

APLIWELD®
Secure+

**The exothermic
welding in tablets**

**Saves costs
Simplifies work
Prevents labor risks**



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**APLICACIONES
TECNOLÓGICAS**

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The revolution in tablet format

✓ Labor risks prevention

- Remote control ignition unit **Apliweld®-E** makes the process far safer compared to the traditional ignition method of applying a spark to the starting powder.
- **Apliweld®-E** electronic starter provides a fast and safe reaction, improving safety in transportation and storage. Forget the risks of spark lighters and flammable material.

Apliweld®Secure+ is a major step forward and no longer requires a manual spark ignition. Our new welding compound in tablet form along with remote ignition using an electronic starter replaces the traditional old system.

✓ Cost saving

- **Apliweld®-T** tablets are supplied in only 2 sizes thus avoiding high stock levels compared to 8 sizes commonly used in traditional exothermic welding.
- Simplifies transport and storage conditions. Tablets do not degrade throughout time under standard storage conditions
- Easy to use, reduces costs in labor and training.

✓ Simplifies work

- Compact & easy to use product streamlines field work.
- No problems with wind or humidity as is experienced with traditional powder.
- Minimizes waste material easing clean-up.
- **Apliweld®-T** tablets also ignite using traditional starting powder.



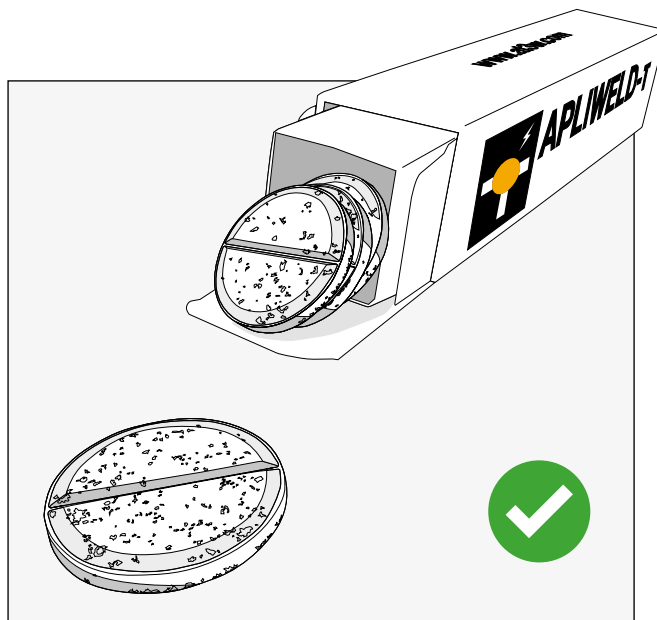
Keep all the benefits of traditional exothermic welding

- Connection has equal or higher electrical conductivity than the conductors themselves.
- Higher mechanical and crush resistance than the conductors themselves.
- Welding does not degrade throughout time and resists the galvanic coupling.
- In summary, **Apliweld® Secure+** offers a permanent welding and a low-resistance connection essential to reach the most reliable and permanent earthing connections.
- Withstands repeated current impulses.
- Its resistance never increases.

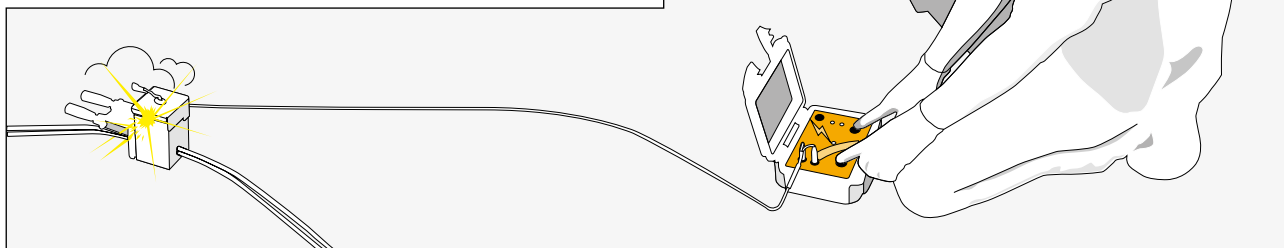
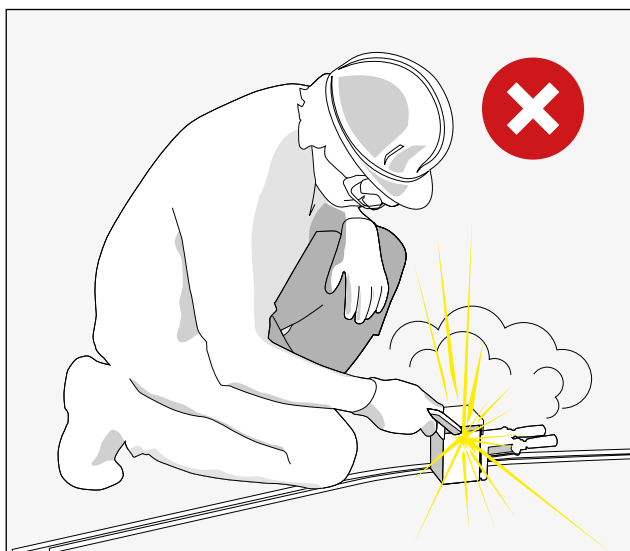
Innovation, less stock costs and more safety

Traditionally, exothermic welding required the user to be provided with multiple cartridges with different powder weights for making the various connections. Once the conductors were inserted in the graphite mould, the welding compound and the reactive powder (usually a

flammable compound,) were poured in the crucible. Then a flint gun, applied manually to the starting powder at arm's length produced a spark triggering the exothermic reaction.



With **Apliweld® Secure +**, the required number of tablets are placed inside the graphite mould. The electronic starter is inserted on top and activated from distance. Hence there is no need for multiple packages and it's extremely safe for the operator.

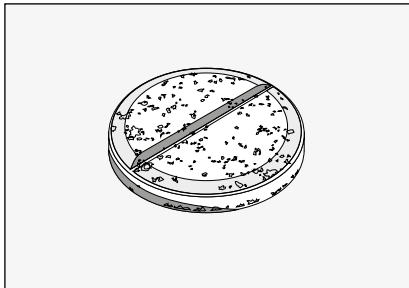


How to use new components



APLIWELD®-T

Welding compound in tablets.



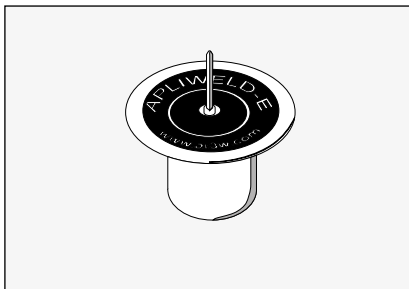
1

Insert the tablets
APLIWELD®-T



APLIWELD®-E

Electronic starter.



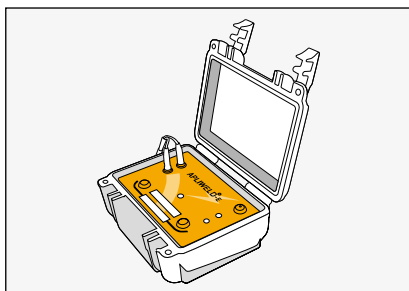
2

Place and connect
the electronic starter
APLIWELD®-E



Kit APLIWELD®-E

Electronic starting device.



