TIGRE

Electricity

Technical Catalogue and Products

Group TIGRE

A better world is in the making.

A BETTER TOMORROW FOR EVERYONE. THIS IS OUR BRAND IN THE WORLD.

Each of our actions or our products has a single goal: to build a better world for all.

Better for our professionals who, united and guided by solid values, create innovative solutions to transform reality and people's lives.

Better for our customers, who receive the technology and trust that only a market-leading brand for decades can offer.

And better for the planet, which has every drop of its most precious natural resource respected and preserved with all affection.

Today, we are an admired multinational worldwide, with 24 manufacturing units (10 in Brazil and 14 abroad), present in more than 40 countries. All this done by more than 5,000 dedicated and passionate employees.

These numbers fill us with pride, but what really inspires us is knowing that a better world is at work.

And if it depends on Tigre, he will be better and better for everyone.

Our solutions

When it comes to building or renovating, count on Tigre! More than 75 years of history and innovation with a complete line of products for each stage of your project. After all, as important as a pioneering and transformative stance, it is to bring to the homes of millions of Brazilians solutions that guarantee tranquility and comfort. Whether for home renovation, collective, industrial and building works, real estate and artistic painting, sanitary metals, drainage projects, basic sanitation, agriculture, mining, among other applications, Tigre products guarantee innovative solutions ranging from infrastructure to finishing. And the best part: they are easy to install and very safe.

- Water
- Sewage
- Drainage
- Accessories
- Electrical
- Painting Tools - Real Estate
- Painting Tools - Artistic
- Industry
- Irrigation
- Infrastructure
- Fire Fighting System
- Residential Gas

Summary

Distribution Boards

1. Distribution Boards

Do you want to combine beauty and safety in the electrical installation of your home or business? With Tigre solutions this is possible.

The modern design of the Distribution Boards integrates with different environments. Made of flame retardant material, safe to install and handle.

1.1. Function/Application

To house the electrical safety devices (circuit breakers, DDR, IDR and DPS), receive the wires that come from the meter and distribute the electrical circuits that will power the building. Embed and overlap model for use in residential, commercial and industrial low-voltage electrical installations, in installation, in masonry and Drywall.

1.2. Benefits and Differentials

Modern Design
Exclusive design developed by Design Studio that integrates the decoration of the environment, with soft lines and ends up understated mind.

Easy Installation
Housing for busbar at the edge of the board, facilitating its fixation; Universal support for DIN or NEMA circuit breakers with the possibility of mounting the circuit breakers on the out-of-board support in addition to towers with height adjustment for circuit breakers.

More practicality
Adhesive labels for circuit identification. Reversible cover with 180° opening with the opening side indicated on the cover. It has a smooth surface that facilitates cleaning.

Increased safety
PVC insulating and anti-flame material with reinforced structure providing more durability and resistance.

1.3. Technical Characteristics

Material: Made of PVC Polyvinyl chloride) anti-flame.

Color: White.

Busbar: Options with and without NEUTRAL busbar and GROUND KIT;
Notes: PHASE bus, NEUTRAL kit and GROUND can be purchased separately.

Models: Embedded and Overlaid.

Degree of protection: IP 40 according to NBR 6146.

Circuit breakers: Accepts NEMA or DIN standard circuit breakers:

Below, see the list of reference standards that govern the manufacture of Distribution Boards and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR IEC 60439-3	Low Voltage Switchgear and Control Assemblies.
NBR 6146	Electrical Equipment Enclosures - Protection.
NBR 5410	Low Voltage Electrical Installations.
NBR IEC 60670	Boxes for Fixed Electrical Installations for Domestic and Similar Uses.

Grid for Distribution Board Model Choice

Number of Circuit Breakers	Installation	Cover	Neutral Busbar and Ground
3/4	Embedded	White	Without
		Transparent	Without
	Overlaid	White	Without
		Transparent	Without
6/8	Embedded	White	With
			Without
		Transparent	With
	Overlaid	White	With
			Without
		Transparent	With
12/16	Embedded	White	With
			Without
		Transparent	With
	Overlaid	White	With
			Without
		Transparent	With
18/24	Embedded	White	With
			Without
		Transparent	With
	Overlaid	White	With
			Without
		Transparent	With
27/36	Embedded	White	With
			Without
		Transparent	With
	Overlaid	White	With
			Without

1.3.1. Body - Embedded Model

- Inputs in the 25 and 32 mm gauges at the bottom and sides, for installation of Threadable Conduits or Tigreflex®, with detachable inserts.
- It has notches to lock the fasteners for Drywall (4 units for the 3/4 board and 8 units for the other sizes).
- It allows the application on single or double plasterboard walls of plasterboard, only needing to invert the direction of fitting on the body;
- It has an indication of the mounting position inscribed on the bottom of the board (upwards);
- Adjustment towers: allow up to 5 levels of height adjustment of circuit breakers;
- On the edge, it has points for fixing the frame on the body (it already comes with screws: 2 units for 3/4 boards and 4 for other sizes);
- Option of choice with or without Kit NEUTRAL bus and GROUND (the 3/4 circuit breakers model does not come with busbars);
- Housing on the edge of the walls to fix the NEUTRAL and GROUND busbars, with four different positions.

1.3.2. Body - Overlaid Model

- Rounded corners;
- Inputs in the 25 and 32 mm gauges at the bottom and sides, for installation of Threaded Conduits or Tigreflex®. On the sides, there are positioners for opening with cup saw. In the background there are detachable inserts.
- It has cutting marking for opening that allows fitting of the 20x50 mm channels.
- Indication of mounting position inscribed on the bottom (upwards);
- Adjustment towers: allow up to 5 levels of height adjustment of circuit breakers;
- It has towers for fixing the frame (it already comes with screws: 2 units for 3/4 boards and 4 for other sizes);
- Towers on the sides of the walls to fix the NEUTRAL and GROUND busbars, in 4 different positions;
- Option of choice with or without Kit NEUTRAL bus and GROUND (the 3/4 circuit breakers model does not come with bus);
- Fixing to the wall by means of 5 screws (1 upper center), with indication of drilling at the bottom of the tank.

1.3.3. Frame

- Component made of anti-flame PVC in white color.
- Fixation to the body through 4 self-tapping screws with combined slot;
- It presents space for gluing the identification labels of the circuits/circuit breakers, with plastic protection;
- Opening for access to DIN or NEMA circuit breakers. For NEMA models, the frame is provided with pre-cuts, simply cutouts with saw or stylet to fit the circuit breaker.
- It comes with PVC blind covers to cover the frame spaces not occupied by the circuit breakers. They are supplied in plates, with predefined measurements, which are detached according to the required size, press-fitted into the frame.

1.3.4. Cover

- Made of PVC, with a different design.
- White or transparent color options;
- Opening direction reversal option (right or left side);
- 180° aperture;
- Opening side indicated over the cover

1.3.5. Busbars

- "Born" type busbars, speed up the fittings, just peel the wire and insert it into the desired hole and tighten the screw;
- Can be purchased separately;
- Electric current intensity capacity of 125 A;
- They allow the installation of electrical cables of section up to 10 mm2.

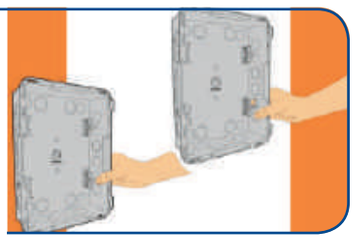
1.4. Embedded Model

1.4.1. Embedded Masonry Walls Model

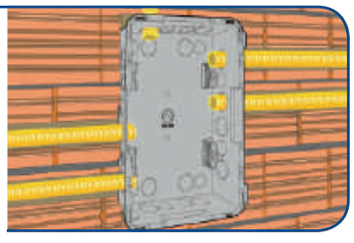
The embedded boards are provided with openings for fitting the electroducts on all faces (sides and bottom), and the DN 25 and 32 inserts are prepared to receive Tigreflex® or Rigid Conduits, just highlight them. All inputs have interference points for locking the conduits.

TAMANHO DE BARRAMENTO	NÚMEROS DE ORIFÍCIOS
6/8	9
12/16	17
18/24	24
27/36	37

1 After defining the openings for connecting the conduits, remove the inserts by pressing with your fingers and connect the conduits by simple fitting.



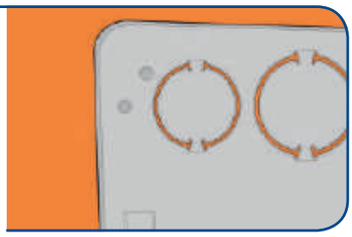
2 Fix the board in the location provided for in the project, connecting the respective conduits



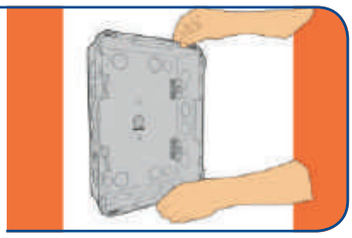
Important:
Consider the masonry level, leaving room for later finishing with plaster.

1.4.2. Drywall Embedded Model

1. Use the 4 embossed dots on the bottom of the board to mark the plasterboard at the pre-defined location in the project.

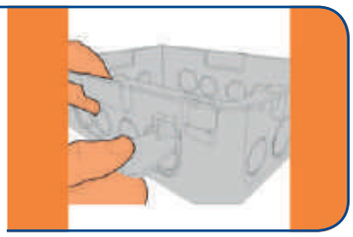


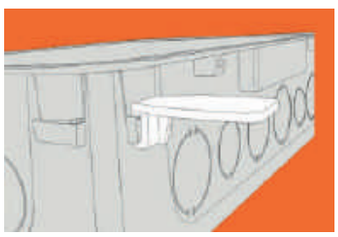
2. Once the location is identified, firmly press the tank against the board. Use the 4 marks left on the board as a template to start the cutout.



3. With the aid of a hole equipped with a 60 mm cup saw, make 4 cutouts on the plate. Finish the opening with a saw or jigsaw. Once the trimming is complete, begin the installation of the board.

4. To fix the distribution board to the board, use the 4 Drywall fasteners that come with the product. Fit the fasteners to the brackets on the sides of the board. Use position A for 1 plasterboard, and position B for 2 boards.

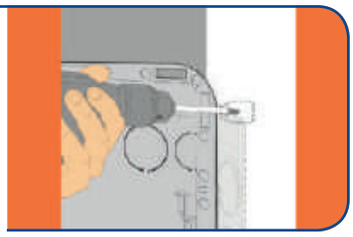




Position A:
One plasterboard

Position B:
Two plasterboards

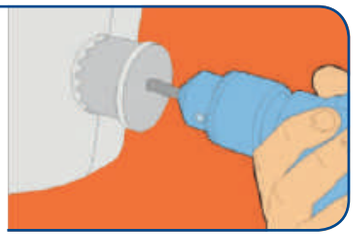
5. Finish the fixing by screwing the board and fasteners for Drywall. Use the existing slots on the edge of the board as a positioning orientation for the fasteners. If you prefer, screw the fasteners for direct Drywall upstream.



Important:
Make sure the board is level with the plasterboard.

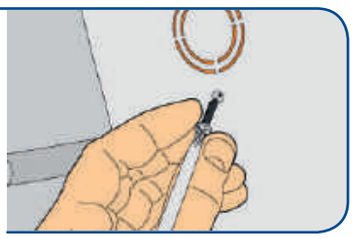
1.5. Overlaid Model

1. Make the opening for passage of the conduits in the wall of the distribution board according to the project. Use cup saw on the diameter of the existing markings on the body of the board.



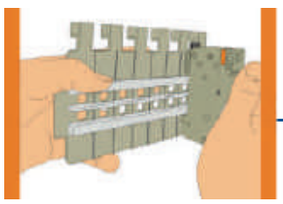
2. Mark the desired height for positioning the board on the wall. Mark the fixing points with the help of the indications at the bottom of the board. Make sure the board is level.

3. Secure the board with the accompanying screws and bushings. Proceed with the installation of the circuit breakers and the frame.



1.6 Installation of Circuit Breakers and Frame

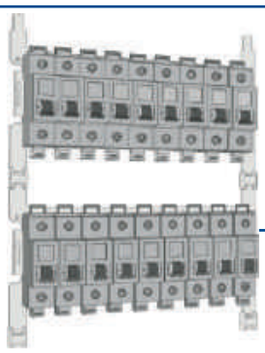
1. Mount the circuit breakers on the bracket, choosing the respective side to the model (rail face for the DIN circuit breaker or lock face for the NEMA circuit breaker).



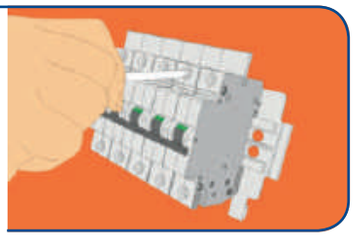
Disjuntor DIN

Disjuntor NEMA

2. For the boards with 24 and 36 circuit breakers, it is possible to join one support to the other, by simple fitting.



3 Connect the circuit breakers using the jumping system or busbar comb.



4 Secure the bracket with the circuit breakers already mounted on the height adjustment towers.

Position it at the ideal height so that the circuit breakers are faced with the frame that will be placed later (use the different levels of the towers).

Fit first into one of the towers (A) and then press the other tower slightly to the side (B), making it easier to fit.

A

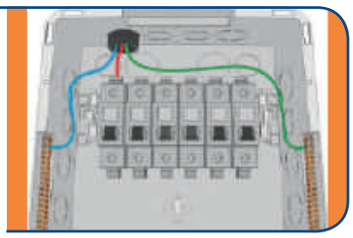
B

5 Press the NEUTRAL and GROUND busbars on the housings located on the edges (embedded model) or on the towers (overlapping model) of the distribution board, fixing it by simple fitting.

Embedded Board

Wall Mounted

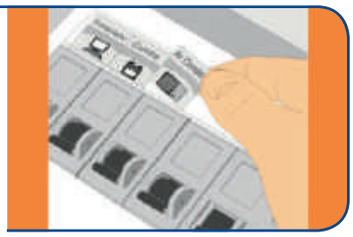
6 Make the electrical installation by connecting the NEUTRAL and GROUND wires to the busbars, and the phase and circuit breakers to the corresponding circuits.



7 After electrical installation, fix the bezel with the cover on the distribution board with the accompanying screws.

8 To reverse the opening side of the cover, disengage it from the board axis by fitting it on the other side.

9 Glue the circuit breaker identification stickers. Finish by placing the plastic cover on the adhesives.



10 If not all the circuit breakers that the distribution board holds are used, cover the remaining spaces through the blind covers. Cut them from the frame, according to the size and quantity required.

1.7. Instructions

1.7.1. Maintenance

The Distribution Boards require no maintenance. It is advisable to only do a periodic cleaning with a soft cloth, water and mild soap.

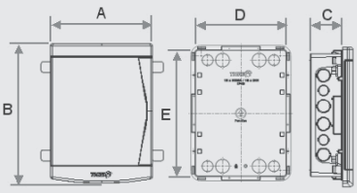
Important:
Do not use any corrosive chemicals for cleaning.

1.7.2. Storage

Store the product in its original packaging on a flat surface, free of irregularities, in a covered and ventilated place.

