	

**650° C
Maximum Temperature
Butt Splices.**


Contact Material :
Nickel

Other Wire Size Ranges and Versions on request.

Wire Size Range (mm ²)	Dimensions (mm)		Part Number	Tooling
	S	L		
0,25-1,6	0,8	14,7	322324-0	CERTI-CRIMP 46447-0
1,0-2,6	0,8	14,4	322345-0	
2,7-6,6	1,0	14,4	323696-0	

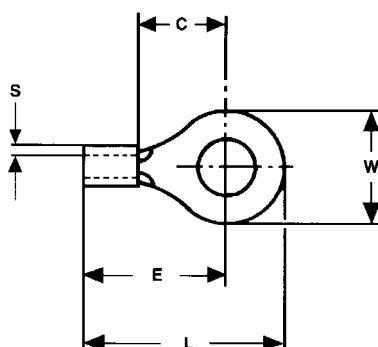
AMP and CERTI-CRIMP are trademarks

All specifications are subject to change. Consult AMP for latest designs specification

STRATO-THERM Terminals and Splices for High Temperature Application

**Ring Tongues
and Splices
for High Temperature
Applications**

**340° C
Maximum Temperature
Ring Tongues.**



Contact Material :
Copper, nickel plated

0,25/1,6 mm², AWG 22-16

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
3-3,5	3,6	0,8	5,5	4,0	15,3	12,5	322797-0	CERTI-CRIMP 46447-0
4	4,3	0,8	7,1	6,3	18,5	14,9	322798-0	
5	5,5	0,8	7,1	6,3	18,5	14,9	322799-0	

1,0/2,6 mm², AWG 16-14

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
3-3,5	3,6	0,8	8,7	7,1	20,3	15,9	322693-0	CERTI-CRIMP 46447-0
4	4,3	0,8	8,7	7,1	20,3	15,9	322694-0	
5	5,5	0,8	8,7	7,1	20,3	15,9	322695-0	
6	6,4	0,8	11,9	11,1	25,9	19,9	322733-0	

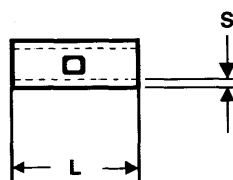
2,7/6,6 mm², AWG 12-10

Stud M	Stud Hole (mm)	Dimensions (mm)					Part Number	Tooling
		S	W	C	L	E		
4	4,3	1,0	9,5	7,7	25,6	20,8	323061-0	CERTI-CRIMP 46447-0
5	5,5	1,0	9,5	7,7	25,6	20,8	323062-0	
6	6,4	1,0	13,5	11,9	31,8	25,0	323063-0	
8	8,3	1,0	13,5	11,9	31,8	25,0	323064-0	

Other Wire Size Ranges and Versions on request.

**Butt Splices
for High Temperature
Applications**

**340° C
Maximum Temperature
Splices.**



Contact Material :
Copper, nickel plated

Wire Size Range (mm²)	Dimensions (mm)		Part Number	Tooling
	S	L		
0,25-1,6	0,8	14,7	323796-0	46447.0
1,0-2,6	0,8	14,5	322795-0	
2,7-6,6	1,0	14,4	323755-0	

Uninsulated Copper Tubular Terminals and Splices

XCT Terminals and XG7T Splices

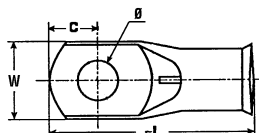
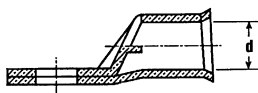
XCT Uninsulated Terminals and XG7T Uninsulated Splices are ideally suited to terminate electrical copper wire.

This range includes Ring Tongue Terminals, 90° bent Terminals, compact narrow tongue terminals, Splices.



Product Facts

- Wire size 1,5 - 630 mm².
- Tube type Terminal made from highly conductive electrolytic copper with a bright tin finish offers outstanding resistance to oxidation and corrosion.
- Designed for use with rigid stranded wires (class 2).
- Wire size and stud holes clearly marked in metric.
- Funnel entry design and inspection hole ensure ease of handling.
- Compliance with NFC 20 130 French standard.
- Application with either hex crimp type or indent crimp type tooling.



XCT Ring Tongue Terminals

Wire size mm ²	Stud M	Dimensions (mm)					Package quantity	Part Number	Tooling See p. : 3 - 4
		Ø	W	d	C	L			
1,5	3 •	3,2	6	1,8	3,25	17	100	710971-1	line 1
	4 •	4,3	6,5	1,8	4	17	100	710972-1	
	5 * •	5,3	7,5	1,8	4,75	18	100	710973-1	
	6 * •	6,4	9	1,8	6,5	19	100	711674-1	
2,5	4 •	4,3	8	2,2	4,5	18	100	710974-1	line 2
	5 •	5,3	8,5	2,2	5	19	100	710975-1	
	6 * •	6,4	9	2,2	6,5	20	100	710976-1	
	4 •	4,3	9	2,7	4,75	21	100	710977-1	
4	5 •	5,3	9	2,7	4,75	24	50	710978-1	line 3
	6 •	6,4	12	2,7	6,5	25	50	710979-1	
	4 * •	4,2	10	3,3	7	31	100	710032-1	
	5	5,2	10	3,3	7	31	100	710032-2	
6	6	6,4	13	3,3	7	31	100	710032-4	line 4
	8	8,3	13	3,3	9	35	100	710032-6	
	4 * •	4,2	11	4,2	7	33	100	710031-1	
	5	5,2	11	4,2	7	33	100	710031-2	
10	6	6,4	11	4,2	7	33	100	710031-4	line 5
	8	8,3	14	4,2	10	38	100	710031-6	
	10	10,3	14	4,2	10	38	100	710031-8	
	5 * •	5,2	12	5,3	6	34	100	710030-1	
16	6	6,4	12	5,3	6	34	100	710030-3	line 6
	8	8,3	16	5,3	9	39	100	710030-5	
	10	10,3	16	5,3	11	43	100	710030-7	
	12 * •	12,8	16	5,3	11	44	100	710030-8	
25	5 * •	5,2	13	6,6	7	35	100	710026-1	line 7
	6	6,4	13	6,6	7	35	100	710026-3	
	8	8,3	16	6,6	9	40	100	710026-5	
	10	10,3	16	6,6	11	44	100	710026-7	
35	12 * •	12,8	16	6,6	11	44	100	710026-8	line 8
	6	6,4	15	7,9	7	36	50	710027-1	
	8	8,3	17	7,9	10,5	45	50	710027-2	
	10	10,3	17	7,9	10,5	45	50	710036-3	
50	12 * •	12,8	17	7,9	10,5	45	50	710036-4	line 9
	6 * •	6,4	18	9,2	9,5	49	25	710025-3	
	8	8,3	18	9,2	9,5	49	25	710025-2	
	10	10,3	18	9,2	9,5	49	25	710025-5	
60	12	12,8	19	9,2	9,5	49	25	710025-7	line 10
	8 * •	8,3	19	10,5	10,3	53	25	709817-1	
	10 * •	10,3	19	10,5	10,3	53	25	709817-2	
	12 * •	12,8	19	10,5	10,8	56	25	709817-3	
70	8	8,3	21	11	12	58	25	710028-1	line 11
	10	10,3	21	11	12	58	25	710028-3	
	12	12,8	21	11	12	58	25	710028-5	
	16 * •	16,5	21	11	11,5	58	25	710028-8	

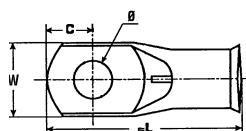
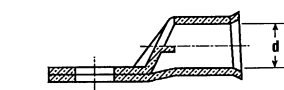
* No compliance with NFC 20 130.

• Stud diameter different than NFC 20 130 request.

Uninsulated Copper Tubular Terminals and Splices

XCT Terminals and XG7T Splices

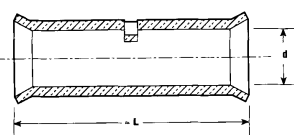
XCT Ring Tongue Terminals (continued)



Wire size mm ²	Stud M	Dimensions (mm)					Package quantity	Part Number	Tooling See p. : 3 - 4
		Ø	W	d	C	L			
95	8	8,3	23	13,1	12,2	70	25	709819-1	line 12
	10	10,3	23	13,1	12,2	70	25	709819-3	
	12	12,8	23	13,1	12,2	70	25	709819-5	
	14	14,5	23	13,1	12,2	70	25	709819-7	
	16	16,5	23	13,1	12,2	70	25	709819-8	
120	10	10,3	28	14,5	14,5	76	25	709820-1	line 13
	12	12,8	28	14,5	14,5	76	25	709820-3	
	14	14,5	28	14,5	14,5	76	25	709820-4	
	16	16,5	28	14,5	14,5	76	25	709820-6	
150	10	10,3	30	16,1	15,8	82	10	709821-2	line 14
	12	12,8	30	16,1	15,8	82	10	709821-3	
	14	14,5	30	16,1	15,8	82	10	709821-4	
	16	16,5	30	16,1	15,8	82	10	709821-5	
185	12	12,8	33	18	16,8	88	10	709822-2	line 15
	14	14,5	33	18	16,8	88	10	709822-3	
	16	16,5	33	18	16,8	88	10	709822-4	
240	14	14,5	37	20,6	19,1	99	10	709823-3	line 16
	16	16,5	37	20,6	19,1	99	10	709823-4	
	20	21,0	37	20,6	19,1	99	10	709823-5	
300	14	14,5	41	23,1	21	103	10	709818-1	line 17
	16	16,5	41	23,1	21	103	10	709818-3	
	20	21,0	41	23,1	21	103	10	709818-4	
400	16	16,5	47	26	22	120	3	709887-1	line 18
500	NP *		55	29,2		145	1	708370-1	line 19
630	NP *		60	33,2		150	1	708371-1	line 20

* Without stud hole

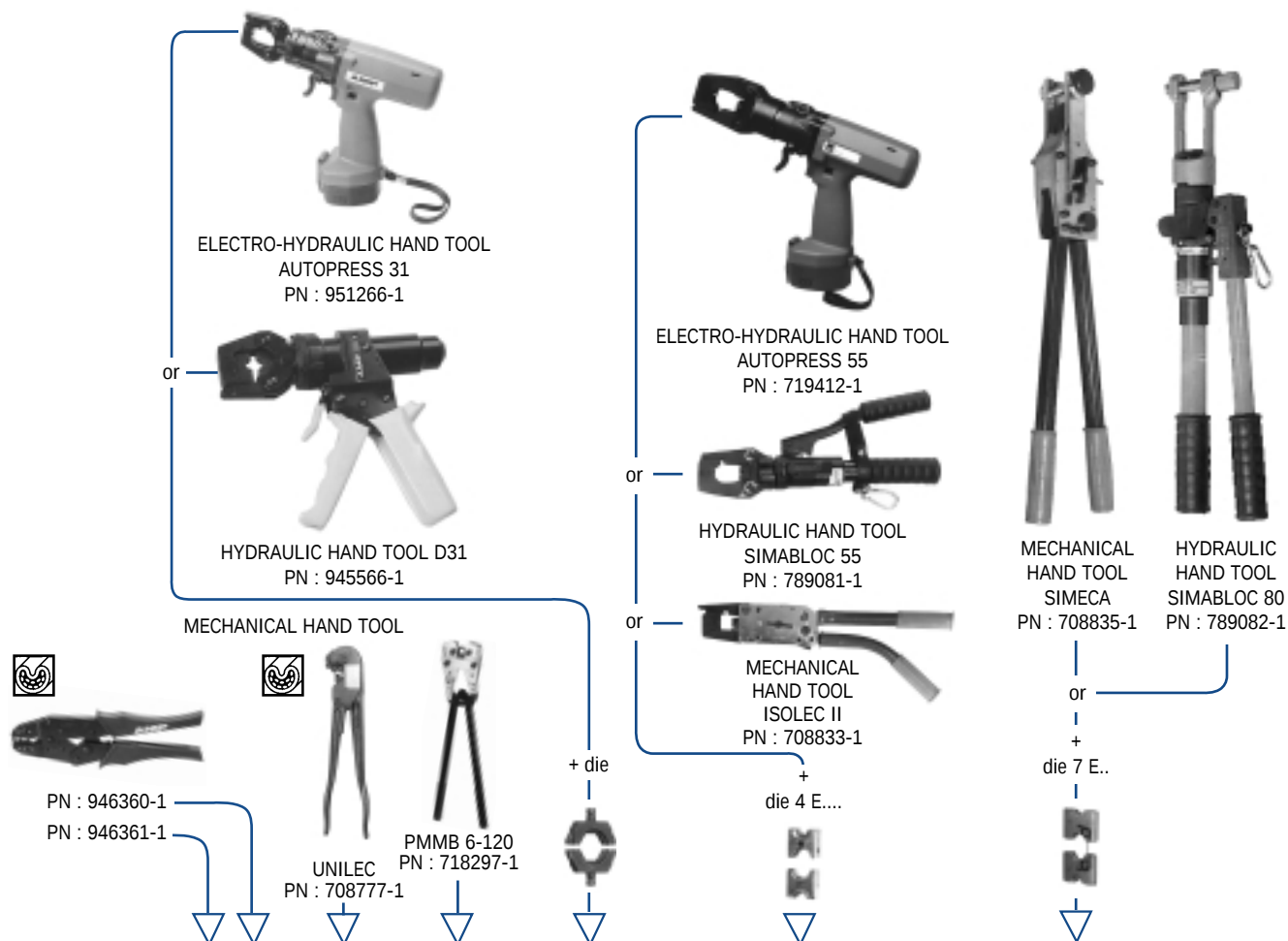
XG7T Splices



Wire size mm ²	Dimensions (mm)		Package quantity	Part Number	Tooling See p. : 3 - 4
	d	L			
1,5	1,8	15	100	710982-1	line 1
2,5	2,2	18	100	710983-1	line 2
4	2,7	22	100	710984-1	line 3
6	3,3	31	50	709834-1	line 4
10	4,2	39	50	709835-1	line 5
16	5,3	39	50	709836-1	line 6
25	6,6	39	50	709837-2	line 7
35	7,9	39	50	709838-1	line 8
50	9,2	50	25	709839-1	line 9
60	10,5	47	25	709840-1	line 10
70	11	52	25	709841-1	line 11
95	13,1	65	25	709842-1	line 12
120	14,5	71	10	709843-1	line 13
150	16,2	78	10	709844-1	line 14
185	18	86	10	709845-1	line 15
240	20,6	94	10	709846-1	line 16
300	23,1	102	5	709847-1	line 17
400	26	102	5	709574-1	line 18

Uninsulated Copper Tubular Terminals and Splices

Application Tooling for XCT., XG7T..



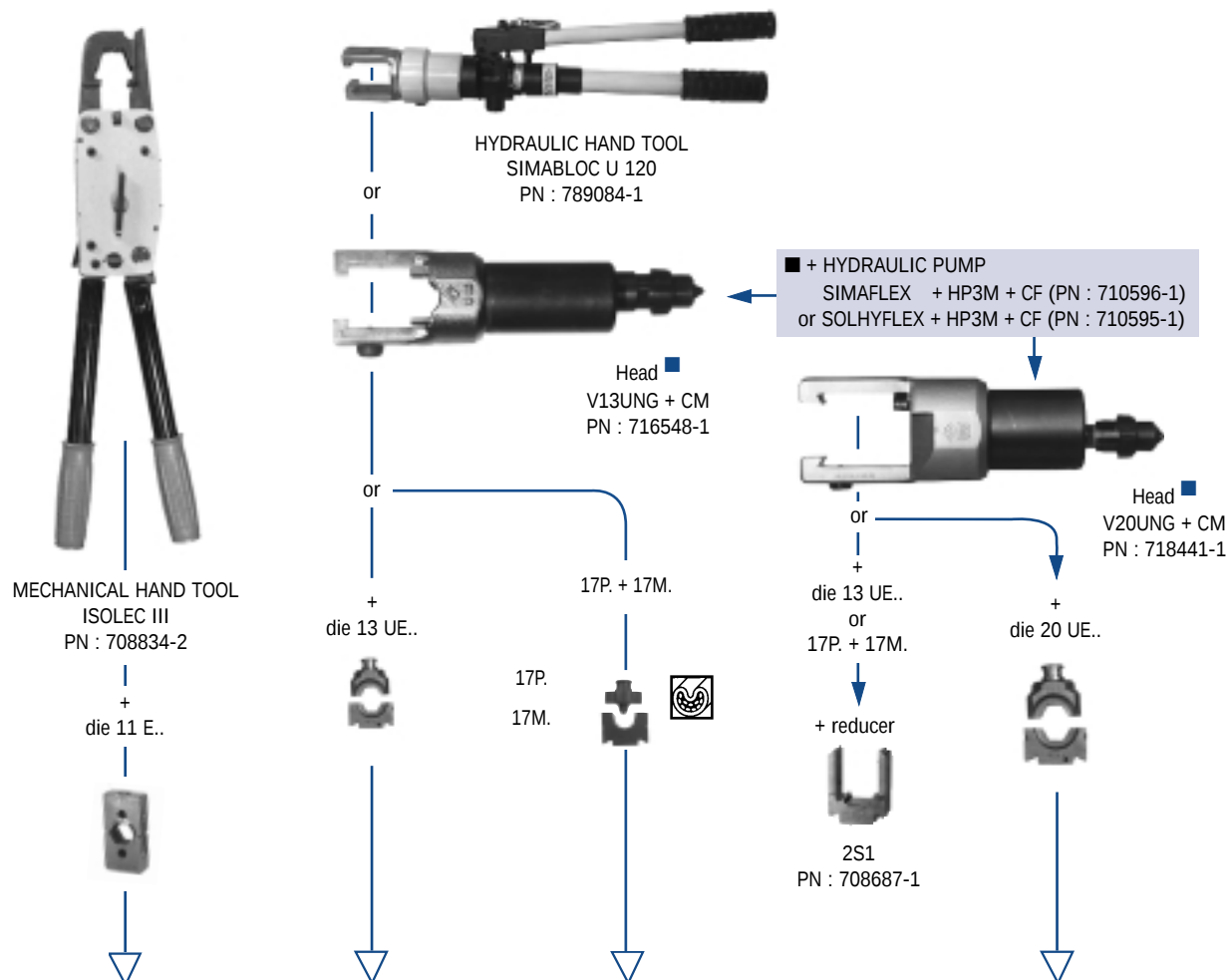
Tooling Line	Wire size mm ²				Die Part Number	Type of die 4 E..	Part Number	Type of die 7 E..	Part Number
1 →	1,5	X							
2 →	2,5	X							
3 →	4		X			4E120- 4 Cu	708802-1		
4 →	6		X	X	947926-1	4E 35- 6 Cu	708797-1	7E 10- 6 Cu	708818-1
5 →	10		X	X	945567-1	4E 50-10 Cu	708798-1	7E 10- 6 Cu	708818-1
6 →	16			X	945568-1	4E 70-16 Cu	708799-1	7E 25-16 Cu	708815-1
7 →	25			X	945569-1	4E 95-25 Cu	708801-1	7E 25-16 Cu	708815-1
8 →	35			X	945570-1	4E 35- 6 Cu	708797-1	7E 95-35 Cu	708817-1
9 →	50			X	945571-1	4E 50-10 Cu	708798-1	7E150-50 Cu	708816-1
10 →	60					4E 60 Cu	708800-1	7E 60 Cu	708825-1
11 →	70			X	945572-1	4E 70-16 Cu	708799-1	7E120-70 Cu	708819-1
12 →	95				945573-1	4E 95-25 Cu	708801-1	7E 95-35 Cu	708817-1
13 →	120					4E120-4 Cu	708802-1	7E120-70 Cu	708819-1
14 →	150					5E150 Cu *	708811-1	7E150-50 Cu	708816-1
15 →	185							7E185 Cu	708820-1
16 →	240							7E240 Cu	708824-1
17 →	300								
18 →	400								
19 →	500								
20 →	630								

* Die to be used on Autopress 55 and Simabloc 45 only.

All specifications are subject to change. Consult AMP for latest designs specification

Uninsulated Copper Tubular Terminals and Splices

Application Tooling for XCT., XG7T..

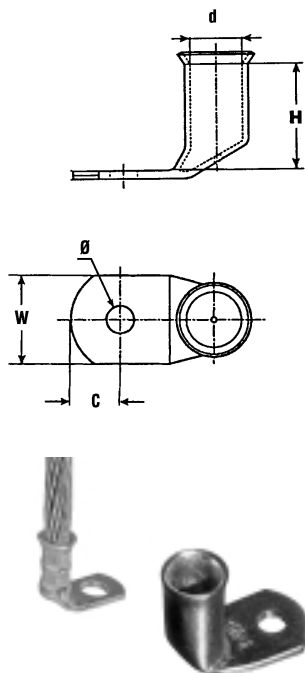


Wire Size mm²	Type of die 11 E..	Part Number	Type of die 13 UE..	Part Number	17P + 17M Indenter	Nest	Part Number	Part Number	Type of die 20 UE..	Part Number
4 → 6										
5 → 10										
6 → 16					17P16	17M6	710362-1	718356-1		
7 → 25						17M10		718355-1		
8 → 35	11E 95-35 Cu	709429-1	13UE 35 Cu	708646-1		17M16		710074-1		
9 → 50	11E150-50 Cu	709429-2	13UE 50 Cu	708646-2	17P50	17M25	708744-1	710075-1		
10 → 60						17M35		710076-1		
11 → 70	11E120-70 Cu	709429-3	13UE 70 Cu	708646-3		17M50		710077-1		
12 → 95	11E 95-35 Cu	709429-1	13UE 95 Cu	708646-4		17M60		710078-1		
13 → 120	11E120-70 Cu	709429-3	13UE120 Cu	708646-5	17PC120	17M70	710065-1	710079-1		
14 → 150	11E150-50 Cu	709429-2	13UE150 Cu	708646-6		17M95		710080-1		
15 → 185	11E185 Cu	708657-1	13UE185 Cu	708646-7		17M120		710081-1		
16 → 240	11E240 Cu	708657-2	13UE240 Cu	708646-8		17M150		710082-1		
17 → 300	11E300 Cu	708679-1	13UE300 Cu	708646-9	17PC240	17M185	710066-1	710083-1		
18 → 400						17M240		710084-1		
19 → 500									20UE300 Cu	709420-1
20 → 630									20UE400 Cu	709421-1
									20UE500 Cu	709422-1
									20UE630 Cu	709422-2

Uninsulated Copper Tubular Terminals and Splices

XCT., XCT.C.

XCT.EQ. 90° Bent Terminals



Wire size mm ²	Stud M	Dimensions (mm)					Package quantity	Part Number	Tooling See p. : 3 - 4
		Ø	W	d	C	H			
6	6	6,5	13	3,3	7,5	14,4	100	708470-1	line 4
10	6	6,5	11	4,2	6,5	12,2	100	708471-1	line 5
	8	8,5	12	4,2	10	12,2	100	708471-2	
16	6	6,5	12	5,3	6,25	13	100	708472-1	line 6
	8	8,5	16	5,3	9	12,8	100	708472-2	
25	6	6,5	13	6,6	6,25	13,5	100	708412-1	line 7
	8	8,5	16	6,6	10	13,5	100	708412-2	
35	6	6,5	15	7,9	7,5	14	50	708473-1	line 8
	8	8,5	17	7,9	10	14,5	50	708473-2	
	10	10,5	17	7,9	12	22	50	708473-3	
50	6	6,5	17	9,2	6,25	28	50	708474-1	line 9
	8	8,5	18	9,2	10	18,3	25	708474-2	
	10	10,5	18	9,2	12	18,5	25	708474-3	
70	10	10,5	21	11	12	19,5	25	708476-1	line 10
	12	13	21	11	13	19,5	25	708476-2	
95	10	10,5	23	13,1	12	35	25	708477-1	line 12
	12	13	23	13,1	13	35	25	708477-2	
120	10	10,5	28	14,5	12	38	25	708478-1	line 13
150	12	13	28	16,2	15	40	10	708479-1	line 14

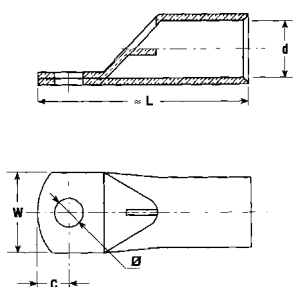
Other dimensions on request.

Ring Tongue Terminal with reduced Tongue Width

For space saving applications (circuit breakers, ...)



XCT.C Compact Narrow Tongue Terminals



Wire size mm ²	Stud M	Dimensions (mm)					Package quantity	Part Number	Tooling See p. : 3 - 4
		Ø	W	d	C	L			
120	10	10,3	24,5	14,3	11,5	63	25	708461-1	line 13
150	10	10,3	24,5	16	11,5	64,5	10	708462-1	line 14
185	10	10,3	24,5	17,8	11,5	72,5	10	708463-1	line 15
240	10	10,3	31	20,4	11,5	74	10	708464-1	line 16
300	10	10,3	31	22,9	11,5	83	10	708465-1	line 17

Other dimensions on request.

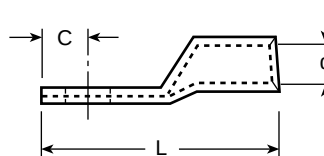
Engineering Notes

AMPOWER III Terminals and Splices

AMPOWER III Terminals and Splices are easily crimpable in a large number of indent and hex-crimp type tooling in use today. For detailed test results please contact AMP.

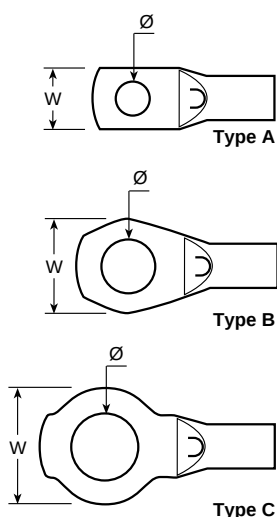
Product Facts

- Wire sizes 10-300 mm²
- Tube type terminal made from highly conductive electrolytic copper with a bright tin finish offers outstanding resistance to oxidation and corrosion.
- Designed for use with both rigid stranded (Class 2) and flexible (Class 5) wires.
- Accepts IEC 228 and IEC 719 designated cables.
- Wide cable use and tolerances reduce inventory needs.
- Wire size and stud holes clearly marked in metric.
- Chamfer design and inspection hole ensure ease of handling.
- Performance based on UL 486.A, BS 4579-1, IEC 77.
- Low tooling investment because existing indent and hex-crimp standard tool frames can be fitted with specially designed dies.