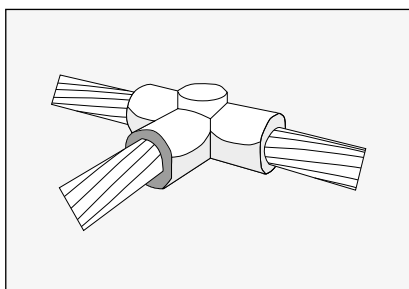
3

Press both push-
buttons at the same
time. **APLIWELD®-E**



Results

Final welding



4

Remove the completed
joint from the **graphite**
mould



APLIWELD® Secure (+) Comprises the following components:



APLIWELD®-T EXOTHERMIC WELDING TABLETS

Description

Innovational tablet utilising only 2 sizes to produce all joints.

Two references **AT-020N**, the most common one (valid for 90% of connections) and **AT021N** long size tablets, for use on larger joints.

Technical characteristics

- Reference: **AT-020N**
- Tablet dimensions: ø 43 mm.
- Units per pack: 20 tablets
- Packaging dimen.: 52x52x220 mm.
- Total weight: 900 gr.
- Reference: **AT-021N**
- Tablet dimensions: ø 55 mm.
- Units per pack: 20 tablets
- Packaging dimen.: 66x66x200 mm.
- Total weight: 2.000 grams

(+) Benefits:

- **Compact and easy to use**
- **Reduces stock costs**
- **Improves welding process times**
- **Increases equipment life-time**
- **Both electronic and powder starters can be employed**



APLIWELD®-E EXOTHERMIC WELDING ELECTRONIC STARTER

Description

Not flammable. Electronic starters only ignite through the power supplied by the ignition device.

Technical characteristics

- Reference: **AT-010N**
- Dimensions: 26 mm. ø24 mm.
- Units per pack: 10
- Packaging dimen.: 125x105x40 mm.
- Total weight: 87 grams
- Time of reaction: < 10 sec.
- Material: not flammable

(+) Benefits:

- **Its safety handle and storage features reduce labor risks**
- **Safe & easy setup**



Kit APLIWELD®-E ELECTRONIC IGNITION DEVICE

Description

Ignition box enables controlled and remote electronic ignition in a quick and safe way. Includes: ignition unit (**AT-096N**), cable (**AT-098N**), 5 crocodile clips (**AT-099N**), battery charger and bag carrier.

Technical characteristics

- Reference: **AT-100N**
- Power supply:
Lead acid battery 6V 7Ah
- DC Voltage: 6V DC
- Battery charge: 12-36V DC 500 mA
- Battery life: more than 100 joints
- Battery charging time: 10 hours
- Dimensions: 216x180x102 mm
- Weight: 2300 grams

(+) Benefits:

- **Remote control ignition reduces labor risks.**





GRAPHITE MOULDS

Two graphite mould systems for exothermic welding:



SPECIFIC MOULDS

ONE MOULD FOR ONE CONNECTION

Description

Each mould makes a particular connection: one mould welds two defined conductors (cable to cable, cable to tape, tape to earth rod...), of a well-determined dimensions (50mm², 70mm², etc) and joined in a selected manner (straight, in cross or T shape...)

Features

- Each mould last for 50-100 joints depending on models.
- Consult references, accessories and required tablets in this guide (reference selection on pages 10-22) or use "specific mould selection" in our website.
- **Apliweld®** welding manual explains the correct procedures using specific moulds (download it from www.at3w.com).



MULTIPLE MOULD

ONE MOULD FOR SEVERAL CONNECTIONS

Description

System designed to allow different connections using the same graphite mould (see multiple mould selection guide on page 21). The system allows either electronic (**Apliweld-E®**) or traditional (**AT-012N**) ignition.

Features

- Multiple mould is particularly suitable for cross and T (horizontal and vertical) weldings; also in some cases for straight and parallel joints. It welds cables up to 95mm², tapes up to 30mm wide and from 12 to 19mm diameter earth rods.
- The product is supplied in a tool box that includes all the needed materials to carry out the welding except for the consumables (see page 21).
- Cavity sealers (**MM-CS**) are, together with tablets, these consumables. MM-CS is supplied in a 60 units bag. They form the hollow space for welding when placed according to the connection table (see page 21).
- Graphite moulds will withstand at least 80 joints.
- Multiple mould is the best solution if only a few common welding types are required, when the working features cannot be predicted, when conductor sizes are variable or in case of any unexpected connection during the installation.
- Please refer to the instruction sheet included in all multiple mould cases or download the **Apliweld®** manual from www.at3w.com



ACCESSORIES Clamps, cleaning tools, conductor fittings and others



AT-068N & AT-069N BASIC TOOL SETS

Description

Cleaning tools sets for conductors and moulds. Include safety gloves and sealing paste.

AT-069N Technical features and composition

- **AT-061N** Conductors cleaning brush.
- **AT-062N** Crucible and electronic starter cavity cleaning brush.
- **AT-063N** Slag scraper.
- **AT-064N** Welding cavity cleaning brush.
- **AT-065N** Sealing paste (0.45 kg).
- **AT-073N** Safety gloves.
- Dimensions: 250x125x140mm.
- Weight: 1.000 grams.
- A new set is advised for every 250 welds.

AT-068N



AT-068N includes the same references as described but also **AT-060N** Spark lighter, necessary in traditional starting powder ignition.



AT-049N HANDLE CLAMP FOR S SIZE MOULDS

Description

Accessory to lock mould halves together allowing safe handling of mould.

This is the most common clamp, suitable for almost 80% of the connections.

Technical features

- Dimensions: 65x65x250 mm.
- Weight: 1.250 grams.
- Service life: Around 250 joints

In connections to metallic surface (HT/HP type), the tool **AT-058N** should be used together with the clamp **AT-049N** for avoiding leakages.

AT-049N



AT-050N HANDLE CLAMP FOR G SIZE MOULDS

Description

Accessory similar to **AT-049N** but larger. Valid for large conductors and some particular moulds like LO, XO, TO... types.

Technical features

- Dimensions: 80x80x275 mm.
- Weight: 1.470 grams.
- Service life: Around 250 joints

In connections to metallic surface (HT/HP type), the tool **AT-058N** should be used together with the clamp **AT-050N** for avoiding leakages.

AT-050N





Miscellanea. Other clamps & tools

Description

Other accessories may eventually be necessary to carry out a less common type of connection or to assure a good quality joint depending on working conditions.

Find all the references on page 22.
The most regularly used accessories are described in this page:

AT-077N



AT-077N: Safety glasses. Recommended in all welding processes.

AT-065N



AT-065N: Sealing paste (0,45 kg).
AT-066N (0,9 kg) and **AT-071N** (2,25 kg) are also available.

AT-051N



AT-051N: Clamp either for vertical metallic surface splices or along vertical rebars or earth rods.

MM-053N



MM-053N: Multiple mould clamp.

AT-054N



AT-054N: Head or web rail connection clamp.

AT-052N: Foot rail connection clamp is also available.

AT-059N



AT-059N: Holding cable clamp. This clamp should be used for cables under tension, keeping the conductors from springing the mold open or being pulled out during welding reaction. Complementary to either **AT-049N** or **AT-050N** in any connection involving run cables.