1.8. Distribution Board Line Items

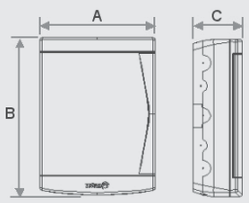
• Embedded Distribution Board 3/4 Circuit Breakers



DIMENSIONS (MM)

CODE	A	B	C	D	E	Cover	Busbar
33046979	186	173	78,7	141	148	White	Without
33047029	186	173	78,7	141	148	Transparent	Without

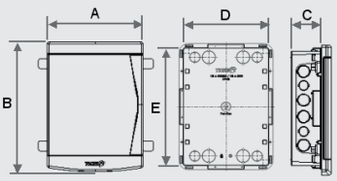
• Distribution Board Overlaid 3/4 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	Cover	Busbar
33048416	186	173	100,5	White	Sem
33048459	186	173	100,5	Transparent	Sem

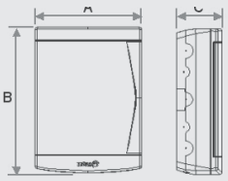
• Embedded Distribution Board 6/8 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	D	E	Cover	Busbar
33046987	186	173	78,7	141	148	White	Sem
33048491	186	173	78,7	141	148	White	Com
33048530	186	173	78,7	141	148	Transparent	Com

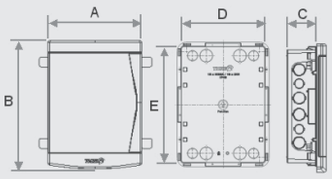
• Table of Distribution Overlaid 6/8 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	Cover	Busbar
33048424	245	190	100,5	White	Sem
33048572	245	190	100,5	White	Com
33048602	245	190	100,5	Transparent	Com

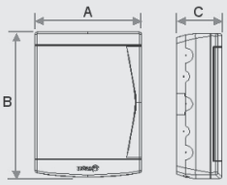
• Table of Embedded Distribution Board 12/16 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	D	E	Cover	Busbar
33046995	250	344,8	78,7	213	298	White	Sem
33048505	250	344,8	78,7	213	298	White	Com
33048548	250	344,8	78,7	213	298	Transparent	Com

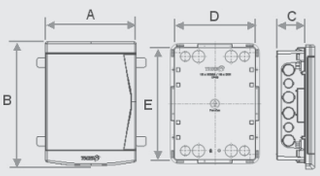
• Distribution Board Overlaid 12/16 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	Cover	Busbar
33048432	250	344,8	100,5	White	Sem
33048580	250	344,8	100,5	White	Com
33048610	250	344,8	100,5	Transparent	Com

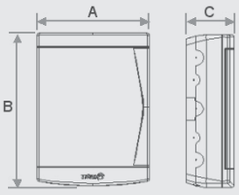
• Embedded Distribution Board 18/24 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	D	E	Cover	Busbar
33047002	350	379	78,7	313	328	White	Sem
33048513	350	379	78,7	313	328	White	Com
33048556	350	379	78,7	313	328	Transparent	Com

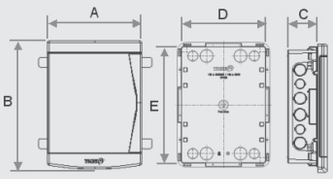
• Distribution Board Overlaid 18/24 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	Cover	Busbar
33048440	350	379	100,5	White	Sem
33048599	350	379	100,5	White	Com
33048629	350	379	100,5	Transparent	Com

• Embedded Distribution Board 27/36 Circuit Breakers



DIMENSIONS (MM)

CÓDIGO	A	B	C	D	E	Cover	Busbar
33047010	355,4	525	78,7	313	468	White	Sem
33048521	355,4	525	78,7	313	468	White	Com
33048564	355,4	525	78,7	313	468	Transparent	Com

• NEUTRAL/ GROUND busbar for Distribution Board

DIMENSIONS (MM)

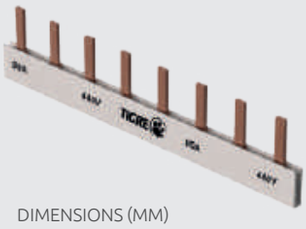
CÓDIGO	DISJUNTORES	A	L	d	e	Furos
37430510	12/16	9,1	128	5	6,5	17
37430528	18/24	9,1	165,5	5	6,5	24
37430536	27/36	9,1	250	5	6,5	37

• NEUTRAL busbars/ grounding Universal holes

DIMENSIONS (MM)

Código	A	B	Furos
300000607	67,5	6,5	10

• Single Phase Busbar



DIMENSIONS (MM)

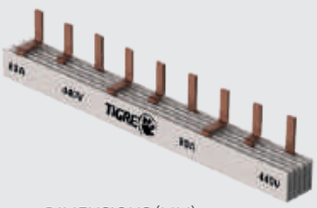
Código	LIGAÇÕES	A	e	C
37430803	8	30	4	155
37430838	12	30	4	226
37430862	57	30	4	1027

• Biphasic Phase Bus

DIMENSIONS (MM)

Código	LIGAÇÕES	A	e	C
37430811	8	30	10	155
37430846	12	30	10	226
37430870	57	30	10	1009

• Triphasic Phase Bus



DIMENSIONS (MM)

Código	LIGAÇÕES	A	e	C
37430820	9	30	16	172
37430854	12	30	16	226
37430889	57	30	16	1027

Slim Distribution Boards

2. Slim Distribution Boards

Beauty and safety in fine harmony. The Slim Distribution Board is thinner and meets different needs. Its modern design allows it to match any environment. Mounted in modules, it meets the circuit breaker (DIN) standard of residential and commercial electrical installations and is easy to install.

2.1. Function/Application

Sheltering the circuit breakers (safety devices), receiving the wires that come from the meter and distributing the electrical circuits that will power the building. For residential and commercial electrical installations.

2.2. Benefits and Differentials

Modern Design
It has an excellent finish, to match any environment.

Easy Installation
Thinner, they are ideal for walls of smaller thickness and with [11] carry the main circuit breaker pattern (DIN).

More practicality
Cover with reversible system and 180° opening with opening side indicated on the cover and easy identification of the circuits through the labels. Smooth surface that facilitates cleaning.

Increased safety
Degree of protection represents less risk of access to live (electrified) parts of the board, offering greater safety.

2.3. Technical Characteristics

2.3.1. Body

Material: Made of PVC Poly(vinyl chloride) anti-flame.

Color: White.

Embedded Model: Inputs in the 25 and 32 mm gauges at the bottom and sides, for installation of Threaded or flexible Tigreflex Conduits, with detachable inserts.
Notes: The Slim Distribution boards do not have busbars.

Degree of protection: IP 40 according to NBR 6146.

2.3.2. Frame

Material: Made of PVC Poly(vinyl chloride) anti-flame.

Color: White.

Fixing: Attached to the body through self-tapping screws with combined slot.

Degree of protection: IP 40 according to NBR 6146.

Identification: It presents space for gluing the identification labels of the circuits/circuit breakers, with plastic protection;

Finishing: It comes with PVC blind covers to cover the frame spaces not occupied by the circuit breakers that are supplied in boards, with predefined measurements that are highlighted according to the required size.
Notes: Snap-fit into the frame.

2.3.3. Cover

Material: Made of PVC Poly(vinyl chloride), with a different design.

Color: White.

Opening: 180° with option to reverse the opening direction (right or left side). Opening side indicated over the cover.

Degree of protection: IP 40 according to NBR 6146.

Below, see the list of reference standards that govern the manufacture of Slim Distribution Boards and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 6808	Factory Mounted Low Voltage Switchgear and Control Assemblies - Specification.
NBR 6146	Electrical Equipment Enclosure - Protection.
NBR 5410	Low Voltage Electrical Installations.
NBR IEC 60670-1	Boxes for Fixed Electrical Installations for Domestic and Similar uses.

2.4. Sizes and Models

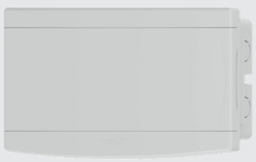
12 CIRCUIT BREAKERS	Embedded	No busbar	White cover
16 CIRCUIT BREAKERS	Embedded	No busbar	White cover
32 CIRCUIT BREAKERS	Embedded	No busbar	White cover
48 CIRCUIT BREAKERS	Embedded	No busbar	White cover
64 CIRCUIT BREAKERS	Embedded	No busbar	White cover

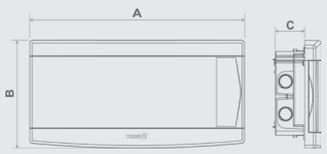
Table of Busbars per Board:

Board Code	Board Description	Bus Code	Description	Quantity
33040806	QD DIST SLIM 12 DISJ	37665959	Grounded and Neutral Busbar Table 12 Separate	1 PAIR (01 pc for ground and 01 pc for neutral)
33040814	QD DIST SLIM 16 DISJ	37430510	Bus N/T QD DIST 12/16 DISJ	1 PAIR (01 pc for ground and 01 pc for neutral)
33040822	QD DIST SLIM 32 DISJ	37430510		2 PAIRS* (02 pc for ground and 02 pc for neutral)
33040830	QD DIST SLIM 48 DISJ	37430510		3 PAIRS* (03 pc for ground and 03 pc for neutral)
33040849	QD DIST SLIM 64 DISJ	37430510		4 PAIRS* (04 pc for ground and 04 pc for neutral)

2.5. Slim Distribution Board Line Items

• Slim Distribution Board 12 Circuit Breakers

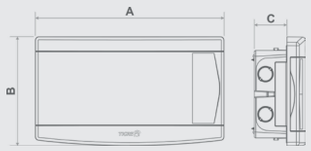




DIMENSIONS (MM)

CODE	A	B	C	Cover	Busbar
33040806	330	190	59	White	Without

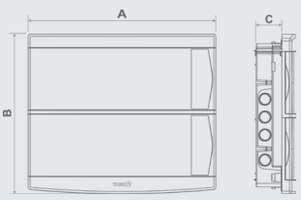
• Slim Distribution Board 16 Circuit Breakers



DIMENSIONS (MM)

CODE	A	B	C	Cover	Busbar
33040814	420	209,5	59	White	Without

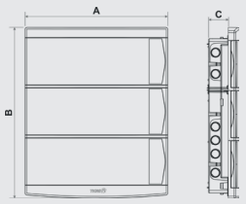
• Slim Distribution Board 32 Circuit Breakers



DIMENSIONS (MM)

CODE	A	B	C	Cover	Busbar
33040822	420	357	59	White	Without

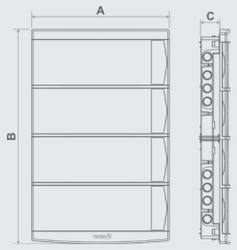
• Slim Distribution Board 48 Circuit Breakers



DIMENSIONS (MM)

CODE	A	B	C	Cover	Busbar
33040830	420	505	59	Branca	Sem

• Slim Distribution Board 64 Circuit Breakers



DIMENSIONS (MM)

CODE	A	B	C	Cover	Busbar
33040849	420	653	59	Branca	Sem

• Neutral Busbar/ 12 Hole Ground

DIMENSIONS (MM)

CODE	A	L	e	d
37665959	9,1	107,8	6,5	5

VDI Boards

3. VDI Boards

For the electrical installation of a building work, all pipes, wiring and protection devices (circuit breakers, DRs and DPs) are packed in the distribution boards. However, the telephone, network and TV facilities also need a place for the necessary calls to be made and allow for any maintenance. The VDI TIGRE System Boards bring the necessary solutions to meet this need with innovation and safety.

2.1. Function/Application

Receive and house, in a single point, pipes, wiring/cabling, connectors and devices of the Voice (telephony) facilities. Data (networks) and Image (TV antenna).

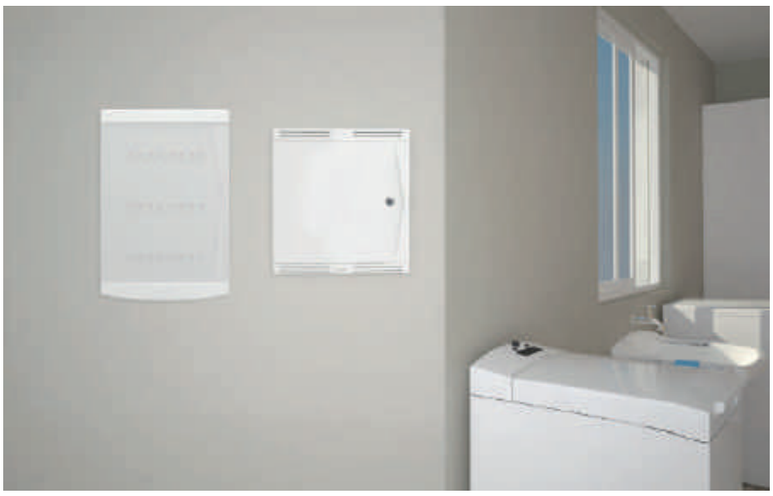
To be applied in building works of:

- Residences
- Offices
- Stores

To be installed on walls of:

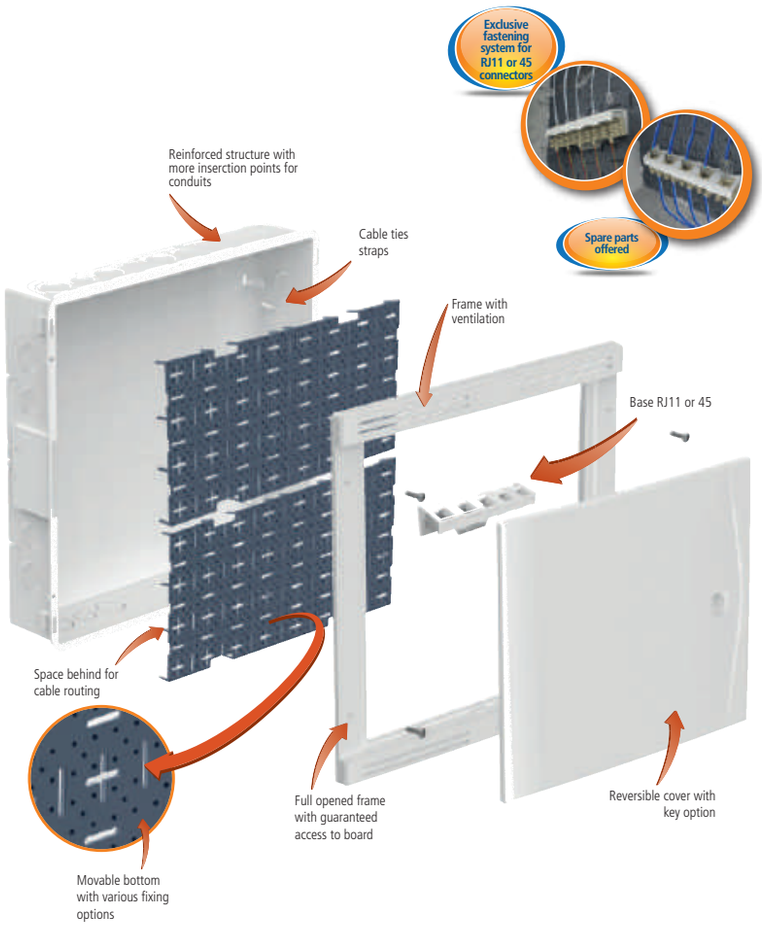
- Masonry
- Drywall
- Wood

It allows the installation of the entire communication network at a single point.



The VDI System Boards can be installed next to the Distribution Board. Thus, all installations (electrical and communications) are concentrated in a single location, facilitating access and eventual maintenance.