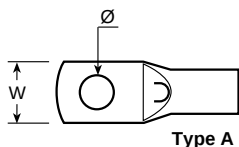
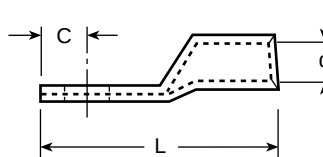


Ring Tongue Terminals

Wire Size mm²	Stud	Dimensions mm [in]					Type	Part Number	Hydraulic Heads and Dies	Hand Tools					
		Ø	W	d	C	L									
10	4	4,2	[.165]	10	[.394]	5,0	[.197]	6	[.236]	26	[1.024]	A	719538-1	SIMABLOC 55	
	5	5,2	[.205]	10	[.394]	5,0	[.197]	6,5	[.256]	27	[1.063]	A	719538-2		
	6	6,4	[.252]	11	[.433]	5,0	[.197]	7	[.276]	28	[1.102]	B	719538-3		
	8	8,3	[.327]	15	[.591]	5,0	[.197]	8	[.315]	31	[1.220]	B	719538-4		
	10	10,3	[.406]	17	[.669]	5,0	[.197]	10	[.394]	35	[1.378]	C	719538-5		
16	5	5,2	[.205]	12	[.472]	6,0	[.236]	6,5	[.256]	29	[1.142]	A	719551-1	AUTOPRESS 55	
	6	6,4	[.252]	12	[.472]	6,0	[.236]	7	[.276]	30	[1.181]	A	719551-2		
	8	8,3	[.327]	15	[.591]	6,0	[.236]	8	[.315]	33	[1.299]	B	719551-3		
	10	10,3	[.406]	17	[.669]	6,0	[.236]	10	[.394]	37	[1.457]	C	719551-4		
	12	12,8	[.504]	22	[.866]	6,0	[.236]	12	[.472]	42	[1.654]	C	719551-5		
25	6	6,4	[.252]	15	[.591]	7,7	[.303]	7	[.276]	32	[1.260]	A	719552-1	SIMABLOC U120	
	8	8,3	[.327]	15	[.591]	7,7	[.303]	8	[.315]	35	[1.378]	A	719552-2		
	10	10,3	[.406]	17	[.669]	7,7	[.303]	10	[.394]	39	[1.535]	B	719552-3		
	12	12,8	[.504]	22	[.866]	7,7	[.303]	12	[.472]	44	[1.732]	C	719552-4		
	14	14,5	[.571]	24	[.945]	8,3	[.327]	14	[.551]	51	[2.008]	A	719555-2		
35	6	6,4	[.252]	17	[.669]	9,0	[.354]	7	[.276]	38	[1.496]	A	719553-1	HEAD V 13 U NG WITH DIES 13M+13P AMP III	
	8	8,3	[.327]	17	[.669]	9,0	[.354]	8	[.315]	41	[1.614]	A	719553-2		
	10	10,3	[.406]	17	[.669]	9,0	[.354]	10	[.394]	45	[1.772]	A	719553-3		
	12	12,8	[.504]	22	[.866]	9,0	[.354]	12	[.472]	50	[1.969]	B	719553-4		
	16	16,5	[.649]	27	[1.063]	10,5	[.413]	7	[.276]	41	[1.614]	A	719554-1		
50	8	8,3	[.327]	19	[.748]	10,5	[.413]	8	[.315]	44	[1.732]	A	719554-2	HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES 13M+13P AMP III	
	10	10,3	[.406]	19	[.748]	10,5	[.413]	10	[.394]	48	[1.890]	A	719554-3		
	12	12,8	[.504]	22	[.866]	10,5	[.413]	12	[.472]	53	[2.087]	B	719554-4		
	14	14,5	[.571]	24	[.945]	13,2	[.520]	8	[.315]	47	[1.850]	A	719555-1		
	16	16,5	[.649]	27	[1.063]	13,2	[.520]	10	[.394]	51	[2.008]	A	719555-2		
70	12	12,8	[.504]	24	[.945]	13,2	[.520]	12	[.472]	56	[2.205]	A	719555-3	ISOLEC III	
	14	14,5	[.571]	24	[.945]	13,2	[.520]	14	[.551]	60	[2.362]	A	719555-4		
	16	16,5	[.649]	27	[1.063]	13,2	[.520]	16	[.630]	63	[2.480]	B	719555-5		
	8	8,3	[.327]	27	[1.063]	15,0	[.591]	8	[.315]	53	[2.087]	A	719556-1		SIMABLOC U120
	10	10,3	[.406]	27	[1.063]	15,0	[.591]	10	[.394]	57	[2.244]	A	719556-2		
95	12	12,8	[.504]	27	[1.063]	15,0	[.591]	12	[.472]	62	[2.441]	A	719556-3		
	14	14,5	[.571]	27	[1.063]	15,0	[.591]	14	[.551]	65	[2.559]	A	719556-4		
	16	16,5	[.649]	27	[1.063]	15,0	[.591]	16	[.630]	68	[2.677]	A	719556-5		

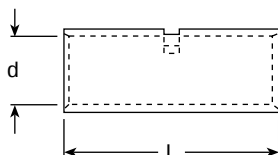


AMPOWER III Ring Tongue Terminals (Continued)



Wire Size mm²	Stud M	Dimensions mm [in]						Type	Part Number	Hydraulic Heads and Dies	Hand Tools				
		Ø	W	d	C	L									
120	10	10,3	[.406]	29	[1.142]	16,2	[.638]	10	[.394]	62	[2.441]	A	719557-1	HEAD V 13 U NG WITH DIES 13M+13P AMP III	SIMABLOC U120
	12	12,8	[.504]	29	[1.142]	16,2	[.638]	12	[.472]	67	[2.638]	A	719557-2	OR	
	14	14,5	[.571]	29	[1.142]	16,2	[.638]	14	[.551]	70	[2.756]	A	719557-3	HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES	
	16	16,5	[.649]	29	[1.142]	16,2	[.638]	16	[.630]	73	[2.874]	A	719557-4	13M+13P AMP III	
150	12	12,8	[.504]	32	[1.260]	18,0	[.709]	12	[.472]	71	[2.795]	A	719558-1	HEAD V 13 U NG WITH DIES	SIMABLOC U120
	14	14,5	[.571]	32	[1.260]	18,0	[.709]	14	[.551]	75	[2.953]	A	719558-2	13M+13P AMP III	
	16	16,5	[.649]	32	[1.260]	18,0	[.709]	16	[.630]	79	[3.110]	A	719558-3	OR	
	20	21	[.826]	32	[1.260]	18,0	[.709]	20	[.787]	87	[3.425]	A	719558-4		
185	12	12,8	[.504]	37	[1.457]	20,6	[.811]	12	[.472]	76	[2.992]	A	719559-1	HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES	NON
	14	14,5	[.571]	37	[1.457]	20,6	[.811]	14	[.551]	80	[3.150]	A	719559-2	13M+13P AMP III	
	16	16,5	[.649]	37	[1.457]	20,6	[.811]	16	[.630]	84	[3.307]	A	719559-3	OR	
	20	21	[.826]	37	[1.457]	20,6	[.811]	20	[.787]	92	[3.622]	A	719559-4		
240	12	12,8	[.504]	41,5	[1.634]	23,0	[.906]	12	[.472]	80	[3.150]	A	719560-1	HEAD V 20 U NG WITH DIES	NON
	14	14,5	[.571]	41,5	[1.634]	23,0	[.906]	14	[.472]	84	[3.307]	A	719560-2	20M+20P AMP III	
	16	16,5	[.649]	41,5	[1.634]	23,0	[.906]	16	[.630]	88	[3.465]	A	719560-3	OR	
	20	21	[.826]	41,5	[1.634]	23,0	[.906]	20	[.787]	96	[3.780]	A	719560-4		
300	16	16,5	[.649]	47	[1.850]	26,1	[1.028]	16	[.630]	98	[3.858]	A	719561-1	HEAD V 20 U NG WITH DIES	NON
	20	21	[.826]	47	[1.850]	26,1	[1.028]	20	[.787]	106	[4.173]	A	719561-2	20M+20P AMP III	

Splices



Wire Size mm ²	Dimensions mm [in]		Part Number	Hydraulic Heads and Dies	Hand Tools
	d	L			
10	5,0 [197]	24,0 [945]	719689-1	HEAD V 13 U NG WITH DIES 13M+13P AMP III OR HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES 13M+13P AMP III	SIMABLOC 55 OR AUTOPRESS 55 OR SIMABLOC U120 OR ISOLEC III (35mm ² ONLY)
16	6,0 [236]	26,0 [1.024]	719690-1		
25	7,7 [303]	28,0 [1.102]	719691-1		
35	9,0 [354]	34,0 [1.339]	719692-1		
50	10,5 [413]	38,0 [1.496]	719693-1	HEAD V 13 U NG WITH DIES 13M+13P AMP III OR HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES 13M+13P AMP III	SIMABLOC U120
70	13,2 [520]	42,0 [1.654]	719694-1		
95	15,0 [591]	49,0 [1.929]	719695-1		
120	16,2 [638]	53,0 [2.087]	719696-1		
150	18,0 [709]	57,0 [2.244]	719697-1	HEAD V 13 U NG WITH DIES 13M+13P AMP III OR HEAD V 20 U NG WITH REDUCER 2S1 WITH DIES 13M+13P AMP III	SIMABLOC U120
185	20,6 [811]	61,0 [2.402]	719698-1		
240	23,0 [906]	75,0 [2.953]	719699-1		
300	26,1 [1.028]	85,0 [3.346]	719700-1	HEAD V 20 U NG WITH DIES 20M+20P AMP III	NON

AMPOWER III Tooling



HEAD V 13 U NG



HEAD V 20 U NG



Reducer 2S1

Hydraulic Heads

Description	Part Number	To Be Used with Dies	Application	Weight	
				kg.	Lb. and Oz.
HEAD V 13 U NG	716548-1	DIES 13...	10 - 300 mm ²	3,9	8 lb. 10 oz.
HEAD V 20 U NG	718441-1	DIES 13...WITH REDUCER 2S1	10 - 300 mm ²	7,0	15 lb. 7 oz.
		DIES 20	150 - 300 mm ²		
REDUCER 2S1	708687-1	—	—	0,4	14 oz.



SIMABLOC 55



AUTOPRESS 55



ISOLEC III



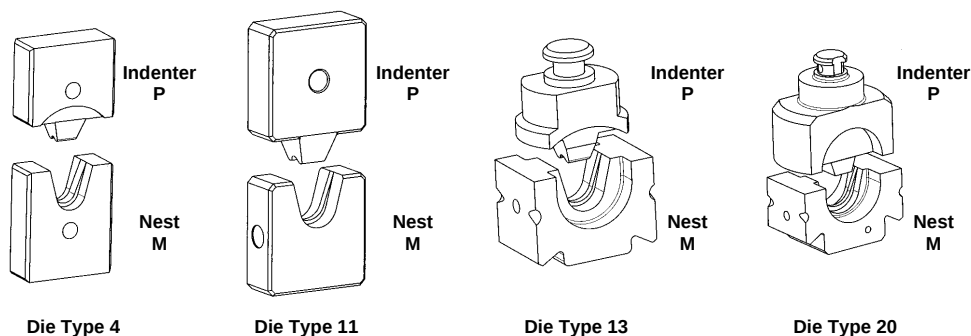
SIMABLOC U 120

Mechanical and Hydraulic Hand Tools

Description	Part Number	To Be Used with Dies	Application	Weight	
				kg.	Lb. and Oz.
SIMABLOC 55 Hydraulic Hand Tool	789081-1	4M+4P AMP III	10 - 35 mm ²	1,9	4 lbs. 3 oz.
AUTOPRESS 55 Electro-Hydraulic Hand Tool	719412-1	4M+4P AMP III	10 - 35 mm ²	3,8	8 lbs. 6 oz.
ISOLEC III Mechanical Hand Tool	708834-2	11M+11P AMP III	35 - 95 mm ²	4,5	9 lbs. 15 oz.
SIMABLOC U 120 Hydraulic Hand Tool	789084-1	13M+13P AMP III	10 - 240 mm ²	3,9	8 lbs. 10 oz.

For hydraulic power units, hoses, cases, kits and accessories please consult AMP for information.

AMPOWER III Dies



Wire Size mm ²	Type of Die 4	Part Number		To Be Used with Tools
		Indenter P	Nest M	
10	4P + 4M AMP III 10	1018536-1	1018532-1	SIMABLOC 55 Hydraulic Hand Tool OR AUTOPRESS 55 Electro-Hydraulic Hand Tool
16	4P + 4M AMP III 16	1018536-1	1018533-1	
25	4P + 4M AMP III 25	1018537-1	1018534-1	
35	4P + 4M AMP III 35	1018537-1	1018535-1	

Wire Size mm ²	Type of Die 11	Part Number		To Be Used with Tools
		Indenter P	Nest M	
35	11P + 11M AMP III 35	1018542-1	1018538-1	ISOLEC III Mechanical Hand Tool
50	11P + 11M AMP III 50	1018543-1	1018539-1	
70	11P + 11M AMP III 70	1018543-1	1018540-1	
95	11P + 11M AMP III 95	1018544-1	1018541-1	

Wire Size mm ²	Type of Die 13	Part Number		To Be Used with Tools
		Indenter P	Nest M	
10	13P + 13M AMP III 10	719713-1	719701-1	SIMABLOC U 120 (10 - 240 mm ²) OR HEAD V 13 U NG OR HEAD V 20 U NG WITH REDUCER 2S1
16	13P + 13M AMP III 16	719713-1	719702-1	
25	13P + 13M AMP III 25	719714-1	719703-1	
35	13P + 13M AMP III 35	719714-1	719704-1	
50	13P + 13M AMP III 50	719715-1	719705-1	HEAD V 13 U NG OR HEAD V 20 U NG WITH REDUCER 2S1
70	13P + 13M AMP III 70	719715-1	719706-1	
95	13P + 13M AMP III 95	719716-1	719707-1	
120	13P + 13M AMP III 120	719716-1	719708-1	
150	13P + 13M AMP III 150	719717-1	719709-1	
185	13P + 13M AMP III 185	719717-1	719710-1	
240	13P + 13M AMP III 240	719718-1	719711-1	
300	13P + 13M AMP III 300	719718-1	719712-1	

Wire Size mm ²	Type of Die 20	Part Number		To Be Used with Tools
		Indenter P	Nest M	
150	20P + 20M AMP III 150	1018549-1	1018545-1	HEAD V 20 U NG
185	20P + 20M AMP III 185	1018549-1	1018546-1	
240	20P + 20M AMP III 240	1018550-1	1018547-1	
300	20P + 20M AMP III 300	1018550-1	1018548-1	

All part numbers refer to the tool itself.
For hydraulic power units, hoses, cases, kits and accessories please consult AMP for information.

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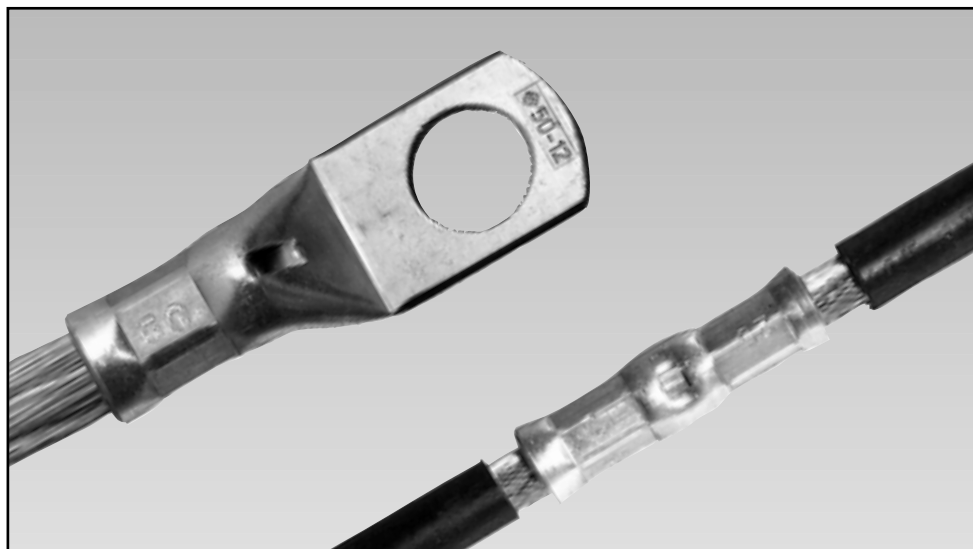
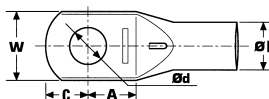
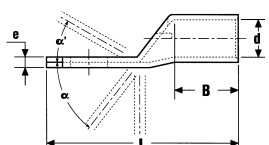
Uninsulated Copper Tubular Terminals and Splices

CTN Terminals and MJTN Splices

CTN Uninsulated Terminals and MJTN Uninsulated Splices are specially designed for flexible wires.

Product Facts

- Wire size 10 - 240 mm².
- Tube type Terminal made from highly conductive electrolytic copper with a bright tin finish offers outstanding resistance to oxidation and corrosion.
- Designed for use with flexible copper wires (class 5).
- Used in Railway rolling stock, railway signalling installations and electrical power supply systems.
- Wire size and stud hole clearly marked in metric.
- Chamfer design and inspection hole ensure ease of handling.
- Compliance with NFF 00363.
- Application tooling available to comply with French or Swedish specifications.
- Can be crimped either with hex crimp or indent crimp



CTN Ring Tongue Terminals

Wire Size mm ²	Stud M	Dimensions (mm)									Part Number	Tooling See p. : 0 3
		d	D	E	W	e	L	A	C	B		
10	4	4,4	5	8	15,5	2	34	10	8	10	707880-1	line 1 - 7
	5	5,6	5	8	15,5	2	34	10	8	10	707880-2	
	6	6,6	5	8	15,5	2	34	10	8	10	707880-3	
	8	8,6	5	8	15,5	2	34	10	8	10	707880-4	
	10*	10,8	5	8	17,5	2	36	12	8	10	707880-5	
	12*	13	5	8	17,5	2	36	12	8	10	707880-6	
16	6	6,6	6	9	17,3	2	37	10	8	11	707881-1	line 2 - 8
	8	8,6	6	9	17,3	2	37	10	8	11	707881-2	
	10*	10,8	6	9	18	1,6	39	12	8	11	707881-3	
	12*	13	6	9	18	1,6	39	12	8	11	707881-4	
25	5	5,6	7,7	10,5	17,3	2,3	45	11	10	13	707870-1	line 3 - 9
	6	6,6	7,7	10,5	17,3	2,3	45	11	10	13	707870-2	
	8	8,6	7,7	10,5	17,3	2,3	45	11	10	13	707870-3	
	10*	10,8	7,7	10,5	18,5	2,3	45	11	10	13	707870-4	
	12*	13	7,7	10,5	18,5	2,3	45	11	10	13	707870-5	
35	6	6,6	9	12	18	2,5	50	13	11	16,5	707869-1	line 4 - 10
	8	8,6	9	12	18	2,5	50	13	11	16,5	707869-2	
	10*	10,8	9	12	18	2,5	50	13	11	16,5	707869-3	
	12*	13	9	12	18	2,5	50	13	11	16,5	707869-5	
50	6	6,6	10,5	14	21,5	3	58	14	12	19	707868-1	line 5 - 11
	8	8,6	10,5	14	21,5	3	58	14	12	19	707868-2	
	10*	10,8	10,5	14	21,5	3	58	14	12	19	707868-3	
70	8	8,6	12,5	16	25	3	66	17	15	22	707867-1	line 6 - 12
	10	10,8	12,5	16	25	3	66	17	15	22	707867-2	
	12	13	12,5	16	25	3	66	17	15	22	707867-3	
	10	10,8	14,5	18,5	28	3,5	73	18	16,5	25	707866-1	
95	12	13	14,5	18,5	28	3,5	73	18	16,5	25	707866-2	line 13
	14	15	14,5	18,5	28	3,5	73	18	16,5	25	707866-3	

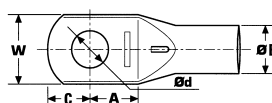
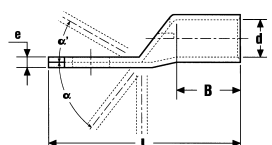
* Compact Terminal (tongue narrower than NFF 0363 standard request) not complying with NFF 00363.

Uninsulated Copper Tubular Terminals and Splices

CTN Terminals and MJTN Splices



CTN Ring Tongue Terminals



Wire Size in mm ²	Stud M	Dimensions (mm)									Part Number	Tooling See p. : 0 3
		d	D	E	W	e	L	A	C	B		
120	10	10,8	16,2	21	31	4,3	84	21	17,5	28	707865-1	line 14
	12	13	16,2	21	31	4,3	84	21	17,5	28	707865-2	
	14	15	16,2	21	31	4,3	84	21	17,5	28	707865-3	
	16	17	16,2	21	31	4,3	84	21	17,5	28	707865-4	
150	10	10,8	18	23	34	4,5	90	23	19	31	707864-1	line 15
	12	13	18	23	34	4,5	90	23	19	31	707864-2	
	14	15	18	23	34	4,5	90	23	19	31	707864-3	
	16	17	18	23	34	4,5	90	23	19	31	707864-4	
	18	19	18	23	34	4,5	90	23	19	31	707864-5	
185	12	13	20,6	26	38,5	4,9	102	25	21,5	35	707863-1	line 16
	14	15	20,6	26	38,5	4,9	102	25	21,5	35	707863-2	
	16	17	20,6	26	38,5	4,9	102	25	21,5	35	707863-3	
	18	19	20,6	26	38,5	4,9	102	25	21,5	35	707863-4	
240	14	15	23	29	43	5,3	110	28	24	39	707862-1	line 17
	16	17	23	29	43	5,3	110	28	24	39	707862-2	
	18	19	23	29	43	5,3	110	28	24	39	707862-3	
	20	21	23	29	43	5,3	110	28	24	39	707862-4	

* Compact Terminal (tongue narrower than NFF 0363 standard request) not complying with NFF 00363.

All specifications are subject to change. Consult AMP for latest designs specification



MJTN Splices



Sectional area mm ²	Dimensions			Part Number	Tooling See p. : 0 3
	D	ØE	L		
10	5	8	30	707885-1	line 1 - 7
16	6	9	35	707886-1	line 2 - 8
25	7,7	10,5	35	707887-1	line 3 - 9
35	9	12	38	707888-1	line 4 - 10
50	10,5	14	43	707889-1	line 5 - 11
70	12,5	16	49	707890-1	line 6 - 12
95	14,5	18,5	56	707895-1	line 13
120	16,2	21	62	707896-1	line 14
150	18	23	68	707897-1	line 15
185	20,6	26	76	707898-1	line 16
240	23	29	84	707899-1	line 17

All specifications are subject to change. Consult AMP for latest designs specification

Uninsulated Copper Tubular Terminals and Splices

Application Tooling for CTN and MJTN

10 to 70 mm²



MECHANICAL HAND-TOOL
ISOLEC II
P. N : 708833-1

HYDRAULIC HAND-TOOL
SIMABLOC 55
P. N : 789081-1

ELECTRO-HYDRAULIC
AUTOPRESS 55
P. N : 719412-1

Line	Wire Size mm ²	Type of Die 4E.. CTN	Part Number
1 →	10	4E 35-10 CTN	707956-1
2 →	16	4E 50-16 CTN	707957-1
3 →	25	4E 70-25 CTN	707958-1
4 →	35	4E 35-10 CTN	707956-1
5 →	50	4E 50-16 CTN	707957-1
6 →	70	4E 70-25 CTN	707958-1

10 to 240 mm²

HYDRAULIC HAND-TOOL
SIMABLOC U 120
P. N : 789084-1
240 mm² maxi

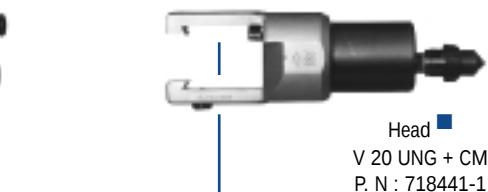
Head ■
V 13 UNG + CM
P. N : 716548-1



+
die 13 UE..



+
die 13 CT



Head ■
V 20 UNG + CM
P. N : 718441-1

+
die 13 UE..



+
die 13 CT



+
reducer
2S1



P. N : 708687-1

+
die 20 UE.. CT



Tooling	Wire Size	Type of Die	Part	Type of Die 13 CT				Part Number		Type of Die	Part
Line	mm ²	13UE..	Number	Indenter P..	+	Nest M		Indenter P	Nest M	20UE.. CT	Number
7 →	10	13 UE 10 CT	707872-1	13 CTW 10- 35		13 CTW 10		718816-1	718817-1	20 UE 16 CT	707902-2
8 →	16	13 UE 16 CT	707872-2			13 CTW 16			718818-1	20 UE 16 CT	707902-2
9 →	25	13 UE 25 CT	707872-3			13 CTW 25			718819-1	20 UE 25 CT	707902-3
10 →	35	13 UE 35 CT	707873-1			13 CTW 35			718820-1	20 UE 35 CT	707901-1
11 →	50	13 UE 50 CT	707873-2	13 CTN 50- 70		13 CTN 50- 70		718450-1	718449-1	20 UE 50 CT	707901-2
12 →	70	13 UE 70 CT	707873-3			13 CTN 50- 70				20 UE 70 CT	707901-3
13 →	95	13 UE 95 CT	707873-4	13 CTN 95-120		13 CTN 95-120		718452-1	718451-1	20 UE 95 CT	707901-4
14 →	120	13 UE 120 CT	707874-1			13 CTN 95-120				20 UE 120 CT	707900-1
15 →	150			13 CTN 150-185		13 CTN 150-185		718454-1	718453-1	20 UE 150 CT	707900-2
16 →	185					13 CTN 150-185				20 UE 185 CT	707900-3
17 →	240					13 CTN 150-185				20 UE 240 CT	707900-4

4 E..CTN, 13 UE. and 20 UE. die sets for compliand with NFF 00363 French std.
13 CTW. and 13 CTN. die sets for compliand with Swedish spec. N° 2098134.

■ + hydraulic pump SIMAFLEX + HP3M+CF (PN 710596-1)
or SOLHYFLEX+HP3M+CF (PN 710595-1)

All specifications are subject to change. Consult AMP for latest designs specification

Engineering Notes

Connectors for Underground Networks

Product Facts :

Straight end lug, with aluminium barrel and copper tag for aluminium core cables, or possibly copper cables of cross-section $\leq 50 \text{ mm}^2$.

Simplified outside or inside ends for synthetically insulated cables.

Functional end boxes.
LV and MV cable ends.

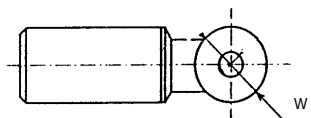
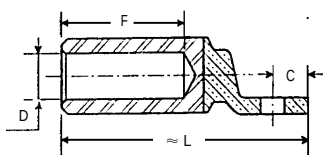
Technical specifications :
HN68S90, appendix 2.



XCX Ring Tongue Terminals

Wire size size (mm ²)	Reference AMP-SIMEL	Stud Dia.	DIMENSIONS						Part Number	Tools and dies see page 2-3
			W	D	C	L maxi	F mini			
16	XCX 16	10,5	20	5,5	10	78,5	40		708235-1	line 1
25	XCX 25	10,5	20	6,5	10	78,5	40		708235-2	line 1
35	XCX 35	12,8	25	8	12,5	78,5	40		708249-1	line 1
50	XCX 50	12,8	25	9	12,5	88,5	40		708250-1	line 2
70	XCX 70	12,8	25	11	12,5	88,5	40		708250-4	line 2
95	XCX 95	12,8	25	12,5	12,5	88,5	40		708250-7	line 2
120	XCX 120	12,8	30	13,7	15	108,5	55,5		708255-1	line 3
150	XCX 150	12,8	30	15,5	15	108,5	55,5		708255-4	line 3
185	XCX 185	12,8	30	17	15	108,5	55,5		708264-1	line 4
240	XCX 240	12,8	30	19,5	15	108,5	55,5		708264-4	line 4

For XG8BM, XN8BM, see page 4



Applications Tooling for XCX, XG8BM, XN8BM

Mechanical Hand Tool

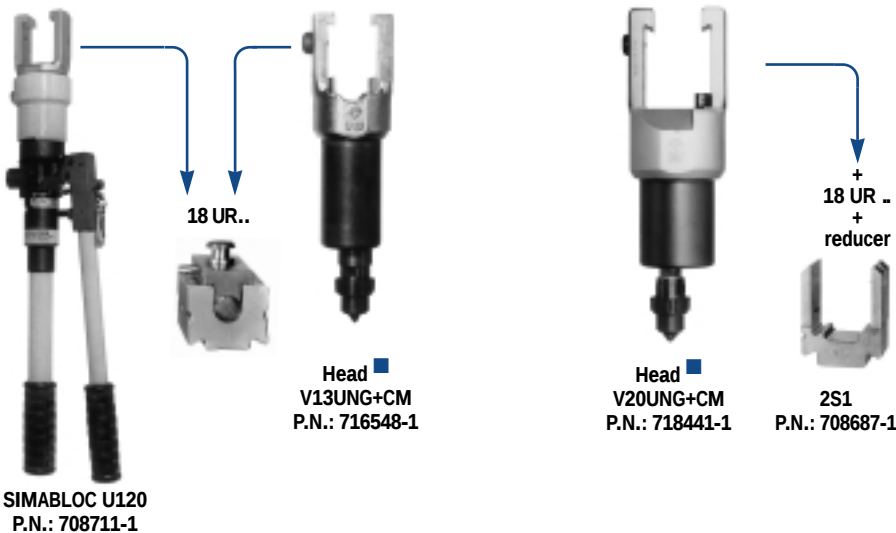


Connector	Line	Wire Size mm²	Die	P.N.	Punch	P.N.
	1 →	16-25-35	18 ME 35	710056-1	11 PE 35	710071-1
	2 →	50-70-95	18 ME 95	708665-1	11 PE 95	710071-2
	3 →	120-150	18 ME 150	708667-1	11 PE 150	710071-3

XCX

Hydraulic Hand Tools

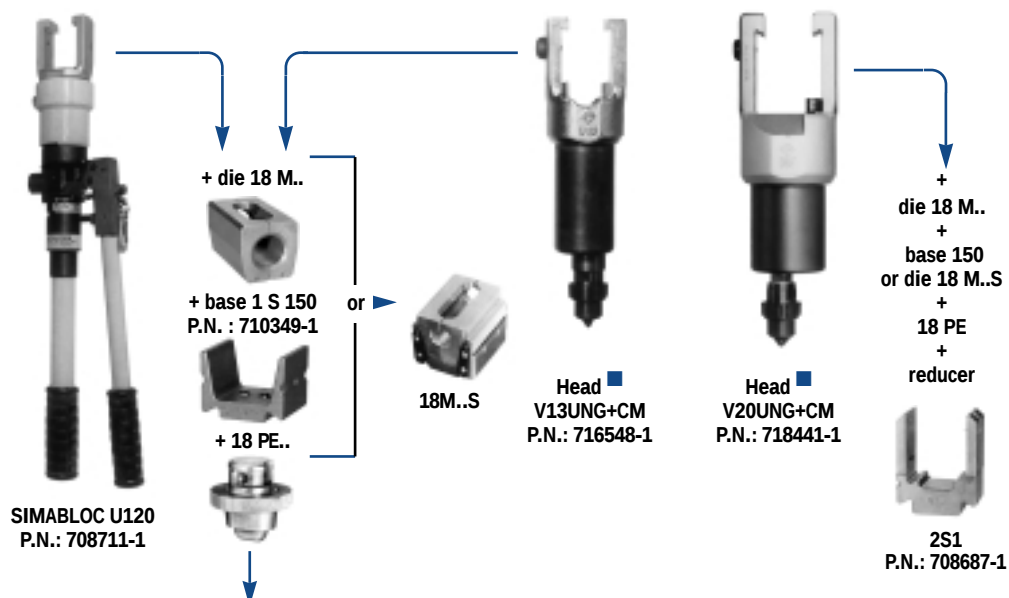
Rounding dies



Wire Size mm²	Reference	P.N.
50	18 UR 50	709388-1
70	18 UR 70	709379-1
95	18 UR 95	709380-1
120	18 UR 120	709381-1
150	18 UR 150	709382-1
185	18 UR 185	709383-1
240	18 UR 240	709384-1
300	28 R 300	709431-1

Applications Tooling for XCX, XG8BM, XN8BM

Hydraulic Hand Tools



Connector



XCX

Line	Wire Size mm ²	Die	P.N.	die with Integral base	P.N.	Punch	P.N.
1 →	16-25-35	18 ME 35	710056-1	18 MES 35	708626-1	18 PE 35	710055-1
2 →	50-70-95	18 ME 95	708665-1	18 MES 95	708627-1	18 PE 95	710042-1
3 →	120-150	18 ME 150	708667-1	18 MES 150	708628-1	18 PE 150	710043-1
4 →	185-240	18 ME 240	708672-1	18 MES 240	708629-1	18 PE 240	710044-1

Connectors



XN8BM



Line	Wire Size mm ²	Die	P.N.	die with Integral base	P.N.	Punch	P.N.
5 →	16-25-35	18 MBM 35	709393-1	18 MBMS 35	708634-2	18 PE 35	710055-1
6 →	50-70-95	18 MBM 95	709387-1	18 MBMS 95	708630-1	18 PE 95	710042-1
7 →	120-150	18 MBM 150	708886-1	18 MBMS 150	708631-1	18 PE 150	710043-1
8 →	185-240	18 MBM 240	708887-1	18 MBMS 240	708632-1	18 PE 240	710044-1

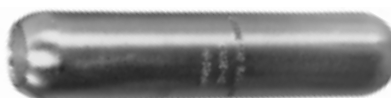
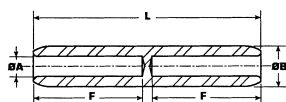
■ for hydraulic pump

- SIMAFLEX + HP3M + CF
P.N. : 710596-1- SOLHYFLEX + HP3M + CF
P.N. : 710595-1

Aluminium junction fittings

- Joining LV and MV cables of equal cross-section, for aluminium cores of cross-section $\leq 240 \text{ mm}^2$ and possibly copper cables of cross-section $\leq 50 \text{ mm}^2$.