Reference selection guide:

Select the correct **Apliweld®** products for each joint along with quantities required using the reference selection tables (pages 12-20) as shown in this general example:

1

a Select joint type required, a conductor type and size

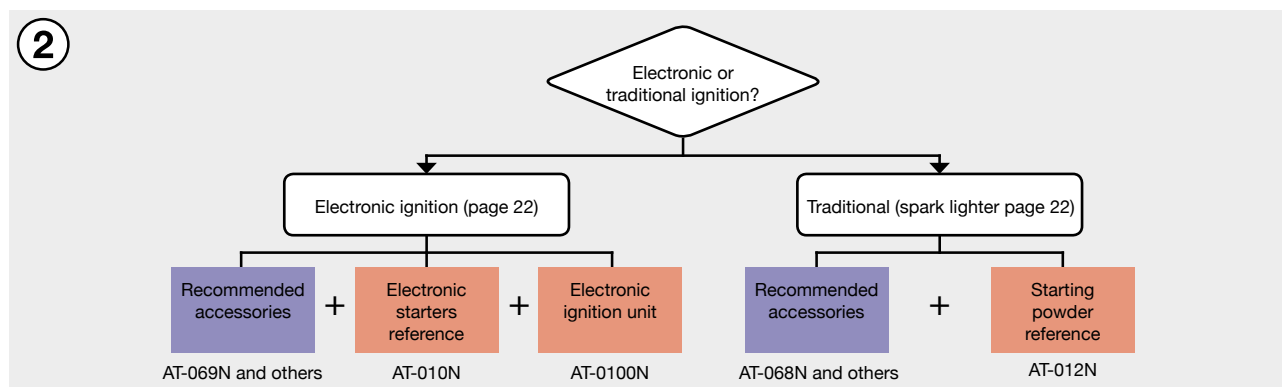
b Mould reference

c Tablet reference – Tablets per connection

d Corresponding handle clamp reference

1	Connection	Reference	Conductor 1	Conductor 2	Tabls. ref.	Tabls/con.	Clamp
	LV	C35/C35/LV	Cable 35mm²	Cable 35mm²	AT-020N	1	AT-049N
		C50/C50/LV	Cable 50mm²	Cable 50mm²	AT-020N	1	AT-049N
		C70/C70/LV	Cable 70mm²	Cable 70mm²	AT-020N	1,5	AT-049N
		C95/C95/LV	Cable 95mm²	Cable 95mm²	AT-020N	2	AT-049N
		C120/C120/LV	Cable 120mm²	Cable 120mm²	AT-020N	2	AT-049N
		C150/C150/LV	Cable 150mm²	Cable 150mm²	AT-020N	2,5	AT-049N

*From Table 1 (page 12)



3 Set the correspondent quantities of each reference under the following criteria:

Reference	Description	Usability
Graphite moulds	Specifics or multiple	50-100 joints on average
AT-020N	Exothermic welding tablets	20 tablets per box
AT-021N	Exothermic welding tablets	20 tablets per box
AT-010N	Exothermic welding electronic starters	10 starters per box
AT-012N	Exothermic welding starting powder	10 starters per box
AT-049N	Handle clamp S size	250 weldings per clamp
AT-050N	Handle clamp G size	250 weldings per clamp
AT-068N	Basic tool kit	250 weldings per kit
AT-100N	Electronic ignition unit	10 years life span

- To determine the correct number of other accesories, please consult our technical department.
- Note that quantities may change depending on the working conditions (if there is more than one installer, more than one working place or any particular harsh conditions)
- Download the **Apliweld®** welding manual to increase and broaden information about products and how to use them from www.at3w.com
- **Please contact us for any question.**



Selection example 1:

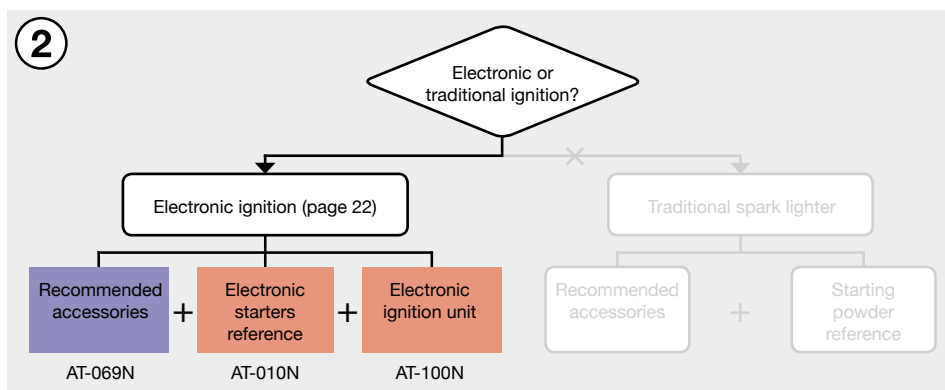
If your installation requires 300 horizontal T type joints, between 2 x 50mm² cables using the electronic ignition system.

Then please use as follows:

1 **a** Select joint type required, conductor type and size **b** Mould reference **c** Tablet reference – Tablets per connection **d** Corresponding handle clamp reference

2 Connection	Reference	Conductor 1	Conductor 2	Tabls. ref.	Tabls/con.	Clamp
	C35/C35/TH	Cable 35mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N
	C50/C50/TH	Cable 50mm²	Cable 50mm²	AT-020N	2	AT-049N
	C70/C70/TH	Cable 70mm ²	Cable 70mm ²	AT-020N	2	AT-049N
	C95/C95/TH	Cable 95mm ²	Cable 95mm ²	AT-020N	2,5	AT-049N
	C120/C120/TH	Cable 120mm ²	Cable 120mm ²	AT-020N	3	AT-049N

*From table 2 (page 12)



3

With the data and the obtained references, the order should be as follows:

Reference	Units
C50/C50/TH	4
AT-020N	30
AT-010N	30
AT-049N	2
AT-069N	2
AT-100N	1

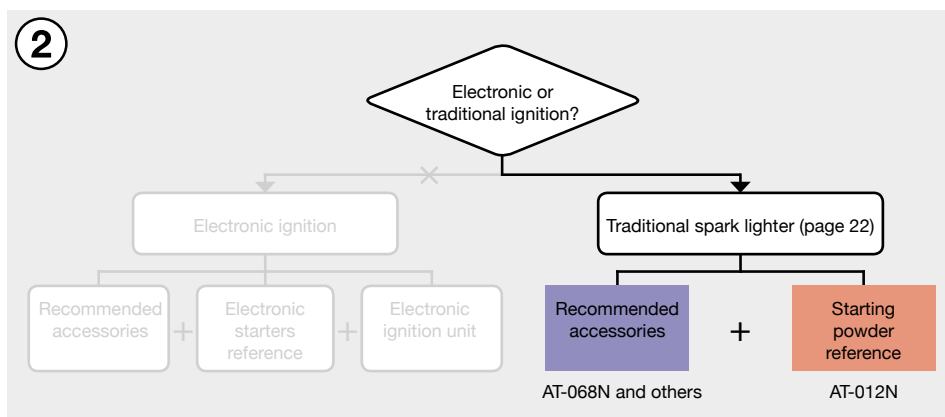
Selection example 2:

Two working groups have to make 450 weldings between 120mm² cables in cross shape using spark lighter ignition.

1 **a** Select joint type required, conductor type and size **b** Mould reference **c** Tablet reference – Tablets per connection **d** Corresponding handle clamp reference

3 Connection	Reference	Conductor 1	Conductor 2	Tabls. ref.	Tabls/con.	Clamp
	C35/C35/XH	Cable 35mm ²	Cable 35mm ²	AT-020N	2	AT-049N
	C50/C50/XH	Cable 50mm ²	Cable 50mm ²	AT-020N	2	AT-049N
	C70/C70/XH	Cable 70mm ²	Cable 70mm ²	AT-020N	2,5	AT-049N
	C95/C95/XH	Cable 95mm ²	Cable 95mm ²	AT-020N	3	AT-049N
	C120/C120/XH	Cable 120mm²	Cable 120mm²	AT-020N	3,5	AT-049N

*From table 3 (page 13)



3

With the data and the obtained references, the order should be as follows:

Reference	Units
C120/C120/XH	8
AT-020N	79
AT-012N	45
AT-049N	2
AT-068N	3

Reference selection table: Suitable moulds, tablets and Clamps

Connection:
Drawing and union type code.
In tables where more than one connection appears, the correct mould reference is obtained changing the letters of the union type by those of the required connection.