3.2. Components of VDI System Boards



3.3. Possible Installations

1

Telephony

- Telephony set
- Joint
- Switchboard
- Connectors

VOZ

VOICE (TELEPHONY)

2

TV antenna

- Antenna Splitter (Split)
- Signal amplifier
- Amendment

IMAGEM

IMAGE (TV ANTENNA)

3

Networks (Logical Network)

- Modem
- Switch
- Router
- Connectorization
- Amendment

DADOS

DATA (LOGICAL NETWORK)

4

Installation with 3 systems

VOZ — VOICE (TELEPHONY)

DADOS — DATA (LOGICAL NETWORK)

IMAGEM — IMAGE (TV ANTENNA)

3.4. Benefits and Differentials

Beauty
Smooth lines and discreet finish with the same design as the Tigre Distribution Boards. Hides equipment and fittings.

Easy Installation
Greater number of inputs for conduits; Pre-cuts for full opening at the top and bottom of the board for conduit entry.

Flexibility in Installation
Movable bottom allows the installation of devices and connectors according to the need for installation Exclusive fastening system for RJ 11 and RJ45 connectors.

Convergence
It concentrates, in only one location, devices and fittings of communication networks.

Practicality
Possibility of reversing the direction of opening of the cover. Easy access to the interior to perform changes or maintenance on the VDI network.

Organization
Hooks at the bottom for lashing the cables. Labels for identification of points.

Safety
Insulating material, does not conduct electric current; Anti-flame material (does not propagate flames). Possibility of installing a key on the cover to restrict access to the inside of the board.

Durability
It does not react with the installation surface and does not rust.

3.5. Technical Characteristics

Material: Boards made of PVC Poly(vinyl chloride) flame retardant and insulator.

Color: White.

Inputs: For PVC conduits in white color with ventilation fins and opening for access to the interior of the VDI System Board.

Cover: Made of white PVC with the possibility of installing a lock or latch. Allows inversion in the direction of opening the cover.

Fund Movable bottom plate made of gray PVC, with pre-holes for Velcro, which allow the attachment of connectors and telephone, data and TV devices.

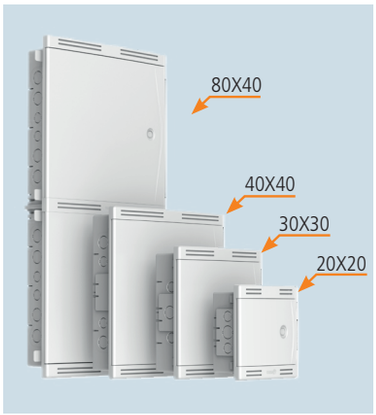
Support: RJ made of white PVC for 05 RJ11 (telephony) or RJ45 (data) connectors.

Models: Embedded and overlaid in 4 sizes (approx.): 20x20 cm, 30x30 cm, 40x40 cm and 80x40 cm.

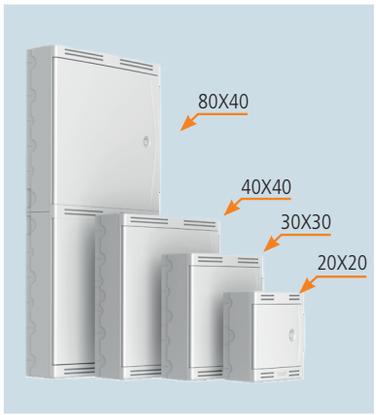
Frame: Nickel-plated screws 4.2x19 mm for fixing the frame.

Sizes	Installation	Supports	
		mobile fund	RJ 11/45
20 x 20 cm	Embedded	1	—
	Overlaid		
30 x30 cm	Embedded	1	1
	Overlaid		
40 x 40 cm	Embedded	2	1
	Overlaid		
80 x 40 cm	Embedded	4	2
	Overlaid		

EMBEDDED



OVERLAID



VDI System Board - Number of inputs for Conduits

Gauge	Board Surface	Models			
		20x20	30x30	40x40	80x40
25 mm	Upper	2	2	4	4
	Bottom	2	2	4	4
	Right Side	2	2	2	4
	Left Side	2	2	2	4
32 mm	Upper	2	4	5	5
	Bottom	2	4	5	5
	Right Side	1	1	2	4
	Left Side	1	1	2	4

3.6. Installation

3.6.1. Masonry Embedded Model

1. After defining the openings for connecting the electrodes, remove the pads by pressing with your fingers.

2. Fix the VDI Board in the place foreseen in the project, connecting the respective conduits by simple fitting.

Important:
Consider the level of the masonry, leaving room for later finishing with plaster.

3.6.2. Drywall Embedded Model

1. Use the 4 embossed dots on the bottom of the VDI Board to mark the plasterboard at the predefined project location.

2. Identifying the location, firmly press the VDI Board against the plasterboard. Use the 4 marks left as a template to start the cutout.

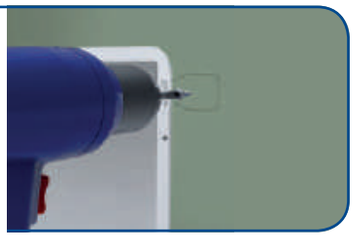
3. With the aid of a hole equipped with a 60 mm cup saw, make 4 cutouts on the plasterboard where the marks were made. Finish the opening with a saw or jigsaw. Once the trimming is complete, begin the installation of the VDI Board.

4 To fix the VDI board to the plasterboard, use the 4 fasteners for Drywall (Drywall Fastening Kit sold separately). Fit the fasteners to the brackets on the sides of the VDI Board. Use position A for one plasterboard and position B for two plasterboards.

Position A:
One plasterboard

Position B:
Two plasterboards

5 Finish the fixing by screwing the board and fasteners for Drywall. Use the existing slots on the edge of the VDI Board as a positioning orientation for the fasteners. If you prefer, screw the fasteners for direct Drywall upstream.

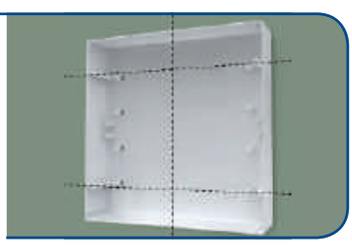


Important:
Make sure the VDI Board is level with the plasterboard.

3.6.3. Overlaid Model

1 Make the opening for passage of the conduits in the wall of the VDI board according to the project. Use cup saw on the diameter of the existing markings on the body of the VDI Board.

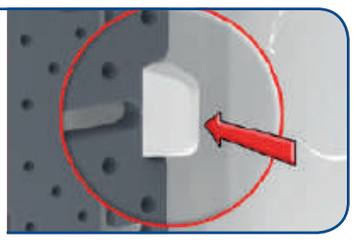
2 Mark the desired height for positioning the VDI Board on the wall. Mark the fixing points with the help of the indications at the bottom of the VDI board. Make sure it's level.



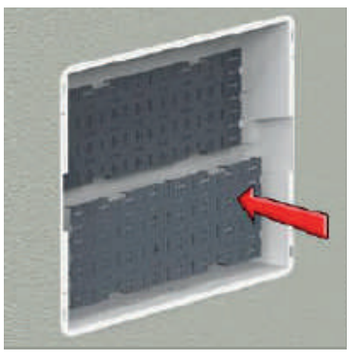
3 Secure the VDI Board with the accompanying screws and bushings. Proceed with the installation of the other components as instructed on the cover packaging.

3.6.4. Mounting of Brackets

1 The brackets are fixed by simple fitting. Hold the bracket on the docking fins of the base and press down to its perfect fit.



The VDI Boards in the 20x20 and 30x30 models have a Mobile Base support each. The 40x40 model, on the other hand, is accompanied by two Mobile Fund brackets.



3.6.5. Image – TV or CCTV antenna

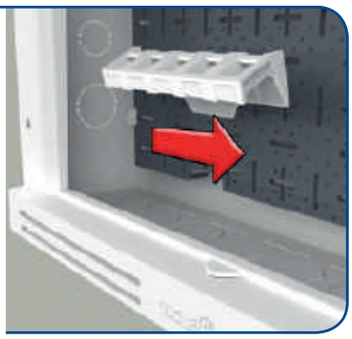
1 To fix the cable TV distributors, simply screw them as shown.

2 Make the fittings of the antenna cables according to the distribution of the work.

3.6.6. Data – Logical Network

1. To fix modem, switch or other logic equipment, screws, plastic clamps or Velcro tapes can be used to facilitate maintenance (as shown in the figure).

2. To attach the RJ45 connectors, simply use the RJ11 and RJ45 connector holders that come with the product (30x30 and 40x40 versions only). Couple the RJ bracket locking pins into the holes in the movable bottom bracket. Subsequently, pull to your right side, finishing the fit.



3. Fit the RJ45 connectors into the bracket compartments and proceed with installation.

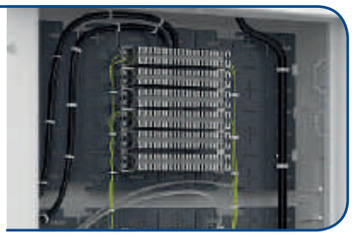
3.6.7. Power Point

1. If it is necessary to install a power point inside the VDI Board, it is enough to fix it with the aid of screws, as shown in the figure.

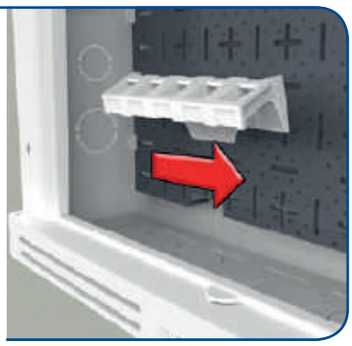
3.6.8. Voice - Telephony

1. To fix the telephone blocks, simply screw them as shown.

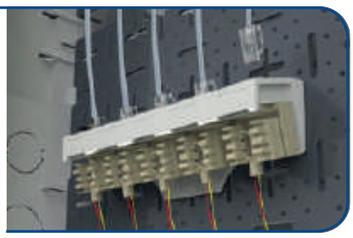
2 Make the fittings of the telephone cables according to the distribution of the work.



3 In cases of use of RJ11 connectors, simply attach them to the RJ 11 and RJ45 connector holders that come with the product (30x30 and 40x40 versions only). Couple the RJ bracket locking pins into the holes in the movable bottom bracket. Subsequently, pull to your right side, finishing the fit.



4 Fit the RJ11 connectors into the bracket compartments and proceed with installation



3.6.9. Frame and Cover Attachment

1 After installation of all components of the VDI Board, secure the frame and cover assembly with the accompanying screws.

2 If you prefer to change the opening side of the cover, undock it from the frame, reverse the position, and dock the cover again.

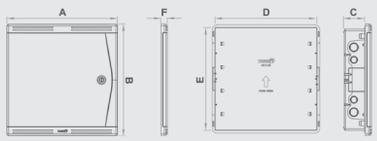
3.6.10. Lock Attachment

1. Drill with the aid of a glass saw the pre-established location on the cover of the VDI Board.

2. Install the lock, finishing the installation.

3.7. VDI System Board Line Items

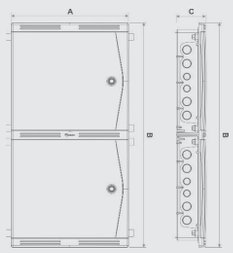
• Embed VDI System Boards



DIMENSIONS (MM)

CODE	GAUGE	A	B	C (without cover)	D	E	F
33044216	20x20	241	241	85	200	200	25
33044232	30x30	341	341	85	300	300	25
33044267	40x40	447	447	85	400	400	25

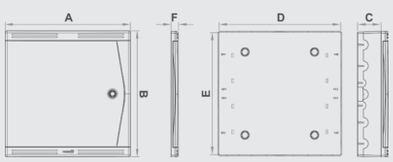
• Embed VDI System Boards



DIMENSIONS (MM)

CODE	GAUGE	A	B	C (with cover)
33044369	80x40	447	859	115

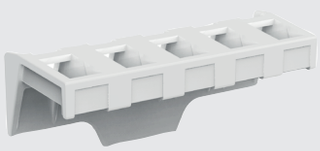
• VDI System Boards OVERLAID

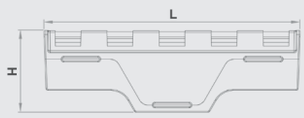


DIMENSIONS (MM)

CODE	GAUGE	A	B	C (without cover)	D	E	F
33044313	20x20	241	241	85	233	233	25
33044330	30x30	341	341	85	333	333	25
33044364	40x40	447	447	85	440	440	25

• Support RJ Connectors for VDI Board





DIMENSIONS (MM)

CODE	H	L
33045000	37	127

Notes

Wall Mounted Electrical Junction Box

4.Wall Mounted Electrical Junction Box

New work or renovation? Never mind, the Tigre Electrical Junction Box is installed overlaid or recessed. Its reinforced structure provides greater durability to the installation and its discreet finish adapts to its environment. Quality and safety of Tigre products for your project.

4.1. Function/Application

Allow the passage, derivation and access to the networks: electrical, telephony, logic and television, also allowing maintenance and inspections. Embedded and overlaid models for use in residential, commercial and industrial low-voltage electrical installations, in masonry or Drywall. They can be used in new works or renovations.

4.2. Benefits and Differentials

Better integration with the environment
Smooth lines and discreet finish with the same design as the Tigre Distribution Boards.

Easy Installation
To fit the conduits, it is enough to manually detach the inserts; It has enough inputs to meet the design needs, on all faces with diameters DN 25 and 32.

Practicality
Greater internal space.

Safety
PVC insulating and anti-flame material with reinforced structure, providing more durability and resistance.

4.3. Technical Characteristics

Material: Boxes made of PVC Polyvinyl chloride) anti-flame.

Color: White.

Cover: White color, fixed by 2 screws in the CPT 1 5 tank and 4 screws in the CPT 20, CPT 30 and CPT 40 boxes.

IP 40 Level: Degree of protection that represents less risk of access to live (electrified) parts of the tank.

Inputs: For 25 and 32 mm gauges, for installation of Threaded Conduits or Tigreflex®

Below, see the list of reference standards that govern the manufacture of Electrical Wall Junction Boxes and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR IEC 60670	Boxes for Fixed Electrical Installations for Domestic and Similar Items
NBR 5410	Low Voltage Electrical Installations

4.3.1. Body - Embedded Model

- Bottom and side entries with detachable inserts for conduit installation;
- Indication of mounting position inscribed on the bottom (upwards);
- Drywall fasteners kit: there are 4 PVC fasteners, to fit the existing notches in the body of the boxes.
- After fitting, they must be screwed into the Drywall plate.
- The tank faces the board.

4.3.2. Body - Overlaid Model

- Detachable inserts for coupling the conduits at the bottom;
- Sides with positioners for opening with cup saw.
- It also has a cut marking for fitting 20x50 mm channels.
- Indication of mounting position inscribed on the bottom (upwards);
- It comes with 4 screws for fixing the tank to the wall of 4.2 x 32 mm with S-6- zinc-plated bushing.

Embedded

Overlaid

CPT Box 15 - Overlaid and Embedded Model

Size: 140 x 1 50 x 75 mm.
Cover: white color, fixed by means of two screws 4.2 x 19 mm - nickel plated.

CPT Box 20 - Overlaid and Embedded Model

Overlaid Size: 200 x 200 x 98 mm.
Embed Size: 200 x 200 x 85 mm.
Cover: white color, fixed by means of 4 screws 4.2 x 19 mm - nickel plated.

CPT Box 30 - Overlaid and Embedded Model

Size: 310 x 330 x 75 mm.
White cover, fixed by 4 screws 4.2 x 19mm - nickel plated

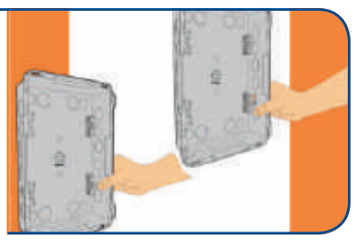
CPT Box 40 - Overlaid and Embedded Model

Overlaid Size: 400 x 400 x 98 mm.
Embed Size: 400 x 400 x 85 mm.
Cover: white color, fixed by means of 4 screws 4.2 x 19 mm - nickel plated.