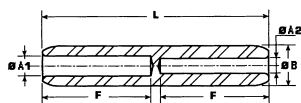
- Technical specification :
HN68S90, appendix 8.



Wire Size mm ²	Reference.	Dimensions (mm)				Part Number	Tools and dies See P. K 2-3
		Ø B	Ø A	F	L		
16- 16	XG8BM 16	16	5,5	37,3	90,5	708979-1	line 5
25- 25	XG8BM 25	16	6,5	37,3	90,5	708943-1	line 5
35- 35	XG8BM 35	16	8	37,3	90,5	708942-1	line 5
50- 50	XG8BM 50	20	9	44,8	106,5	708937-1	line 6
70- 70	XG8BM 70	20	11	44,8	106,5	708938-1	line 6
95- 95	XG8BM 95	20	12,5	44,8	106,5	708954-1	line 6
120-120	XG8BM 120	25	13,7	55,4	133	708961-1	line 7
150-150	XG8BM 150	25	15,5	55,4	133	708953-1	line 7
185-185	XG8BM 185	32	17	57,3	143,5	708939-1	line 8
240-240	XG8BM 240	32	19,5	57,3	143,5	708934-1	line 8

- Joining LV and MV cables of unequal cross-section, for aluminium cores of cross-section $\leq 240 \text{ mm}^2$ and possibly copper cables of cross-section $\leq 50 \text{ mm}^2$.

- Technical specification :
HN68S90, appendix 9.



Wire Size mm ²	Reference.	Dimensions (mm)				Part Number	Tools and Dies See P. K 2-3
		Ø B	Ø A1	Ø A2	F		
50- 25	XN8BM 50- 25	20	9	6,5	44,8	709030-2	line 6
50- 35	XN8BM 50- 35	20	9	8	44,8	709030-3	line 6
70- 50	XN8BM 70- 50	20	11	9	44,8	708955-3	line 6
95- 35	XN8BM 95- 35	20	12,5	8	44,8	708949-3	line 6
95- 50	XN8BM 95- 50	20	12,5	9	44,8	708949-4	line 6
95- 70	XN8BM 95- 70	20	12,5	11	44,8	708949-5	line 6
150- 35	XN8BM 150- 35	25	15,5	8	55,4	708950-1	line 7
150- 50	XN8BM 150- 50	25	15,5	9	55,4	708950-2	line 7
150- 70	XN8BM 150- 70	25	15,5	11	55,4	708950-3	line 7
150- 95	XN8BM 150- 95	25	15,5	12,5	55,4	708950-5	line 7
150-120	XN8BM 150-120	25	15,5	13,7	55,4	708950-6	line 7
240- 70	XN8BM 240- 70	32	19,5	11	57,3	708940-1	line 8
240- 95	XN8BM 240- 95	32	19,5	12,5	57,3	708940-2	line 8
240-150	XN8BM 240-150	32	19,5	15,5	57,3	708940-4	line 8

The fitting comes with sufficient insulating compound for filling the punch indents after mounting.

XG8BM gusset for re-insulating (for LV use only)



Fitting type	Part Number
For XG8BM/XN8BM 16 to 95 mm ²	716463-1
For XG87BM/XN87BM 16 to 240 mm ²	716464-1

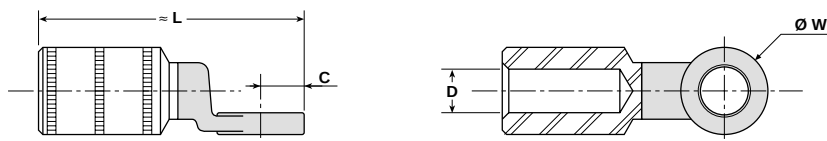
ACX, Bimetallic Terminals

Product Facts:

- Bimetallic Alu/Cu terminals
- Ideally suited for connecting Aluminium cables onto copper apparatus bushings (circuit breakers, motors, switchboards...)
- Wire size range: 35 to 300 mm²
- Application with hex crimp type tooling



ACX



Wire Size mm ²	Ref.	Stud Hole Dia. mm	Dimensions (mm)				Part Number	Tools and Dies See Page 2
			Ø W	D	C	≈ L		
35	ACX 35	8,2	16	8	8	57	709032-1	line 1 , 5
50	ACX 50	8,2	16	9	8	57	709032-2	line 1 , 5
70	ACX 70	10,3	20	11	10	60	709033-1	line 2 , 6
95	ACX 95	10,3	20	12,5	10	60	709033-2	line 2 , 6
120	ACX 120	10,3	20	13,7	10	60	709033-3	line 2 , 6
150	ACX 150	12,8	30	15,5	15	89	709034-1	line 3 , 7
185	ACX 185	12,8	30	17	15	89	710148-1	line 3 , 7
240	ACX 240	12,8	30	19,5	15	89	709034-2	line 3 , 7
300	ACX 300	14,5	35	22	17,5	91	709781-1	line 4 , 8

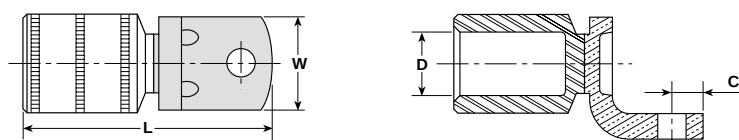
ACX-C, Narrow Tongue Bimetallic Terminals

Product Facts:

- Bimetallic Alu/Cu terminals
- Narrow tongue for reduced width apparatus bushings
- Wire size range: 150 to 300 mm²
- Application with hex crimp type tooling



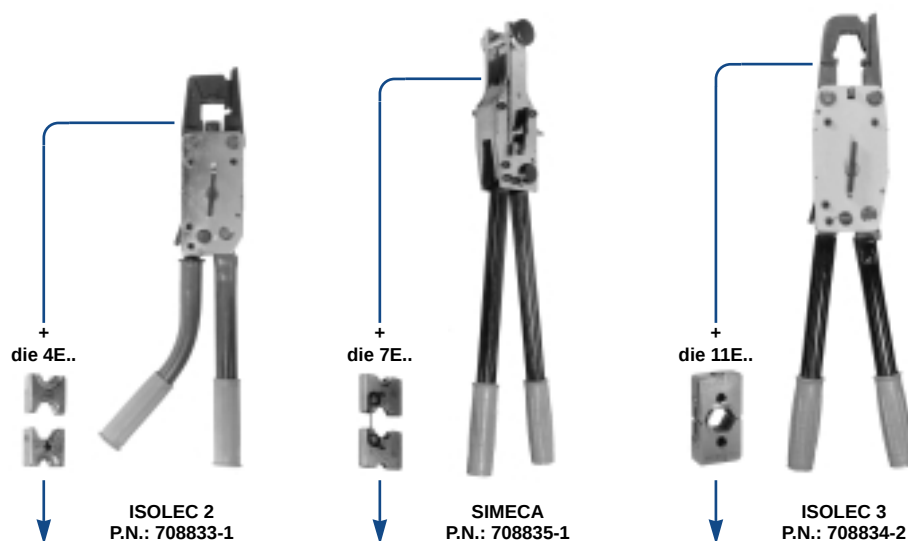
ACX-C



Wire Size mm ²	Ref.	Stud Hole Dia. mm	Dimensions (mm)				Part Number	Tools and Dies See Page 2
			W	D	C	≈ L		
150	ACX-C 150	10,3	25	15,5	11,5	76	708576-1	line 3 , 7
185	ACX-C 185	10,3	25	17	11,5	76	708575-1	line 3 , 7
240	ACX-C 240	10,3	30	19,5	11,5	76	708574-1	line 3 , 7
300	ACX-C 300	10,3	30	22	11,5	85	708573-1	line 4 , 8

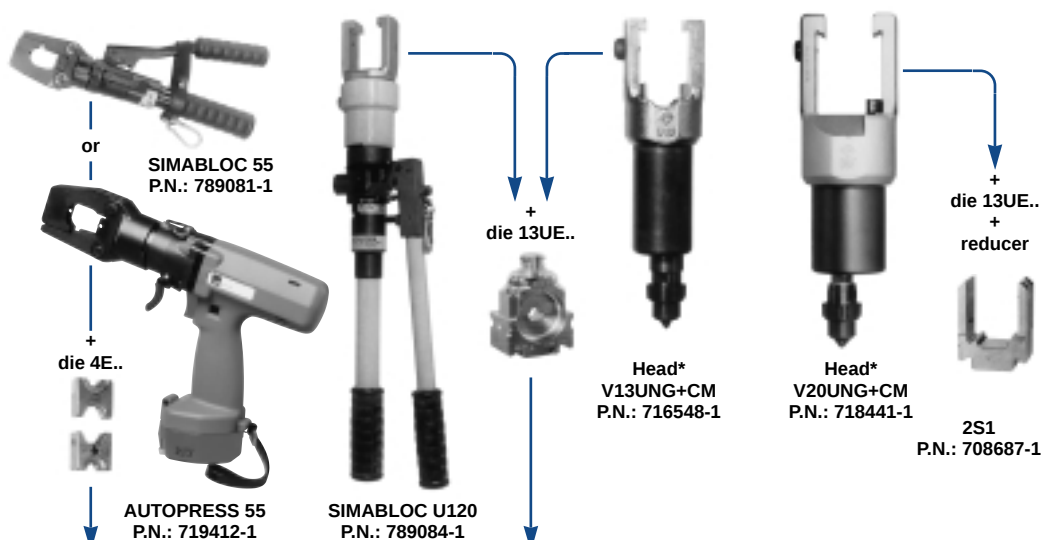
ACX, ACX-C Applications Tools and Tooling

Mechanical Hand Tools



Line	Wire Size mm ²	Type of Die 4..	P.N.	Type of Die 7..	P.N.	Type of Die 11..	P.N.
1 →	35-50	4E140 E83	708810-1	7E173 E140	708823-1	11E140/2x9	709419-1
2 →	70-95-120	4E173	708809-1	7E173 E140	708823-1	11E173/2x9	709419-2
3 →	150-185-240	—	—	7E235	708814-1	11E235/2x9	709419-3
4 →	300	—	—	—	—	11E260	710088-1

Hydraulic Hand Tools



Line	Wire Size mm ²	Type of Die 4..	P.N.	Type of Die 13..	P.N.
5 →	35-50	4E140 E83	708810-1	13UE140/2x9	708647-1
6 →	70-95-120	4E173	708809-1	13UE173/2x9	708647-3
7 →	150-185-240	—	—	13UE235/2x9	708647-4
8 →	300	—	—	13UE260/9	708640-4

■ for hydraulic pump

- SIMAFLEX + HP3M + CF P.N. : 710596-1
- SOLHYFLEX + HP3M + CF P.N. : 710595-1

Underground Cable Connectors

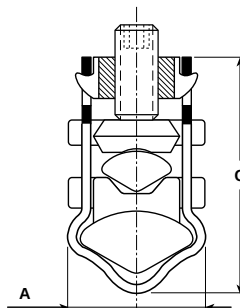
Product Facts:

- Two conductor connection device for either copper cable or aluminium cable
- Conductor range 25 to 240 mm²
- Aluminium to Aluminium, Aluminium to Copper
- Applicable on both rigid stranded of solid conductor
- Accept circular and V shaped cores
- Body in corrosion resistant high strength copper alloy, tin plated
- When connector is tightened, bottom shape develops a spring action ensuring high contact performance
- Suitable for service entrance, street lighting applications, cable joints
- Used in taping cable joints or cast resin joints
- Can be delivered with insulating cover



ESU

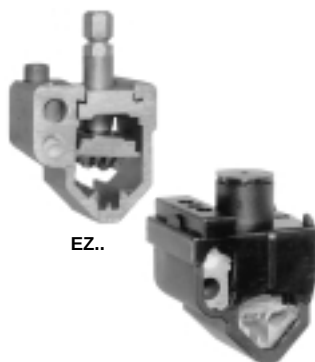
ESU Connectors



Wire Size mm ²		Reference	Dimensions			Part Number	Tooling
Primary	Secondary		A	C	Width		
25 to 95	10 to 35	ESU 95	25	43	32,5	710127-1	Clesim 1 wrench
		ESU 95 + gusset				711724-1	
95 to 240	16 to 70	ESU 150	30	49	38	709542-2	Clesim 2 ratchet wrench
		ESU 150 + gusset				711725-1	
95 to 240	95 to 150	ESU 240	30	49	79	709541-1	
		ESU 240 + gusset				711726-1	
150 to 240	95 to 150	ESU 240 SIB	30	68	79	709774-1	
		ESU 95/150 gusset				716462-1	
		ESU 240 gusset				716461-1	

Product Facts:

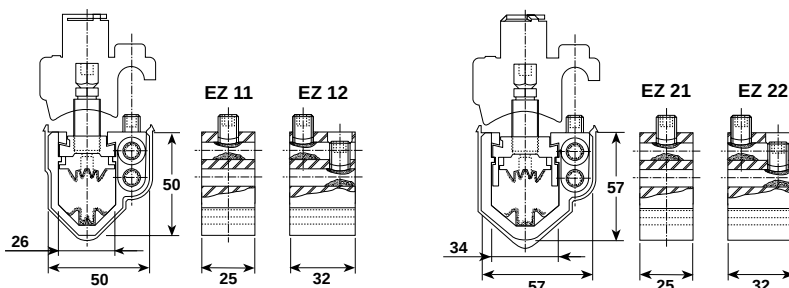
- Single or double tapping connection device without stripping primary
- Primary conductor range: 50 to 240 mm²
Secondary conductor range: 4 to 50 mm²
- Insulation piercing connection on aluminium primary cable
- Applicable on both rigid stranded and solid cable
- Accept circular and V shaped core (primary)
- Aluminium to Aluminium or Aluminium to Copper
- Control torque shear head / primary application
- Comply with NFC 63061
- Can be delivered with insulating cover



EZ..

EZ..R

EZ, Insulation Piercing Connectors



Wire Size mm²		Reference	Part Number	Tooling
Primary	Secondary			
Single pole fittings for single branching				
50 to 150 Al	4 to 35 Cu or 16 to 50 Al	EZ 11	709133-1	Clesim 1 wrench or Clesim 2 ratchet wrench
50 to 150 Al	4 to 35 Cu or 16 to 50 Al	EZ 11 R	709133-3	
185 to 240 Al	4 to 35 Cu or 16 to 50 Al	EZ 21	709134-1	
185 to 240 Al	4 to 35 Cu or 16 to 50 Al	EZ 21 R	709134-3	
Single pole fittings for double branching				
50 to 150 Al	2x4 to 25 Cu or 2x35 maxi Al	EZ 12	709133-2	Clesim 2 ratchet wrench
50 to 150 Al	2x4 to 25 Cu or 2x35 maxi Al	EZ 12 R	709133-4	
185 to 240 Al	2x4 to 25 Cu or 2x35 maxi Al	EZ 22	709134-2	
185 to 240 Al	2x4 to 25 Cu or 2x35 maxi Al	EZ 22 R	709134-4	

R = insulating cover.

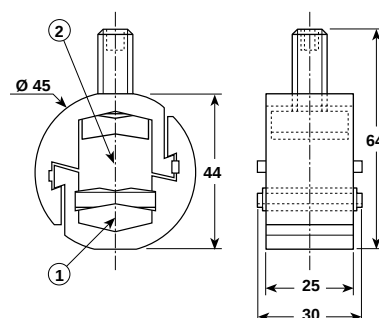
Underground Cable Connectors

Product Facts:

- Ideally suited for connecting grounding braids all together to grounding wires
- Used in cable joints, aerial/underground connection
- Aluminium to Copper
Aluminium to Aluminium
- Wire size range: 16 mm² to 95 mm²
- Connect up to 6 braids of 25 mm²
- High strength aluminium alloy



ESA



Use	Wire Size mm ²	Reference	Part Number	Tooling
Earthing HN33S23 cable or Cu 25 ² U1000 R2V (underground overhead riser MV HN33S23 cable)	① alu MALT 25 ² cable ② 1 to 6 strands 16 ² or 25 ² Cu	ESA 25	709753-1	Clesim 1 wrench or Clesim 2 ratchet wrench
LV cable neutral earthing	① 16 ² to 95 ² Al ② 16 ² to 25 ² Cu			

Fixed (CP) or Rotatable (CPO) Connector Studs

Product Facts:

- Connection for solid or stranded aluminium conductors for any shape into underground or industrial boxes
- Tapping or a main conductor
- Junction of two conductors



CPO.

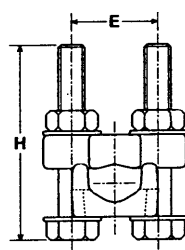
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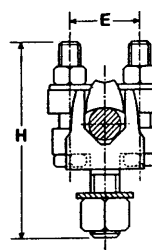
CP 300 A



CP.



CP



CPO

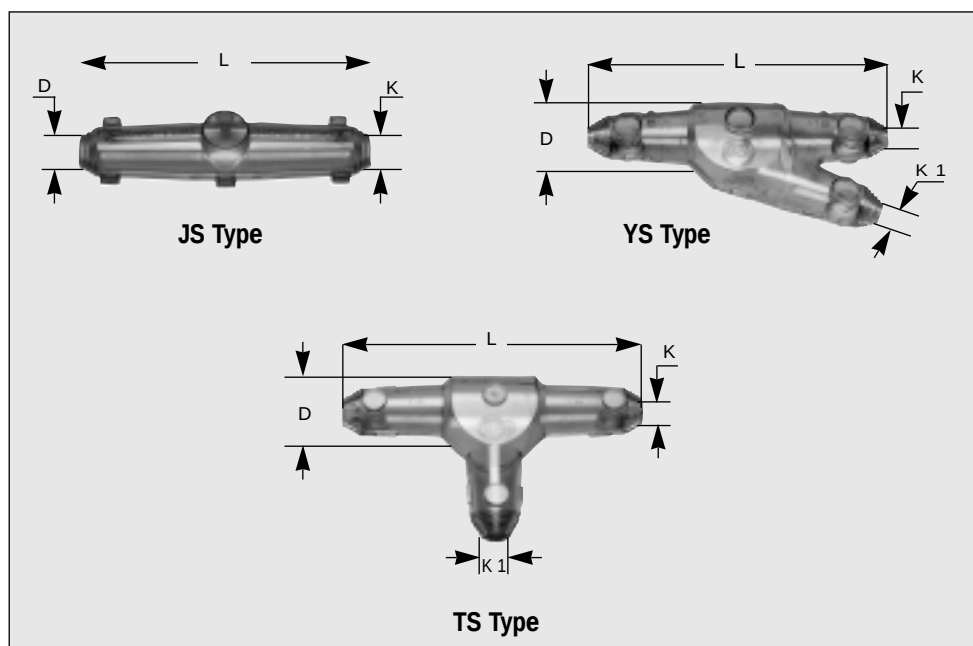
Wire Size mm ²		Reference	Dimensions			Part Number	Code
Mini	Maxi		E	H	thickness		
38	150	CP 150 A	56	26	35	711672-1	027080
16	150	CPO 150A	71	26	35	709554-2	031210
75	300	CP 300A	110	33	65	710580-1	001580
2x75	2x300	CP 300A double	200	33	65	710582-1	001610

SIMCAST - Cast resin joints

Cast resin joint range includes straight joints, Y-shape branch joints and T-shape branch joints.

Product Facts

- **Applications :**
 - LV and MV (up to 12 kV) power cables,
 - Signal cables,
 - Telephone cables.
- **Used for cable joints, branch-joints (street lighting, service entrance...).**
- **Delivery includes :**
 - Cast Mould,
 - Cast resin,
 - Funnel (for Y and T joints)
 - Sealing tape,
 - Spacers (for straight joints).
- **High mechanical strength cast mould.**
- **Transparent cast moulds enable control of connection.**
- **Two component polyurethane cast resin in separate two-pocket bag, ready to be mixed before opening.**
- **Great ease of handling.**
- **Storage conditions :** 30 months, temperature + 15° to + 30° C.
- **Complies with VDE 0291, part 2.**



Designation	Dimensions (mm)				Part Number
	L	D	K	K1	
JS 00	180	24	7 - 16		710909-1
JS 11	190	36	14 - 22		710910-1
JS 12	260	47	14 - 30		710911-1
JS 13	360	55	20 - 37		710912-1
JS 14	400	70	25 - 42		710913-1
JS 15	530	100	33 - 55		710914-1
JS 16	700	125	45 - 74		1-0719876-0
YS 0	185	39	8 - 17	8 - 17	710915-1
YS 1	240	50	9 - 22	9 - 22	710916-1
YS 3	240	99	25 - 42	21 - 37	710917-1
YS 4	285	100	29 - 53	21 - 37	719468-1
YS 4 1/2	335	118	32 - 56	25 - 42	719051-1
TS 2	267	60	17 - 30	17 - 30	718066-1
TS 2 1/2	310	75	21 - 37	21 - 37	717586-1
TS 3	354	90	25 - 42	25 - 42	718067-1

SIMTAPE - PVC Insulation tape

Product Facts

- Allweather electric insulation tape.
- Thickness : 0,12 mm.
- Adhesive strength : 1.2 N/10 mm.
- Breaking force : 27.5 N/10 mm.
- Dielectric strength : > 8 kV.
- Operating temperature : - 5° to + 80° C.
- Width : 15 mm
Length : 10 m.
- 10 colours and mixed available.
- Delivery quantity : 10 pieces.



Colour	black	red	blue	White	yellow/green	brown	yellow	green	orange	gray	mixed
Part Number	710922-1	710923-1	710924-1	710925-1	710926-1	710927-1	710928-1	710929-1	710930-1	710931-1	710932-1

Product Facts

- Allweather electric insulation tape.
- Thickness : 0,19 mm.
- Adhesive strength : 2.6 N/10 mm.
- Breaking force : 41.2 N/10 mm.
- Dielectric strength : > 9 kV.
- Operating temperature : - 18° to + 90° C.
- Width : 19 mm
Length : 20 m.
- Colour : black.
- Delivery quantity : 10 pieces.



Part Number : 710921-1

ISOLAMES® Flexible Insulated Bars

ISOLAMES® Flexible Insulated Bars

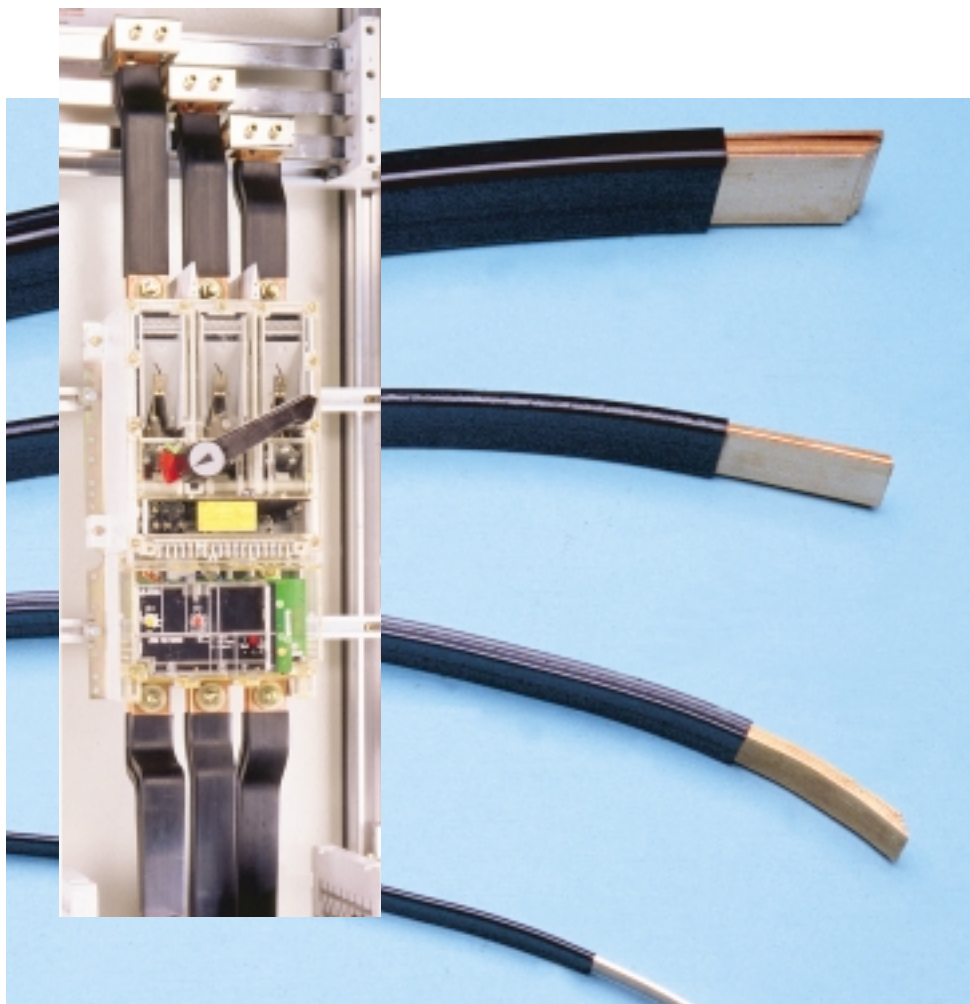
ISOLAMES® flexible insulated bars are made with high flexibility laminated copper layers, coated with black coloured, self-extinguishable insulating PVC compound.

Applications

- Low voltage power distribution : connections of switchboards, panel boards, transformers, busbars
- Industrial applications, controls : connection of industrial machineries, motors, control panels, processing units, power supplies

Product Facts

- Wide range of cross section : 21 to 1 200 mm²
- Various laminated copper layer widths enable connection on all main apparatus and copper busbars
- High dielectric strength
- Flame retardant insulating material
- Limited temperature rises compared to cables or non-insulated copper bars
- High flexibility enables bending by hand
- Space saving : ISOLAMES® bend radius is smaller than equivalent copper cable one
- Standard delivery length : 2.00 m
- Also available on request :
 - Tin plated copper laminated layers
 - Halogen-free insulation material
 - Longer bars (up to 4.00 m)
- Approvals :
 - LLOYD N° 93/30023
 - CSA N° 099903



Characteristics

Laminated Copper Layers

- Compliance with NFA 51050, standard
- Electrolytic copper annealed Cu-ETP (state 0) : 99,9 % Cu
- Resistivity 1,724 $\mu\Omega$ cm²/cm (NFA 51100)
- Vickers hardness : < 50 HV
- Maximum tensile strength ≥ 200 N/mm²
- Elongation ≥ 30 %

Insulation

- Polyvinylchloride (PVC)
- Self-extinguishable, class CR2-C2 (NFC 32070, IEC 332-1)
- Colour : black
- Application by extrusion or heatshrinking (80 and 100 mm width series)
- Hardness SHORE A : 70 to 80 (DIN 53505)
- Oxygen-index : 25.0 % (ASTM D 2863-70)
- Dielectric strength : > 23 kV/mm
- Elongation after 7 days ageing at 136° C : > 200 % (UL 758)
- Maximum tensile strength > 16 Mpa
- Maximum Elongation : > 300 % (DIN 53455)

Flexible Insulated Bar

- Operating temperature at core surface : - 55° C to + 105° C
- Self extinguishable (C32 200)
- Operating voltage range : 1 000 V
- Dielectric strength for 15 min before flashover (50 Hz) :
 - between layers and ground applied on insulating material surface : > 15 000 V
 - between two conductors with insulation in contact : > 30 000 V

ISOLAMES® Flexible Insulated Bars (continued)

Current and Temperature Rating of ISOLAMES®

■ ISOLAMES® have different current flow capacity depending on copper cross-section and dimensions.

■ Attached form and drawing indicate bar heating created by current flow value for each ISOLAMES® bar.

■ Taking into consideration you needs for :

- Current flow value (A)
- Acceptable bar heating (ΔT)
- Acceptable copper layer width (W),

you select the correct ISOLAMES® bar you need for your application.

■ Bar heating (ΔT)

$$T_a = T_c + \Delta T$$

- T_a = Bar temperature when crossed by current flow (A).