Reference: Conductor 1 / Conductor 2 / Union type
Conductor 1: Conductor code
In case the conductors have different sections, then Conductor 1 will be the passing conductor.
Conductor 2: Conductor code
In case the conductors have different sections, then Conductor 1 will be the terminal conductor.

Tabs. ref: Tablet size reference
Tabs/con.: Tablets required per connection.

Clamp: Reference needed for a tight lock and safe handling of the mould.
Remarks: Warnings and recommended accessories.

I.e.: If a T vertical mould for 240mm² cables is required, just turn C240/C240/TH to C240/C240/TV. Then tablets and accessories keep the same.

2 Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
TH 	C35/C35/TH	Cable 35mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	
	C50/C50/TH	Cable 50mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
TV 	C70/C70/TH	Cable 70mm ²	Cable 70mm ²	AT-020N	2	AT-049N	
	C95/C95/TH	Cable 95mm ²	Cable 95mm ²	AT-020N	2,5	AT-049N	
	C120/C120/TH	Cable 120mm ²	Cable 120mm ²	AT-020N	3	AT-049N	
	C150/C150/TH	Cable 150mm ²	Cable 150mm ²	AT-020N	4	AT-049N	
	C185/C185/TH	Cable 185mm ²	Cable 185mm ²	AT-021N	2	AT-050N	
	C240/C240/TH	Cable 240mm ²	Cable 240mm ²	AT-021N	3	AT-050N	
	C50/C35/TH	Cable 50mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	
	C70/C35/TH	Cable 70mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	

Most common connections:

Cable/Cable:	Tables 1-5	Cable/Metal surface:	Tables 12-13	Tape/Earth rod:	Table 19
Cable/Earth rod:	Tables 6-8	Tape/Tape:	Tables 14-16	Others:	Table 20
Cable/Rebar:	Tables 9-11	Cable/Tape:	Tables 17-18	Multiple mould:	Tables 21-23

CABLE/CABLE

1 Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
LV 	C35/C35/LV	Cable 35mm ²	Cable 35mm ²	AT-020N	1	AT-049N	
	C50/C50/LV	Cable 50mm ²	Cable 50mm ²	AT-020N	1	AT-049N	
	C70/C70/LV	Cable 70mm ²	Cable 70mm ²	AT-020N	1,5	AT-049N	
	C95/C95/LV	Cable 95mm ²	Cable 95mm ²	AT-020N	2	AT-049N	
	C120/C120/LV	Cable 120mm ²	Cable 120mm ²	AT-020N	2	AT-049N	
	C150/C150/LV	Cable 150mm ²	Cable 150mm ²	AT-020N	2,5	AT-049N	
	C185/C185/LV	Cable 185mm ²	Cable 185mm ²	AT-021N	2	AT-050N	
	C240/C240/LV	Cable 240mm ²	Cable 240mm ²	AT-021N	2	AT-050N	
2 Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
TH 	C35/C35/TH	Cable 35mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	
	C50/C35/TH	Cable 50mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	
	C50/C50/TH	Cable 50mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
	C70/C35/TH	Cable 70mm ²	Cable 35mm ²	AT-020N	1,5	AT-049N	
	C70/C50/TH	Cable 70mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
TV 	C70/C70/TH	Cable 70mm ²	Cable 70mm ²	AT-020N	2	AT-049N	
	C95/C35/TH	Cable 95mm ²	Cable 35mm ²	AT-020N	2	AT-049N	
	C95/C50/TH	Cable 95mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
	C95/C70/TH	Cable 95mm ²	Cable 70mm ²	AT-020N	2,5	AT-049N	
	C95/C95/TH	Cable 95mm ²	Cable 95mm ²	AT-020N	2,5	AT-049N	
	C120/C35/TH	Cable 120mm ²	Cable 35mm ²	AT-020N	2	AT-049N	
	C120/C50/TH	Cable 120mm ²	Cable 50mm ²	AT-020N	2,5	AT-049N	
	C120/C70/TH	Cable 120mm ²	Cable 70mm ²	AT-020N	3	AT-049N	
	C120/C95/TH	Cable 120mm ²	Cable 95mm ²	AT-020N	3	AT-049N	
	C120/C120/TH	Cable 120mm ²	Cable 120mm ²	AT-020N	3	AT-049N	
	C150/C35/TH	Cable 150mm ²	Cable 35mm ²	AT-020N	2,5	AT-049N	
	C150/C50/TH	Cable 150mm ²	Cable 50mm ²	AT-020N	2,5	AT-049N	
	C150/C70/TH	Cable 150mm ²	Cable 70mm ²	AT-020N	3	AT-049N	
	C150/C95/TH	Cable 150mm ²	Cable 95mm ²	AT-020N	3,5	AT-049N	
	C150/C120/TH	Cable 150mm ²	Cable 120mm ²	AT-020N	3,5	AT-049N	
	C150/C150/TH	Cable 150mm ²	Cable 150mm ²	AT-020N	4	AT-049N	
	C185/C185/TH	Cable 185mm ²	Cable 185mm ²	AT-021N	2	AT-050N	
	C240/C240/TH	Cable 240mm ²	Cable 240mm ²	AT-021N	3	AT-050N	



3	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
XH		C35/C35/XH	Cable 35mm ²	Cable 35mm ²	AT-020N	2	AT-049N	
		C50/C35/XH	Cable 50mm ²	Cable 35mm ²	AT-020N	2	AT-049N	
		C50/C50/XH	Cable 50mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
		C70/C35/XH	Cable 70mm ²	Cable 50mm ²	AT-020N	2,5	AT-049N	
		C70/C50/XH	Cable 70mm ²	Cable 50mm ²	AT-020N	2,5	AT-049N	
PH		C70/C70/XH	Cable 70mm ²	Cable 70mm ²	AT-020N	2,5	AT-049N	
		C95/C35/XH	Cable 95mm ²	Cable 35mm ²	AT-020N	2,5	AT-049N	
		C95/C50/XH	Cable 95mm ²	Cable 50mm ²	AT-020N	2,5	AT-049N	
		C95/C70/XH	Cable 95mm ²	Cable 70mm ²	AT-020N	3	AT-049N	
		C95/C95/XH	Cable 95mm ²	Cable 95mm ²	AT-020N	3	AT-049N	
		C120/C35/XH	Cable 120mm ²	Cable 35mm ²	AT-020N	2,5	AT-049N	
		C120/C50/XH	Cable 120mm ²	Cable 50mm ²	AT-020N	3	AT-049N	
		C120/C70/XH	Cable 120mm ²	Cable 70mm ²	AT-020N	3,5	AT-049N	
		C120/C95/XH	Cable 120mm ²	Cable 95mm ²	AT-020N	4	AT-049N	
		C120/C120/XH	Cable 120mm ²	Cable 120mm ²	AT-020N	4	AT-049N	
		C150/C35/XH	Cable 150mm ²	Cable 35mm ²	AT-020N	3	AT-049N	
		C150/C50/XH	Cable 150mm ²	Cable 50mm ²	AT-020N	3,5	AT-049N	
		C150/C70/XH	Cable 150mm ²	Cable 70mm ²	AT-020N	3,5	AT-049N	
		C150/C95/XH	Cable 150mm ²	Cable 95mm ²	AT-020N	3,5	AT-049N	
		C150/C120/XH	Cable 150mm ²	Cable 120mm ²	AT-020N	4,5	AT-049N	
		C150/C150/XH	Cable 150mm ²	Cable 150mm ²	AT-020N	4,5	AT-049N	
		C185/C185/XH	Cable 185mm ²	Cable 185mm ²	AT-021N	3	AT-050N	
		C240/C240/XH	Cable 240mm ²	Cable 240mm ²	AT-021N	4	AT-050N	