4.4. Installation

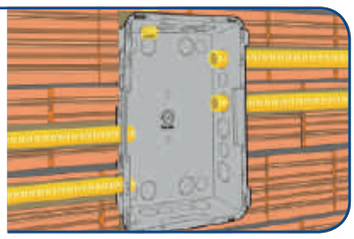
4.4.1. Masonry Embedded Model

1 After defining the openings for connecting the conduits, remove the inserts by pressing with your fingers and connect the conduits by simple fitting.



2 Fix the box in the place foreseen in the project, connecting the respective conduits.

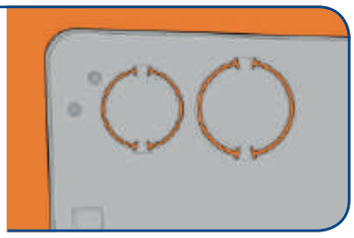
Important:
Consider the level of the masonry, leaving room for later finishing with plaster.



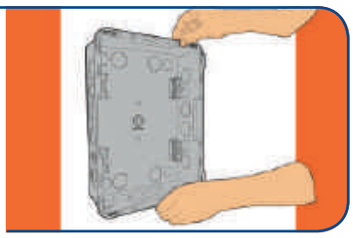
3 Once the electrical installation is completed, secure the cover to the Junction Box using the screws that come with it.

4.4.2. Drywall Embedded Model

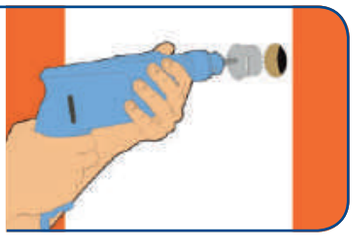
1 Use the 4 embossed dots on the bottom of the tank to mark the plasterboard at the predefined location in the project.



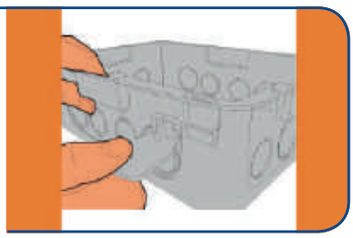
2 Once the location is identified, firmly press the tank against the plasterboard. Use the 4 marks left on the board as a template to start the cutout.



3 With the aid of a drill equipped with a 60 mm cup saw, make 4 cutouts on the plate. Finish the opening with a saw or jigsaw. Once the cutting is completed, begin the installation of the Junction Box.



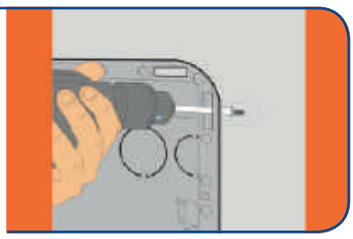
4 To fix the tank to the plasterboard, use the 4 Drywall fasteners that come with it. Fit the fasteners to the brackets on the sides of the tank.
Use position **A** for one plasterboard, and position **B** for two boards.



Position A:
One plasterboard

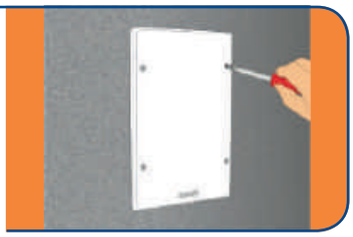
Position B:
Two plasterboards

5 Finish the fixing by screwing the board and fasteners for Drywall. Use the existing slots on the edge of the tank as a positioning orientation for the fasteners. If you prefer, screw the fasteners for direct Drywall upstream.



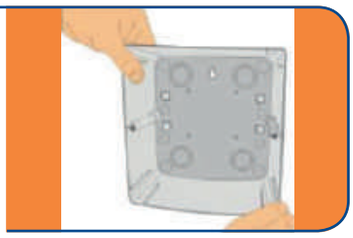
Important:
Make sure the tank is flush with the board.

6 After performing the electrical installation, secure the cover to the Junction Box using the accompanying screws.



4.4.3. Overlaid Model

1 Mark the desired height for positioning the Junction Box on the wall. Mark the fixing points as indicated on the bottom of the tank. Make sure it's level.



2 Make the opening for the passage of the conduits in the wall of the box, according to the project. Use cup saw on the diameter of the existing markings on the product body.

3 Once the electrical installation is completed, attach the cover to the Junction Box using the screws that accompany it.

4.5. Instructions

4.5.1. Maintenance

TIGRE Junction Boxes require no maintenance. It is advisable to only do a periodic cleaning with a soft cloth, water and mild soap.

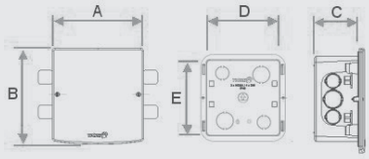
Important:
Do not use any corrosive chemicals for cleaning.

4.5.2. Storage

Store the product in its original packaging on a flat surface, free of irregularities, in a covered and ventilated place.

4.6. Wall Mounted Electrical Junction Box Line Items

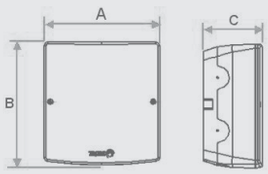
• Wall Mounted/ Embedded Electrical Junction Box



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	D	E
33048157	CPT 15	173,3	186	78,7	141	148
33044410	CPT 20	250	240	85	200	200
33048165	CPT 30	355,4	525	78,7	313	468
33044437	CPT 40	447	447	85	400	400

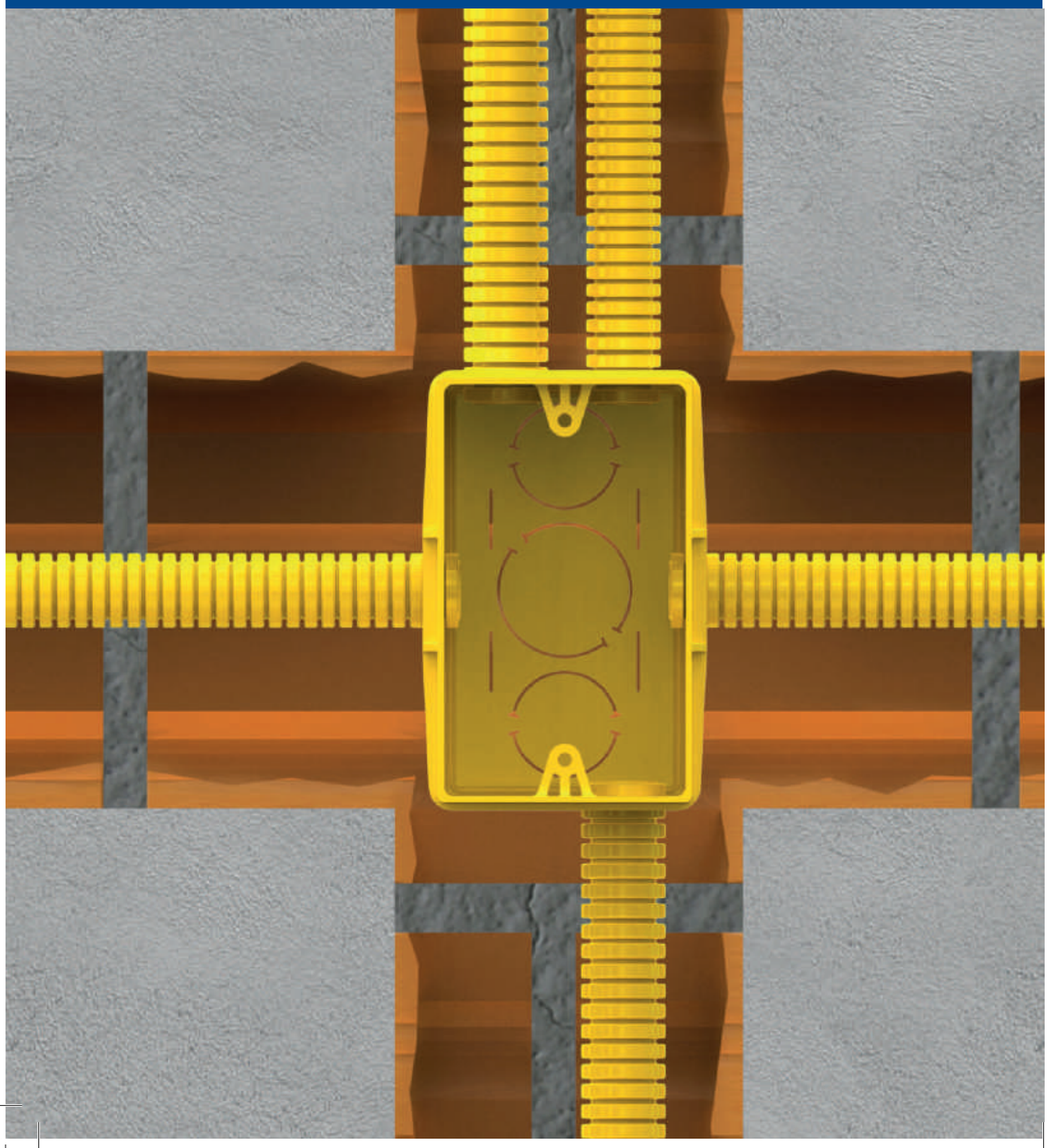
• Wall/Overlaid Electrical Junction Box



DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33047177	CPT 15	173,3	186	85,5
33044453	CPT 20	240	240	98
33047185	CPT 30	379	350	85,5
33044470	CPT 40	447	447	98

Tigreflex®



5. Tigreflex®

Does not spread flames, bend or crumple. Now that's safety! The Tigreflex® Corrugated Flexible Conduit (yellow) has meter-by-meter orientation markings that facilitates its handling. Its coil was designed so that the conduit is easily uncoiled, maintaining the organization of the roll. More protection for the embedded electrical installations.

5.1. Function/Application

Mechanical protection for low voltage electrical installations, made of masonry with mortar coating. For residential, commercial and industrial works.

5.2. Benefits and Differentials

Ease of Installation
The special geometry of the flexible PVC conduit allows it to be curved to make changes in direction, dispensing with fittings, without compromising the nominal internal diameter. With a low friction coefficient of the conduit, it facilitates the introduction and passage of electrical cables.

Lightness
Tigreflex® is lightweight because it is made of PVC.

Savings
Reduces labor costs and installation execution times, due to the flexibility and length of the coils, eliminating fittings.

Durability and resistance
It has high chemical and corrosion resistance, ideal in coastal or aggressive regions; Ideal for embedded use on walls, supporting a load of up to 320 N/5 cm.

Safety
Flame retardant product (does not propagate flame).

5.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Yellow.

Conduit: With flexible corrugated profile.

Diameters: 20, 25 and 32 mm.

Coils: Conduits supplied in coils with 7 m (diameter of 25 mm), with 25 m (diameters of 20, 25 and 32 mm), with 50 m (diameters of 20 and 25 mm) and with 100 m (diameters of 20 and 25 mm).

Diametrical resistance of conduits: load up to 320 N/5 cm.

Electrical boxes: IP 40 rated (protection index).

5.4. Tigreflex® Electrical Boxes

Does not spread flames, bend or crumple. Now that's safety. The large internal space of the Tigreflex® Electrical Box allows you to better accommodate the cables, avoiding heating and providing more safety for the electrical installations of your work. It also offers more conduit inputs. Their ends are reinforced, do not dust, do not break, and do not propagate flames.

5.4.1. Function/Application

Allow the derivation of electrical circuits and fixing of accessories, such as outlets and switches in low voltage electrical installations.

5.4.2. Benefits and Differentials

Ease of Installation
Larger internal space and more inlets for rigid or flexible conduits in the diameters of 20mm (1/2"), 25mm (3/4") and 32mm (1"); Slots in the walls and bottom to cut and couple more conduits;

Ease of storage
Format of the base of the boxes, which allows stacking one on top of the other.

Durability
Reinforcement at the edges of the boxes to prevent warping of the part.

5.4.3. Technical Characteristics

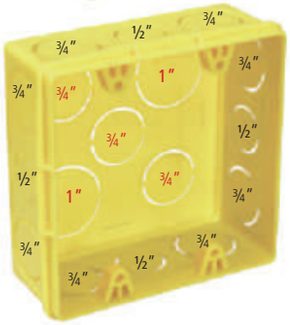
Possibility of coupling conduits in the gauges of 20mm (1/2"), 25mm (3/4") and 32mm (1").

Box 4"x 2"

Bottom with two 25mm (3/4") inlets and one 32mm (1") inlets.

Box 4"x 4"

Bottom with three 25mm (3/4") inlets and two 32mm (1") inlets.



Mobile Bottom Octagonal Box

Bottom with a 32mm (1") inlet, a 25mm (3/4") inlet and two 20mm (1/2") inlets.

Octagonal Box with Slip Ring

Bottom with a 25mm (3/4") inlet.

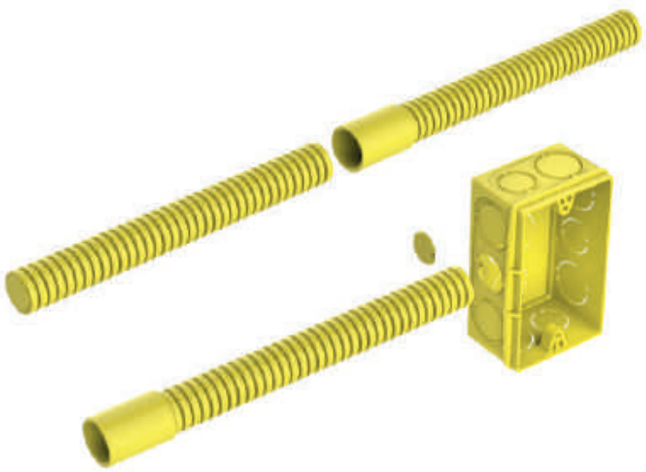
Next, see the list of reference standards that govern the manufacture of Tigreflex® and ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 15465	Plastic Conduit Systems for Low Voltage Electrical Installations - Performance Requirements.
NBR 5410	Low Voltage Electrical Installations

5.5. Joint Execution

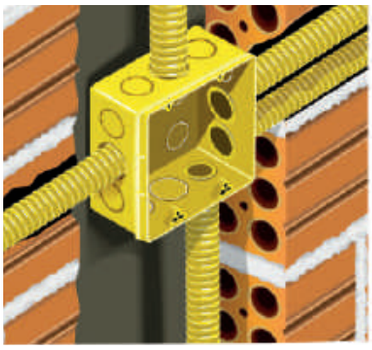
The interconnection between two Tigreflex® conduits is made with a specific system of simple pressure fitting, through Tigreflex® Pressure Sleeves.

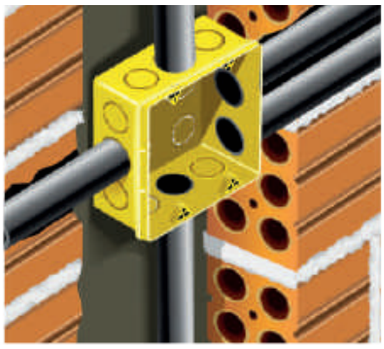
Tigreflex® conduits are connected to the electrical boxes (or junction boxes) and distribution boards by simple fitting, simply by removing the weakened circular zones (medals) at the desired points from the box.



Tigreflex® Electrical Boxes 4"x 2" and 4"x 4" also allow coupling of 20 mm (1/2"), 25 mm (3/4") and 32 mm (1 ") Threaded Conduits.