- T_c = Cabinet Internal Temperature

- ΔT = Bar heating

Important Note :
Maximum $T_a \leq 105^\circ\text{C}$

■ Example :

Which ISOLAMES® should you choose when :

- Requested current flow capacity is 360A
- Requested cabinet internal temperature is 35°C
- Requested bar maximum temperature is 85°C
- Requested maximum width = 20 mm

$$\Rightarrow \Delta T = 85^\circ\text{C} - 35^\circ\text{C} = 50^\circ$$

$\Rightarrow$ in the column heating 50° , we look for 360A. The two acceptable bars closest to the value are $3 \times 24 \times 1$ and $4 \times 20 \times 1$

$\Rightarrow$ taking into consideration 20 mm maximum width : final choice becomes $4 \times 20 \times 1$

DESCRIPTION OF BARS				BAR HEATING (ΔT)								Part Number
Copper Width W (mm)	Description N° of Layers width Layers thickness	Cross section (mm²)	Weight for 2,00 m long (kg)	20°	30°	40°	50°	60°	70°	80°		
							CURRENT (A)					
9	3 x 9 x 0,8	21,6	0,385	91	115	134	151	166	180	192	708511-2	
	4 x 9 x 0,8	28,8	0,513	107	135	158	178	196	212	226	708512-	
	6 x 9 x 0,8	43,2	0,769	138	174	204	230	253	273	292	708514-1	
16	2 x 16 x 0,8	25,6	0,457	113	143	167	188	207	224	239	708515-1	
	3 x 16 x 0,8	38,4	0,686	141	177	208	234	257	278	297	708516-1	
	4 x 16 x 0,8	51,2	0,914	167	210	246	277	304	329	352	708517-2	
	6 x 16 x 0,8	76,8	1,371	209	263	309	348	382	413	442	708518-2	
	10 x 16 x 0,8	128	2,284	286	359	421	474	522	564	603	708520-1	
20	2 x 20 x 1	40	0,712	154	194	227	255	281	304	325	708521-1	
	3 x 20 x 1	60	1,068	191	241	282	317	349	378	403	708522-1	
	4 x 20 x 1	80	1,424	224	282	330	372	409	442	472	708523-1	
	5 x 20 x 1 Example	100	1,780	254	319	374	421	463	501	535	708524-1	
	6 x 20 x 1	120	2,136	284	357	418	471	518	561	599	708525-1	
	8 x 20 x 1	160	2,848	336	422	495	558	613	663	709	708526-1	
24	11 x 20 x 1	220	3,916	382	481	563	634	698	755	806	716442-1	
	2 x 24 x 1	48	0,855	178	224	262	296	325	352	376	708527-1	
	3 x 24 x 1	72	1,282	223	280	328	370	406	440	470	708528-1	
	4 x 24 x 1	96	1,709	260	327	383	432	475	514	549	708529-2	
	5 x 24 x 1	120	2,136	294	370	434	489	537	581	621	708530-1	
	6 x 24 x 1	144	2,564	328	413	484	545	599	648	693	708531-1	
	8 x 24 x 1	192	3,418	390	490	574	647	712	770	822	708532-1	
32	10 x 24 x 1	240	4,272	440	554	648	731	809	869	929	708533-1	
	3 x 32 x 1	96	1,709	280	353	413	466	512	554	592	708535-1	
	4 x 32 x 1	128	2,279	329	414	485	546	600	649	694	708536-1	
	5 x 32 x 1	160	2,848	371	467	547	616	678	733	783	708537-1	
	6 x 32 x 1	192	3,418	412	519	608	685	753	815	870	708538-2	
	8 x 32 x 1	256	4,557	480	604	707	797	876	948	1012	708539-1	
	10 x 32 x 1	320	5,696	547	688	806	908	998	1080	1154	708540-1	
40	4 x 40 x 1	160	2,848	394	495	580	654	719	778	831	708584-1	
	5 x 40 x 1	200	3,560	446	561	657	740	814	880	941	708541-1	
	6 x 40 x 1	240	4,272	487	613	718	809	890	962	1028	708542-1	
	8 x 40 x 1	320	5,696	569	716	839	946	1040	1125	1202	708594-1	
	10 x 40 x 1	400	7,120	646	813	952	1073	1180	1276	1363	708598-1	
	4 x 50 x 1	200	3,560	475	597	700	788	867	938	1002	708543-1	
50	5 x 50 x 1	250	4,450	531	668	783	882	970	1049	1121	708544-2	
	6 x 50 x 1	300	5,340	584	735	861	970	1066	1153	1232	708545-1	
	8 x 50 x 1	400	7,120	680	855	1002	1129	1242	1343	1435	708546-2	
	10 x 50 x 1	500	8,900	766	963	1128	1272	1398	1512	1616	708547-1	
63	5 x 63 x 1	315	5,607	641	806	944	1064	1170	1265	1352	708587-1	
	6 x 63 x 1	378	6,729	703	884	1035	1167	1283	1388	1483	708591-1	
	8 x 63 x 1	504	8,972	813	1023	1198	1350	1484	1605	1715	708595-1	
	10 x 63 x 1	630	11,214	908	1142	1338	1507	1658	1793	1916	708599-1	
80	3 x 80 x 1	240	4,380	604	759	889	1002	1102	1192	1274	708569-1	
	4 x 80 x 1	320	5,840	698	878	1029	1159	1275	1379	1473	708586-1	
	5 x 80 x 1	400	7,300	781	982	1151	1297	1426	1542	1648	708588-1	
	6 x 80 x 1	480	8,760	852	1072	1255	1415	1556	1683	1798	708592-1	
	8 x 80 x 1	640	11,680	978	1230	1441	1624	1786	1932	2064	708596-1	
	10 x 80 x 1	800	14,600	1083	1362	1595	1797	1977	2138	2284	708600-1	
100	5 x 100 x 1	500	9,125	935	1176	1377	1552	1707	1846	1972	708589-1	
	6 x 100 x 1	600	10,950	1013	1274	1493	1682	1850	2000	2138	708593-1	
	8 x 100 x 1	800	14,600	1156	1455	1704	1920	2112	2284	2440	708597-2	
	10 x 100 x 1	1000	18,250	1274	1602	1877	2115	2325	2515	2687	708601-1	
	12 x 100 x 1	1200	21,900	1387	1744	2043	2302	2532	2738	2926	708602-1	

BOLD : ISOLAMES® stock items



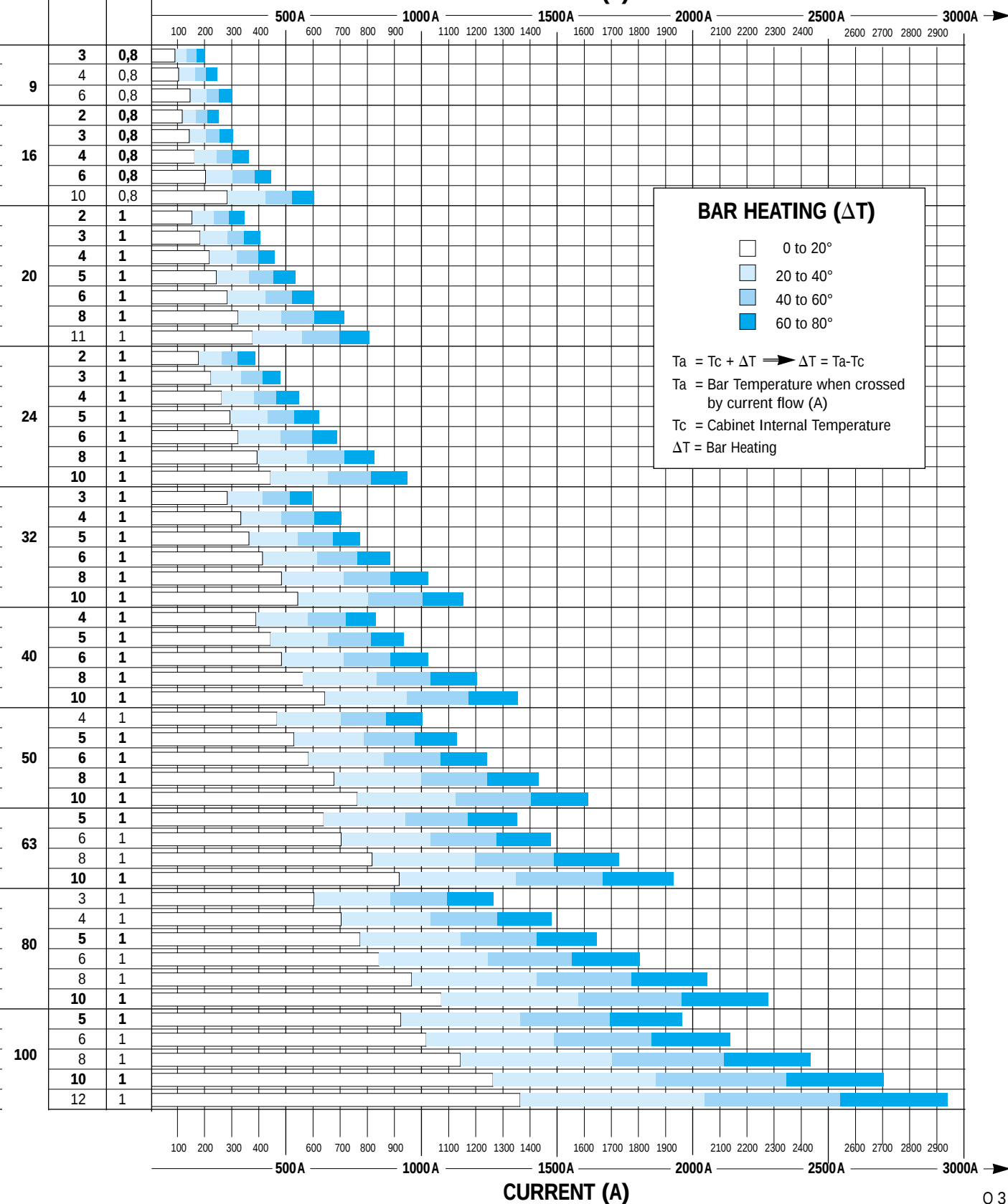
COPPER LAYERS

Width
W
(mm)

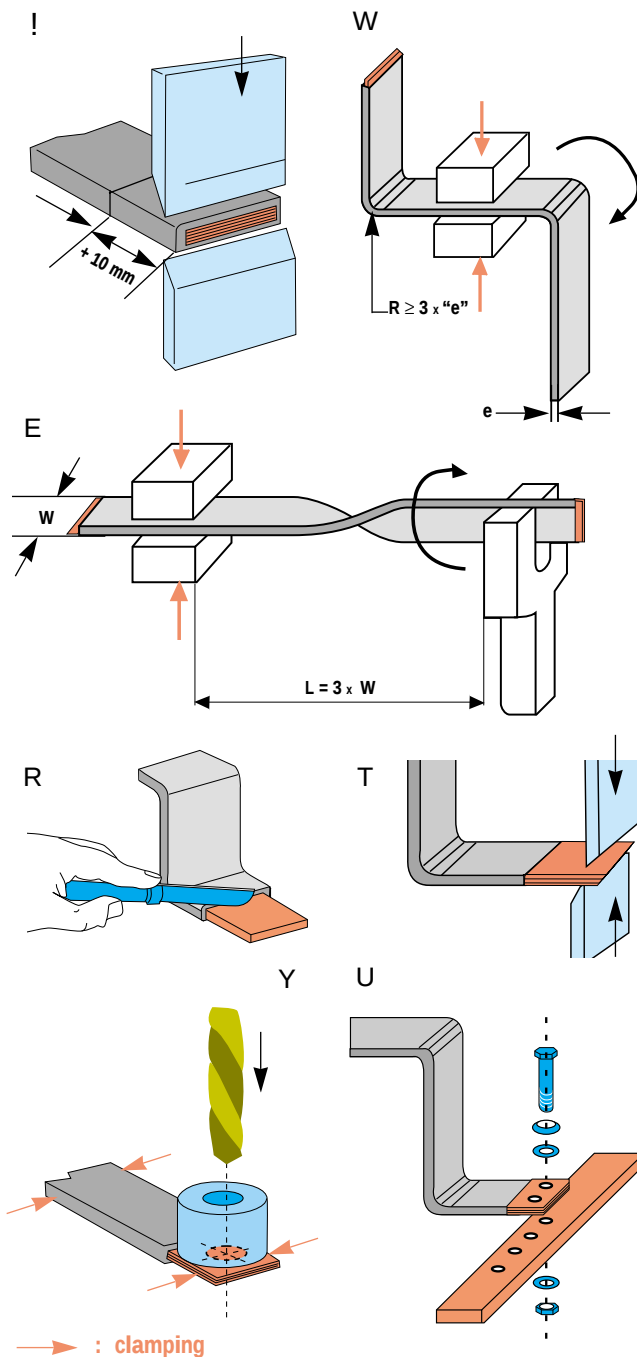
N°
of
Layers

T
(mm)

CURRENT (A)



Use of ISOLAMES® Flexible Insulated Bars



1 - Cutting

Handle properly ISOLAMES® bar. It may be cut by sawing or shearing, to leave a clean cut. If the bar will be bent, we recommend to add a safety margin (10 mm) to the required final length, to correct, if necessary, possible slippage of layers after bending.

2 - Bending

Small and medium size cross sections ISOLAMES® flexible insulated bars may be bent by hand. When using larger cross section bars, protect insulation before bending or curving with metallic tools (minimum bend radius : 3 x bar thickness).

3 - Twisting

Flexible bar can be twisted care should be taken to apply 90° rotation on a length > (3 x bar width).

4 - Stripping

Stripping can be done using a stripper or a knife. Care should be taken to avoid damaging copper layers and to limit stripped area to necessary connection space.

5 - Correct layer slippage

If bar has been bent, layers may have slipped. Cutting of layers is necessary to realign layer ends.

6 - Drilling / Punching

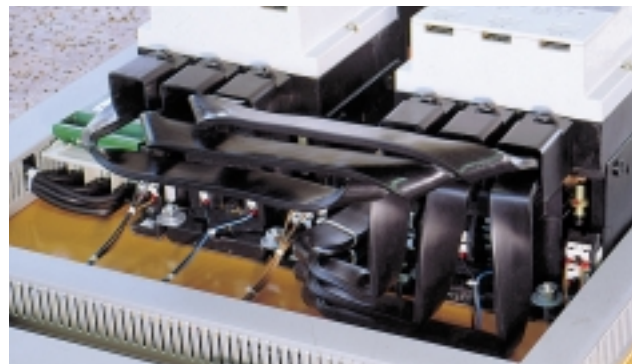
Drilling or punching is done after bending and stripping. Punching gives best and most reliable results. If holes are drilled, use adapted drilling template, enabling guidance of the bit and holding of flexible bar during the operation.
(hole diameter < half of the layer width).

7 - Assembly

Once connected on apparatus, apply torque requested in instruction sheet of equipment.
When connected to busbar, we recommend :

Ø	Torque
M8	23 Nm
M10	42 Nm
M12	65 Nm

Application



ISOSPEED®, power distribution bus system

ISOSPEED® is a power distribution bus system consisting of 2, 3 or 4 conductors equipped with tabs placed in an insulating PVC rail.

Product Facts

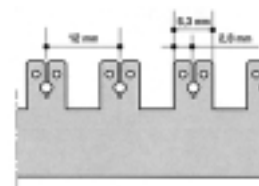
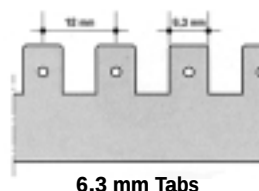
- conductors are made in brass or tinned copper, equipped with preformed tabs,
- tabs are 6,3 mm width, suitable for FASTON terminals (2,8 mm width tabs also available on request),
- PVC rail including 4 grooves protects against electrical hazards and short circuits,
- number of connection up to 332 connections/1m, (6,3 mm tab),
- fast set-up,
- plugging and unplugging without tools,
- insulating separators (20 mm long, PVC) enable to subdivide conductors and multiply number of circuits,
- power feeding connector available (up to 63A, 16, sq mm capacity),
- rail fittings and side support available (supplied with bolt). Side support enables also labelling of rail; it can also be used as rail end fitting. When associated to an insulating separator.

Characteristics

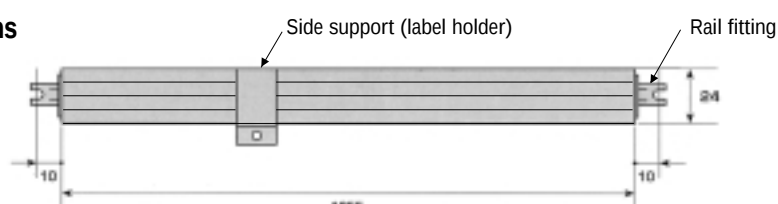
- standard length : 1,855 m,
- width : 24 mm,
- height : 28 mm,
- number of conductors : 1 to 4,
- current rating :
brass : 32A,
tinned copper : 63A,
- maximum voltage : 660 V.



Brass or tinned copper conductors



Dimensions



Description	Part Number	Delivery Qty (pcs)
1 PVC rail + 2 brass conductors (6,3 mm tab)	711676-1	10
1 PVC rail + 3 brass conductors (6,3 mm tab)	711677-1	10
1 PVC rail + 4 brass conductors (6,3 mm tab)	711678-1	10
1 PVC rail + 2 tinned copper conductors (6,3 mm tab)	711679-1	10
1 PVC rail + 3 tinned copper conductors (6,3 mm tab)	711680-1	10
1 PVC rail + 4 tinned copper conductors (6,3 mm tab)	711681-1	10
Power feeding connector	711691-1	10
PVC separator	711683-1	100
Side support	708861-1	50
Rail end fitting	711682-1	50

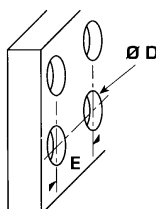
Rigid copper busbars

Rigid copper bars
Standard length : 6 m



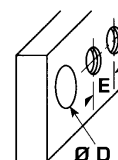
Sharp edged, bar

Width x thickness (mm)	Cross-section mm ²	Part Number	Weight (kg/m)	Current rating (A) depending on number of bars		
						
20 x 5	100	711611-1	0,89	307	491	645
25 x 5	125	711612-1	1,113	370	592	777
30 x 5	150	711613-1	1,335	429	686	901
40 x 5	200	711614-1	1,78	547	875	1149
50 x 5	250	711615-1	2,225	755	1208	1586
63 x 5	315	711616-1	2,804	806	1290	1693
80 x 5	400	711617-1	3,56	994	1590	2087
100 x 5	500	711618-1	4,45	1197	1915	2514
50 x 10	500	711712-1	4,45	963	1541	2022
80 x 10	800	711714-1	7,12	1396	2234	2932
100 x 10	1000	711715-1	8,9	1650	2610	3465
125 x 10	1250	711716-1	11,126	2004	3120	4208



Double perforated copper busbars

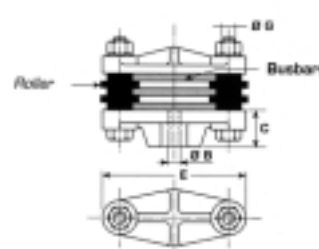
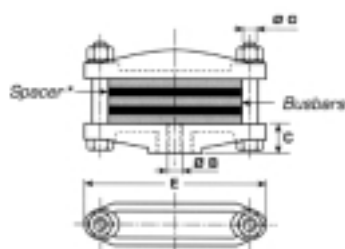
Width x thickness mm	Part Number	Length (m)	Weight (kg/pc)	Ø D	E (mm)
25 x 5	711596-1	1,75	2,000	10	25
50 x 5	711597-1	1,75	3,900	10	25
63 x 5	711598-1	1,75	4,950	10	25
80 x 5	711599-1	1,75	6,250	10	25
100 x 5	711600-1	1,75	7,800	10	25
125 x 5	711601-1	1,75	9,750	10	25



Threaded copper busbars

Width x thickness mm	Part Number	Length (m)	Weight (kg/pc)	Stud	E (mm)	Bar end hole Ø D
15 x 5	711593-1	0,99	0,668	M6	25	8
20 x 5	711594-1	0,99	0,890	M6	25	10
32 x 5	711595-1	0,99	1,424	M6	25	12

Rigid busbar clamps



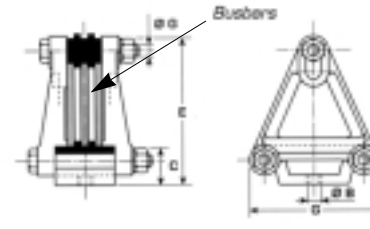
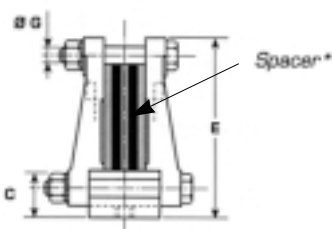
Horizontal copper busbar clamps

Busbar width capacity (mm)	Designation	Part Number	DIMENSIONS (mm)			
			Ø B	C	E	Ø G
60 to 65	BF 65 B 1 B 5	708418-1	M 10	16	96	M 8
70 to 80	BF 80 B 1 B 5	708419-1	M 12	20	123	M 10
70 to 80	BF 80 B 2 B 10	716483-2	M 12	20	123	M 10
70 to 80	BF 80 B 2 B 5	710695-1	M 12	20	123	M 10
100	BF 100 B 1 B 10	716483-3	M 12	23	151	M 12
100	BF 100 B 1 B 5	708420-1	M 12	23	151	M 12
100	BF 100 B 2 B 5	716483-6	M 12	23	151	M 12
100	BF 100 B 5 B 5	1-0716483-6	M 12	23	151	M 12
125	BF 125 B 2 B 5	1-0716483-2	M 12	25	173	M 12

Horizontal sliding copper busbar clamps

Busbar width capacity (mm)	Designation	Part Number	DIMENSIONS (mm)			
			Ø B	C	E	Ø G
40 to 50	BG 50 B 2 B 5	708421-1	M 10	17	84	M 8
70 to 80	BG 80 B 1 B 5	716608-1	M 10	17	84	M 8
100	BG 100 B 1 B 8	716485-2	M 12	23	151	M 12
100	BG 100 B 3 B 5	718064-1	M 12	23	151	M 12

* Spacer not provided.



Vertical copper busbar clamps

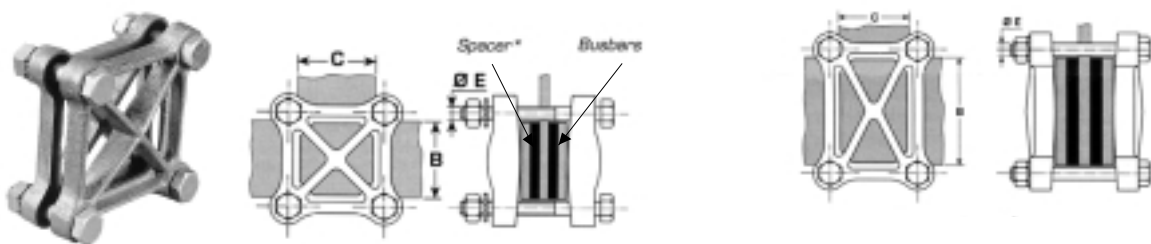
Busbar height capacity (mm)	Designation	Part Number	DIMENSIONS (mm)				
			Ø B	C	E	G	Ø G
40 to 50	BH 50 B 1 B 5	716490-8	M 10	25	91	78	M 8
40 to 50	BH 50 B 2 B 5	708425-1	M 10	25	91	78	M 8
60 to 65	BH 65 B 1 B 5	1-0716490-5	M 10	25	106	78	M 8
60 to 65	BH 65 B 2 B 5	708426-1	M 10	25	106	78	M 8
70 to 80	BH 80 B 1 B 10	716490-6	M 10	25	122	78	M 8
70 to 80	BH 80 B 2 B 10	708427-1	M 10	25	122	78	M 8
70 to 80	BH 80 B 2 B 5	710607-1	M 10	25	122	78	M 8
100	BH 100 B 1 B 10	716490-1	M 12	29	149	97	M 10
100	BH 100 B 2 B 10	708605-1	M 12	29	149	97	M 10
100	BH 100 B 2 B 5	710482-1	M 12	29	149	97	M 10
100	BH 100 B 3 B 5	716490-2	M 12	29	149	97	M 10
tightening (25)							
100	BH 100 B 4 B 5	716490-4	M 12	29	149	97	M 10
tightening (35)							
125	BH 125 B 2 B 5	2-0716490-2	M 12	29	170,5	100	M 10

Vertical sliding copper busbar clamps

Busbar height capacity (mm)	Designation	Part Number	DIMENSIONS (mm)				
			Ø B	C	E	G	Ø G
40 to 50	BJ 50 B 1 B 5	716492-1	M 10	25	91	78	M 8
40 to 50	BJ 50 B 2 B 5	708430-1	M 10	25	91	78	M 8
70 to 80	BJ 80 B 2 B 10	708432-1	M 10	25	122	78	M 8
100	BJ 100 B 1 B 10	716492-6	M 12	29	149	97	M 10
100	BJ 100 B 2 B 10	708433-1	M 12	29	149	97	M 10

* Spacer not provided.

Rigid busbar clamps (continued)



Square clamps for rigid copper busbars

Busbar height capacity B x C (mm)	Designation	Part Number	Ø E (mm)
40 x 40	BKB 40 x 40 tightening 10	716486-1	M 8
50 x 50	BKB 50 x 50 tightening 15	708435-1	M 8
60 x 60	BKB 60 x 60 tightening 15	708435-2	M 8
80 x 80	BKB 80 x 80 tightening 15	710576-1	M 10
80 x 80	BKB 80 x 80 tightening 30	708435-4	M 10
100 x 100	BKB 100 x 100 tightening 10	716486-4	M 12
100 x 100	BKB 100 x 100 tightening 25	708435-9	M 12
100 x 100	BKB 100 x 100 tightening 40	710616-1	M 12
100 x 100	BKB 100 x 100 tightening 50	1-0716486-3	M 12

Rectangular clamps for rigid copper busbars

Busbar height capacity B x C (mm)	Designation	Part Number	Ø E (mm)
100 x 50	BKB 100 x 50 tightening 30	708435-7	M 10

* Spacer not provided.

AMP-TY Cable Ties and Adhesive Mounting Bases

Technical Features

- Self-locking head ensures stable binding power even under extreme conditions, e.g. temperature and vibration.
- Interior serrations help hold individual wires or bundles firmly in place through friction.
- Tapered tip often with the "bent tail" facility for easy insertion, speeds up threading and reduces applied cost.
- Tough, smooth polyamide may be used for indoor and outdoor applications. Black UV resistant ties are recommended for out-door use.
- The all synthetic one-piece design eliminates metal parts.
- AMP-TY cable ties can be hand applied or by using application tools.



Applications

- Bundling and mounting of wires, cables, harnesses and hoses in many industries.
- Clean bundling of cables and leads in switch boards and control systems.
- Mounting of conduits, tubes, cables and components in installations.
- Fastening and mounting of

Technical Data

Material :
Polyamide 6.6.

Colour :
Natural or black.

Temperature Range :
-40°C to + 80°C.

Application Temperature :
-10°C to + 60°C.

Melting Point :
+ 256°C.

Dielectric Strength :
50 kV/mm.

Flammability Rating :
UL 94 V-2.

Resistance to external agents :
Bases, oils, greases, oil-products, chlorate solvents.

Limited Resistance to :
All Acids.

No resistance to :
Phenols.

Material :
Polyamide 12.

Colour :
Black.

Temperature Range :
-40°C to + 80°C.

Application Temperature :
-20°C to + 60°C.

Melting Point :
+ 186°C.

Dielectric Strength :
28 kV/mm.

Flammability Rating :
UL 94 HB.

Resistance to external agents :
Ultra-Violet rays.

Good resistance to :
Bases, oils, greases, oil-products, saline atmosphere.

No resistance to :
Chlorate solvents.