4	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
PV		C35/C35/PV	Cable 35mm ²	Cable 35mm ²	AT-020N	2	AT-049N	
		C50/C50/PV	Cable 50mm ²	Cable 50mm ²	AT-020N	2	AT-049N	
		C70/C70/PV	Cable 70mm ²	Cable 70mm ²	AT-020N	2,5	AT-049N	
		C95/C95/PV	Cable 95mm ²	Cable 95mm ²	AT-020N	3,5	AT-049N	
		C120/C120/PV	Cable 120mm ²	Cable 120mm ²	AT-020N	4	AT-049N	
		C150/C150/PV	Cable 150mm ²	Cable 150mm ²	AT-020N	5	AT-049N	
		C185/C185/PV	Cable 185mm ²	Cable 185mm ²	AT-021N	3	AT-050N	
		C240/C240/PV	Cable 240mm ²	Cable 240mm ²	AT-021N	4	AT-050N	

5	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
XS		C35/C35/XS	Cable 35mm ²	Cable 35mm ²	AT-020N	2,5	AT-049N	
		C50/C35/XS	Cable 50mm ²	Cable 35mm ²	AT-020N	3	AT-049N	
		C50/C50/XS	Cable 50mm ²	Cable 50mm ²	AT-020N	3	AT-049N	
		C70/C35/XS	Cable 70mm ²	Cable 50mm ²	AT-020N	3	AT-049N	
		C70/C50/XS	Cable 70mm ²	Cable 50mm ²	AT-020N	3,5	AT-049N	
		C70/C70/XS	Cable 70mm ²	Cable 70mm ²	AT-020N	4	AT-049N	
		C95/C35/XS	Cable 95mm ²	Cable 35mm ²	AT-020N	3	AT-049N	
		C95/C50/XS	Cable 95mm ²	Cable 50mm ²	AT-020N	3,5	AT-049N	
		C95/C70/XS	Cable 95mm ²	Cable 70mm ²	AT-020N	4	AT-049N	
		C95/C95/XS	Cable 95mm ²	Cable 95mm ²	AT-020N	4	AT-049N	
		C120/C35/XS	Cable 120mm ²	Cable 35mm ²	AT-020N	4	AT-049N	
		C120/C50/XS	Cable 120mm ²	Cable 50mm ²	AT-020N	4,5	AT-049N	
		C120/C70/XS	Cable 120mm ²	Cable 70mm ²	AT-020N	5	AT-049N	
		C120/C95/XS	Cable 120mm ²	Cable 95mm ²	AT-020N	5	AT-049N	
		C120/C120/XS	Cable 120mm ²	Cable 120mm ²	AT-020N	5	AT-049N	
		C150/C35/XS	Cable 150mm ²	Cable 35mm ²	AT-020N	4	AT-049N	
		C150/C50/XS	Cable 150mm ²	Cable 50mm ²	AT-020N	4,5	AT-049N	
		C150/C70/XS	Cable 150mm ²	Cable 70mm ²	AT-020N	5	AT-049N	
		C150/C95/XS	Cable 150mm ²	Cable 95mm ²	AT-020N	5	AT-049N	
		C150/C120/XS	Cable 150mm ²	Cable 120mm ²	AT-020N	5	AT-049N	
		C150/C150/XS	Cable 150mm ²	Cable 150mm ²	AT-020N	5	AT-049N	
		C185/C185/XS	Cable 185mm ²	Cable 185mm ²	AT-021N	4	AT-050N	
		C240/C240/XS	Cable 240mm ²	Cable 240mm ²	AT-021N	5	AT-050N	

CABLE/ROD

If more than one connection appears in a table, change (if necessary) the union type code into the required one to get the right reference.

Example: If a TT vertical mould is needed for 50mm² cable to Ø 14,3 mm rod, then the reference will be C50/T14/TT (instead of C50/T14/TV). The number of tablets and other accessories will remain the same.

6	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
TV		C35/T14/TV	Cable 35mm ²	Rod Ø 14.3mm	AT-020N	2	AT-049N	
		C35/T16/TV	Cable 35mm ²	Rod Ø 15.9mm	AT-020N	2	AT-049N	
		C50/T14/TV	Cable 50mm ²	Rod Ø 14.3mm	AT-020N	2	AT-049N	
		C50/T16/TV	Cable 50mm ²	Rod Ø 15.9mm	AT-020N	2	AT-049N	
		C50/T17/TV	Cable 50mm ²	Rod Ø 17.2mm	AT-020N	2,5	AT-049N	
TT		C50/T18/TV	Cable 50mm ²	Rod Ø 18.3mm	AT-020N	2,5	AT-049N	
		C50/T19/TV	Cable 50mm ²	Rod Ø 19mm	AT-020N	2,5	AT-049N	
		C70/T14/TV	Cable 70mm ²	Rod Ø 14.3mm	AT-020N	2,5	AT-049N	
		C70/T16/TV	Cable 70mm ²	Rod Ø 15.9mm	AT-020N	2,5	AT-049N	
		C70/T17/TV	Cable 70mm ²	Rod Ø 17.2mm	AT-020N	2,5	AT-049N	
		C70/T18/TV	Cable 70mm ²	Rod Ø 18.3mm	AT-020N	2,5	AT-049N	
		C70/T19/TV	Cable 70mm ²	Rod Ø 19mm	AT-020N	3	AT-049N	
		C95/T14/TV	Cable 95mm ²	Rod Ø 14.3mm	AT-020N	2,5	AT-049N	
		C95/T16/TV	Cable 95mm ²	Rod Ø 15.9mm	AT-020N	2,5	AT-049N	
		C95/T17/TV	Cable 95mm ²	Rod Ø 17.2mm	AT-020N	2,5	AT-049N	
		C95/T18/TV	Cable 95mm ²	Rod Ø 18.3mm	AT-020N	3	AT-049N	
		C95/T19/TV	Cable 95mm ²	Rod Ø 19mm	AT-020N	3	AT-049N	
		C120/T17/TV	Cable 120mm ²	Rod Ø 17.2mm	AT-020N	3	AT-049N	
		C120/T18/TV	Cable 120mm ²	Rod Ø 18.3mm	AT-020N	3	AT-049N	
		C120/T19/TV	Cable 120mm ²	Rod Ø 19mm	AT-020N	3,5	AT-049N	
		C120/T20/TV	Cable 120mm ²	Rod Ø 20mm	AT-020N	3,5	AT-049N	
		C120/T22/TV	Cable 120mm ²	Rod Ø 22mm	AT-020N	4	AT-049N	
		C120/T25/TV	Cable 120mm ²	Rod Ø 25mm	AT-020N	4,5	AT-049N	
		C150/T17/TV	Cable 150mm ²	Rod Ø 17.2mm	AT-020N	4	AT-049N	
		C150/T18/TV	Cable 150mm ²	Rod Ø 18.3mm	AT-020N	4	AT-049N	
		C150/T19/TV	Cable 150mm ²	Rod Ø 19mm	AT-020N	4,5	AT-049N	
		C150/T20/TV	Cable 150mm ²	Rod Ø 20mm	AT-020N	4,5	AT-049N	
		C150/T22/TV	Cable 150mm ²	Rod Ø 22mm	AT-020N	4,5	AT-049N	
		C150/T25/TV	Cable 150mm ²	Rod Ø 25mm	AT-020N	5	AT-049N	
		C185/T19/TV	Cable 185mm ²	Rod Ø 19mm	AT-021N	2	AT-050N	
		C185/T20/TV	Cable 185mm ²	Rod Ø 20mm	AT-021N	2	AT-050N	
		C185/T22/TV	Cable 185mm ²	Rod Ø 22mm	AT-021N	3	AT-050N	
		C185/T25/TV	Cable 185mm ²	Rod Ø 25mm	AT-021N	3	AT-050N	
		C240/T19/TV	Cable 240mm ²	Rod Ø 19mm	AT-021N	3	AT-050N	
		C240/T20/TV	Cable 240mm ²	Rod Ø 20mm	AT-021N	3	AT-050N	
		C240/T22/TV	Cable 240mm ²	Rod Ø 22mm	AT-021N	3	AT-050N	
		C240/T25/TV	Cable 240mm ²	Rod Ø 25mm	AT-021N	3	AT-050N	

A circular inset showing a close-up of a wooden joint. A metal fastener, possibly a bolt or screw, is visible, securing the wood. The wood has a light, natural finish.