For this, it is enough to cut with the help of a knife (or stylet) the burrs of the medals.



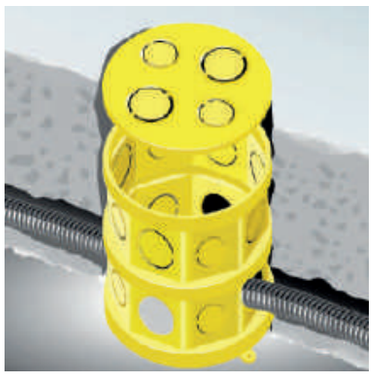


5.6. Instructions

5.6.1. Extender for Octagonal Box

Part that fits between the top of the octagonal tank and the movable bottom, thus attending to situations of installation in double slabs or of greater thicknesses.

The tongue located at the bottom of the tank supports weights of up to 8kg, thus being able to fix chandeliers up to this value. It should not be used as a support for ceiling fans or other devices that cause great effort.



5.6.2. Octagonal Box 3x3 Slip Ring

The main characteristic of this box are the sliding ring system, where the switch plate fixing tabs are located. This system allows small adjustments to be made to the alignment of switch plates and electrical accessories, even after the box is installed.

Important:
It is not recommended to use the conduits of the Tigreflex® line in installations embedded in reinforced concrete, as well as in installations where the ambient temperature at the time of installation is greater than 40°C.

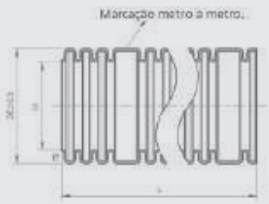
5.6.3. Storage

Tigreflex® coils, boxes and fittings must be stored in an easily accessible and shaded place, free of direct action or continuous exposure to the sun.

In loading and unloading operations, shocks, knocks, friction must be avoided, as well as walking on the products to prevent breaks and/or cracks.

5.7. Tigreflex® Line Items

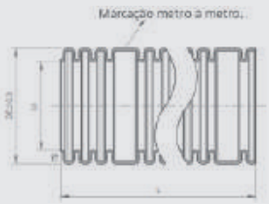
• Tigreflex® Yellow Corrugated Flexible Conduit - 7 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
14210628	25	25	19,42	2,8	7

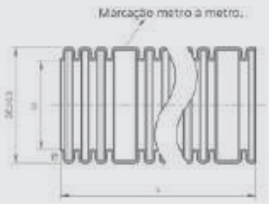
• Tigreflex® Yellow Corrugated Flexible Conduit - 25 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
14210229	20	20	15	2,5	25
14210270	25	25	19,4	2,8	25
14210326	32	32	25,6	3,2	25

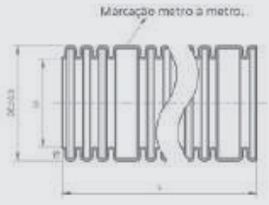
• Tigreflex® Yellow Corrugated Flexible Conduit - 50 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
14210202	20	20	15	2,5	50
14210253	25	25	19,4	2,8	50
100020929	32	32	25,58	3,2	50

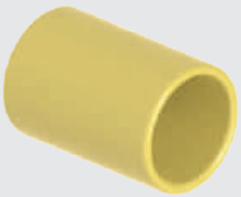
• Tigreflex® Yellow Corrugated Flexible Conduit -100 meters

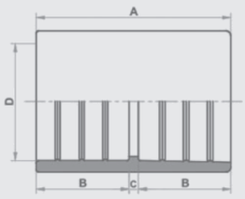


DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
100020928	20	20	14,95	2,5	100
100020927	25	25	19,42	2,8	100

• Tigreflex socket

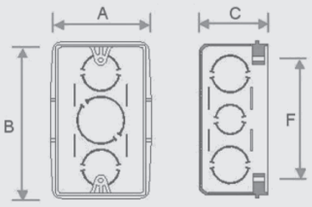




DIMENSIONS (MM)

CODE	GAUGE	A	B	C	D
33100167	16	41	19,5	2	3/8"
33100205	20	41	19,5	2	1/2"
33100264	25	41	19,5	2	3/4"
33100329	32	41	19,5	2	1"

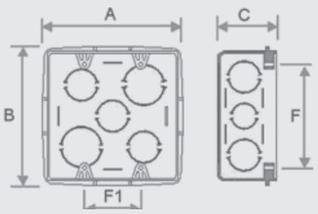
• Tigreflex® 4"x2" Electrical Box



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	F
33043554	4" x 2"	70	108,5	47,5	83,5

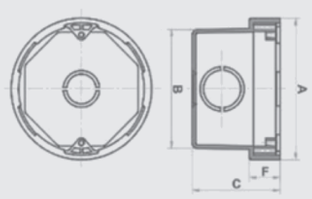
• Tigreflex® 4"x4" Electrical Box



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	F	F1
33043619	4" x 4"	112	112	47,5	83,5	45

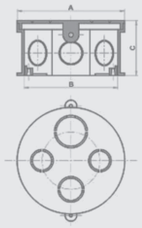
• Octagonal Box with Slip Ring Tigreflex®



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	F
33043171	3" x 3"	87	77,5	50,8	17,8

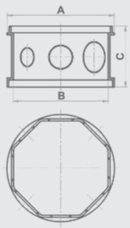
• Tigreflex® Mobile Bottom Octagonal Box



DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043155	4" x 4"	105,6	85,5	60,5

• Tigreflex® Octagonal Case Extender

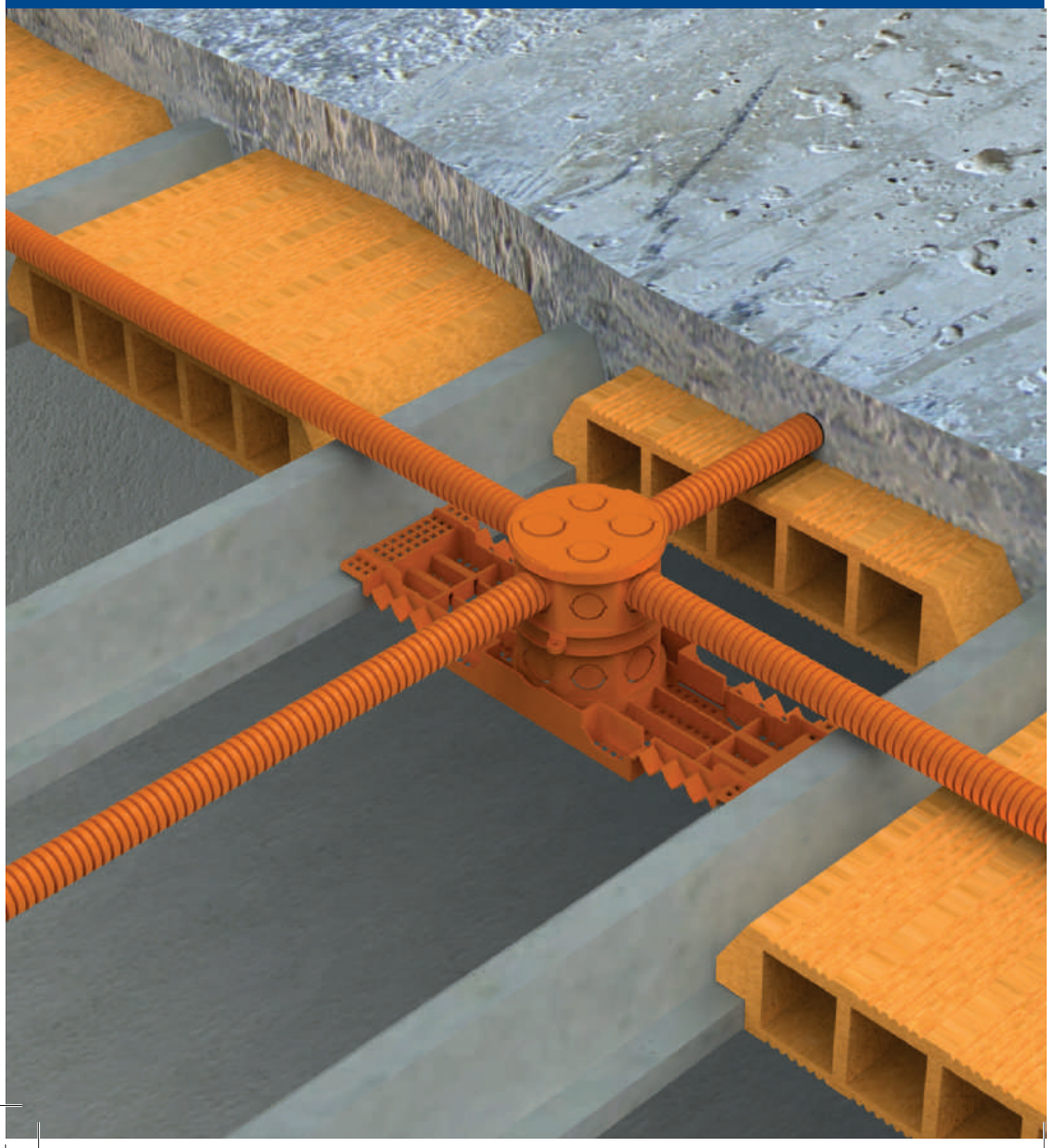


DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043201	4" x 4"	105,6	96	60

Notes

Tigreflex®
Reinforced



6. Tigreflex® Reinforced

Does not spread flames, bend or crumple. Now that's safety! The Tigreflex® Reinforced Flexible Conduit has meter-by-meter orientation marking to facilitate its handling and installation. Its coil is designed so that the conduit is easily unwound while keeping the roller organized. Ideal solution to protect the electrical installations of your work.

6.1. Function/Application

Mechanical protection for low voltage electrical installations embedded in concrete slabs. For use in building, commercial and industrial constructions, new or renovated, where the demand for mechanical efforts during the concreting of slabs or floors is high.

6.2. Benefits and Differentials

Ease of Installation
Even though it is reinforced, it maintains its flexibility characteristics; It has a low friction coefficient of the conduit, facilitating the introduction and passage of electrical cables, reducing labor costs and installation execution times.

Durability
High chemical and corrosion resistance, as they are made of PVC.

High Resistance
Ideal for use on slabs, having sufficient strength to withstand the efforts of crushing the conduit in the concreting process (placing concrete on the slab) and the intense movement of people and wheelbarrows in the progress of a work.

Safety
It does not spread flames, offers safety and reliability to users..

6.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Orange.

Conduit: With flexible corrugated profile and reinforced wall thickness, which result in high diametrical strength.

Diameters: 20, 25 and 32 mm.

Coils: Conduits supplied in coils with 25 m (diameters of 32 mm), 50 m (diameters of 20, 25 and 32 mm) and 100 m (diameters of 20 and 25 mm).

Diametrical resistance of conduits: Load up to 750 N/5 cm.

Electrical boxes: IP 40 rated (protection index).

Notes: As modified in NBR 1 5465 (standard that regulates rigid and flexible conduits in Brazil), TIGRE changed the color from gray to orange of the entire Tigreflex® Reinforced Line. The orange color, in addition to meeting the standard, facilitates the identification of TIGRE electricity solutions for installations on concrete slabs.

Conduits - Tigre Solutions According to NBR 15465

Tigre Solution	Class*	Color	Installation
Tigreflex	Mild	Yellow	Walls
Tigreflex® Reinforced	Medium	Orange	Slabs and Walls
Threadable Conduit	Heavy	Black	Slabs, Walls and Buried
Top® Conduit	Heavy	Gray	Apparent

***Compressive Strength**
Light: 320 N/5 cm | Medium: 750 N/5 cm | Heavy: 1200 N/5 cm

Next, see the list of reference standards that govern the manufacture of the Reinforced Tigreflex® and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 15465	Plastic Conduit Systems for Low Voltage Electrical Installations - Performance Requirements.
NBR 5410	Low Voltage Electrical Installations.

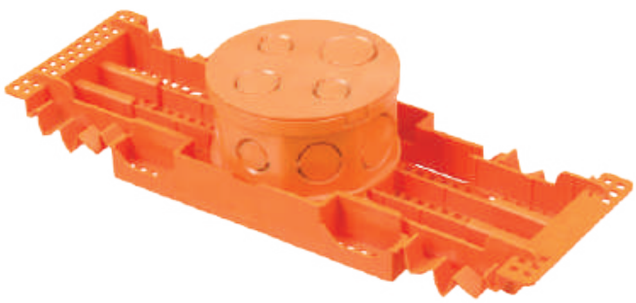
6.4. Joint Execution

The interconnection between two Tigreflex® Reinforced electrodes is made with a specific system of simple pressure fitting, through the Pressure Sleeves.

To connect them to the octagonal boxes, simply remove from the boxes the weakened circular zones (medals), at the desired points, and couple the conduits by simple fitting.

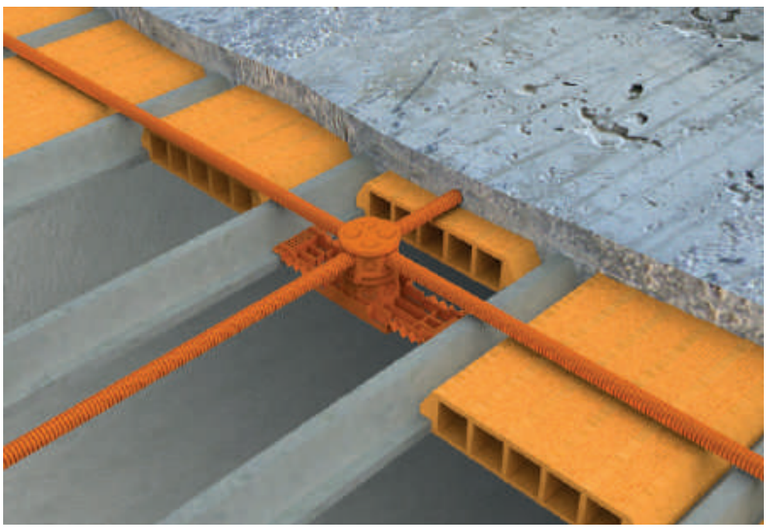
6.5. Instructions

6.5.1. Mobile Bottom Octagonal Box with Slab Holder



To facilitate the positioning service of the octagonal boxes on the slabs, TIGRE has the ideal solution: Octagonal Box with Slab Holder.

With adjustable supports for the widths of tiles between 25 and 31 cm, this solution prevents the displacement of the tank during concreting.



6.5.2. Installation of Concrete Conduits in Reinforced Concrete

Some procedures should be avoided during slab concreting operations:

- Release of concrete from great heights.
- Transit of people or wheelbarrows directly on the pipes supported on the slab hardware.
- Use of vibrators directly on the conduits.
- Release of concrete with varied granulometry, large and sharp stones (gravels).
- Installation when the ambient temperature is higher than 40°C.

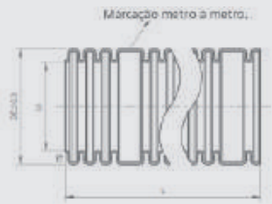
6.5.3. Storage

They should be stored in a covered area for better conservation. Exposure to UV rays can cause the product to dry out, making it brittle.

As it is a very light product and supplied in coils, it is very easy to handle. However, impacts that may damage the conduits should be avoided, especially when thrown from great heights.