Fast and Easy to Apply



AMP - TY Cable Ties

POLYAMIDE CABLE TIES

Cable Bundling
System

Standard Style
(acc. MIL-S-23190E)

Material :

Polyamide 6,6

Colour :

natural or black

Dimensions (mm)		Cable Bundle Diameter max. (mm)	Tensile Strength N	Bent Tail	AMP Basic Part Number	Package Quantity	Tooling See p. : K 7
Length	Width						
75	2,2	15	60		2-160965-x	100	
88	2,5	18	82	X	2-160966-x	100	
98	2,5	21	82	X	2-160967-x	100	
134	2,6	32	82		2-160968-x	100	
160	2,8	40	82		2-160969-x	100	
200	2,6	52	82	X	2-160970-x	100	
140	3,6	35	130	X	2-160971-x	100	
200	3,6	50	130	X	2-160996-x	100	
290	3,6	80	130		2-160972-x	100	
370	3,6	103	130	X	2-160994-x	100	
120	4,5	24	200		2-160997-x	100	
160	4,5	40	200	X	2-160973-x	100	
178	4,8	45	220	X	2-160974-x	100	
200	4,8	50	220	X	2-160975-x	100	
255	4,8	68	220		2-160976-x	100	
290	4,8	79	220		2-160977-x	100	
370	4,8	103	220		2-160978-x	100	
430	4,8	115	220	X	2-160995-x	100	
120	7,8	25	550		2-160979-x	100	
180	7,8	45	550		2-160980-x	100	
240	7,8	63	550		2-160981-x	100	
300	7,8	80	550		2-160982-x	100	
365	7,8	100	550		2-160983-x	100	
450	7,8	130	550		2-160984-x	100	
540	7,8	158	550		2-160985-x	100	
750	7,8	200	550		2-160986-x	100	
780	9,0	233	770		1-160987-x	50	
225	12,6	57	1100		1-160988-x	50	
500	12,6	143	1100		1-160989-x	50	
720	12,6	213	1100		1-160990-x	50	
850	12,6	255	1100		1-160991-x	50	
1000	12,6	302	1100		1-160992-x	50	

x = Colour Code

(Suffix) :

-1 = natural

-2 = black

AMP-TY Cable Ties (continued)

Push-Mounting
Cable Ties

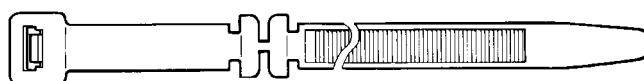
Material :
Polyamide 6,6
Colour :
natural

Dimensions (mm)		Cable Bundle Diameter max. (mm)	Tensile Strength N	Mounting Hole Diameter (mm)	Panel Thickness max. (mm)	AMP Part Number	Package Quantity	Tool See p. K 7
Length	Width							
155	3,3	38	130	5,2	2,8	2-100713-1	100	
200	4,6	50	220	6,3	3,6	2-100714-1	100	

Screw Mounting
Cable Ties
(acc. MIL-S-23190E)

Material :
Polyamide 6,6
Colour :
natural

Dimensions (mm)		Cable Bundle Diameter max. (mm)	Tensile Strength N	Size of Mounting Hole (mm)	AMP Part Number	Package Quantity	Tool See p. : K 7
Length	Width						
150	3,6	32	130	4,5	2-100715-1	100	
200	4,8	54	200	4,5	2-100716-1	100	
200	7,8	50	550	6,5	2-100717-1	100	
300	7,8	75	550	6,5	2-100718-1	100	
380	7,8	104	550	6,5	2-100719-1	100	

Cable Tray
Fixing Ties

Material :
Polyamide 6,6
Colour :
black

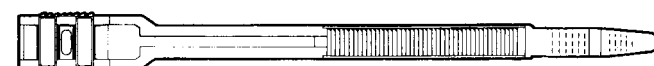
Dimensions (mm)		Cable Bundle Diameter max. (mm)	Tensile Strength N	AMP Part Number	Package Quantity	Tool See p. : K 7
Length	Width					
24 + 270	7,8	75	550	2-100720-2	100	
50 + 275	12,6	75	1100	1-100721-2	50	

AMP-TY Cable Ties (continued)

Cable Bundling System



type A



type B

Belturing Ties, Extra Heavy-Duty Style (acc. MIL-S-23190E)

Material :
Polyamide 12
Colour :
black

Type	Dimensions (mm)		Cable Bundle Diameter max. (mm)	Tensile Strength N	AMP Part Number	Package Quantity	Tooling See p. : K 7
	Length	Width					
A	115	6,0	25	250	2-100697-2	100	
A	180	6,0	45	250	2-100698-2	100	
A	290	6,0	78	250	2-100699-2	100	
A	360	6,0	100	250	2-100700-2	100	
A	175	8,0	42	350	2-100701-2	100	
B	255	8,0	57	450	2-100702-2	100	
B	350	8,0	88	450	2-100703-2	100	
A	132	9,0	27	350	2-100704-2	100	
A	180	9,0	45	350	2-100705-2	100	
B	265	9,0	65	510	2-100706-2	100	
B	300	9,0	80	510	2-100707-2	100	
B	360	9,0	93	510	2-100708-2	100	
▲	510	9,0	140	550	2-100709-2	100	
▲	760	9,0	220	550	2-100710-2	100	

▲ Reinforced double head

Cable Ties with Identification plate



type C



type D



type E

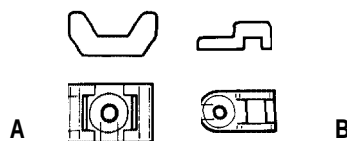
Material :
Polyamide 6,6
Colour :
Natural

Type	Dimensions (mm)		Cable Bundle Diameter max. (mm)	AMP Part Number	Package Quantity	Tooling See p. : K 7
	Length	Width				
C	100	2,5	20	2-0106110-1	100	
C	200	2,5	50	2-0106111-1	100	
D	110	2,5	20	2-0106112-1	100	
D	210	2,5	50	2-0106113-1	100	
E	190	4,8	48	2-0106114-1	100	
E	270	4,8	68	2-0106115-1	100	

AMP-TY Cable Tie Accessories (continued)

Mounting Base
for screw application

Material :
Polyamide 6,6



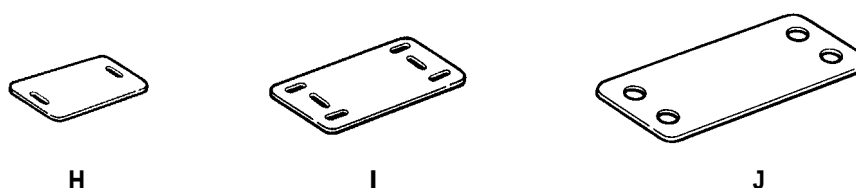
Type	Dimensions (mm)		Max width AMP TY	AMP Part Number	Package Quantity
	Length	Width			
A	10,0	20,0	4,3	2-0106091-x	100
B	15,0	9,5	5,0	2-0106092-x	100
B	22,5	15,0	9,0	2-0106093-x	100

Self adhesive
Mounting Base

Type	Dimensions (mm)		Max width AMP TY	Material		AMP Part Number	Package Quantity
	Length	Width					
C	19,0	19,0		PA 6.6		2-0106096-x	100
D	26,0	26,0		PA 6.6		2-0106097-x	100
D	26,0	26,0		PA 6.6		2-0106098-x	100
E	20,0	26,0		PVC		2-0106099-1	100
E	25,0	26,0		PVC		2-0106100-1	100
E	30,0	26,0		PVC		2-0106101-1	100
F	19,0	19,0	3,6	PA 6.6	one-way	2-0100691-x	100
F	26,5	26,5	4,8	PA 6.6	one-way	2-0100692-x	100
G	19,0	19,0	3,6	PA 6.6	two-way	2-0100693-x	100
G	26,5	26,5	4,8	PA 6.6t	wo-way	2-0100694-x	100

Identification Plates
for use with Ties
up to 4,8 mm width

Material :
Polyamide 6,6
Colour :
natural



Type	Dimensions (mm)		Hole Diameter	AMP Part Number	Package Quantity
	Length	Width			
H	26,4	16,2	5,2	2-0106102-1	100
I	60,5	25,2	5,1	2-0106103-1	100
J	59,9	49,9	4,9	2-0106104-1	100
J	40,3	20,5	4,9	2-0106105-1	100

-x = colour

Code : -1 = natural

-2 = black.

AMP-TY Cable Tie Accessories (continued)

Wall Plug bases

Material :
Polyamide 6,6
Colour :
black



Single

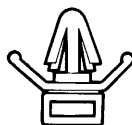


Double

Model Head	Dimensions (mm)		Max . width AMP-TY	Height Head	Part Number	Package Quantity
	Length	DIA				
Single	37	10	9	6,5	2-0106094-2	100
Double	37	10	9	13,0	2-0106095-2	100

Push Mount Bases

Material :
Polyamide 6,6
Colour :
natural

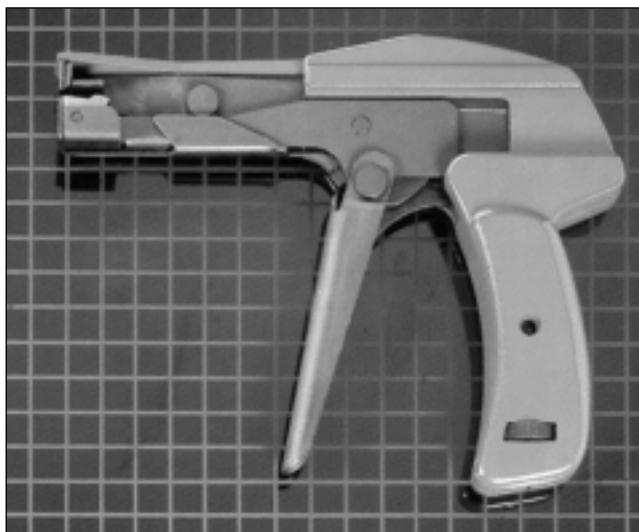


Hole Dia	Dimensions (mm)		Height Head	max. Panel Thickness	Part Number	Package Quantity
	Length	width				
6,2	10	10	10,3	3,2	2-0106106-1	100

TY Cable Ties (Tooling)

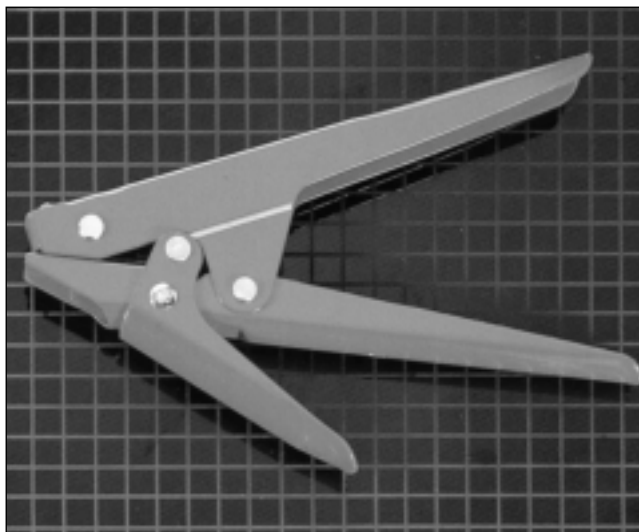
**Hand Tool
with Adjustable
Tension Setting
and Permanent
Cut-Off Device
for Cable Ties
up to 4.8 mm Width**

Part Number **734587-1**



**Hand Tool
for Belturing or
Extra Heavy-Duty Ties,
User Controlled Tension
and Cut-Off Device
for Cable Ties with
a Width of 6.0-9.0 mm**

Part Number **734611-1**

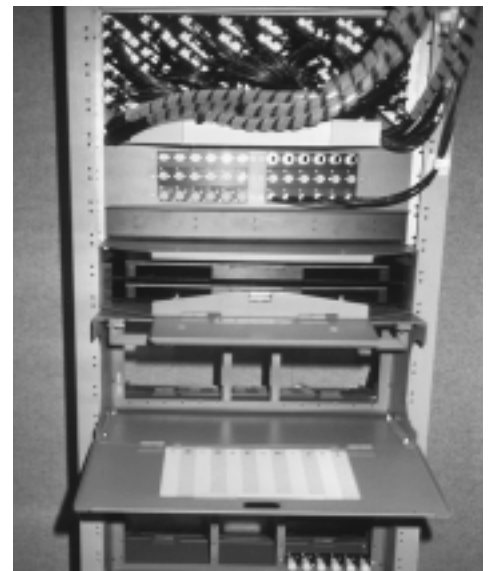
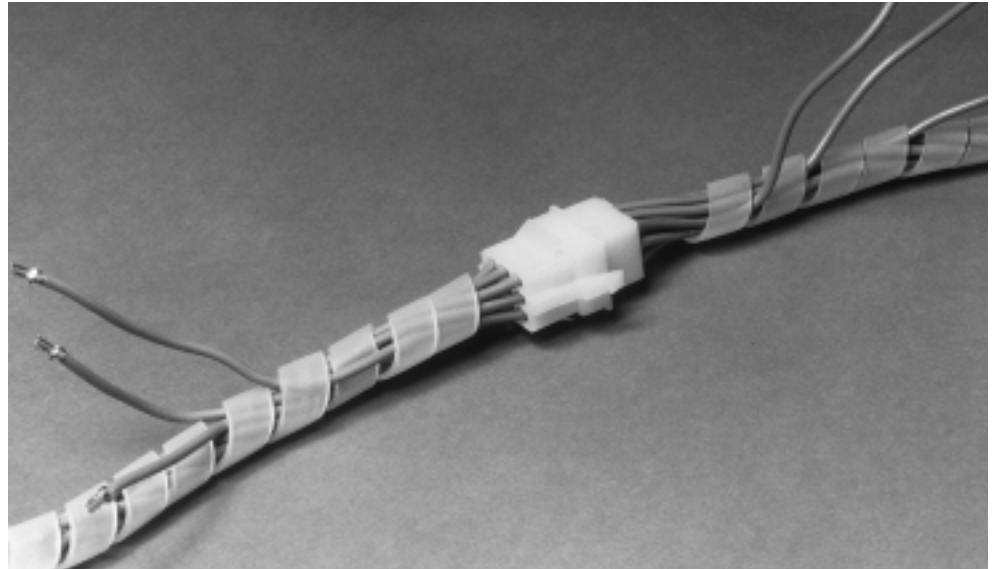


Engineering Notes

SPIRAP Plastic Cable Wrap

Product Facts

- Provides abrasion protection for wires, cables, tubing, and hoses.
- Attractive – makes neat, compact uniform bundles.
- Break-out at any point along the bundle.
- Moisture resistant – will not hold “cable-rotting” moisture.
- Meets military and commercial specifications.
- Available in three sizes covering from 1/16th – inch (1.58) to 4-inch (101.60) diameter bundles.
- Available in six materials to accommodate any application need.
- Quickly applied by hand or by supplied hand tool.



SPIRAP plastic wrap is a very practical way to bundle and harness cable, wire, tubing and hoses.

Economical and quickly applied, it provides continuous abrasion protection – even under severe vibration.

SPIRAP plastic wrap is prewound in continuous lengths. The diameter of the SPIRAP plastic wrap

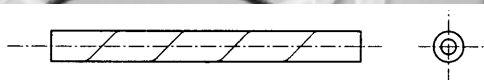
is slightly smaller than the bundle diameter it is recommended to protect. When applied, the plastic coil self-contracts to contain those items being bundled. This produces a tight, uniform protective jacket.

SPIRAP plastic wrap is available in six materials to meet your application requirements.

The SPIRAP Hand Tool is furnished with each box. The hand tool increases the speed of application and permits uniform wrapping along the bundle length.

AMP/and SPIRAP are trademarks

All specifications are subject to change. Consult AMP for latest designs specification

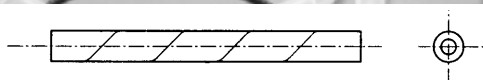
SPIRAP Plastic Cable Wrap (Continued)


Material	Colour	Application	Flammability	Temperature Range °C		Packing Qty m	Size	Bundle Diameter		Part Number
				min.	max.			min.	max.	
POLYETHYLENE	Natural	Inside	Flammable	-75	100	30	1/8	1	10	500000-2
POLYETHYLENE	Natural	Inside	Flammable	-75	100	30	1/4	5	50	500001-2
POLYETHYLENE	Natural	Inside	Flammable	-75	100	15	1/2	10	100	500002-1
POLYETHYLENE	Black	Outdoor	Flammable	-75	100	15	1/4	5	50	500030-1
POLYETHYLENE	Black	Outdoor	Flammable	-75	100	15	1/2	10	100	500031-1
POLYAMIDE	Black	Outdoor	Self Extinguishing	-100	100	30	1/8	1	10	500035-2
POLYAMIDE	Black	Outdoor	Self Extinguishing	-100	100	15	1/4	5	50	500036-1
POLYAMIDE	Natural	Inside	Self Extinguishing	-100	120	15	1/8	1	10	500013-1
POLYAMIDE	Natural	Inside	Self Extinguishing	-100	120	30	1/4	5	50	500015-2
POLYAMIDE	Natural	Inside	Self Extinguishing	-100	120	15	1/2	10	100	500017-1
POLYETHYLENE	White	Inside	Self Extinguishing	-20	95	30	1/2	10	100	500005-2
FLUORPOLYMER	Natural	Outdoor	Inflammable	-270	260	15	1/8	1	10	500023-1
FLUORPOLYMER	Natural	Outdoor	Inflammable	-270	260	15	1/4	5	50	500024-1

SPIRAP Hand Tool

Furnished with each box, the SPIRAP Hand Tool increases the speed of application and permits uniform wrapping along the bundle length. The hand tool is slotted for 1/8-inch (3.18), 1/4-inch (6.35) and 1/2-inch (12.70) SPIRAP tubing.

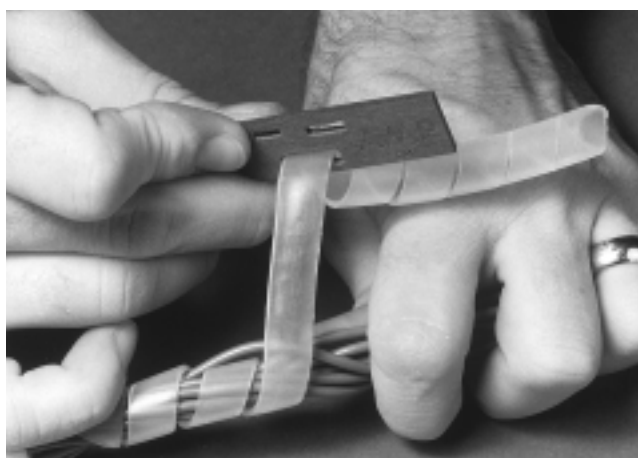


SPIRAP Plastic Cable Wrap (Continued)


Material	Colour	Application	Flammability	Packing Qty m	Size	Bundle Diameter		Réf. AMP-SIMEL
						min.	max.	
POLYETHYLENE	Natural	Inside	Flammable	75	1/8	1	10	142829-4
POLYETHYLENE	Natural	Inside	Flammable	30	1/4	5	50	142830-2
POLYETHYLENE	Natural	Inside	Flammable	15	1/2	10	100	142831-1
POLYETHYLENE	Natural	Inside	Flammable	10		25	100	134406-1
POLYETHYLENE	Black	Outdoor	Flammable	75	1/8	1	10	142839-4
POLYETHYLENE	Black	Outdoor	Flammable	30	1/4	5	50	142840-2
POLYETHYLENE	Black	Outdoor	Flammable	15	1/2	10	100	142841-1
POLYETHYLENE	Black	Outdoor	Flammable	10		25	100	134407-1

SPIRAP Hand Tool

Furnished with each box, the SPIRAP Hand Tool increases the speed of application and permits uniform wrapping along the bundle length. The hand tool is slotted for 1/8-inch (3.18), 1/4-inch (6.35) and 1/2-inch (12.70) SPIRAP tubing.

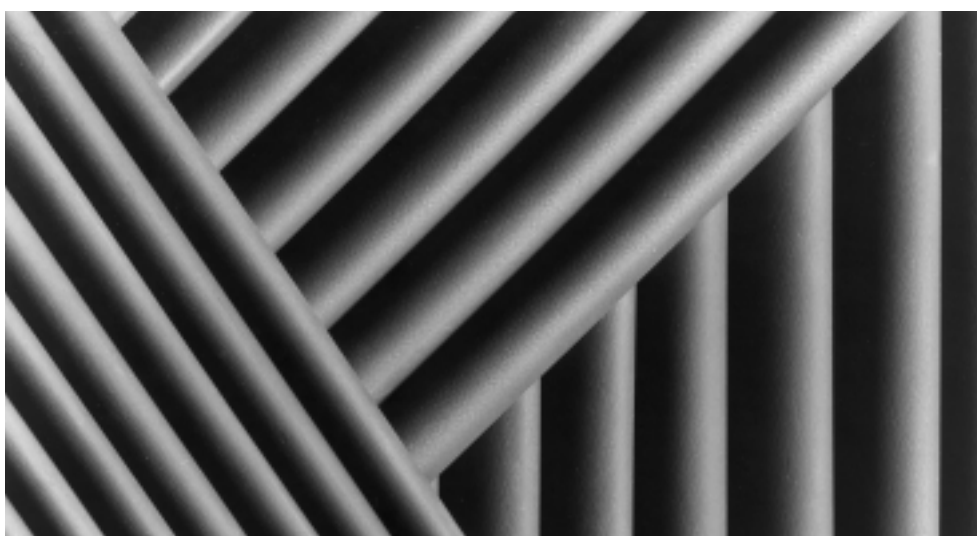
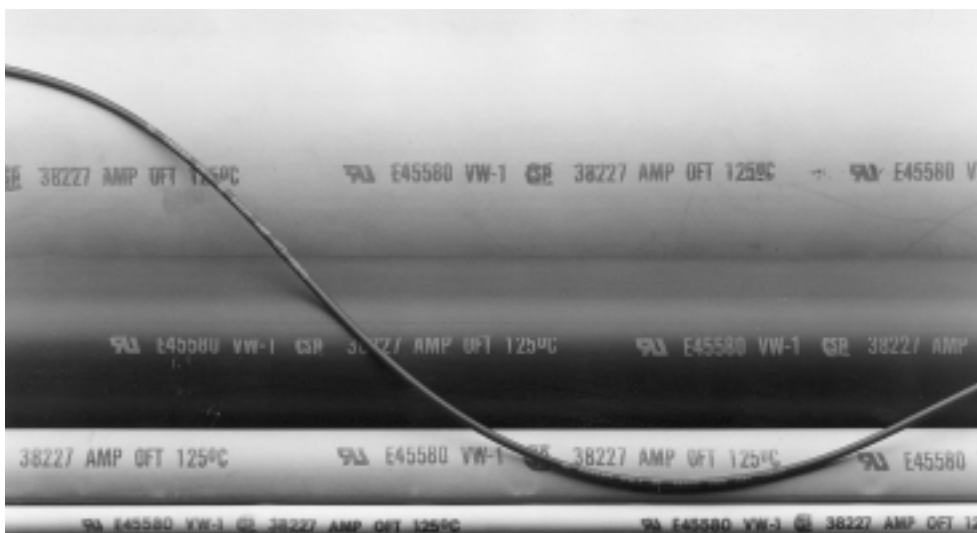
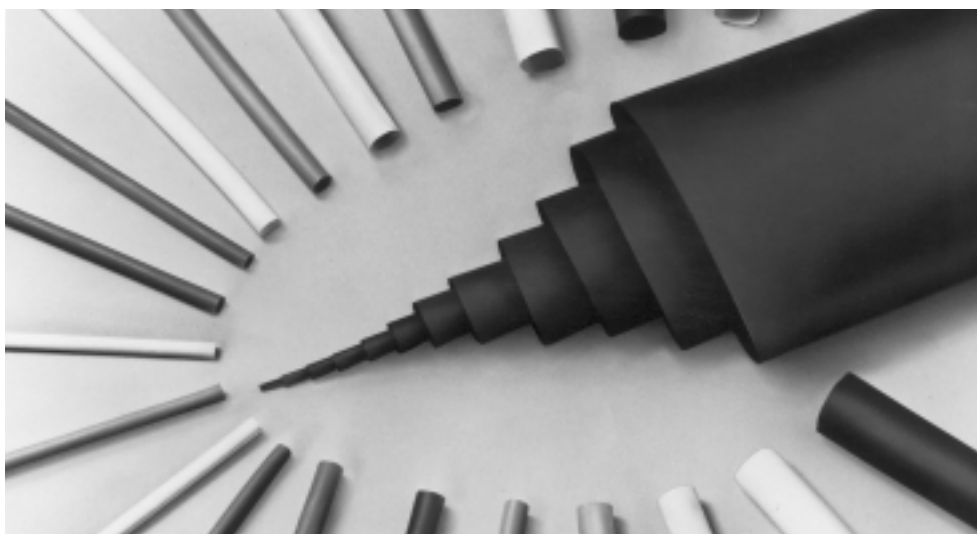


Engineering Notes

Heat Shrinkable Products

AMP Heat-shrinkable products are used world-wide in cable repairs, cables joints, sealing of construction parts. They are characterized above all by their reliability and ease of application, resulting in reduced installation costs. They provide electrical insulation as well as mechanical protection.

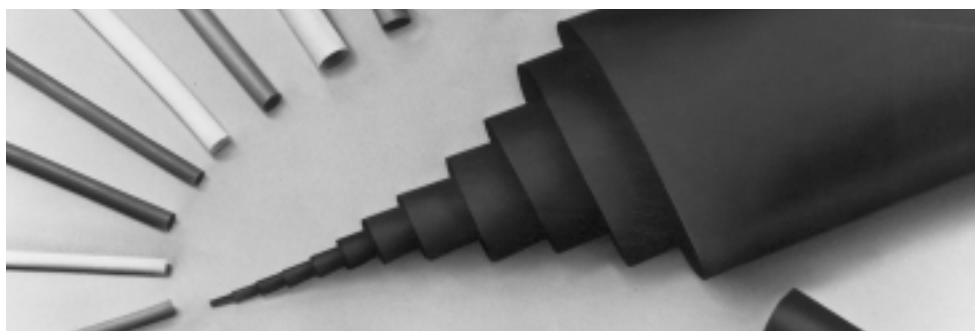
The following products have been selected among the AMP heat-shrinkable product offering. For more information on additional products such as Telecommunications technology applications, please contact your local AMP representative.



Heat Shrinkable Products

Heat Shrinkable Tubing Thin-wall All colours

- Flame retardant.
- 2 : 1 shrink ratio.
- Operating Temperature range :
- 40° C to + 135° C.
- Polyolefin tubing.
- High dielectric and mechanical strength.
- High Resistance to common fluids and solvents.
- Wide range of colours
- Delivery length : 1,00 m.
(all colours) or on reels (black only).



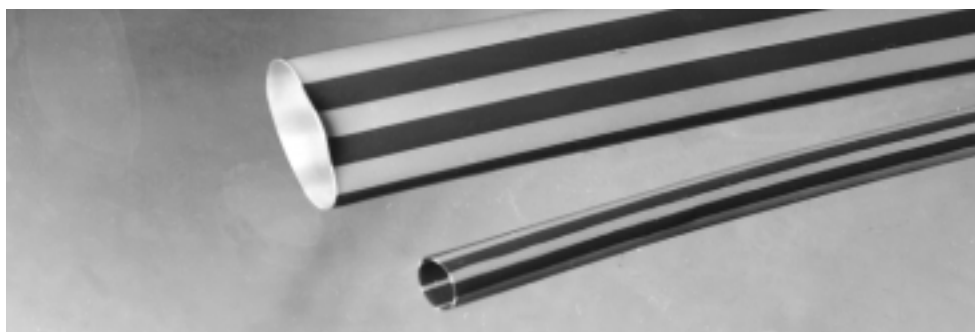
Dimensions (mm)		Wall thickness recovered (mm)	1,00 m length(All colours)		Black colour on reel	
minimum at delivery	maximum recovered		Delivery No. of pcs	Part Number	Delivery Length (m)	Part Number
1,2	0,6	0,45	20	135917-x	300	135916-1
1,6	0,8	0,45	20	135919-x	300	135918-1
2,4	1,2	0,50	20	135921-x	150	135920-1
3,2	1,6	0,50	20	135923-x	150	135922-1
4,8	2,4	0,50	20	135925-x	150	135924-1
6,4	3,2	0,65	20	135927-x	75	135926-1
9,5	4,8	0,65	10	135929-x	75	135928-1
12,7	6,4	0,65	10	135931-x	75	135930-1
19,0	9,5	0,75	10	135933-x	75	135932-1
25,4	12,7	0,90	10	135935-x	30	135934-1
38,0	19	1,00	10	135937-x	30	135936-1
50,8	25,5	1,15	5	135939-x	30	135938-1
76	38	1,25	5	135941-x	15	135940-1
102	51	1,40	5	135943-x	15	135942-1

Colour code -x :

- 1 Black (standard)
- 2 Red
- 3 Yellow
- 4 Green
- 5 Blue
- 6 White
- 7 Natural

Heat Shrinkable Tubing Thin-Wall Green-Yellow stripes

- 2 : 1 shrink ratio.
- Flame retardant.
- Polyolefin Tubing.
- High dielectric and mechanical strength.
- High Resistance to common Fluids and Solvents.
- Delivery length : 1,00 m.
- Operating Temperature Range :
- 55° C to + 135° C.



Dimensions (mm)		Wall thickness recovered mm	Colour : green - yellow	
minimum at delivery	maximum recovered		Delivery No of 1,0 m Length (pcs)	Part Number
3,0	1,5	0,50	20	136032-1
6,0	3,0	0,60	20	136033-1
8,0	4,0	0,65	20	136034-1
10,0	5,0	0,65	10	136035-1
12,0	6,0	0,65	10	136036-1
19,0	9,0	0,75	10	136037-1
26,0	13,0	0,90	5	136038-1
38,0	19,0	1,00	5	136039-1

Colours : Green - Yellow.

Heat Shrinkable Products (continued)

Heat Shrinkable Tubing Medium Wall with adhesive Sealant

- 3 : 1 shrink ratio.
- Operating Temperature range :
- 30° C to + 80° C.
- Colour : black.
- Polyolefin tubing.
- Suitable for environmental protection and sealing.
- Delivery length : 1,00 m.



Dimensions (mm)		Wall thickness recovered (mm)	Delivery No. of 1.0 m length (pcs)	Part Number
minimum at delivery	maximum recovered			
3	1	1,00	20	136215-1
6	2	1,00	20	136216-1
9	3	1,35	20	136217-1
12	4	1,50	20	136218-1
18	6	1,70	10	136219-1
24	8	1,95	10	136220-1
39	13	2,10	10	136221-1

Thick Wall with or without adhesive sealant

- 3 : 1 shrink ratio.
- Operating Temperature range :
- 55° C to + 135° C.
- Colour : black.
- Polyolefin tubing.
- High electrical and physical properties.
- Delivery length : 1,00 m.

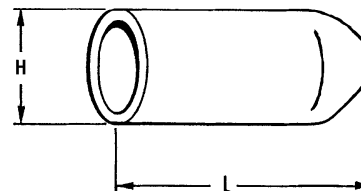


Dimensions (mm)		Wall thickness recovered (mm)	Delivery No. of 1.0 m length (pcs)	Part Number	
minimum at delivery	maximum recovered			with adhesive	without adhesive
9	3	1,8	6	135996-1	135005-1
13	4	2,4	6	135997-1	135006-1
19	6	2,4	6	135998-1	135007-1
28	9	3,0	6	135999-1	135008-1
38	12	4,1	6	136000-1	136009-1
51	16	4,1	6	136001-1	136010-1
68	22	4,1	1	136002-1	136011-1
90	30	4,1	1	136003-1	136012-1
130	36	4,2	1	136004-1	136013-1

Colour : Black.