CABLE/RE-BAR

If more than one connection appears in a table, change (if necessary) the union type code into the required one to get the right reference.

I.e.: If a PT mould for 35mm² tap cable to Ø 10mm run rebar is required, just turn C35/V10/PV to C35/V10/PT. The number of tablets and other accessories will remain the same.

9	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
	PV	C35/V10/PV	Cable 35mm ²	Re-bar Ø 10mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V12/PV	Cable 35mm ²	Re-bar Ø 12mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V16/PV	Cable 35mm ²	Re-bar Ø 16mm	AT-020N	1,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V20/PV	Cable 35mm ²	Re-bar Ø 20mm	AT-020N	1,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V25/PV	Cable 35mm ²	Re-bar Ø 25mm	AT-020N	1,5	AT-049N	Requires sealing paste AT-065N or AT-066N
	PT	C50/V10/PV	Cable 50mm ²	Re-bar Ø 10mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V12/PV	Cable 50mm ²	Re-bar Ø 12mm	AT-020N	2,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V16/PV	Cable 50mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V20/PV	Cable 50mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V25/PV	Cable 50mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V10/PV	Cable 70mm ²	Re-bar Ø 10mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V12/PV	Cable 70mm ²	Re-bar Ø 12mm	AT-020N	2,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V16/PV	Cable 70mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V20/PV	Cable 70mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V25/PV	Cable 70mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V10/PV	Cable 95mm ²	Re-bar Ø 10mm	AT-020N	2,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V12/PV	Cable 95mm ²	Re-bar Ø 12mm	AT-020N	3	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V16/PV	Cable 95mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V20/PV	Cable 95mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V25/PV	Cable 95mm ²	Re-bar Ø 25mm		2	AT-049N	Requires sealing paste AT-065N or AT-066N

10	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
	XS	C35/V10/XS	Cable 35mm ²	Re-bar Ø 10mm	AT-020N	3	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V12/XS	Cable 35mm ²	Re-bar Ø 12mm	AT-020N	3,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V16/XS	Cable 35mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V20/XS	Cable 35mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C35/V25/XS	Cable 35mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V10/XS	Cable 50mm ²	Re-bar Ø 10mm	AT-020N	3	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V12/XS	Cable 50mm ²	Re-bar Ø 12mm	AT-020N	3,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V16/XS	Cable 50mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V20/XS	Cable 50mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C50/V25/XS	Cable 50mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V10/XS	Cable 70mm ²	Re-bar Ø 10mm	AT-020N	3,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V12/XS	Cable 70mm ²	Re-bar Ø 12mm	AT-020N	4	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V16/XS	Cable 70mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V20/XS	Cable 70mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C70/V25/XS	Cable 70mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V10/XS	Cable 95mm ²	Re-bar Ø 10mm	AT-020N	3,5	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V12/XS	Cable 95mm ²	Re-bar Ø 12mm	AT-020N	4	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V16/XS	Cable 95mm ²	Re-bar Ø 16mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V20/XS	Cable 95mm ²	Re-bar Ø 20mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N
		C95/V25/XS	Cable 95mm ²	Re-bar Ø 25mm	AT-020N	2	AT-049N	Requires sealing paste AT-065N or AT-066N



CABLE/METAL SURFACE

If more than one connection appears in a table, change (if necessary) the union type code into the required one to get the right reference.

I.e.: If a HP mould for run 35mm² cable over horizontal metal surface is required, just turn C35/M/HT to C35/M/HP. The number of tablets and other accessories will remain the same.

14	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
HT		C35/M/HT	Cable 35mm ²	Metal surface	AT-020N	1,5	AT-049N	Advisable AT-058N clamp for assuring connection
		C50/M/HT	Cable 50mm ²	Metal surface	AT-020N	2	AT-049N	Advisable AT-058N clamp for assuring connection
		C70/M/HT	Cable 70mm ²	Metal surface	AT-020N	2	AT-049N	Advisable AT-058N clamp for assuring connection
		C95/M/HT	Cable 95mm ²	Metal surface	AT-020N	2	AT-049N	Advisable AT-058N clamp for assuring connection
HP		C120/M/HT	Cable 120mm ²	Metal surface	AT-020N	2,5	AT-049N	Advisable AT-058N clamp for assuring connection
		C150/M/HT	Cable 150mm ²	Metal surface	AT-020N	2,5	AT-049N	Advisable AT-058N clamp for assuring connection
		C185/M/HT	Cable 185mm ²	Metal surface	AT-021N	2	AT-050N	Advisable AT-058N clamp for assuring connection
		C240/M/HT	Cable 240mm ²	Metal surface	AT-021N	2	AT-050N	Advisable AT-058N clamp for assuring connection

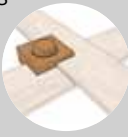
15	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
VTB		C35/M/VTB	Cable 35mm ²	Metal surface	AT-020N	2	AT-051N	Requires sealing paste AT-065N or AT-066N
		C50/M/VTB	Cable 50mm ²	Metal surface	AT-020N	2	AT-051N	Requires sealing paste AT-065N or AT-066N
		C70/M/VTB	Cable 70mm ²	Metal surface	AT-020N	2	AT-051N	Requires sealing paste AT-065N or AT-066N
		C95/M/VTB	Cable 95mm ²	Metal surface	AT-020N	2,5	AT-051N	Requires sealing paste AT-065N or AT-066N
		C120/M/VTB	Cable 120mm ²	Metal surface	AT-020N	2,5	AT-051N	Requires sealing paste AT-065N or AT-066N
VPV		C150/M/VTB	Cable 150mm ²	Metal surface	AT-020N	2,5	AT-051N	Requires sealing paste AT-065N or AT-066N
		C185/M/VTB	Cable 185mm ²	Metal surface	AT-021N	2	AT-050N	Requires sealing paste AT-065N or AT-066N
		C240/M/VTB	Cable 240mm ²	Metal surface	AT-021N	2	AT-050N	Requires sealing paste AT-065N or AT-066N
VTH								
VPH								



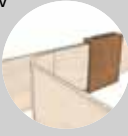
TAPE/TAPE

If more than one connection appears in a table, change (if necessary) the union type code into the required one to get the right reference.

I.e.: If a LH mould for horizontal 30x2mm tape to tape is required, just turn P302/P302/LV to P302/P302/LH. The number of tablets and other accessories will remain the same.