6.6. Tigreflex® Reinforced Line Items

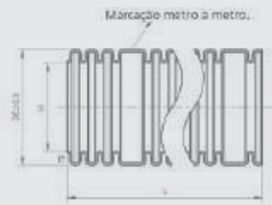
• Tigreflex® Reinforced Corrugated Flexible Conduit - 25 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
14211322	32	32	25,17	3,4	25

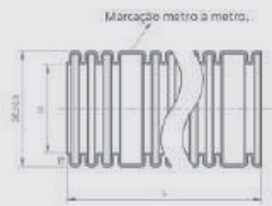
• Tigreflex® Reinforced Corrugated Flexible Conduit - 50 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
14211209	20	20	14,52	2,75	50
14211250	25	25	18,4	3,3	50
100019003	32	32	25,17	3,4	50

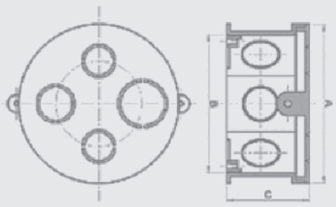
• Tigreflex® Reinforced Corrugated Flexible Conduit - 100 meters



DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
100019001	20	20	14,52	2,75	100
100019002	25	25	18,4	3,3	100

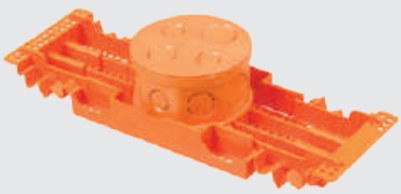
• Box of Octagonal Inlay Mobile Fund Tigreflex® Reinforced

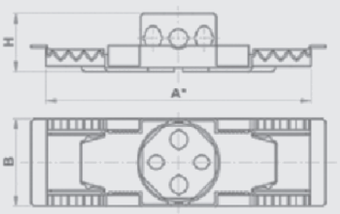


DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043309	4" x 4"	105,6	85,5	60,5

• Mobile Bottom Octagonal Inlay Box with Tile Holder

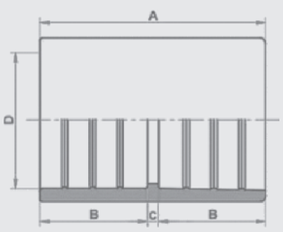




DIMENSIONS (MM)

CODE	GAUGE	A max	A min	B	H
33043716	4" x 4"	310	250	112	74

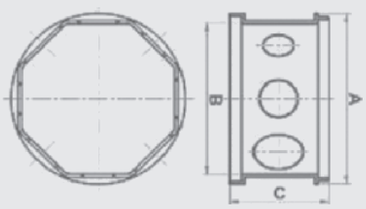
• Tigreflex® Reinforced Pressure Sleeve



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	D	DE
33102208	20	41	19,5	2	20,3	24,3
33102259	25	41	19,5	2	25,3	29,3
33102321	32	41	19,5	2	32,3	36,3

• Tigreflex® Reinforced Octagonal Box Extender



DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043457	4" x 4"	105,6	85,5	60,5

Notes

Tigreflex® Blue Duct

7. Tigreflex® Blue Duct

The Tigreflex® Blue Duct does not propagate flames, does not bend and does not knead, providing safety during installation and use! In addition to protection, it reduces labor costs and installation execution times, as it does not require the use of fittings.

7.1. Function/Application

Mechanical protection for signal installations (tv, internet, telephone, etc.). For use in building, commercial and industrial constructions, new or renovated, where the demand for mechanical efforts during concreting is high.

7.2. Benefits and Differentials

Safety
Made from PVC, they do not propagate flame, bringing safety and reliability to the user, unlike Polyethylene hoses that are flammable.

High Mechanical Strength
Ideal for use in masonry or slabs, supporting a load of up to 750 N/5 cm, sufficient to withstand the efforts of crushing the conduit in the concreting process (placing concrete on the slab), and for intense movement of people and wheelbarrows in the progress of a work.

Flexibility
The Tigreflex® corrugation system, combined with its low coefficient of internal friction, provides enormous ease for threading, reducing labor costs and installation execution times. Its corrected geometry allows it to bend with enormous ease, even when reinforced.

Durability
They have high chemical and corrosion resistance, in addition to not propagating flame.

Versatility Economy
It will serve those who use Polyethylene hoses (flammable and with little resistance to mechanical efforts) that they want better quality product and more safety.

7.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Blue

Conduit: With flexible corrugated profile and reinforced wall thickness, which result in high diametrical strength.

Diameters: 20 and 32 mm.

Diametrical resistance of conduits: Load up to 750 N/5 cm.

7.4. Instructions

7.4.1. Reinforced Concrete Embedded Installations

Tigreflex® ducts must be installed in order to avoid kneading or breakage during concreting. Therefore, it is recommended to avoid the following operations:

- Concrete releases from great heights.

- Transit of people or handcarts directly on the pipes supported on the slab hardware.
- Use of vibrators directly on the conduits.
- Release of concrete with varied granulometry, large and sharp stones (gravels).
- Installation when the ambient temperature is higher than 40°C.

Notes: If the working conditions do not comply with the aforementioned precautions, it is recommended to use the Flameproof Threaded Conduits, which have been specially sized for use in more adverse situations.

7.4.2. Assembly

It is done by simply fitting the fittings to the flexible pipe.

7.4.3. Transport/Handling

As it is a very light product and supplied in rolls, it is very easy to handle. However, impacts that may damage the conduits should be avoided, especially when thrown from great heights.

7.4.4. Storage

Another important recommendation is that these products should be stored in a covered area for better conservation. Exposure to the sun's UV rays can cause the product to dry out and become brittle.

7.5. Tigreflex® Blue Duct Line Items

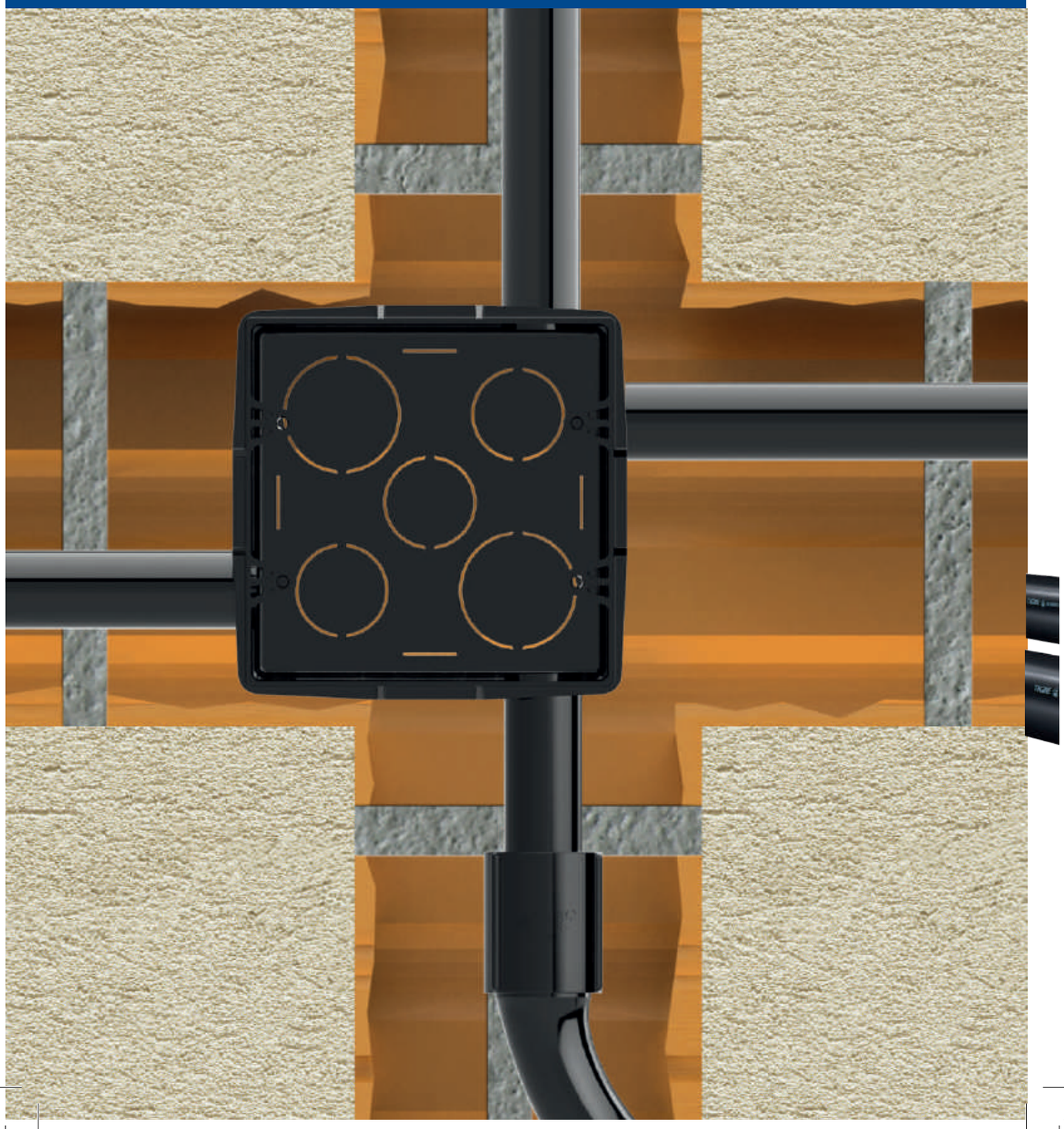
• Tigreflex® Corrugated Telecom Conduit

DIMENSIONS (MM)

CODE	GAUGE	DE	DI	e	L (m)
100020133	25	25	19	3	50
100020134	32	32	25	3,5	25

Notes

Rigid Conduit
Weldable and Threadable



8. Weldable and Threadable Rigid Conduit

The resistance your electrical installation needs, the safety you deserve. The Tigre Threadable and Weldable Conduit line has been made and designed to protect electrical installations from high mechanical stresses during the concreting process.

8.1. Function/Application

Mechanical protection for wires and cables in low voltage embedded electrical installations, in which the demand for mechanical efforts during concreting is high. For building, commercial and industrial works, it can also be applied to the inputs of residential standards.

8.2. Benefits and Differentials

Ease of Installation
Conduits lighter than metallic ones.

Durability and resistance
High mechanical strength. Immune to harmful soil elements and do not oxidize, even when exposed to harsh environments. They are also unaffected by the substances that make up concrete and mortar.

Safety
Anti-flame products (do not propagate flame) and resistance to deformation, meeting the requirements of Standard NBR 15465.

8.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Black.

Diameters (Gauges): 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2", 3", 4" (inches).

Pipes: Supplied in 3 m bars, available in threaded or unthreaded models at both ends, the threaded model being ISO-7 standard thread (BSP).

8.4. Electrical Boxes for Rigid Conduit

8.4.1. Function/Application

Allow the derivation of electrical circuits and fixing of accessories, such as outlets and switches in low voltage electrical installations.

8.4.2. Benefits and Differentials

Ease of Installation
Larger internal space and more inlets for rigid or flexible conduits in 1/2", 3/4" and 1" diameters. Slots in the walls and bottom to cut and couple more conduits;

Durability
Reinforcement at the edges of the boxes to prevent warping of the part.

Ease of storage
Shape of the base of the boxes that allows stacking one on top of the other.

8.4.3. Technical Characteristics

Box 4”x2”

Bottom with two 3/4” inlets and one 1” inlet.

Box 4”x 4”

Bottom with three 3/4” inlets and two 1” inlets.

Mobile Bottom Octagonal Box

Bottom with one 1” inlet, one 3/4” inlet and two 1/2” inlets.

Notes: Electrical boxes with IP 40 rating (protection index).

Below, see the list of reference standards that govern the manufacture of Electrical Boxes for Rigid Conduit and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 15465	Plastic Conduit Systems for Low Voltage Electrical Installations - Performance Requirements.
NBR 5410	Low Voltage Electrical Installations.

8.5. Head for Power Input

8.5.1. Function/Application

Protect electrical wires and cables in the connection of the service extension.

8.5.2. Benefits and Differentials

Ease of installation
Simplifies the process of connecting the service extension, as it does not require the use of traditional "walking sticks" (180° and or 135° curves).

Safety
Protects the service extension connection from water ingress.

Easy Maintenance
Simple to undock and manipulate cables.

8.5.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Black.

Diameters: 3/4", 1", 1.1/4" and 1.1/2" (inches).

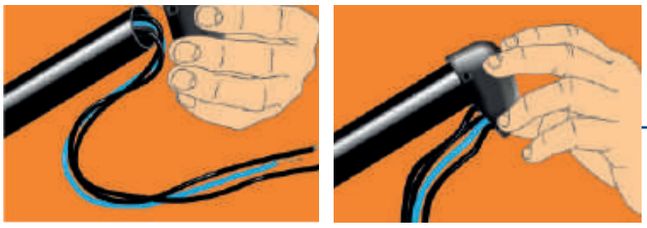
Head: It has internal guides for fitting the conduit; It comes with 1 self-tapping stainless steel screw to secure the head to the conduit.

8.6. Facilities

8.6.1. Power Input Head Installations

The assembly is done by simple fitting and locking of the head at the end of the conduit:

1. Fit the head-input power to the end of the conduit, with the cables folded

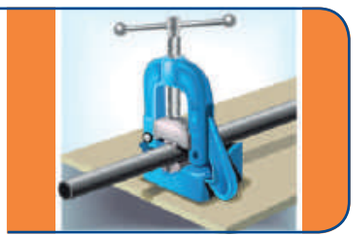


2. Finish installation fixing the screw to lock the head-input power to conduit

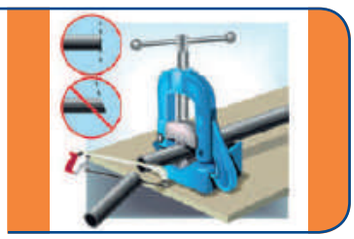
Obs.: Only one screw is enough

8.6.2. Execution of Threadable Joints

1. Attach the pipe to the vise, preventing it from being ovalized, so as not to result in an imperfect thread.

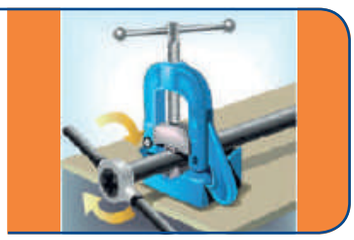


2. Cut the pipe into the square and remove the burrs. Measure the maximum thread length to be made to avoid over-opening.



Important:
All remaining burr after cutting must be removed to avoid damage to the wiring that will be conducted by the conduits.

3. Fit the tap into the pipe from the guide side, turning one turn to the right and back to the left, repeating the operation until you get the thread to the desired length.



Important:
Always use TIGRE Tapping. The co-signets used for steel pipes shall not be used on the TIGRE PVC Pipes.

4 For joints in places subject to moisture, clean the pipe and apply TIGRE Thread Sealing Tape on the fillets, in favor of the thread, so that each turn exceeds the other by half a centimeter.

8.6.3. Execution of Weldable Joints

1 Clean pipe and pouch surfaces with Preparing Solution TIGRE, eliminating impurities and fats.

2 Evenly distribute the Adhesive with a brush or the nozzle of the tube itself in the bag and at the tip to be welded.

3 Fit at once the ends to be welded, promoting, while fitting, a slight rotational movement between the parts. 1/4 turn until they reach the definitive position. Remove any excess Adhesive.

8.7. Instructions

8.7.1. Installation of Rigid Conduits in Reinforced Concrete

Conduits embedded in reinforced concrete must be placed in order to avoid their deformation during concreting. The electrical boxes and ends of the conduits must be closed with materials that prevent the entry of mortar during concreting.