Heat Shrinkable Products (continued)

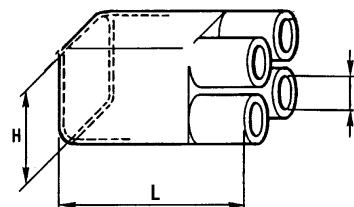
**Heat Shrinkable
End Caps
with adhesive Sealant**
for sealing cable ends



Colour : Black.

Cable diameter (mm)	Dimensions (mm) at Delivery		Dimensions (mm) Recovered		Part Number
	H		H1	L1	
4-8	12,7		2,3	33	136052-1
8-17	20		7,5	55	136053-1
17-30	35		15	90	136054-1
30-45	55		25	143	136055-1
45-65	73		32	150	136056-1
65-95	100		45	163	136057-1

**Heat Shrinkable
breakouts
(2, 3 or 4 cores)**
for sealing
transition area



Colour : Black.

Wire size mm²	Dimension (mm) at Delivery		Dimension (mm) Recovered			Part Number
	H	J	H1	J1	L	
2 Phase Cable						
4-25	28	15	9	4,1	90	136040-1
35-150	48	22	32	7	172	136041-1
3 Phase Cable						
4-35	38	16	13	4,2	103	136042-1
50-150	63	26	22	9	180	136043-1
185-300	82	36	28	13	200	136044-1
4 Phase Cable						
16-35	36	14	16,5	3,4	96	136045-1
70-150	60	25	25	9	217	136046-1
185-300	90	33	31	13,5	223	136047-1

Tapes and Sealants

Product Facts

- Self-adhering and self-curing ; bonds into a permanent, inseparable insulator within 24 hours at room temperature.
- Color stripe guides adequate tape overlap for optimum insulation.
- Rated for use from - 60° C to 200° C and up to 260° C for short durations.
- Solid rubber insulating barrier provides greater resistance to moisture and chemicals.
- Highly flexible, making it ideal for completely covering irregular surfaces.
- Availability color stripe guides offers a wider choice of color-coding.
- Meets or exceeds the requirements of MIL-I-46852, Type II.

Homogeneous, cross linked, thermally stabilised butyl rubber.

Part Number : **603098-1**

Application :

- Under heat shrinkable tubes without built-in sealant.
- Water tight if applied well.

Silicone Fusion Tape

Width	Thickness	Color		Length m	Weight grams	Part Number
		Tape	Stripe*			
25,40	0,51	Red	Blue	11	127,0	608036-1
25,40	0,51	Grey	Blue	11	127,0	608036-2
25,40	0,76	Grey	White	11	172,4	608036-4
31,75	1,02	Red	Green	11	263,1	608036-6
38,10	2,03	Red	White	11	576,1	608036-9
25,40	0,51	Clear	Blue	11	127,0	1-608036-2
25,40	0,51	Red	Blue	4,6	54,4	1-608036-3
25,40	0,51	Black	White	4,6	54,4	1-608036-4

* AMP Silicone Fusion Tape has a center color stripe on one side throughout the length which serves as a guide to proper coverage when wrapping.
IS 408-9716

Tape Sealant

Packing roll	Width mm	Part Number
7,60 m on paper	25,4	603098-1

Technical features

Thermal values :

Temperature range :

- 35° C to + 135° C.

Physical values

Elongation : 400 %

Adhesion : 11 N/cm²

Steam penetration :
0,02 per m/cm

Shore hardness A : 15-16

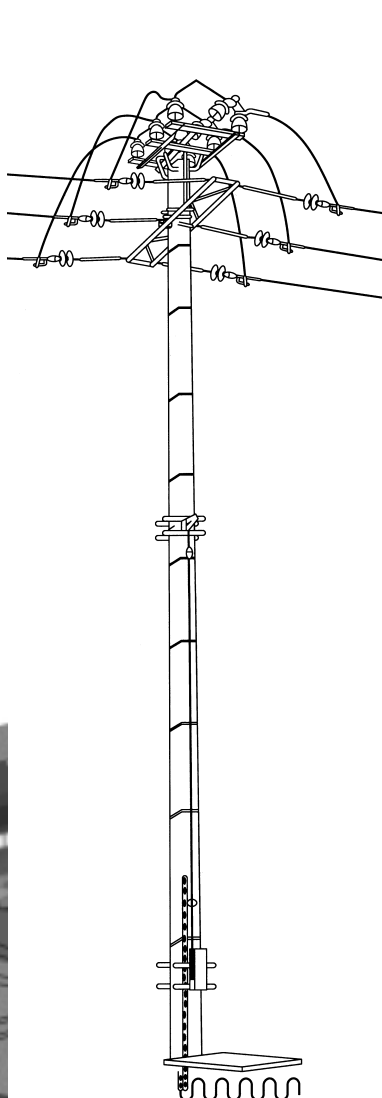
General resistivity

Resists water, acides, bases
and standard dissolvants.

Engineering Notes

Protection Products

Contents



Crimp Terminal Lugs TR 24

Mechanical Terminal Lugs TR 16

Crimp Connectors TR 25

Mechanical Connectors TR 15

AMPACT Copper Taps TR 2-4

AMPACT Terminal Lugs TR 11

Structure Grounding Clamps TR 13

AMPACT Copper Taps TR 2-4

ENERGUARD [C-LOK] Connectors TR 5

ENERGUARD [SHEAR-LOK] Connectors TR 6

ENERGUARD [WRENCH-LOK] Connectors TR 7-11

Cable Grip TR 18-19

Earthing Clamps TR 14

Earthing Rods TR 21-22

ENERGUARD [SHEAR-LOK] Connectors TR 6

Grounding Connectors TR 12

Earthing Rods TR 21-22

Protection Products

AMPACT Copper Grounding System

Product Facts

- Unique design provides firm, sure contact for consistent, all weather, wire-to-wire, low resistance grounding connections
- Compact, lightweight application tool permits easy installation almost anywhere, without bulky equipment, heat, or external power
- Simple installation system greatly reduces exposure to energized lines
- Connectors may be checked visually — speeding inspection and practically eliminating callbacks
- Electrical joints are stable and effective for optimum electrical contact, even under conditions of creep and cold flow
- Taps will not penetrate copper plating, allowing secure connections from copper conductors to ground rods, reinforcing bars or conductors of any type
- AMPACT copper taps are made of quality alloys for low resistivity and superior corrosion resistance

Selecting the proper tap is an important part of the application procedure. Use the following charts to determine letter codes, wire sizes, or AMPACT tap part numbers for specific applications.

Approvals

- Listed by Underwriters Laboratories Inc., File No. E69905



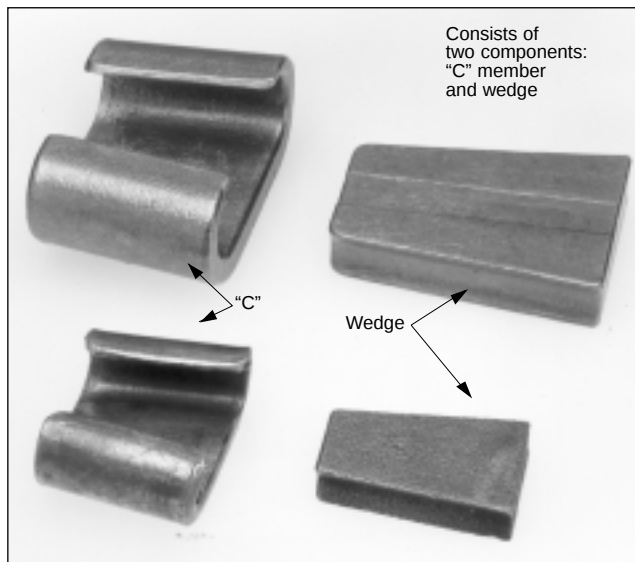
- Certified by Canadian Standards Association, File No. LR 56476



- REA Letter of Technical Acceptance (Grounding Taps)



AMPACT copper taps are used when you need a permanent connection. They resist corrosion and will not loosen. The unique design, incorporating a tapered “C” member and wedge, permits easy installation in only a fraction of the time required for conventional crimp-type or molded joints.



AMPACT Copper Tap Selection by Groove Size or Conductor Diameter Limits

Groove Size kcmil or AWG	Groove Code	Conductor Diameter			
		Minimum		Maximum	
		Inches	[mm]	Inches	[mm]
500	A	.785	[19.9]	.813	[20.7]
450	B	.745	[18.9]	.784	[19.9]
400	E	.700	[17.8]	.744	[18.9]
350	G	.650	[16.5]	.699	[17.8]
300	H	.620	[15.7]	.649	[16.5]
250	K (R) ^{††}	.561	[14.2]	.625	[15.9]
4/0	L	.506	[12.9]	.560	[14.2]
3/0	M	.451	[11.5]	.505	[12.8]
2/0	N	.401	[10.2]	.450	[11.4]
1/0	O	.355	[9.0]	.400	[10.2]
No. 2	T	.280	[7.1]	.354	[9.0]
No. 4	W	.216	[5.5]	.279	[7.1]
No. 6	X	.182	[4.6]	.215	[5.5]

^{††}250 kcmil groove is identified with the letter “K” when paired with 300 through 500 kcmil grooves, and with letter “R” when paired with No. 6 AWG through 250 kcmil grooves.

Wire-to-Rod application



Wire-to-Wire application



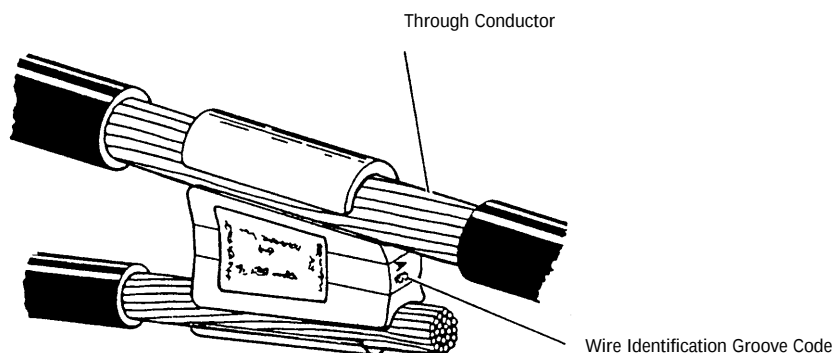
All specifications are subject to change. Consult AMP for latest designs specification

Protection Products

AMPACT Copper Grounding System (Continued)

AMPACT Copper Tap Selection for Wire-to-Wire Applications

Typical Example:
500 to 350 kcmil = Groove Code AG = Part No. 1-276337-1



Wire Size*	Use Red Cartridge Part No. 69338-2				Use White Cartridge Part No. 69338-5				Use Blue Cartridge Part No. 69338-1				
	X 5,6	W 4	T 2	O 1/0	N 2/0	M 3/0	L 4/0	K (R) 250	H 300	G 350	E 400	B 450	A 500
X 5,6	277060-4		277060-2		4-275187-0	3-275187-7	3-275187-4	3-275187-1	6-276337-5	5-276337-4	4-276337-2	2-276337-9	1-276337-8
W 4		277060-3			3-275187-9	3-275187-6	3-275187-3	3-275187-0	6-276337-4	5-276337-3	4-276337-1	2-276337-8	1-276337-7
T 2				277060-1	1-275187-7	1-275187-4	1-275187-0	275187-5	6-276337-2	5-276337-1	3-276337-9	276337-4	276337-8
O 1/0				1-275187-8	1-275187-6	1-275187-3	275187-9	275187-4	6-276337-0	4-276337-9	3-276337-7	2-276337-5	1-276337-4
N 2/0					1-275187-5	1-275187-2	275187-8	275187-3	5-276337-9	4-276337-8	3-276337-6	276337-3	276337-7
M 3/0						1-275187-1	275187-7	275187-2	5-276337-8	4-276337-7	3-276337-5	2-276337-4	1-276337-3
L 4/0							275187-6	275187-1	5-276337-7	4-276337-6	3-276337-4	276337-2	276337-6
K (R) 250								2-275187-8	5-276337-6	4-276337-5	3-276337-3	2-276337-3	276337-9
H 300									5-276337-5	4-276337-4	3-276337-2	2-276337-2	1-276337-2
G 350										4-276337-3	3-276337-1	2-276337-1	1-276337-1
E 400											3-276337-0	2-276337-0	1-276337-0
B 450												1-276337-9	276337-1
A 500													276337-5

*Letters Indicate Groove Code Identification.

Notes: For No. 8 to No. 8 Wire Terminations, Use AMPACT Red-Coded Tap Part No. 277060-5 (Not Listed in the Chart).

Protection Products

AMPACT Tooling

Lightweight cartridge-actuated tool requires minimum operator effort
Installs and removes taps even in confined spaces
Adaptable for standard hot-stick use
Conductor applications imprinted on tap packages
Packages and labels color coded to match taps to tools and cartridges



Small AMPACT Tool



Cleaning Tool



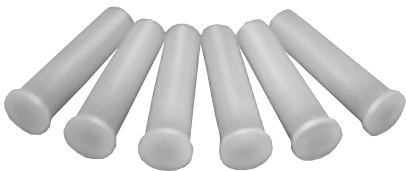
Part Number	Type	Connects
69437	Small AMPACT Tool For Red-, White-, and Blue-Coded Taps	Wire Combinations: Copper 13.3 to 253 mm² [6 to 500 MCM]
314199-1	Cleaning Tool	—

Instruction Sheet 408-1201, 408-9907, 408-2354

Note: Refer to Customer Manual 409-2106 for instructions on AMPACT Connector installation and removal.

AMPACT Accessories

Cartridges



Take-Off Clip



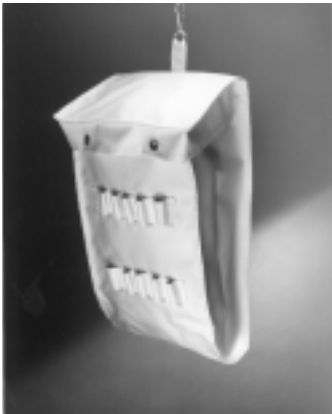
Cartridge Color	Part Number
Blue	69338-1
Red	69338-2
White	69338-5

Description	Part Number
For Blue- or White-Coded Copper Taps	69685-1*
For Red-Coded Taps	69684
For White-Coded Taps	69947

*Instruction Sheet 408-2589

Note: Refer to Customer Manual 409-2106 for AMPACT Tap removal.

Accessory Bag
Part No. 29346-1
Size: 18x6x7 [460x150x180]
Color - yellow



Protection Products

ENERGUARD Copper Tap/Grounding Connector [SHEAR-LOK Style]

No Special Tooling Required

Product Facts

- Wedge Pressure Technology
- Shear-head bolt—controlled torque
- Removable without conductor damage
- No special tools
- Application not inhibited by disfigured ground rod end
- Taps into existing ground conductors

Approvals

- Certified by Canadian Standards Association, File No. LR7189A-399  CERTIFIED
- Submitted for Grounding and Bonding Approval including Direct Burial

Typical Applications

- Railway grounds
- Telco distribution, CATV grounds
- Pole grounds
- Industrial/residential service grounds

Technical Document Instruction Sheet

408-9921



AMP has developed the SHEAR-LOK Copper Tap/Grounding Connector for applications in the railroad, power utility and telco industries where connectors are required to withstand mid-range (20 kA symmetrical RMS) magnitudes of fault current.

The SHEAR-LOK connectors utilize AMP Wedge Pressure Technology and controlled torque drive bolts to provide easily-applied and highly-reliable ground rod connections.

This family of connectors is ideal for applications where connections must be made between conductor and rods, specifically in the range of 5.29 mm² [10AWG], 13.3 mm² [6 AWG], 21.1 mm² [4 AWG] to both 15.88 mm [5/8-.625] and 19.05 mm [3/4-.750] dia. copper clad and galvanized rods.

Connects Rod	To	Conductor	Part Number
Cu Clad 14.30 [.562] Dia.		53.7 mm² [1/0] Stranded	83000-1 +
Cu Clad 14.30 [.562] Dia.		13.3 mm² [6 AWG] Solid or Stranded or 21.1 mm² [4 AWG] Solid or Stranded.	80408-2 + *
Galv. 15.88 [.625] Dia.		13.3 mm² [6 AWG] Solid or Stranded	80408-2 + *
Cu Clad 17.32 [.682] Dia.		13.3 mm² [6 AWG] Solid or Stranded	80408-3
Cu Clad 17.32 [.682] Dia.		21.1 mm² [4 AWG] Solid or Stranded	80408-4 + *
Galv. 19.05 [.750] Dia.		13.3 mm² [6 AWG] Solid or Stranded	80408-4 + *
Galv. 19.05 [.750] Dia.		21.1 mm² [4 AWG] Solid or Stranded	80408-5
Cu Clad 17.32 [.682] Dia.		53.7 mm² [1/0 Stranded]	80408-6 +
Cu Clad 14.30 [.562] Dia.		13.3 mm² [6 AWG] Solid, 8.3 mm² [8 AWG] Solid, Stranded or 5.29 mm² [10 AWG] Solid, Stranded	80408-7 +

Note: + UL Listed File No. E69905 Grounding & Bonding Including Direct Burial
* CSA Certified

All specifications are subject to change. Consult AMP for latest designs specification

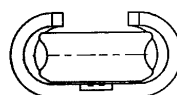
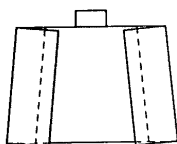
Protection Products

ENERGUARD Grounding and Bonding Connectors [C-LOK Style]

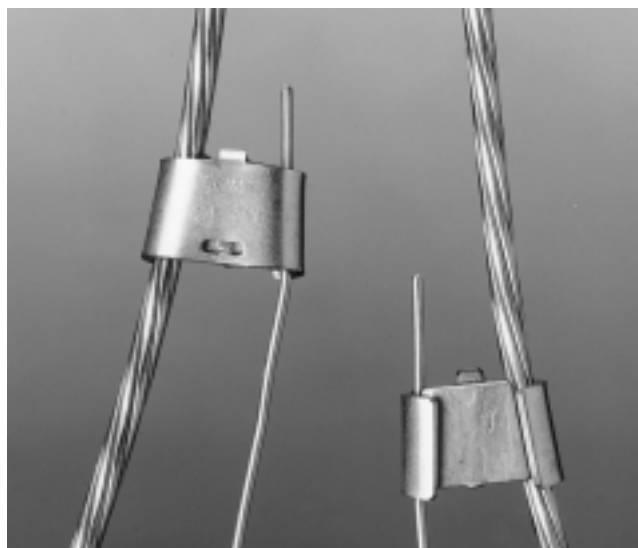
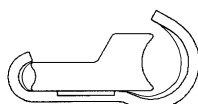
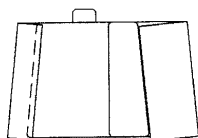
Product Facts

- C-LOK connectors are made of tin-plated or unplated copper alloy
- C-LOK connectors can be rapidly and safely installed without special tools
- A securing lock stops the wedge from coming loose after installation
- This lock is visible in the inspection window to verify a good connection
- C-LOK connectors are removable and do not damage the conductors, either during installation or during removal
- The "C" and "wedge" components are available with/without factory applied inhibitor
- C-LOK connectors come packaged with wire combinations and part number imprinted on the bag
- C-LOK connectors are tamper-proof — cannot be disturbed by other trades

Symmetrical "C" Member and Wedge



Asymmetrical "C" Member and Wedge



LISTED
File No.
E69905



CERTIFIED
File No.
LR7189



Letter of Technical
Acceptance

No Special Tooling Required

Part Number		Conductor Sizes		
Plated "C" (with Inhibitor)	Unplated "C" (No Inhibitor)	Run	to	Tap
81663-3	83016-3	#6 [13 mm ²] sol & str		#10-12 [5-3 mm ²] sol & str
81663-5*	83016-5	#6 [13 mm ²] sol & str		#6 [13 mm ²] sol & str
81663-2*	83016-2	#6 [13 mm ²] str		#10-12 [5-3 mm ²] sol & str
81663-1*	83016-1	#4 [21 mm ²] sol		#6 [13 mm ²] sol & str
		#6 [13 mm ²] str		#6 [13 mm ²] str
1-81663-0*	1-83016-0	#4 [21 mm ²] str		#6 [13 mm ²] sol & str
		#4 [21 mm ²] sol		#4 [21 mm ²] sol
1-81663-1	1-83016-1	#4 [21 mm ²] sol & str		#4 [21 mm ²] sol
		#2 [34 mm ²] sol, 1/4 [6.35 mm] galv		#6 [13 mm ²] sol & str
81663-6	83016-6	#4 [21 mm ²] str		#12-14 [3-2 mm ²] sol & str
		1/4 [6.35 mm] galv		#12-14 [3-2 mm ²] sol & str
1-81663-2	1-83016-2	#4 [21 mm ²] str		#4 [21 mm ²] str
		#2 [34 mm ²] str		#6 [13 mm ²] sol & str
1-81663-6	1-83016-6	1/4 [6.35 mm] galv		#4 [21 mm ²] sol & str
81663-8	83016-8	#2 [34 mm ²] str		#12-14 [3-2 mm ²] sol & str
1-81663-5	1-83016-5	5/16 [7.94 mm] galv		#6 [13 mm ²] sol & str
1-81663-3	1-83016-3	5/16 [7.94 mm] galv		#4 [21 mm ²] sol & str
1-81663-7	1-83016-7	3/8 [9.52 mm] galv		#6 [13 mm ²] sol & str

* Available from stock

Part Number		Conductor Sizes		
Plated "C" (with Inhibitor)	Unplated "C" (No Inhibitor)	Run	to	Tap
83017-3	81713-3	2/0 [70 mm ²]		#6 [13 mm ²] sol & str
		1/0 [50 mm ²] str		#4 [21 mm ²] sol & str
83017-4	81713-4	2/0 [70 mm ²]		#4 [21 mm ²] sol & str
83017-1	81713-1	1/2 (.500) [12.70] rod		#4 [21 mm ²] sol & str
		5/8 (.563) [14.30] rod		#6 [13 mm ²] sol & str
83017-2	81713-2	5/8 (.563) [14.30] rod		#4 [21 mm ²] sol & str
		5/8 (.625) [15.88] rod		#6 [13 mm ²] sol & str

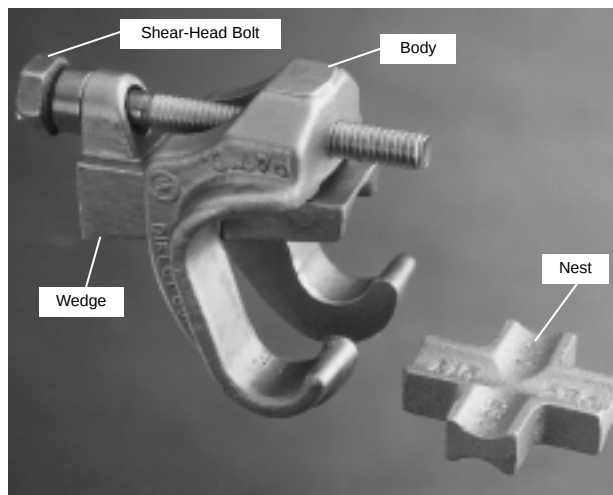
All specifications are subject to change. Consult AMP for latest designs specification

Protection Products

ENERGUARD Copper Grounding System

[WRENCH-LOK Style]

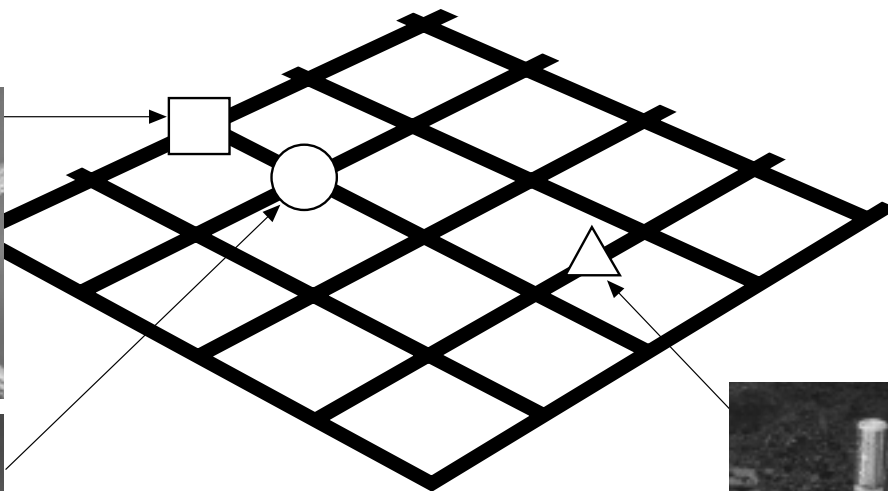
A grid grounding system must dissipate surges of fault current quickly and effectively to limit the potential damage to equipment and to protect personnel close to the equipment. AMP WRENCH-LOK Grounding Connectors are a safe, fast and reliable method to permanently join conductor to conductor or conductor to ground rod in the grid system or other grounding applications.



Product Facts

- No special molds, crimping tool, or dies are required—only a wrench is needed to complete all applications
- Can be applied in virtually all weather conditions and job situations—not affected by adverse environments
- "Spring-like" qualities of the connector's body provide positive, permanent grip on conductors and rod
- Tapered wedge holds conductors and rod in tightly and is locked in place
- Special shear-head, breakaway bolt gives positive indication of completed connection at 130/160 inch-lbs. nominal torque
- Good "range-taking" capability permits effective performance on various sizes and types of copper conductors and their Copperweld equivalents with very few part numbers

Typical Grid Connections



Conductor-to-Conductor (Tee)



Conductor-to-Conductor (Cross)



Conductor-to-Rod



Protection Products

ENERGUARD [WRENCH-LOK] Connectors



Connector Selection Charts

Conductor-to-Ground Rod

3/8 Copper Clad .355 [9.02]	3/8 Galvanized Steel .375 [9.52]	1/2 Copper Clad .475 [12.06]	1/2 Galvanized Steel .500 [12.70]	5/8 Copper Clad .563 [14.30]	5/8 Galvanized Steel .625 [15.88]	3/4 Copper Clad .682 [17.32]	3/4 Galvanized Steel .750 [19.05]	#2	sol, str, cmpt
83747-2	83747-2	83747-4	83747-4	83749-1	83749-2	83749-3	83749-4	1/0	str, compacted
83747-3	83747-3	83749-1	83749-1	83749-2	83749-3	83749-4	83748-3	2/0	str, compacted
83747-4	83747-4	83749-2	83749-2	83749-3	83748-1	83748-3	83748-4	3/0	str, compacted
		83749-3	83749-3	83748-1	83748-2	83748-4	83751-1	4/0	str, compacted
		83748-1	83748-1	83748-2	83748-4	83751-1	83751-2	250	compacted
				83750-1	83751-1	83751-2	83751-3	250	str
					83751-1	83751-2	83751-3	300	compacted
					83751-2	83751-3	83751-4	300	str
					83751-2	83751-3	83751-4	350	compacted
						83751-3	83750-2	350	str
						83751-3	83751-4	400	compacted
							83750-3	400	str
							83750-2	450	compacted
							83750-5	450	str
							83750-3	500	compacted
							83750-4	500	str

Conductor-to-Conductor (Standard Round)

#2	1/0	2/0	3/0	4/0	250	300	350	400	450	500	#2	sol, str
sol, str	str	str	str	str	str	str	str	str	str	str		
83747-1	83747-2	83747-2	83747-3	83747-4	83749-1	83749-2	83749-3	83749-4	83749-4	—	1/0	str
	83747-3	83747-3	83747-4	83749-1	83749-2	83749-3	83748-1	83748-3	83748-3	83751-1	2/0	str
		83747-4	83749-1	83749-2	83749-3	83748-1	83748-2	83748-3	83748-4	83751-1	3/0	str
			83749-2	83749-3	83748-1	83748-2	83748-3	83748-4	83751-1	83751-2	4/0	str
				83748-2	83748-2	83748-4	83751-1	83751-1	83751-2	83751-3	250	str
					83750-1	83751-1	83751-2	83751-2	83751-3	83751-4	300	str
						83750-2	83751-2	83751-3	83751-4	83750-2	350	str
							83751-3	83751-4	83750-2	83750-3	400	str
								83750-2	83750-3	83750-5	450	str
									83750-5	83750-6	500	str

Conductor-to-Conductor (Compacted)

#2	1/0	2/0	3/0	4/0	250	300	350	400	450	500	#2	compacted
compacted	compacted	compacted	compacted	compacted	compacted	compacted	compacted	compacted	compacted	compacted		
83747-1	83747-2	83747-2	83747-3	83747-4	83747-4	83749-1	83749-2	83749-3	83749-3	83749-4	1/0	compacted
	83747-3	83747-3	83747-4	83749-1	83749-2	83749-2	83749-3	83748-1	83749-4	83748-3	2/0	compacted
		83747-4	83749-1	83749-2	83749-2	83749-3	83748-1	83748-2	83748-3	83748-4	3/0	compacted
			83749-2	83749-3	83748-1	83748-1	83748-2	83748-3	83748-4	83751-1	4/0	compacted
			83748-1	83748-2	83748-2	83748-4	83748-4	83751-1	83751-2	83751-2	250	compacted
				83750-1	83750-1	83751-1	83751-1	83751-2	83751-2	83751-3	300	compacted
						83751-2	83751-2	83751-3	83751-3	83751-3	350	compacted
							83751-3	83751-4	83751-4	83751-4	400	compacted
								83750-2	83750-2	83750-3	450	compacted
									83750-3	83750-3	500	compacted

Approvals



LISTED
File No.
E69905



CERTIFIED
File No.
LR56476

- REA
- Meets requirements of IEEE STD 837

Technical Documents

Department Publication

410-5812

Instruction Sheet

408-9504

Replacement Bolts

Part Number

Small Body 81249-1

Large Body 81249-2

Conductors listed are for Stranded Copper
Standard Round.