16	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
	LV	P302/P302/LV	Tape 30x2mm	Tape 30x2mm	AT-020N	2	AT-049N	
		P253/P253/LV	Tape 25x3mm	Tape 25x3mm	AT-020N	1,5	AT-049N	
		P305/P305/LV	Tape 30x5mm	Tape 30x5mm	AT-020N	2,5	AT-049N	
		P405/P405/LV	Tape 40x5mm	Tape 40x5mm	AT-020N	3,5	AT-049N	
		P605/P605/LV	Tape 60x5mm	Tape 60x5mm	AT-021N	3	AT-050N	
	LH							
	TH							
	TV							
	XS							

17	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
	LO	P302/P302/LO	Tape 30x2mm	Tape 30x2mm	AT-020N	3	AT-050N	
		P253/P253/LO	Tape 25x3mm	Tape 25x3mm	AT-020N	3	AT-050N	
		P305/P305/LO	Tape 30x5mm	Tape 30x5mm	AT-020N	4,5	AT-050N	
		P405/P405/LO	Tape 40x5mm	Tape 40x5mm	AT-020N	4,5	AT-050N	
		P605/P605/LO	Tape 60x5mm	Tape 60x5mm	AT-020N	5	AT-050N	
	TO							

18	Connection	Reference	Conductor 1	Conductor 2	Tab. ref	Tab. con.	Clamp	Notes
	PV	P302/P302/PV	Tape 30x2mm	Tape 30x2mm	AT-020N	2,5	AT-049N	
		P253/P253/PV	Tape 25x3mm	Tape 25x3mm	AT-020N	2	AT-049N	
		P305/P305/PV	Tape 30x5mm	Tape 30x5mm	AT-020N	3	AT-049N	
		P405/P405/PV	Tape 40x5mm	Tape 40x5mm	AT-020N	5	AT-049N	
		P605/P605/PV	Tape 60x5mm	Tape 60x5mm	AT-021N	4	AT-050N	

CABLE/TAPE

If more than one connection appears in a table, change (if necessary) the union type code into the required one to get the right reference.

I.e.: If a LH mould for run 30x2mm² tape to tap 50mm² cable is required, just turn C50/P302/TH to C50/P302/LH. The number of tablets and other accessories will remain the same.

19	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
 	TH	C35/P302/TH	Cable 35mm ²	Tape 30x2mm	AT-020N	1,5	AT-049N	
		C50/P302/TH	Cable 50mm ²	Tape 30x2mm	AT-020N	2,5	AT-049N	
		C70/P302/TH	Cable 70mm ²	Tape 30x2mm	AT-020N	2,5	AT-049N	
		C35/P253/TH	Cable 35mm ²	Tape 25x3mm	AT-020N	1,5	AT-049N	
		C50/P253/TH	Cable 50mm ²	Tape 25x3mm	AT-020N	2,5	AT-049N	
		C70/P253/TH	Cable 70mm ²	Tape 25x3mm	AT-020N	2,5	AT-049N	
		C70/P305/TH	Cable 70mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		C95/P305/TH	Cable 70mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		C120/P305/TH	Cable 120mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		C150/P305/TH	Cable 150mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		C150/P605/TH	Cable 150mm ²	Tape 30x5mm	AT-020N	5	AT-049N	
		C185/P605/TH	Cable 150mm ²	Tape 30x5mm	AT-021N	2	AT-050N	
		C240/P605/TH	Cable 150mm ²	Tape 30x5mm	AT-021N	3	AT-050N	

20	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	TH	P302/C35/TH	Cable 35mm ²	Tape 30x2mm	AT-020N	1	AT-049N	
		P302/C50/TH	Cable 50mm ²	Tape 30x2mm	AT-020N	2	AT-049N	
		P302/C70/TH	Cable 70mm ²	Tape 30x2mm	AT-020N	2	AT-049N	
		P253/C35/TH	Cable 35mm ²	Tape 25x3mm	AT-020N	1,5	AT-049N	
		P302/C35/TH	Cable 35mm ²	Tape 30x2mm	AT-020N	1	AT-049N	
		P302/C50/TH	Cable 50mm ²	Tape 30x2mm	AT-020N	2	AT-049N	
		P302/C70/TH	Cable 70mm ²	Tape 30x2mm	AT-020N	2	AT-049N	
		P253/C35/TH	Cable 35mm ²	Tape 25x3mm	AT-020N	1,5	AT-049N	
		P253/C50/TH	Cable 50mm ²	Tape 25x3mm	AT-020N	2	AT-049N	
		P253/C70/TH	Cable 70mm ²	Tape 25x3mm	AT-020N	2	AT-049N	
		P305/C70/TH	Cable 70mm ²	Tape 30x5mm	AT-020N	2	AT-049N	
		P305/C95/TH	Cable 70mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		P305/C120/TH	Cable 120mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		P305/C150/TH	Cable 150mm ²	Tape 30x5mm	AT-020N	2,5	AT-049N	
		P605/C150/TH	Cable 150mm ²	Tape 30x5mm	AT-020N	5	AT-049N	
		P605/C185/TH	Cable 150mm ²	Tape 30x5mm	AT-021N	2	AT-050N	
		P605/C240/TH	Cable 150mm ²	Tape 30x5mm	AT-021N	3	AT-050N	

TAPE/ROD

21	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	TV	P302/T14/TV	Tape 30x2mm	Rod Ø 14.3mm	AT-020N	3	AT-049N	
		P302/T16TV	Tape 30x2mm	Rod Ø 15.9mm	AT-020N	3	AT-049N	
		P302/T18/TV	Tape 30x2mm	Rod Ø 18.3mm	AT-020N	3,5	AT-049N	
		P253/T14/TV	Tape 25x3mm	Rod Ø 14.3mm	AT-020N	2,5	AT-049N	
		P253/T16/TV	Tape 25x3mm	Rod Ø 15.9mm	AT-020N	3	AT-049N	
		P253/T18/TV	Tape 25x3mm	Rod Ø 18.3mm	AT-020N	3	AT-049N	



OTHER

22	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	HT	C35/B/HT	Cable 35mm ²	Metal surface	AT-020N	1,5	AT-049N	Consult before any order
		C50/B/HT	Cable 50mm ²	Metal surface	AT-020N	2	AT-049N	Consult before any order
		C70/B/HT	Cable 70mm ²	Metal surface	AT-020N	2	AT-049N	Consult before any order
		C95/B/HT	Cable 95mm ²	Metal surface	AT-020N	2,5	AT-049N	Consult before any order
		C120/B/HT	Cable 120mm ²	Metal surface	AT-020N	2,5	AT-049N	Consult before any order
	VTO	C150/B/HT	Cable 150mm ²	Metal surface	AT-020N	3	AT-049N	Consult before any order
		C185/B/HT	Cable 185mm ²	Metal surface	AT-021N	NA	AT-050N	Consult before any order
		C240/B/HT	Cable 240mm ²	Metal surface	AT-021N	NA	AT-050N	Consult before any order

Apliweld®Secure + for track

Wire welding railway rail operates identically to the other way, while in each case must be specified to use the rail. If the connection is not mentioned, please contact us.

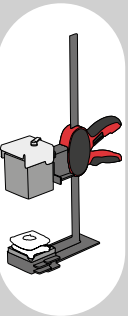
23	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	CR	C35/CR	Cable 35mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C50/CR	Cable 50mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C70/CR	Cable 70mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C95/CR	Cable 95mm ²	Rail	2,5	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C120/CR	Cable 120mm ²	Rail	2,5	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C150/CR	Cable 150mm ²	Rail	3	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N

24	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	AR	C35/AR	Cable 35mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C50/AR	Cable 50mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C70/AR	Cable 70mm ²	Rail	2	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C95/AR	Cable 95mm ²	Rail	2,5	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C120/AR	Cable 120mm ²	Rail	2,5	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N
		C150/AR	Cable 150mm ²	Rail	3	AT-020N	AT-054N	Requires sealing paste AT-065N or AT-066N

25	Connection	Reference	Conductor 1	Conductor 2	Tabs. ref	Tabs/con.	Clamp	Notes
	PR	C35/PR	Cable 35mm ²	Rail	2	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N
		C50/PR	Cable 50mm ²	Rail	2	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N
		C70/PR	Cable 70mm ²	Rail	2	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N
		C95/PR	Cable 95mm ²	Rail	2,5	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N
		C120/PR	Cable 120mm ²	Rail	2,5	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N
		C150/PR	Cable 150mm ²	Rail	3	AT-020N	AT-052N	Requires sealing paste AT-065N or AT-066N

Multiple mould selection guide:

Multiple mould is normally supplied in a case under the general reference **MM-CTX** where "X" corresponds to the required earth rod diameter. Find also listed all other references related to the multiple mould, which are the case elements separately and the basic multiple mould kits.