8.7.2. Execution of Electrical Installation

The passage of the wires and the electrical installation must be carried out only after the completion of the installation of the conduits, respective electrical boxes, distribution boards, junction boxes and other work services. To facilitate the insertion of the wires, the following procedures can be used:

- Pulling guides, which should be introduced only after the installation of the conduits is ready.
- Lubricants that do not impair the insulation of the conductors (industrial petroleum jelly in paste or liquid) that facilitate the sliding of the wires through the interior of the conduits, and that do not harm the insulating part of the wires.

8.7.3. Octagonal Boxes

The Octagonal Boxes have a central internal tongue capable of supporting loads of up to 8kg, and chandeliers or other devices that do not exceed this value can be fixed there. They should not be used as a support for ceiling fans or other devices that cause great effort.

The boxes have a movable bottom, and it can be removed to fit one tank to another, allowing its installation in slabs of greater thickness.

8.7.4 Curves

For changes of direction, the line curves, available at 90° and 180°, must be used.

It is not recommended to curve or produce curves in the conduits themselves, since these procedures can strain the installation and reduce the internal section of the conduits, making it difficult for the electrical wires to pass.

The conduits and fittings of this line are manufactured with threaded tips and, therefore, the use of the Threaded Sleeve to connect one conduit to another or to the fittings is indicated. It is not recommended to make bags with the aid of fire to join pipes and fittings, because, in this way, the tightness is not guaranteed in the different conditions found in the works.

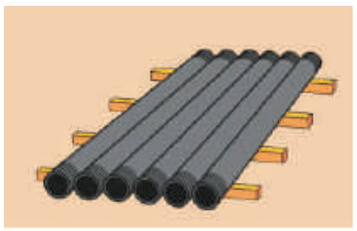
8.7.5. Transport/Handling

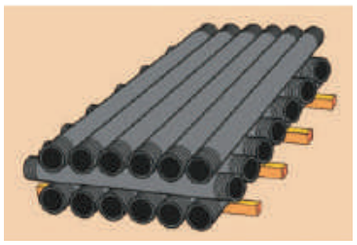
Strong impacts and friction with stones, metal objects and sharp edges in general should be avoided. In loading and unloading operations, shocks, knocks and friction must be avoided to prevent breaks and/or cracks.

8.7.6. Storage

It must be in an easily accessible place and in the shade, free of direct action or continuous exposure to the sun.

The tubing may be stacked to a maximum height of 1.50 meters regardless of the diameter or thickness of the pipes. A stacking alternative is in cross-layers (transverse layers). Regardless of the type of stacking adopted, the first layer of pipes must be supported on slats, transversely to them. The slats must be distanced by a maximum of 1.50 meters.





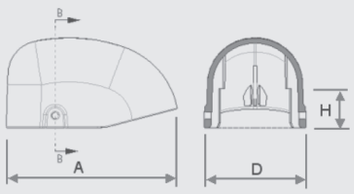
8.8. Threadable Conduit Line Items

• Conduit Rigid Threadable

DIMENSIONS (MM)

CODE	GAUGE	B	e	DI	L
14021850	1/2"	13,2	2,2	16,4	3.000
14021884	3/4"	14,5	2,3	21,3	3.000
14021906	1"	16,8	2,7	27,5	3.000
14021922	1.1/4"	19,1	2,9	36,1	3.000
14021949	1.1/2"	19,1	3	41,4	3.000
14021965	2"	23,4	3,1	52,8	3.000
14021990	2.1/2"	26,7	3,8	67,1	3.000
14022015	3"	29,8	4	79,6	3.000
14022066	4"	35,8	5	103,1	3.000

• Power Input Head

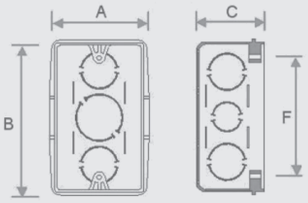


DIMENSIONS (MM)

CODE	GAUGE	A	D	H*
33142013	3/4"	54	3/4"	12
33142021	1"	68	1"	16
33142030	1.1/4"	88	1.1/4"	20
33142048	1.1/2"	100	1.1/2"	22

***Profundidade de inserção do eletroduto no cabeçote.

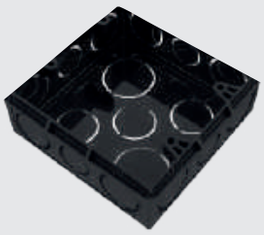
• Electrical Box for Threadable Conduit 4"x 2"

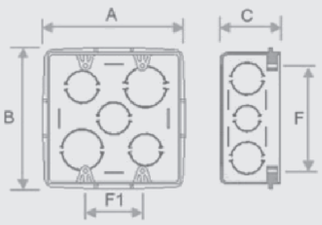


DIMENSIONS (MM)

CODE	GAUGE	A	B	C	F
33042868	4"x 2"	108,5	70	47,5	83,5

• 4”x4” Threadable Conduit Electrical Box

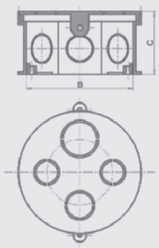




DIMENSIONS (MM)

CODE	GAUGE	A	B	C	F	F1
33042884	4” x 4”	112	112	47,5	83,5	45

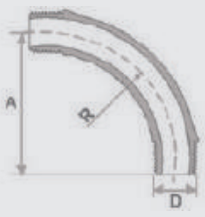
• Octagonal Mobile Bottom Box for Threadable Conduit



DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043376	4” x 4”	105,6	85,5	60,5

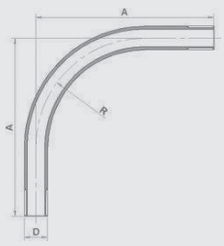
• 90° Bend for Threadable Conduit



DIMENSIONS (MM)

CODE	GAUGE	A	D	R
33051859	1/2”	125	1/2”	58
33051883	3/4”	148	3/4”	66,8
33051905	1”	149	1”	72,6

• 90° Long Bend for Threadable Conduit



DIMENSIONS (MM)

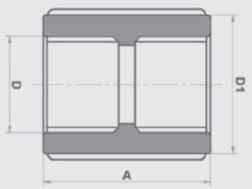
CODE	GAUGE	A	D	R
33051867	1/2″	125	1/2″	58
33051891	3/4″	148	3/4″	75
33051913	1″	149	1″	72,6
33051921	1.1/4″	153	1.1/4″	75
33051948	1.1/2″	152	1.1/2″	62
33051964	2″	187	2″	85
33051999	2.1/2″	220	2.1/2″	100
33052014	3″	248	3″	105
33052065	4″	294	4″	128

• 180° Bend for Threadable Conduit

DIMENSIONS (MM)

CODE	GAUGE	A	D	R
33121881	3/4″	148	3/4″	75
33121903	1″	149	1″	72,6
33121920	1.1/4″	153	1.1/4″	75
33121946	1.1/2″	152	1.1/2″	62
33121962	2″	187	2″	85

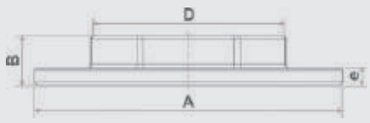
• Threadable Conduit Sleeve



DIMENSIONS (MM)

CODE	GAUGE	A	D	D1
33071868	1/2″	37	1/2″	27
33071892	3/4″	40	3/4″	32,5
33071914	1″	47,5	1″	40,5
33071922	1.1/4″	53	1.1/4″	50
33071949	1.1/2″	53	1.1/2″	56
33071965	2″	61,5	2″	68
33071990	2.1/2″	71	2.1/2″	85,5
33072015	3″	78,5	3″	98,5
33072066	4″	91	4″	126,5

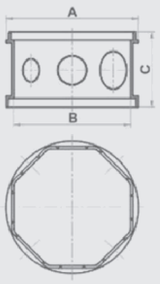
• Flange for Threadable Conduit



DIMENSIONS (MM)

CODE	GAUGE	A	B	D	e
20082259	2"	127	20,2	2"	7,2

• Extender for Octagonal Box for Threadable Conduit

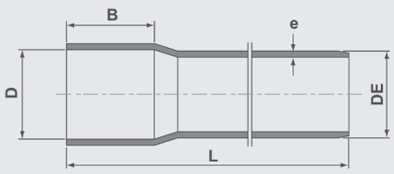


DIMENSIONS (MM)

CODE	GAUGE	A	B	C
33043384	4" x 4"	105,6	85,5	60,5

8.9. Weldable Conduit Line Items

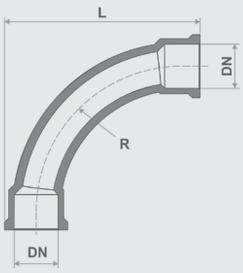
• Rigid Weldable Conduit



DIMENSIONS (MM)

CODE	GAUGE	B	D	DE	e	L
14130209	20	32	20	20	1,5	3000
14130250	25	32	25	25	1,7	3000
14130322	32	32	32	32	2,1	3000
14130403	40	40	40	40	2,4	3000
14130500	50	50	50	50	3	3000
14130527	60	60	60	60	3,1	3000
14130535	75	75	75	75	3,8	3000

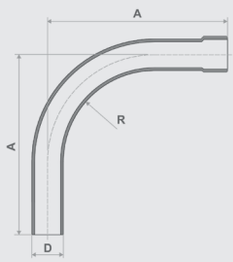
• 90° Bend Weldable Conduit



DIMENSIONS (MM)

CODE	GAUGE	DN	L	R
33060203	20	20	88,25	65,75
33060254	25	25	107	78
33060327	32	32	121,5	91,5

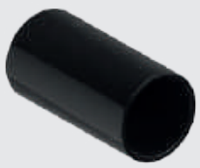
• 90° Long Curve for Weldable Conduit

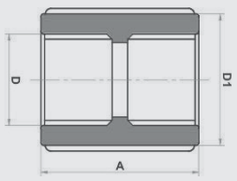


DIMENSIONS (MM)

CODE	GAUGE	A	D	D1
33060211	20	112	20	56
33060262	25	117	25	51
33060335	32	125	32	56
33071809	40	111	40	80
33071817	50	141	50	100
33071825	60	145	60	100
33071841	75	182	75	130

• Weldable Conduit Sleeve

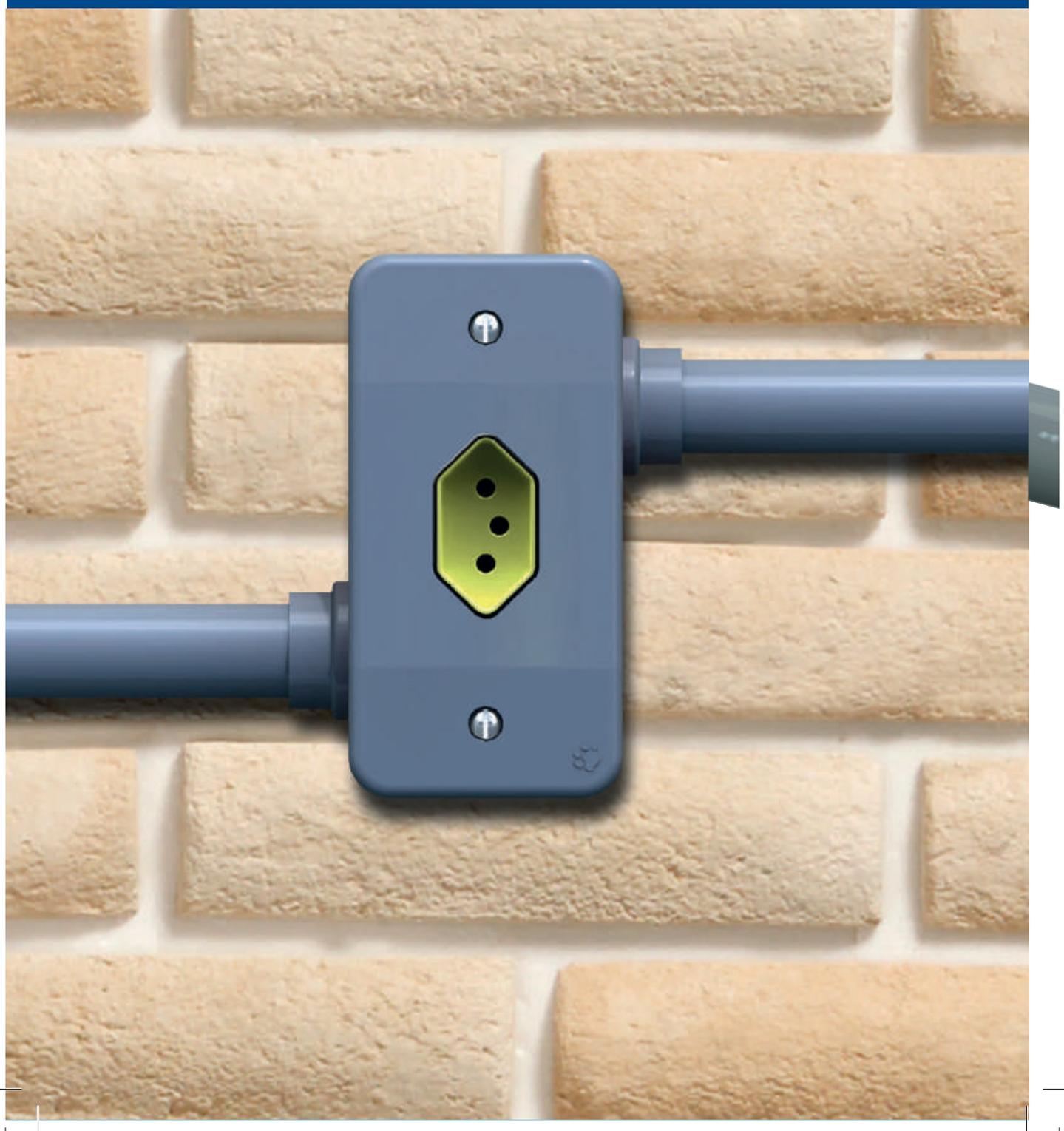




DIMENSIONS (MM)

CODE	GAUGE	A	D	D1
33071973	20	35	20	23,6
33071981	25	40	25	28,6
33072007	32	47	32	36,4
33072023	40	68	40	44,8
33072031	50	53	50	56
33072058	60	81	60	66,2
33072074	75	93	75	82,6

Top® Conduit



9. Top® Conduit

The Top Tigre Conduit line is versatile and safe. It is used to protect electrical wires and cables in apparent installations, on the wall of your home, business or industry. In addition, it allows multiple mounting options in the same tank. The covers have different frames for access to switches and sockets. Disassembles easily for installation maintenance or modifications.

9.1. Function/Application

Mechanical protection for apparent low voltage electrical installations. Its greatest application is in industrial and commercial apparent electrical installation, where the need for layout change is more frequent. For use also in gas stations, schools, bus stations, airports and hospital works.

9.2. Benefits and Differentials

Ease of Installation
Assembly by simple fitting of the parts; Possibility of combining different input positions in the same tank, making the work more flexible and allowing several configurations.

Material saving
Dispenses with tools to make quick coupling between parts.

Safety
Fixing of the Top® Conduit cover by means of screws.

Compatibility
The new caps serve most plug manufacturers on the market.

9.3. Technical Characteristics

Material: Line items made of flame retardant PVC Poly(vinyl chloride).

Color: Gray.

Adoptions: With smooth tips and bags for simple fittings.

Top® Conduit 1" Box: allows the assembly of 1", %" and W conduits, using Top® Conduit Adapters.

Clamps: In the diameters of W, %" and 1" with adjustment for locking.

Next, see the list of reference standards that govern the manufacture of Top® Conduit and ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 5410	Low Voltage Electrical Installations
NBR 14136	Plugs and Sockets for domestic and analog use up to 20a/250V in alternating current - Standardization).