Protection Products

ENERGUARD [WRENCH-LOK] Connectors



Part No. Small Body	Description Standard Round			Compacted			Conductor to Ground Rod		
83747-1	#2 sol.,str.	to	#2 sol.,str.	2	to	#2	to		
83747-2	1/0,2/0 str.	to	#2 sol.,str.	1/0,2/0	to	#2	3/8 Clad or Galv.	to	#2
83747-3	1/0,2/0 str.	to	1/0 str.	1/0,2/0	to	1/0	3/8 Clad or Galv.	to	1/0
83747-4	3/0 str.	to	#2 sol.,str.	3/0	to	#2			
	2/0 str.	to	2/0 str.	2/0	to	2/0	3/8 Clad or Galv.	to	2/0
	3/0 str.	to	1/0 str.	3/0	to	1/0	1/2 Clad or Galv.	to	#2
83749-1	4/0 str.	to	#2 sol.,str.	4/0,250	to	#2			
	3/0 str.	to	#2 str.	3/0	to	2/0	1/2 Clad or Galv.	to	1/0
	4/0 str.	to	1/0 str.	4/0	to	1/0	5/8 Clad	to	#2
83749-2	250 str.	to	#2 sol.,str.	300	to	#2			
	3/0 str.	to	3/0, str.	3/0	to	3/0	1/2 Clad or Galv.	to	2/0
	4/0 str.	to	2/0 str.	4/0,250	to	2/0	5/8 Clad	to	1/0
83749-3	250 str.	to	1/0 str.	250/300	to	1/0	5/8 Galv.	to	#2
	300 str.	to	#2 sol.,str.	350	to	#2			
	4/0 str.	to	3/0 str.	4/0	to	3/0	1/2 Clad or Galv.	to	3/0
83748-1	250 str.	to	2/0 str.	300	to	2/0	5/8 Clad	to	2/0
	300 str.	to	1/0 str.	350	to	1/0	5/8 Galv.	to	1/0
	350 str.	to	#2 sol.,str.	400,450	to	#2	3/4 Clad	to	#2
83748-2	4/0 str.	to	4/0 str.	4/0	to	4/0	1/2 Clad or Galv.	to	4/0
	250 str.	to	3/0 str.	250,300	to	3/0	5/8 Clad	to	3/0
	300 str.	to	2/0 str.	350	to	2/0	5/8 Galv.	to	2/0
83749-4	350 str.	to	1/0 str.	400	to	1/0			
	4/0 str.	to	4/0 str.	250,300	to	4/0	5/8 Clad	to	4/0
	300 str.	to	3/0 str.	350	to	3/0	5/8 Galv.	to	3/0
83748-3	350 str.	to	2/0 str.	400	to	2/0			
	400,450 str.	to	#2 sol.,str.	450	to	1/0	3/4 Clad	to	1/0
				500	to	#2	3/4 Galv.	to	#2
83748-4	350 str.	to	3/0 str.	400	to	3/0	3/4 Clad	to	2/0
	400 str.	to	2/0, 1/0 str.	450	to	2/0	3/4 Galv.	to	1/0
	450 str.	to	1/0 str.	500	to	1/0			
83750-1	300 str.	to	4/0 str.	350	to	4/0, 250	5/8 Galv.	to	4/0
	400 str.	to	3/0 str.	400	to	4/0	5/8 Galv.	to	250 cmpt
	450 str.	to	2/0 str.	450	to	3/0	3/4 Clad	to	3/0
83751-1	500 str.	to	2/0 str.	500	to	3/0	3/4 Galv.	to	2/0
	250 str.	to	250 str.	250,300	to	250,300	5/8 Clad	to	250 str.,cmpt
	300 str.	to	250 str.	350,400	to	300	5/8 Galv.	to	250 str.,300 cmpt
83751-2	350,400 str.	to	4/0 str.	400	to	250	3/4 Clad	to	4/0,250 cmpt
	450 str.	to	3/0 str.	450	to	4/0	3/4 Galv.	to	3/0
	500 str.	to	2/0 str.	500	to	3/0			
83751-3	300,350 str.	to	300 str.	350,400	to	350	5/8 Galv.	to	350 cmpt,300 str.
	350,400 str.	to	250 str.	450	to	300,250	3/4 Clad	to	250 str.,300 cmpt
	450 str.	to	4/0 str.	500	to	250	3/4 Galv.	to	4/0,250 cmpt.
83751-4	500 str.	to	3/0 str.		to				
	350 str.	to	350 str.	400	to	400	3/4 Clad	to	300 str.,350 cmpt,str.,400 cmpt
	400 str.	to	300 str.	450	to	350	3/4 Galv.	to	250 str.,300 cmpt.
83751-5	450 str.	to	250 str.	500	to	350,300			
	500 str.	to	4/0 str.		to				
	400 str.	to	350 str.	400,500	to	400	3/4 Galv.	to	300 str.,350 cmpt,400 cmpt
83750-2	450 str.	to	300 str.		to				
	500 str.	to	250 str.		to				
	400 str.	to	400 str.	450,500	to	450	3/4 Galv.	to	350 str.,450 cmpt
83750-3	450 str.	to	350 str.		to				
	500 str.	to	300 str.		to				
	450 str.	to	400 str.	500	to	500	3/4 Galv.	to	400 str.,500 cmpt
83750-4	450 str.	to	400 str.		to				
	500 str.	to	350 str.		to				
	450 str.	to	450 str.		to				
83750-5	500 str.	to	400 str.		to				
	500 str.	to	450 str.		to				
	500 str.	to	500 str.		to				
83750-6	500 str.	to	500 str.		to				

Protection Products

ENERGUARD
[WRENCH-LOK]
Connectors

IMPERIAL

	Sum of Diameters		Large Wire		Small Wire	
	Max.	Min.	Max.	Min.	Max.	Min.
83747-1	0.595	0.500	0.296	0.204	0.296	0.204
83747-2	0.706	0.594	0.420	0.298	0.296	0.204
83747-3	0.782	0.672	0.470	0.302	0.370	0.258
83747-4	0.832	0.733	0.520	0.313	0.420	0.258
83749-1	0.890	0.799	0.630	0.423	0.470	0.258
83749-2	0.942	0.846	0.630	0.423	0.470	0.258
83749-3	1.003	0.898	0.700	0.470	0.470	0.258
83748-1	1.050	0.943	0.700	0.470	0.700	0.292
83748-2	1.099	0.995	0.700	0.470	0.522	0.295
83749-4	1.068	0.964	0.770	0.500	0.470	0.258
83748-3	1.146	1.042	0.770	0.500	0.520	0.292
83748-4	1.192	1.086	0.770	0.500	0.520	0.316
83750-1	1.148	1.040	0.580	0.460	0.580	0.460
83751-1	1.250	1.147	0.815	0.572	0.575	0.336
83751-2	1.311	1.212	0.815	0.582	0.630	0.414
83751-3	1.374	1.288	0.815	0.606	0.682	0.473
83751-4	1.419	1.342	0.815	0.660	0.682	0.527
83750-2	1.464	1.400	0.815	0.670	0.730	0.585
83750-3	1.510	1.446	0.815	0.676	0.770	0.631
83750-5	1.546	1.495	0.815	0.680	0.815	0.680
83750-4	1.580	1.538	0.815	0.723	0.815	0.723
83750-6	1.620	1.578	0.815	0.763	0.815	0.763

METRIC

	Sum of Diameters		Large Wire		Small Wire	
	Max.	Min.	Max.	Min.	Max.	Min.
83747-1	15.113	12.700	7.518	5.182	7.518	5.182
83747-2	17.932	15.088	10.668	7.569	7.518	5.182
83747-3	19.863	17.069	11.938	7.671	9.398	6.553
83747-4	21.133	18.618	13.208	7.950	10.668	6.553
83749-1	22.606	20.295	16.002	10.744	11.938	6.553
83749-2	23.927	21.488	16.002	10.744	11.938	6.553
83749-3	25.476	22.809	17.780	11.938	11.938	6.553
83748-1	26.670	23.952	17.780	11.938	17.780	7.417
83748-2	27.910	25.273	17.780	11.938	13.259	7.493
83749-4	27.127	24.486	19.558	12.700	11.938	6.553
83748-3	29.108	26.467	19.558	12.700	13.208	7.417
83748-4	30.277	27.584	19.558	12.700	13.208	8.026
83750-1	29.159	26.416	14.732	11.684	14.732	11.684
83751-1	31.750	29.134	20.701	14.529	14.605	8.534
83751-2	33.299	30.785	20.701	14.783	16.002	10.516
83751-3	34.900	32.715	20.701	15.390	17.323	12.014
83751-4	36.043	34.087	20.701	16.764	17.323	13.386
83750-2	37.186	35.560	20.701	17.018	18.542	14.859
83750-3	38.354	36.728	20.701	17.170	19.558	16.027
83750-5	39.268	37.973	20.701	17.272	20.701	17.272
83750-4	40.132	39.065	20.701	18.364	20.701	18.364
83750-6	41.148	40.081	20.701	19.380	20.701	19.380

Protection Products

ENERGUARD [WRENCH-LOK] Copper Ground Grid Connectors

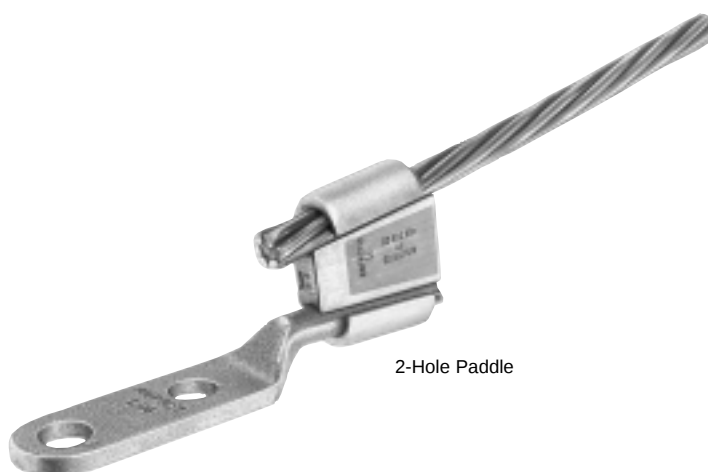
Summary of AMP Test Results
for Copper Ground Grid
Connectors

Test	Results
IEEE Standard 837	Overall, connectors meet all requirements necessary to be considered qualified for permanent grounding connections used in substation grounding.
A. Mechanical Pullout	Connectors exceeded min. standard pullout requirements by wide margin.
B. Electromagnetic Force	Connectors withstood high mechanical and heating stresses of short circuit currents, well within standard.
C. Sequential Tests	
1. Current-Temperature Cycling	Connectors ran much cooler than control conductor and resistance remained low and stable.
2. Freeze-Thaw	Resistance of connectors remained stable, demonstrating connectors are not affected by extreme temp. changes.
3. Corrosion-Nitric Acid	Acid did not penetrate contact interface and resistance remained stable.
4. Fault Current	Connectors withstood severe mechanical and heating stresses with very slight increase in joint resistance, well within standard.
Thermal Shock and Accelerated Corrosion	Stable performance indicates connectors will not be adversely affected by extreme environmental conditions.
Torque of Bolt vs. Resistance of Connection	Connection resistance stable at point much below nominal torque.
Torque of Bolt vs. Deflection of Body	Connector designed with sufficient strength and spring qualities to maintain resilient contact force for dependable, long-term connection.
Tensile vs. Deflection	Connector body designed with sufficient strength to withstand extreme overload mechanical forces.

AMPACT
Terminal Lug

Product Facts

- Easy to install with AMPACT tooling
- Use as disconnectable tap or jumper connection
- Controlled contact pressure
- Easily removable and relocated
- NEMA-type terminal



2-Hole Paddle



Paddle Type	Conductor	Shank Size (Tap Groove)	Part Number
Copper 2-Hole Paddle	#2 to 500 kcmil Copper Cable	4/0 STR	276762-1

Notes: 1. Use AMPACT tooling, see page TR 4
2. Order Tap Kit separately, see page TR 4.

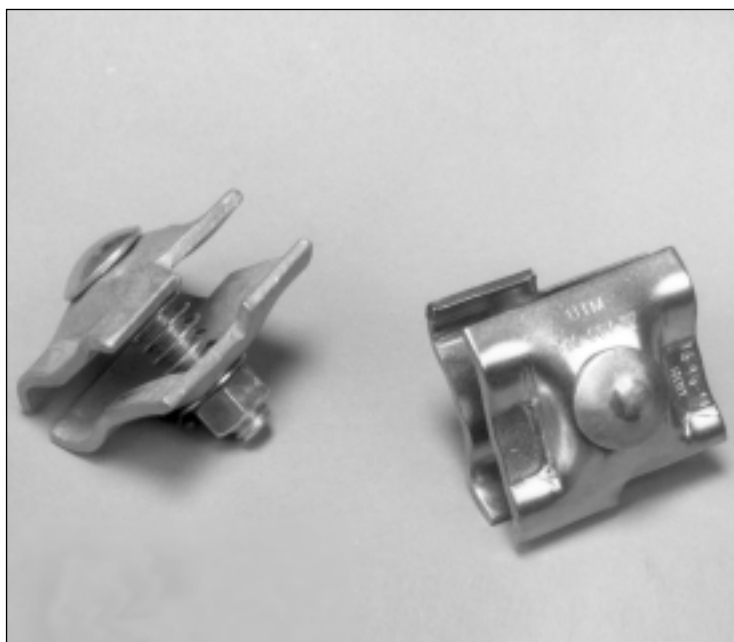
Protection Products

Grounding Connectors

AMP Grounding Connectors provide durable, reliable connections between all types of ground rods, pipes and ground wires. The connector design permits it to be attached anywhere along the length of a rod or pipe. Installation access is not limited to the ends of either. One connector covers the popular sizes of ground rod and the associated conductors. The connector is designed with "spring-like" qualities which prohibit relaxation under any environmental condition.

A factory installed steel spring expands the connector halves as the nut is loosened and holds the halves apart for ease of application. The connector is easily installed using only one wrench.

No Special Tooling Required



Ground Rod Size	Wire Size**	Bolt Size	Part Number	Material and Finish
12.70, 15.87, 19.05 1/2, 5/8, 3/4	8-1/0 AWG	9.52 3/8	81411-3	Body: Galvanized Steel Bolt/Nut/Washer: Galvanized Steel Spring: Zinc Plated Steel
			81412-1*	Body: 300 Series Stainless Steel Bolt/Nut/Washer: 300 Series Stainless Steel Spring: Zinc Plated Steel

*REA Listed

** No. 8 wire not acceptable with 3/4 [19.05] rod

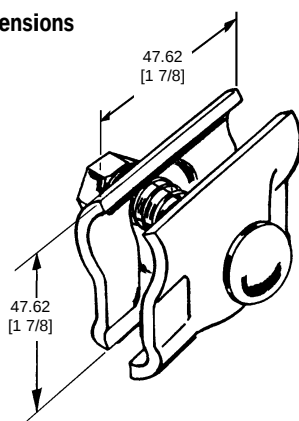
Approvals

- REA Listed (Stainless steel version)

Typical Applications

- Low fault current ground connections in power distribution
- Residential power and telephone service grounds
- CATV grounds
- Any low resistance, low current connection to ground rods or pipes

Dimensions



Technical Document

Instruction Sheet

408-9793

Protection Products

Structure
Grounding
Clamps

Product Facts

- The clamp is designed with “spring-like” qualities which prohibit relaxation under any environmental condition
- Design permits one clamp to accommodate #4 solid thru 350 kcmil as a single wire, and 1/0 thru 4/0 as a double wire
- Clamp top and base are stamped of a high strength, corrosion resistant copper alloy
- Clamp is available with a variety of sizes and types of hardware
- Clamp is available as a single piece (top only) or together with the base
- Clamp available tin plated for all-purpose use

Typical Applications

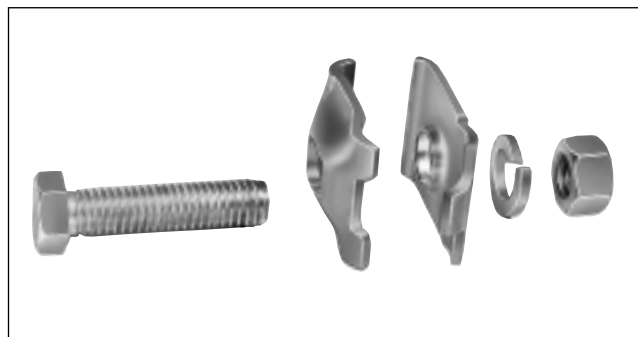
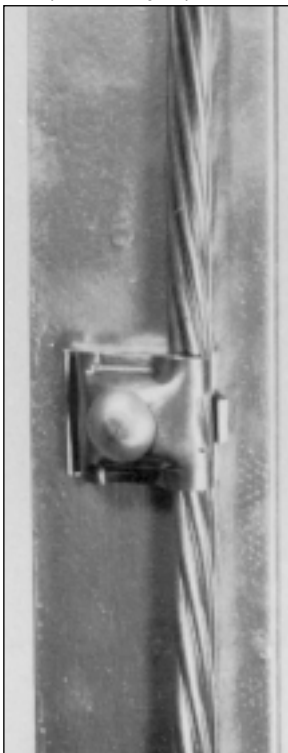
- Positive connection to tower legs
- Ground wire hold-down
- Ground connection for substation structures
- Switchgear ground connections

Technical Document

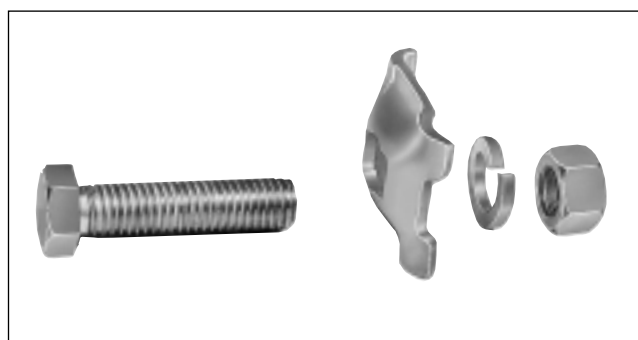
Instruction Sheet

408-9803

No Special Tooling Required



Top, Base and Hardware



Top Only and Hardware

Wire Range	Clamp Description	Clamp Plating	Part Number	
			[12.70] 1/2 Galvanized Steel Round Head Bolt	[12.70] 1/2 Silicon Bronze Hex Head Bolt
4 AWG Sol thru 350 kcmil Str (Single Conductor)	Top, Base & Hardware	Unplated	81416-1	81416-3
		Tin Plated	—	81416-6
1/0 AWG thru 4/0 AWG (Two Conductors)	Top Only & Hardware	Unplated	—	81417-3

Note: Part Numbers 81416-1, 81416-3, and 81416-6 are not UL Listed.

The AMP Structure Grounding Clamp provides a permanent, positive connection of the grounding wire to flat metal surfaces such as tower supports, base plates and substation structures.

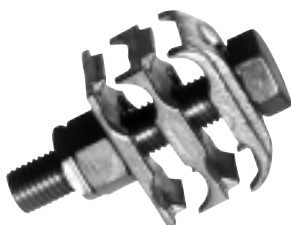
Protection Products

Earthing Clamps



Earthing Clamps

Cross-Section mm ²	Short Circuit Current A	Part Number
48 to 75	—	714131-1
75 to 116	30,000/1s	710313-1
147	40,000/1s	710314-1
181	63,000/0.5s	710315-1

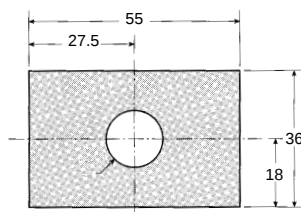


Double Earthing Clamps

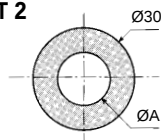
Cross-Section		Short Circuit Current A	Part Number
S2	S1		
45 to 75	48 to 75	—	714132-1
75 to 116	75 to 116	30,000/1s	710316-1
147	75 to 147	40,000/1s	710317-1
181	75 to 181	63,000/0.5s	710318-1

For use with STN, STND clamps when fitted to a galvanized steel or aluminum framework.

PBST 1



PBST 2



Bimetallic Washers

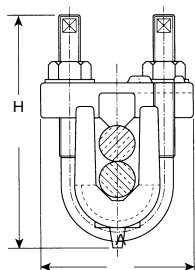
Diameter A		Part Number
mm	[in]	
14.3	[.563]	710115-1
16.5	[.650]	710112-1
14.3	[.563]	710116-1
16.5	[.650]	714527-1

Protection Products

Mechanical Connectors

Product Facts

- Made of high conductivity copper alloy
- Good corrosion withstand
- Flow fault-currents up to 160A/mm²
- Available for copper conductors in accordance with IEC 228A (class 2)
- Good "rangetaking" capability
- No special tooling required

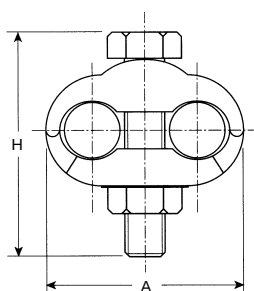


Stirrup Connectors for Copper Conductors

Clamping Capacity mm ²	A		Dimensions H		Width		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
6 to 25 from 2x6 to 2x25	33	[1.299]	61	[2.402]	22	[.866]	710029-1
7 to 50 from 2x7 to 2x50	33	[1.299]	61	[2.402]	22	[.866]	710029-1
10 to 95 from 2x10 to 2x95	43	[1.693]	73	[2.874]	28	[1.102]	709997-1
6 to 25 from 2x6 to 2x25	29	[1.142]	42	[1.654]	20	[.787]	709747-2
6 to 50 from 2x6 to 2x50	33	[1.299]	50	[1.969]	22	[.866]	709748-2
10 to 95 from 2x10 to 2x95	43	[1.693]	73	[2.874]	28	[1.102]	709749-2
95 to 120 from 2x95 to 2x120	43	[1.693]	73	[2.874]	30	[1.181]	716520-1



Claw-Fitting Connectors



Clamping Capacity mm ²	A		Dimensions H		Width		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
2.5 to 16 from 2x25 to 2x16	19	[.748]	23.5	[.925]	14	[.551]	709588-1
4 to 30 from 2x4 to 2x30	26	[1.024]	34	[1.339]	20	[.787]	709589-1
10 to 50 from 2x10 to 2x50	30	[1.181]	39	[1.535]	30.5	[1.201]	709590-1
10 to 75 from 2x10 to 2x75	36	[1.417]	44	[1.732]	32	[1.260]	709591-1
16 to 100 from 2x16 to 2x100	40	[1.575]	55.5	[2.185]	36	[1.417]	709592-1
30 to 150 from 2x30 to 2x150	49	[1.929]	60.5	[2.382]	42	[1.654]	709593-1

Protection Products

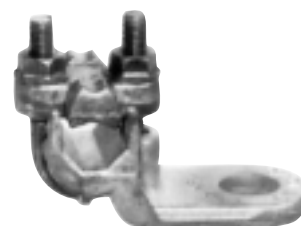
Mechanical Terminal Lugs

Product Facts

- Made of high conductivity copper alloy
- Tested according to NFC 63 061 class C
- Available with copper conductor according to IEC 228 class 1 and class 2
- Good "range taking" capability because of its reversible cap
- Efficient tightening with copper alloy U-bolt
- No special tooling required.



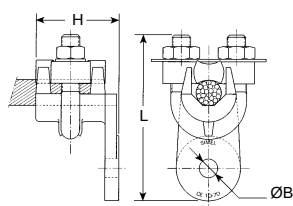
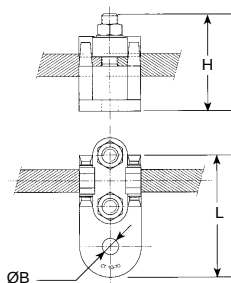
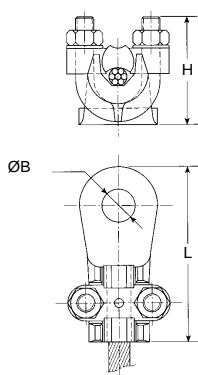
Round or Square Offset Palm Lug



Round Palm Offset T-Shaped Lug



Round or Square Right-Angle Lug



Round or Square Offset Palm Lugs

Wire Size mm ²	L		Dimensions H		B		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
10 to 70	52	[2.047]	39	[1.535]	9	[.354]	709604-2
	52	[2.047]	39	[1.535]	11	[.433]	709608-2
	52	[2.047]	39	[1.535]	13	[.512]	709606-1
	52	[2.047]	39	[1.535]	15	[.591]	709716-1
25 to 120	68	[2.677]	50	[1.969]	13	[.512]	709679-1
70 to 150	77	[3.031]	56	[2.205]	13	[.512]	709688-1
150 to 300	120	[4.724]	67	[2.634]	13	[.512]	709671-1
	130	[5.118]	67	[2.634]	NP	—	709673-1
300 to 500	—	—	—	—	—	—	711720-1

Round Palm Offset T-Shaped Lugs

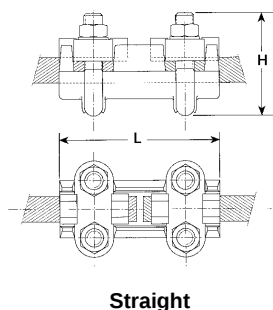
Wire Size mm ²	L		Dimensions H		B		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
10 to 70	50	[1.969]	38	[1.496]	9	[.354]	709020-4
	50	[1.969]	38	[1.496]	11	[.433]	709020-1
25 to 120	75	[2.953]	50	[1.969]	13	[.512]	709681-1

Round or Square Right-Angle Lugs

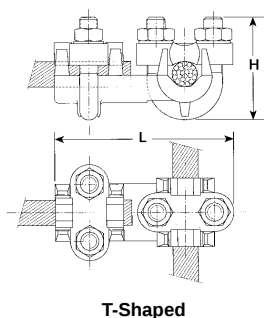
Wire Size mm ²	L		Dimensions H		B		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
10 to 70	60	[2.362]	28	[1.102]	9	[.354]	716501-1
	60	[2.362]	28	[1.102]	11	[.433]	709665-1
25 to 120	82	[3.228]	32	[1.260]	13	[.512]	709683-1
150 to 300	95	[3.740]	77	[3.031]	NP	—	709569-1

Protection Products

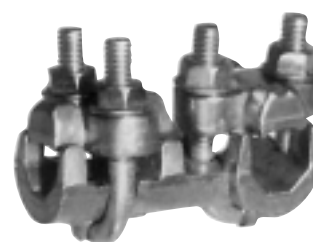
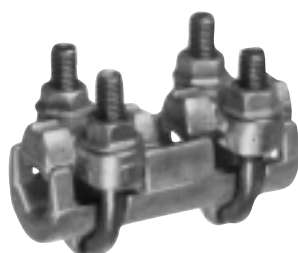
Mechanical Connectors (Continued)



Straight



T-Shaped

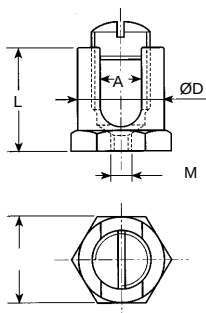


Straight or T-Shaped Connectors

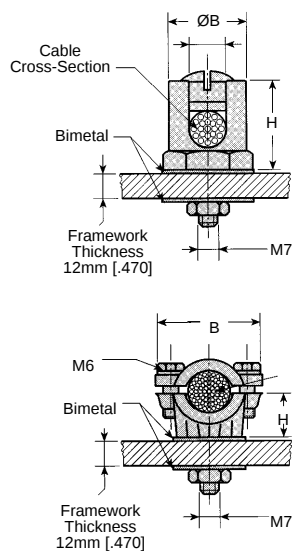
Clamping Capacity mm ²	Description	Dimensions				Part Number
		H		L		
		mm	in.	mm	in.	
Straight Connector						
10 to 70	Steel U-Bolt	50	1.969	35	1.378	709661-1
25 to 120		65	2.559	48	1.890	709684-1
10 to 70	Bronze U-Bolt	50	1.969	35	1.378	709662-1
25 to 120		65	2.559	48	1.890	709685-1
T-Shaped Connector						
10 to 70	Steel	54	2.126	35	1.378	709655-1
25 to 120	U-Bolt	73	2.874	48	1.890	709686-1
10 to 70	Bronze U-Bolt	54	2.126	35	1.378	709656-1
25 to 120		73	2.874	48	1.890	709687-1
70 to 150		80	3.150	53	2.087	709688-1