26	Reference	Description	Notes
	MM-CT14	Multiple mould case for Ø 14,3mm earth rod	See description on table 22
	MM-CT16	Multiple mould case for Ø 16 mm earth rod	See description on table 22
	MM-CT17	Multiple mould case for Ø 17,2 mm earth rod	See description on table 22
	MM-CT18	Multiple mould case for Ø 18,3 mm earth rod	See description on table 22
	MM-CT19	Multiple mould case for Ø 19 mm earth rod	See description on table 22
	MM-BT14	Basic multiple mould kit for Ø 14,3 earth rod	Includes crucible, clamp and lower pieces
	MM-BT16	Basic multiple mould kit for Ø 16 earth rod	Includes crucible, clamp and lower pieces
	MM-BT17	Basic multiple mould kit for Ø 17,2 earth rod	Includes crucible, clamp and lower pieces
	MM-BT18	Basic multiple mould kit for Ø 18,3 earth rod	Includes crucible, clamp and lower pieces
	MM-BT19	Basic multiple mould kit for Ø 19 earth rod	Includes crucible, clamp and lower pieces
	MM-053N	Multiple mould clamp	Included in all MM-CTX and MM-BTX kits (*)
	MM-CS	Cavity sealers (60 units)	2 included in all MM-CTX
	MM-PH	Lower piece for cables and tapes welding	Included in all MM-CTX and MM-BTX kits
	MM-PT14	Lower piece for Ø 14.3 mm earth rod	Included in MM-CT14 and MM-BT14
	MM-PT16	Lower piece for Ø 16 mm earth rod	Included in MM-CT16 and MM-BT16
	MM-PT17	Lower piece for Ø 17,2 mm earth rod	Included in MM-CT17 and MM-BT17
	MM-PT18	Lower piece for Ø 18,3 mm earth rod	Included in MM-CT18 and MM-BT18
	MM-PT19	Lower piece for Ø 19 mm earth rod	Included in MM-CT19 and MM-BT19
	MM-T	Multiple mould crucible	Included in all MM-CTX y MM-BTX
	AT-082N	Vertical stand pliers	Included in all MM-CTX

(*) X = 14, 16, 17, 18 y 19

References included in every MM-CTX case

27	Code	Description	Units
	MM-PTX	Lower piece for earth rod with diameter "X"	1
	MM-053N	Multiple mould clamp	1
	MM-T	Multiple mould crucible	1
	MM-PH	Lower piece for cables and tapes welding	1
	MM-CS	Cavity sealers (60 units)	2
	AT-080N	Multiple mould case	1
	AT-060N	Flint igniter (for powder starter)	1
	AT-061N	Conductors cleaning brush	1
	AT-062N	Crucible and electronic starter cavity cleaning brush	1
	AT-063N	Slag spade	1
	AT-064N	Welding cavity cleaning brush	1
	AT-065N	Sealing paste (0.45 kg)	1
	AT-073N	Safety gloves	1
	AT-082N	Vertical stand pliers for rod welding	1

(*) X = 14, 16, 17, 18 y 19

All pieces may be supplied separately or as spare parts.

The following table describes the appropriate number of tablets and cavity sealers for any connection and how to place them:

28	Conductor 1	Conductor 2	Union	Tablets	SC	CS/Layers
	Cable Up to 70mm ²	Cable Up to 70mm ²	T horizontal	2	2	1+1
	Cable Up to 95mm ²	Cable Up to 95mm ²	T horizontal	2,5	4	2+2
	Cable Up to 50mm ²	Cable Up to 50mm ²	Cross	2	3	1+1+1
	Cable 70mm ²	Cable 70mm ²	Cross	2,5	4	1+2+1
	Cable 95mm ²	Cable Up to 95mm ²	Cross	2,5	6	2+2+2
	Cable Up to 70mm ²	Rod Ø Any	T vertical	2	2	1+1
	Cable 95mm ²	Rod Ø Any	T vertical	2,5	4	2+2
	Tape Any	Tape Any	T/cross	2	3	1+1+1
	Tape Any	Rod Ø Any	T	2	2	1+1

• CS = Cavity Sealers.

• CS/layer: Number of sealers between layers of conductors. Ex.:1+1 means placing first one CS, then the conductors to be welded and on them the other CS

• Besides the described ones, straight weldings are possible for all combinations. They require 2 tablets except for 95mm² cable which requires 2,5 tablets.

• For re-bar connections use the following equivalence: C70 = V10, C95=V12

• For cable to tape joints, tape is equivalent to cable up to 50mm²

• Parallel connections are possible for cables up to 50mm². They all require 2,5 tablets with 1+2+2 CS

• For any other required but not described connection please consult us.



Apliweld® Secure + reference list

Apliweld®-T tablet references

29	Reference	Description	Notes
	AT-020N	20 standard Apliweld® tablets	
	AT-021N	20 large format Apliweld® tablets	

References for the use of electronic ignition **Apliweld®-E**

30	Reference	Description	Notes
	AT-100N	Electronic ignition kit	
	AT-010N	10 electronic starter	
	AT-069N	Basic tool set Apliweld®-E	
	AT-096N	Electronic ignition device (without accessories)	Included in AT-100N
	AT-098N	Standard cable for the ignition device (2m)	Included in AT-100N
	AT-099N	5 spare clamps (for AT098N standard cable end)	Included in AT-100N
	AT-101N	Battery charger for the electronic ignition device	Included in AT-100N

References for traditional ignition

31	Reference	Description	Notes
	AT-012N	10 units starting powder	
	AT-068N	Basic tool set Apliweld® with flint igniter	

References of clamps and clamps accessories

32	Reference	Description	Notes
	AT-049N	Type S handle clamp	
	AT-050N	Type G handle clamp	
	AT-051N	Vertical surface or rebar moulds clamp	
	AT-052N	Clamp Rail foot moulds clamp	
	AT-054N	Clamp for weldings rail head or rail web moulds clamp	
	AT-058N	Horizontal surface moulds handle clamp attachment	
	AT-059N	Holding cable clamp	

Other accessories and tools

33	Reference	Description	Notes
	AT-060N	Flint igniter (for powder starter)	Included in AT-068N
	AT-061N	Conductors cleaning brush	Included in AT-069N and AT-068N
	AT-062N	Crucible and electronic starter cavity cleaning brush	Included in AT-069N and AT-068N
	AT-063N	Slag spade	Included in AT-069N and AT-068N
	AT-064N	Welding cavity cleaning brush	Included in AT-069N and AT-068N
	AT-065N	Sealing paste (0.45 Kg)	Included in AT-069N and AT-068N
	AT-066N	Sealing paste (0.9 Kg)	
	AT-070N	10 Flint gun renewal	
	AT-071N	Sealing paste (2.25 Kg)	
	AT-072N	25 Cable Adapter sleeves (0.3mm)	
	AT-073N	Safety gloves	Included in AT-069N and AT-068N
	AT-074N	Flint igniter extension	
	AT-075N	Blow torch for moulds pre-heating	
	AT-076N	Spare multigas cartridge for the blow torch	
	AT-077N	Safety glasses	
	AT-080N	Tool box	Included in MM-CTX multiple moulds
	AT-081N	Ceramic tray	
	AT-083N	Ceramic blanket	
	AT-092N	Double brush for conductors cleaning	
	AT-093N	Double brush replacements	
	AT-094N	Rasp for surface + replacement	



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