Protection Products

Cable Grip for Conductor Connection to a Metal Armature



Capacity mm	Dimensions										Part Number
	M		A		D		P		L		
	mm	[in]	mm	[in]	mm	[in]	mm	[in]	mm	[in]	
3 to 6	6x100	[.236 x 3.937]	6.3	[.248]	16.8	[.661]	17	[.669]	19	[.748]	709305-2
3 to 6	7x150	[.276 x 5.906]	6.3	[.248]	16.8	[.661]	17	[.669]	19	[.748]	709305-3
3 to 6	8x125	[.315 x 4.921]	6.3	[.248]	16.8	[.661]	17	[.669]	19	[.748]	709305-4
4 to 8	6x100	[.236 x 3.937]	8.3	[.327]	17.8	[.701]	18	[.709]	22	[.866]	709305-6
4 to 8	7x150	[.276 x 5.906]	8.3	[.327]	17.8	[.701]	18	[.709]	22	[.866]	709305-7
4 to 8	8x125	[.315 x 4.921]	8.3	[.327]	17.8	[.701]	18	[.709]	22	[.866]	709305-8
4 to 8	10x150	[.394 x 5.906]	8.3	[.327]	17.8	[.701]	18	[.709]	22	[.866]	709305-9
4 to 8	12x175	[.472 x 6.890]	8.3	[.327]	17.8	[.819]	18	[.827]	22	[.866]	1-709305-0
7 to 10	6x100	[.236 x 3.937]	10.3	[.406]	20.8	[.819]	21	[.827]	26	[1.024]	1-709305-3
7 to 10	7x150	[.276 x 5.906]	10.3	[.406]	20.8	[.819]	21	[.827]	26	[1.024]	1-709305-4
7 to 10	8x125	[.315 x 4.921]	10.3	[.406]	20.8	[.819]	21	[.827]	26	[1.024]	1-709305-5
7 to 10	10x150	[.394 x 5.906]	10.3	[.406]	20.8	[.819]	21	[.827]	26	[1.024]	1-709305-6
8 to 12	6x100	[.236 x 3.937]	12.3	[.484]	23.8	[.937]	24	[.945]	30	[1.181]	1-709305-8
8 to 12	7x150	[.276 x 5.906]	12.3	[.484]	23.8	[.937]	24	[.945]	30	[1.181]	1-709305-9
8 to 12	8x125	[.315 x 4.921]	12.3	[.484]	23.8	[.937]	24	[.945]	30	[1.181]	2-709305-0
8 to 12	10x150	[.394 x 5.906]	12.3	[.484]	23.8	[.937]	24	[.945]	30	[1.181]	2-709305-1
8 to 12	12x175	[.472 x 6.890]	12.3	[.484]	23.8	[.937]	24	[.945]	30	[1.181]	2-709305-2
8 to 14	6x100	[.236 x 3.937]	14.3	[.563]	26	[1.024]	26	[1.024]	34	[1.339]	2-709305-4
8 to 14	7x150	[.276 x 5.906]	14.3	[.563]	26	[1.024]	26	[1.024]	34	[1.339]	2-709305-5
8 to 14	8x125	[.315 x 4.921]	14.3	[.563]	26	[1.024]	26	[1.024]	34	[1.339]	2-709305-6
8 to 14	10x150	[.394 x 5.906]	14.3	[.563]	26	[1.024]	26	[1.024]	34	[1.339]	2-709305-7
8 to 14	12x175	[.472 x 6.890]	14.3	[.563]	26	[1.024]	26	[1.024]	34	[1.339]	2-709305-8



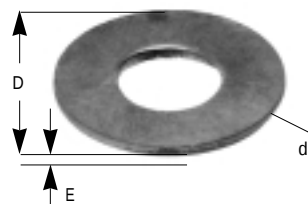
Cable Grip for Cable on Framework

Cable mm ²	Dimensions						Bimetallic washer [mm]						Part Number
	A		B		H		ext.		int.		ep.		
	mm	[in]	mm	[in]	mm	[in]	mm	[in]	mm	[in]	mm	[in]	
75	12.5	[.492]	24	[.945]	30	[1.181]	30	[1.181]	8.5	[.335]	2	[.079]	716090-1
116	14.5	[.571]	26	[1.024]	34	[1.339]	30	[1.181]	8.5	[.335]	2	[.079]	710116-1
147	16.5	[.650]	30	[1.181]	40	[1.575]	30	[1.181]	8.5	[.335]	2	[.079]	716091-1
*181	—	—	46	[1.811]	19.5	[.768]	30	[1.181]	8.5	[.335]	2	[.079]	716092-1

*Can be used ≤ 240 mm²

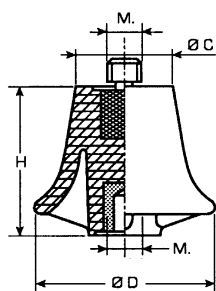
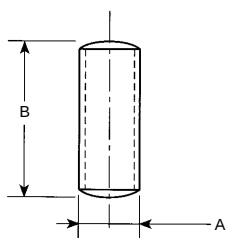
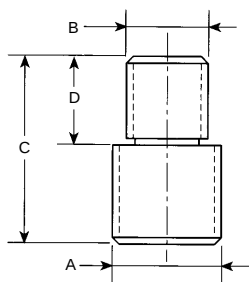
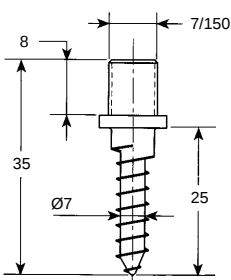
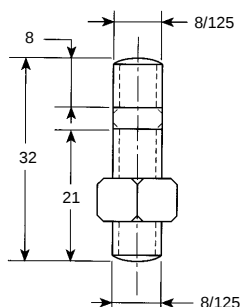
Aluminum-Copper Washers

Dimensions DxdxE		Part Number
[mm]	[in]	
30x6.5x2	[1.181x.256x.079]	709581-1
30x8.5x2	[1.181x.335x.079]	709580-1
30x10.5x2	[1.181x.413x.079]	711621-1
30x13x2	[1.181x.512x.079]	707841-1



Protection Products

Studs and Insulators



Stud with Nut

Cross-Section mm	Part Number
M8	716480-1

Wood Screw

Cross-Section mm	Part Number
M7	710785-1

Reducing Studs

Cross-Section mm	Dimensions						Part Number		
	A		B		C			D	
	mm	[in]	mm	[in]	mm	[in]		mm	[in]
M12/10	12/175	[.472/6.890]	10/150	[.393/5.906]	20	[.787]	10	[.393]	709546-6
M16/10	16/200	[.630/7.874]	10/150	[.393/5.906]	21	[.827]	7	[.276]	709546-3
M16/12	16/200	[.630/7.874]	12/175	[.472/6.890]	27	[1.063]	13	[.512]	709546-4

Studs

Cross-Section mm	Dimensions				Part Number
	A		B		
	mm	[in]	mm	[in]	
M8	8/125	[.315/4.920]	20	[.787]	710149-1
M10	10/150	[.393/5.906]	20	[.787]	710149-2
M12	12/175	[.472/6.890]	25	[.985]	710149-3

Bakelite Insulator

Cross-Section mm	Dimensions						Insulation Voltage [V]	Part Number
	H		C		D			
	mm	[in]	mm	[in]	mm	[in]		
M7	35	[1.378]	22	[.866]	42	[1.654]	3000	716526-1
M8	35	[1.378]	22	[.866]	42	[1.654]	3000	716526-2
M10	50	[1.969]	32	[1.260]	60	[2.362]	5000	716526-3

Permanent Service Temperature: 170°C-Max dielectric withstand: 25kV.

Protection Products

Support Isolators

Size mm ²	Part Number	Dimensions (mm)		Short Circuit Intensity
		E	H	
20 x 3 =60 ²	716503-1	132	80	< 5000/1s
30 x 4 =120 ²	716506-1	180	118	< 5000/1s
30 x 8 =240 ²	707359-1	180	128	< 40000/1s

* For use on copper covered ground rod only

** UL Listing does not include 2/0



Protection Products

Earthing rods and connectors

With AMP-SIMEL, adapt your installation according to the ground and the needs of your customers :

- surface earthing,
- deep earthing,
- corrosive soil,
- high or low fault current level.

For a good installation we are offering :

4 types of rods :

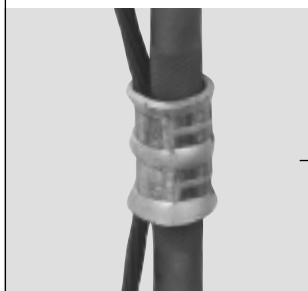
■ **TYPE A** : galvanised steel rod with preinstalled connector (Ø 15 mm)

■ **TYPE B** : x-shaped rod made of galvanised steel.

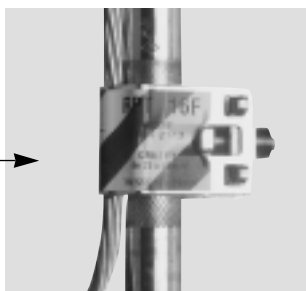
■ **TYPE C** : stainless steel rod, self-coupling type. (Ø 16 mm)
Agreed by EDF.

■ **TYPE D** : copper bonded steel rod, self-coupling type. (Ø 17,3 mm)
Agreed by EDF.

4 connectors for rods : A, C ou D



Crimped connectors, XG7P16 for 16 to 50 mm² cables on rods dia 15 à 17,3 mm.



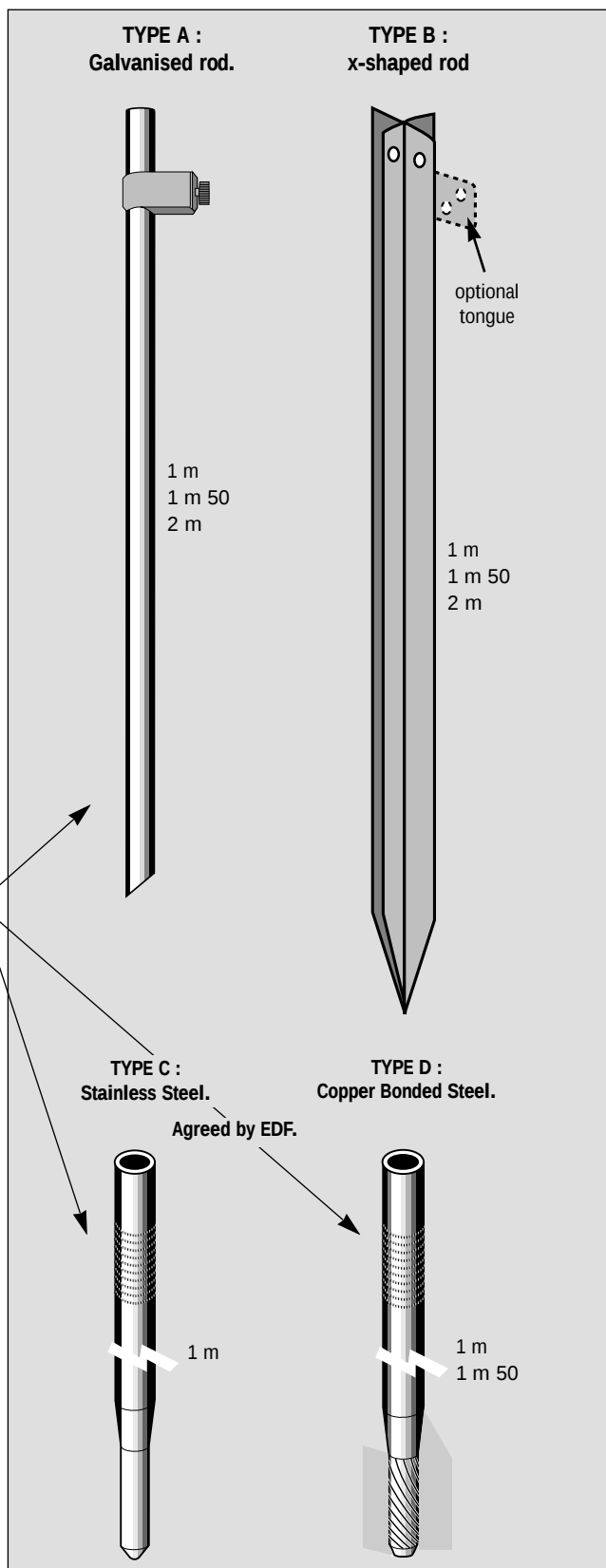
Mechanical connector RPT16F for 16 to 50 mm² cables on rods dia 15 to 17,3 mm.



Wedge type connector : C-Lok.
A parallel jaw plier is enough for installation.



Wedge type connector : Shear-Lok.
The shear head bolt manages the tightening.



DESCRIPTION

Protection Products

Earthing rods and connectors

Réf. PT GALVA 150/1M or 1,5 M or 2 M

Galvanised rod :

- for earthing of domestic or industrial installations,
- low-cost,
- pre installed connector.

Réf. PT X/1 M or 1,5 M or 2 M

- for earthing of industrial or distribution installations,
- larges contact surface with earth,
- low-cost,
- add : (+P) for optional tongue.

Réf. PT INOX 160/AA 1M, stainless steel rod :

- self-coupling type,
- 1 m. long,
- for "surface" or deep earthing,
- made out of Z30C13 stainless steel,
- 16 mm dia,
- streaked part to fit the connector.

Réf. PT ACU 173/AA 1M or 1,5 M

copper bonded rod :

- hard steel bonded with 350 mm of electrolytic copper,
- self-coupling type,
- 1 m. or 1,5 m. long,
- 17,3 mm dia,
- streaked part to fit the connector,
- for "surface" or deep earthing.

SÉLECTION

Designation	AMP-SIMEL Code	Part Number	EDF Code	Packaging	Weight g/unit.
EARTHING RODS					
PT GALVA 150/1M	018594	1018531-1	-	10	1500
		1018531-2		300	
PT GALVA 150/1,5M	018595	1018531-3	-	10	2250
		1018531-4		300	
PT GALVA 150/2M	018596	1018531-5	-	10	3000
		1018531-6		300	
PT X/1 M	018854	1018569-1	-	20	2500
PT X/1,5 M	018855	1018570-1	-	20	3800
PT X/2 M	018856	1018571-1	-	20	5000
PT X/1 M+P	018857	1018572-1	-	20	2600
PT X/1,5 M+P	018858	1018573-1	-	20	3900
PT X/2M+P	018859	1018574-1	-	20	5100
PT INOX 160/AA 1M	001998	707981-2	59-80-195	5	1500
				100	
PT ACU 173/AA 1M	001999	707982-1	59-80-190	5	1800
				100	
PT ACU 173/AA 1,5M	002007	707982-2	59-80-191	5	2000
CONNECTORS FOR EARTHING RODS					
RPT 16F (mechanical)	002778	707985-1	59-83-190/191	10	70
XG7 P16 (for crimping)	000949	707977-1	59-83-186/187	10	70
C-Lock or Shear-Lock	see p. : TR 5 TR 6				

Driving studs are available on request.

Protection Products

Crimp Connectors

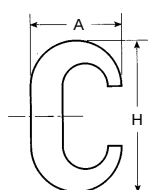
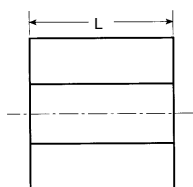
Product Facts

- Made of pure electrolytic copper
- Tin-coated
- High withstand to corrosion in or above the ground
- High capacity to flow fault-currents
- Available for copper conductors in accordance with IEC 228 (class 2)
- Meets the requirements of IEEE 387 (84)
- EDF-GAA and EDF-CERT Technical acceptance



Crimping tools

- see page TR 26



Wire Size mm ²		A		Dimensions H		L		Part Numbers
min.	max.	mm	[in.]	mm	[in.]	mm	[in.]	
3	12	6.4	[.252]	9.8	[.386]	9	[.354]	709636-1
13	20	8.4	[.331]	12.6	[.496]	12	[.472]	709637-1
19	32	12	[.472]	19.4	[.764]	15	[.591]	709638-1
33	56	15.4	[.606]	24.6	[.969]	20	[.787]	709639-1
50	70	15.6	[.614]	26.4	[1.039]	20	[.787]	709640-1
66	100	17.4	[.685]	26.4	[1.039]	20	[.787]	709641-1
105	170	26	[1.024]	41	[1.614]	30	[1.181]	709642-1
150	190	26	[1.024]	41	[1.614]	30	[1.181]	709643-2
156	240	28	[1.102]	45	[1.772]	30	[1.181]	709644-1
225	300	28	[1.102]	45	[1.772]	30	[1.181]	709645-1
260	300	28	[1.102]	45	[1.772]	30	[1.181]	709646-1
210	370	33	[1.299]	54	[2.126]	35	[1.378]	710147-1
387	480	33.7	[1.327]	54	[2.126]	40	[1.575]	714421-1

Selection chart

Main Principal mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240
Tap															
1.5	709636-1	709636-1	709636-1	709636-1**	709637-1**	709638-1**		709639-1**	709640-1**	709641-1**					
2.5		709636-1	709636-1	709636-1	709637-1	709638-1		709639-1	709640-1	709641-1					
4			709636-1	709636-1	709637-1	709638-1		709639-1	709640-1	709641-1					
6				709636-1*	709637-1	709638-1		709639-1	709640-1	709641-1	709642-1**		709644-1		
10					709638-1	709638-1	709639-1	709639-1	709640-1	709641-1	709642-1		709644-1		
16						709638-1	709639-1	709639-1	709640-1	709641-1	709642-1		709644-1		710147-1
25							709639-1	709640-1	709641-1	709641-1*	709642-1		709644-1		710147-1
35								709640-1	709641-1	709642-1	709642-1	709644-1	709644-1		710147-1
50									709641-1*	709642-1	709642-1	709644-1	709644-1*		710147-1
70										709642-1	709643-2	709644-1	709645-1	709646-1	710147-1
95											709643-2*	709644-1	709645-1	710147-1	710147-1
120												709645-1	709645-1	710147-1	710147-1
150													709645-1	710147-1	714421-1
185														710147-1	714421-1
240															714421-1

* Only with solid conductor

** With double small conductor

Protection Products

Crimp Terminal Lugs

Product Facts

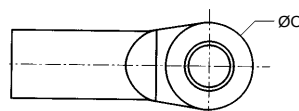
- Forged
- Made of pure copper
- Required to withstand fault current up to 120 A/mm² for 1 sec
- Waterblocked for outside use
- Available on copper conductor according to IEC 228 (class 1 or class 2)

Crimping tools

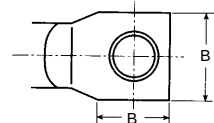
- see page TR 26



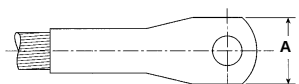
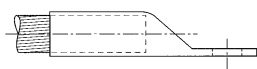
Type 1



Type 2



Terminals for Earthing Cables



Wire Size mm ²	Stud Hole Dia.		Dimensions Type 1 C Dia.		Type 2 B		Part Numbers
	mm	[in.]	mm	[in.]	mm	[in.]	
16	12.8	[.504]	25	[.984]	—	—	709085-1
25	12.8	[.504]	25	[.984]	—	—	709214-1
	12.8	[.504]	25	[.984]	—	—	709903-1
25 or 29	10.2	[.402]	25	[.984]	—	—	709290-2
	14.5	[.571]	25	[.984]	—	—	709230-1
	16.5	[.650]	25	[.984]	—	—	709290-3
35	12.8	[.504]	25	[.984]	—	—	709215-1
50	12.8	[.504]	25	[.984]	—	—	709216-1
	14.5	[.571]	25	[.984]	—	—	709216-2
70	12.8	[.504]	30	[1.181]	—	—	709086-1
95	12.8	[.504]	30	[1.181]	—	—	709217-1
120	14.5	[.571]	35	[1.378]	—	—	709087-2
150	14.5	[.571]	35	[1.378]	—	—	709218-2
185	—	—	—	—	50	[1.969]	709088-1
	12	[.472]	—	—	50	[1.969]	709088-3
	14.5	[.571]	—	—	50	[1.969]	709088-5
	16.5	[.650]	—	—	50	[1.969]	709088-6
	18	[.709]	—	—	50	[1.969]	709088-7
240	—	—	—	—	50	[1.969]	709219-1
	14.5	[.571]	—	—	50	[1.969]	708219-3
	—	—	—	—	60x50	[2.362x1.969]	708098-1
300	16.5	[.650]	—	—	60x50	[2.362x1.969]	708098-2
	—	—	—	—	60	[2.362]	709089-1
	4x9	4x[.354]	—	—	60	[2.362]	709089-2
	14	[.551]	—	—	60	[2.362]	709089-3
	16.5	[.650]	—	—	60	[2.362]	709089-4
350	14.5	[.571]	—	—	60	[2.362]	709220-1
	—	—	—	—	60	[2.362]	709221-1
	14.5	[.571]	—	—	60	[2.362]	709221-2
400	2x16.5	2x[.650]	—	—	60	[2.362]	709221-3
	20	[.787]	—	—	60	[2.362]	709221-4
	4x9	4x[.354]	—	—	60	[2.362]	709221-6

Wire Size mm ²	Stud Hole Dia.		Dimensions A		Part Number
	mm	in.	mm	in.	
75	10.5	.413	11.5	.452	714491-1
75	13.2	.520	14	.551	714329-1
116	10.5	.413	11.5	.452	714492-1
116	13.2	.520	14	.551	714523-1
147	13.2	.520	15	.591	714330-1
147	17	.669	17	.669	714568-1
181	15	.591	16	.629	714528-1
181	17	.669	17	.669	719688-1
240	13.2	.520	14	.551	712145-1
240	17	.669	16	.629	709723-2

Protection Products

Choice of Tools and Tooling to Fit Various Connectors



HYDRAULIC HAND TOOL
SIMABLOC 55
PN : 789081-1



MECHANICAL
HAND TOOL
ISOLEC 2
PN : 708833-1



MECHANICAL
HAND TOOL
SIMECA
PN : 708835-1

HYDRAULIC
HAND TOOL
SIMABLOC 80
PN : 789082-1

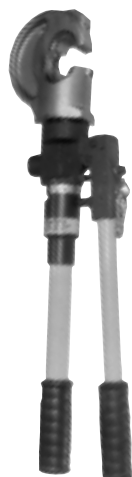
Connector Reference	Conductor Size mm ² or Part Number	ISOLEC 2 or SIMABLOC 55		
		+ Die Reference	+ Die Reference	
 Crimp Terminal Lugs Page TR 24	16 to 50	708798-1	708816-1	
	70 to 150	—	708816-1	
	185-240	—	708824-1	
	300 to 400	—	—	
	709290-1, 709290-2, 709290-3	708654-1	708622-1	
 Crimp Connectors Page TR 25	709636-1	708798-1	—	
	709637-1	708801-1	708815-1	
	709638-1	708799-1	709819-1	
	709639-1, 709640-1, 709641-1	708808-1	708816-1	
	709639-1, 709640-1	708655-1	708	
	709642-1	—	—	
	709644-1, 709645-1, 709646-1	—	—	
	7101147-1	—	—	
	714421-1	—	—	
	707977-1	—	708730-1	

Protection Products

Choice of Tools and Tooling to Fit Various Connectors



MECHANICAL
HAND TOOL
ISOLEC 3
PN : 708834-2



HYDRAULIC
HAND TOOL
SIMABLOC C 12
PN : 789082-1



HYDRAULIC HAND TOOL
SIMABLOC U 120
PN : 789084-1

or



Head ■
V13UNG + CM
PN : 716548-1



Head ■
V20UNG + CM
PN : 718441-1



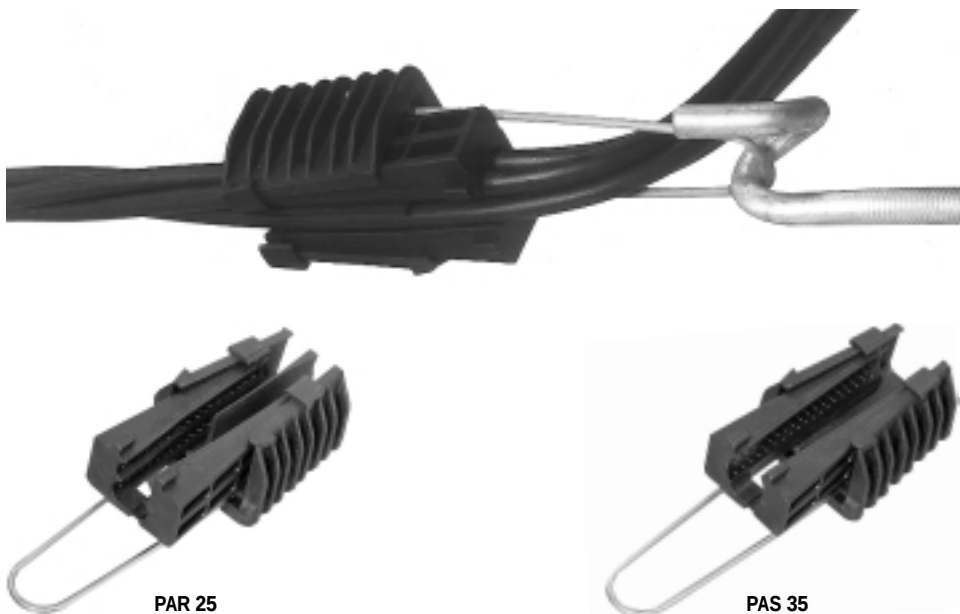
■ + HYDRAULIC PUMP
SIMAFLEX + HP3M + CF
(PN : 710596-1)
or SOLHYFLEX + HP3M + CF
(PN : 710595-1)

	+ Die Reference	+ Die Reference	+ Die Reference	+ Die Reference + Reducer
	709429-2	709445-3	708646-2	708646-2 + 708687-1
	709429-2	709445-7	708646-6	708646-6 + 708687-1
	—	709445-9	708646-8	708646-6 + 708687-1
	—	—	—	709420-1 (300 ²) 709421-1(400 ²)
	—	708684-1	708646-2	708646-2 + 708687-1
	—	—	—	—
	—	709444-3	—	—
	709429-3	709445-4	—	—
	709429-2	709445-7	708646-6	708646-6 + 708687-1
	—	709685-1	708646-6	708646-6 + 708687-1
	—	—	708712-1	708712-1 + 708687-1 or 708888-1
	—	—	—	708889-1
	—	—	—	708890-1
	—	—	—	708890-1
	—	708729-1	708717-1	708717-1 + 708687-1

Branch Anchoring Clamp

Product Facts :

- Wedge grip clamp.
- Application on overhead L.V. twisted insulated cable.
- Adjustable fixing hook.
- Body and wedge, are U.V. resistant plastic material.
- Tensile strenght : 200 daN (4 x 25 mm²).
- Approval : HN 33564 (EDF specification).



Applications

Capacity mm ²	Reference AMP-SIMEL	Part Number
2 x 16 to 4 x 25	PAR 25	708017-1
Ø 9 to 17 mm	PA 9-17	708046-1
Ø 18 to 25 mm	PAS 35	708018-1

Fixing Accessories

- Pig Tail.
- To be bolted or sealed.
- Galvanized steel.



Type	Reference AMP-SIMEL	Part Number
Bolted	BQC 12- 55	711812-1
Sealed	TQC 12-150	711810-1

Service-Entrance Insulation Piercing Connector

Product Facts :

- For application on overhead L.V. insulated cable (Al. and Cu.).
- Waterproofness of connection.
- Withstand 6 KV flashover test.
- To be applied with standard wrench.
- Designed for live line work.
- Approval : C 33020 (French standard).
- Clamping on conductors by tightening bolt equipped with a shear head to control torque value.



Applications

Wire size mm ²		Connector Type	Part Number	Tooling*
Main (Al.)	Tap (Al. or Cu.)			
16-95	4-35	JZ2-95 SM	708055-1	13 mm socket + wrench

Tooling *

- CLESIM 2 + R 13 ratchet wrench with socket of 13 mm.
Part Number : 716387-1

Street Lighting Insulation Piercing Connector



Applications

Wire size mm ²		Connector Type	Part Number	Tooling*
Main (Al.)	Tap (copper)			
16-95	1,5-10	KZEP 13	708052-3	13 mm socket + wrench

Tooling *

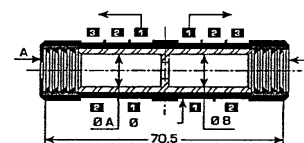
- Approval : C 33020 (French standard).
- CLESIM 2 + R 13 ratchet wrench with socket of 13 mm.
Part Number : 716387-1

Pre-Insulated Sleeves

Pre-Insulated sleeves enable both cable splicing and cross section transition jointing.

Product Facts :

- For application on overhead L.V. insulated cable (Alu. and Cu. up to 10 mm²).
- Waterproofness of splicing/jointing
- Withstand 6 KV flashover test.
- To be applied with hex-crimp tool.
- Designed for live line work.
- Tensile strenght : 200 da N (2 x 16 mm²).
- Approval : C 33021 (French standard).



MJPB

Wire size (59 mm)		Reference	DIMENSIONS			Part Number	Tool*
A	B		ø A	ø B (mm)	ø D		
4	16	MJPB 16 - 4	2,7	5,3	16	709348-4	SIMPI Part Number : 709440-1
6	16	MJPB 16 - 6	3,3	5,3	16	709348-8	
10	16	MJPB 16 - 10	4,3	5,3	16	1-709348-4	
16	16	MJPB 16	5,3	5,3	16	2-709348-0	
6	25	MJPB 25 - 6	3,3	6,5	16	1-709348-0	
10	25	MJPB 25 - 10	4,3	6,5	16	1-709348-6	
16	25	MJPB 25 - 16	5,3	6,5	16	2-709348-2	
25	25	MJPB 25	6,5	6,5	16	2-709348-8	

* For other tools please consult AMP

BPC Pre-Insulated Sleeve Connector

Three versions available to cover Aluminium and copper combinations from 4 to 35 mm²



BPC 35-P35 - Part Number : 719818-1
Stripped cable to insulated cable.



BPC 35-35 - Part Number : 719819-1
Stripped cable to stripped cable.



BPC P35-P35 - Part Number : 719820-1
Insulated cable to insulated cable .

Engineering Notes