9.4. Instructions

9.4.1. Driver Installations and Boxes

Step 1: Start by marking on the wall the place where the network and interconnection points, switches and outlets will pass.

Step 2: Secure the clamps as determined.

Step 3: Measure the length of the conduit sections and cut them, eliminating burrs.

Step 4: Mount the adapters of the Top® Conduit boxes according to the required configuration. Observe the correct alignment in the plug of the cap and the adapter in the openings of the boxes.

Step 5: Attach the Top® Conduit boxes to the wall and attach the conduits to them and also to the clamps. Make sure, when mounting the conduit on the adapter, that it goes to the end stop, thus ensuring the perfect operation.

Step 6: After the wires are inserted, install the outlets and switches and finish with the installation of the switch plates.

9.4.2. Installation Settings

The docking system of the Top® Conduit boxes allows multiple installation options, with models of 5 and 6 inputs: type B, C, E, LB, LL, LR, T and X, among others.

	Model	B	C	E	LB	LL	LR	T	X
1" Conduit	5 Inputs	X	X	X	X			X	X
	6 Inputs		X	X	X	X	X		

Top® Conduit 5 inputs: allows up to 23 configurations of fittings.

Top® Conduit 6 inputs: allows up to 55 configurations.

9.4.3. Top® Conduit Box Covers

Remember to keep the covers removed from the Top® Conduit boxes, because if there is a future need for realignment or removal for new installation, the points can be changed and the old point can be closed.

9.4.4. Installation of Top® Conduit Covers

1. Install the Top® Conduit Overlaid Box under the wall, with the wiring ready proceed with the installation.

2. Screw the power cables (phase, neutral and ground) into the contact points of the outlet to be installed.

3. Screw the plug into the Top® Conduit Overlaid Box.

4. Screw on the Standard New Plug Cover and complete the installation.

9.4.5. Coupling of Telephony and Computer Cables

For the installation of telephone cables (RJ 11) or computer cables (RJ45) in the conduits, use the RJ 11/45 Top® Conduit Covers, exclusively created to allow the perfect connection of these cables to the line boxes.

Coupling options for 1 module or 2 modules. They have space to place an identification label (line/extension/point). Attaching the connector is done by simple fitting on the cover.

FRAME FOR RJ 45 OR RJ 11 CONNECTOR

9.4.6. Maintenance

The nestable components of the line facilitate the disassembly and alteration of the installation, allowing time and speed in configuration modifications.

If it is necessary to repair the conduit section, simply remove the damaged site and repair it through a sleeve, or replace it with another conduit bar.

For cleaning, it is recommended to use a soft cloth with soap and water, or household detergent.

9.4.7. Storage

Storage must be done in an easily accessible place, in the shade, free of direct action or continuous exposure to the sun.

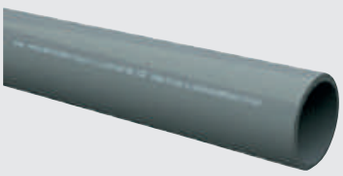
The support surface must be flat, and the conduits must also be supported and fully supported throughout their length. Maximum stacking of 1.50 meters is recommended.

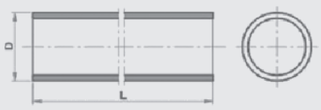
Top® Conduit fittings and boxes must be transported in a packaged form in packages or boxes, preventing them from being impacted.

In loading and unloading operations, shocks, falls and friction of the packaging must be avoided to prevent breaks or cracks in the material.

9.5. Top® Conduit Line Items

• Top® Conduit

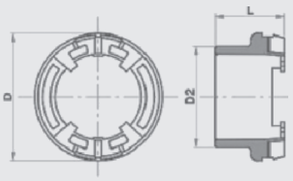




DIMENSIONS (MM)

CODE	GAUGE	D	L
16002020	1/2"	20.8	3000
16002046	3/4"	25.9	3000
16002062	1"	33	3000

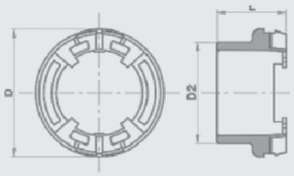
• Top® Conduit Adapter



DIMENSIONS (MM)

CODE	GAUGE	D	D2	L
100019313	1"	20	88,25	65,75

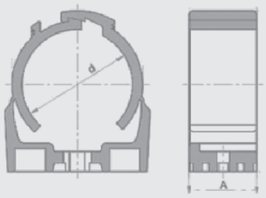
• Top® Conduit Reduction Adapter



DIMENSIONS (MM)

CODE	GAUGE	D	D2	L
100019314	1"x 1/2"	41.4	26	17
100019315	1"x 3/4"	41.4	31	20

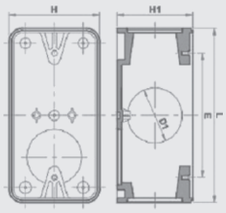
•Top® Conduit Clamp



DIMENSIONS (MM)

CODE	GAUGE	A	d
36005521	1/2"	16	20,8
36005564	3/4"	18	26
36005548	1"	20	33

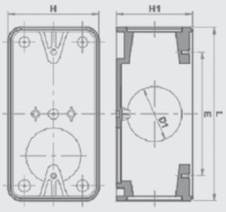
• Top® Conduit Overlaid Box - 5 Inputs



DIMENSIONS (MM)

CODE	GAUGE	D1	L	E	H	H1
36005319	1"	37	117	83,5	61	51

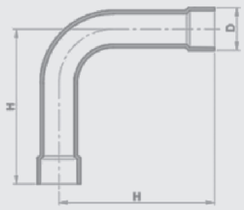
• Top® Conduit Overlaid Box - 6 Inputs



DIMENSIONS (MM)

CODE	GAUGE	D1	L	E	H	H1
36005300	1"	37	117	83,5	61	51

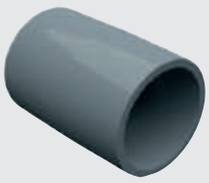
• Top® 90° Conduit Curve

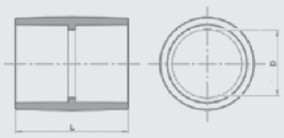


DIMENSIONS (MM)

CODE	GAUGE	D	H
36005629	1/2"	21,05	96,4
36005645	3/4"	26,15	112
36005661	1"	33,2	138,4

• Sleeve Top® Conduit

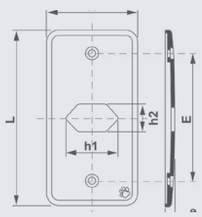




DIMENSIONS (MM)

CODE	GAUGE	D	H
36002905	1/2"	21,05	34,6
36002956	3/4"	26,15	40,3
36002964	1"	33,2	47

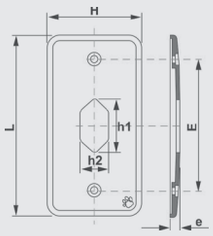
• Top® Conduit Horizontal Hex Socket Cover



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005335	1"	83,5	6	117	61	40,7	22,2

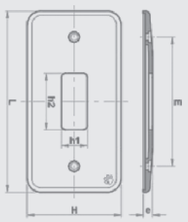
• Top® Conduit Vertical Hex Socket Cover



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005351	1"	83,5	6	117	61	40,7	22,2

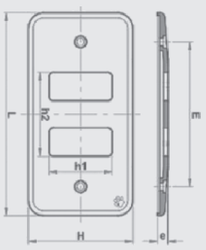
• Top® Conduit Switch Cover



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005505	1"	83,5	6	117	61	16,5	36,5

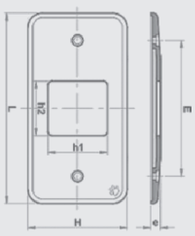
• Top® Conduit Separate 2 Switch Cover



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005530	1"	83,5	6	117	61	36,5	48,5

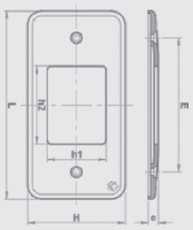
• Top® Conduit 2 Switch Cover Top®



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005432	1"	83,5	6	117	61	36,5	33,5

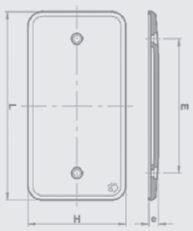
• Cover 3 Switches Together Top® Stylus



DIMENSIONS (MM)

CODE	GAUGE	E	e	L	H	h1	h2
36005491	1"	83,5	6	117	61	36,5	48,5

• Top® Conduit Blind Cover



DIMENSIONS (MM)

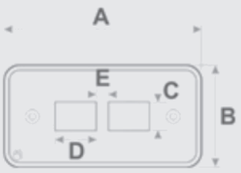
CODE	GAUGE	E	e	L	H
36005556	1"	83,5	6	117	61

• Cover 1 RJ11/45 Module Top® Conduit

DIMENSIONS (MM)

CODE	GAUGE	A	B	C	D
36005572	1"	117	61	17	24,5

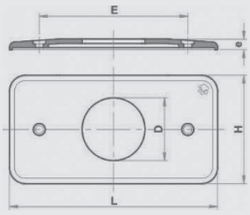
• Cover 2 Modules RJ11/45 Top® Conduit



DIMENSIONS (MM)

CODE	GAUGE	A	B	C	D	E
36005637	1"	117	61	17	24,5	7,5

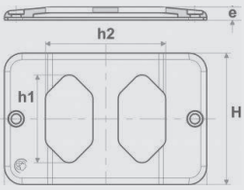
• Conduit Round Socket Cover Top®



DIMENSIONS (MM)

CODE	GAUGE	D	L	e	E	H
36005513	1"	35,3	94,5	6	83,5	50

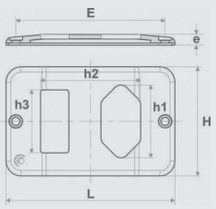
• Top 2 Horizontal Sockets Top® Conduit



DIMENSIONS (MM)

CODE	GAUGE	e	E	H	h1	h2	L
36005912	1"	35,3	94,5	6	83,5	50	94,5

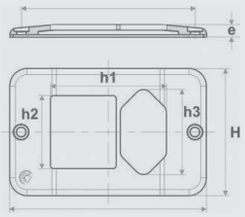
• Cover 1 Socket and 1 Top® Conduit Switch



DIMENSIONS (MM)

CODE	GAUGE	e	E	H	h1	h2	h3	L
36005890	1"	6	83,5	61	40,7	56	32,5	94,5

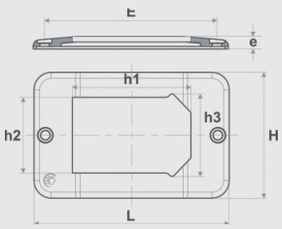
• Cover 1 Socket and 2 Switches Together Top® Conduit



DIMENSIONS (MM)

CODE	GAUGE	e	E	H	h1	h2	h3	L
36005955	1"	6	83,5	61	55,7	35	40,7	94,5

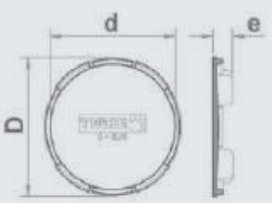
• Cover 1 Socket and 2 Modular Top® Conduit Switches



DIMENSIONS (MM)

CODE	GAUGE	e	E	H	h1	h2	h3	L
36005947	1"	6	83,5	61	57,4	36.7	40	94,5

• Top® Conduit Cap



DIMENSIONS (MM)

CODE	GAUGE	D	d	e
36005343	1"	20	88,25	65,75

Floor Electrical Junction Box

10. Floor Electrical Junction Box

Tough and easy to install, Tigre Floor Electrical Junction Boxes are ideal for electrical installation projects that require an access point, making installation and maintenance easy.

10.1. Function/Application

Derivation and passage of buried low voltage electrical installations and telecommunications. It facilitates the passage of cables and acts as an access point for inspection or maintenance of the installation.

For electrical and telecommunications installations in residential, commercial and industrial works. According to NBR 5410, it is recommended that there are no rectilinear sections of pipes longer than 15 meters without interposition of a junction box.

10.2. Benefits and Differentials

Ease of installation
Simply join the body parts using TIGRE Plastic Adhesive. With external grooves on the body and base, they favor fixation on the ground (anchoring), eliminating the use of concrete.

Versatile
Adjustable depth: with the use of extenders that can be cut every 1cm. Adjustable to network modification by simply cutting and/or replacing the adapter. It allows the use of pipes from 25 mm to 4" according to the need of the work.

Rational
Complete simplified installation solution, eliminating improvisation and rework in the installation and providing easy access to the entrance network. Easy finishing with the floor: square shape of the covers facilitates finishing for any type of floor (cemented, ceramic, paved).

Durability and resistance
Total durability: does not degrade in contact with the soil and its derivatives. It resists light traffic using a reinforced cover.

Easy to transport
Lightweight and with practical packaging.

10.3. Technical Characteristics

Body

Material: Made of PVC Poly(vinyl chloride).

Color: Gray.

Degree of protection: IP 50.

Inputs: It has 2 pre-cut inputs and 2 inputs with the universal adapter.

Add-ons: Next to the tank, they come with the PVC cover and cover holder, resistant to 500 kg. It also takes an extender (without entry).

Non-Input Extender

Size: It has a total height of 17cm of useful area, and can be cut every 1cm, according to the marking on the product.

Reinforced cover

Material: Made of ABS DN 350mm;

Fitting: 100% airtight, with a sealing ring at the bottom.

Resistance: Resistant to light vehicle traffic up to 500kg.

Formwork cover

Surface: It has a rough surface to favor adhesion with concrete or filling mortar.

Resistance: Light Formwork Cover resists pedestrian traffic supporting up to 100kg of load.

Universal Adapter

Material: Made of nitrile rubber.

Color: Black

Compatibility: Compatible with the Tigreflex® line 25 mm and 32 mm gauges, 1", 1.1/4", 1.1/2 ", 2", 3 "and 4" Threaded Conduit line and also with the Tigre ADS line 1.1/4", 2" and 3".

Next, see the list of reference standards that govern the manufacture of the Floor Electrical Junction Box and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 5410	Low Voltage Electrical Installations.

10.4. Installation

Important

1 - Base for Settlement
The tank must always be seated on a well compacted layer of sand, thrown at the bottom of the ditch.

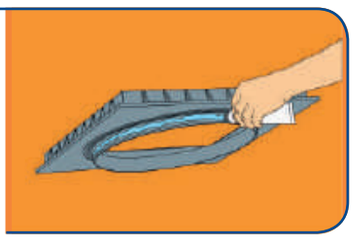
2 - Side Backfill
The backfill soil around the tank must be very well compacted to ensure a firm support for the cover holder.

3 - Floor Finishing
Do it around the cover holder with the cover installed to prevent side deformation of the cover holder.

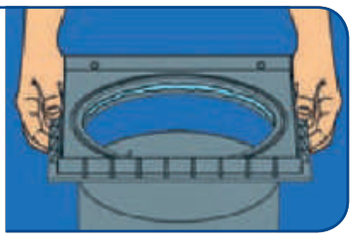
10.4.1. Installation of Electrical Junction Boxes

1. Separate all parts and check the contents of the package.

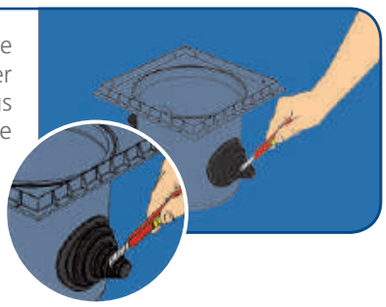
2. Assemble the parts of the box using plastic adhesive between them



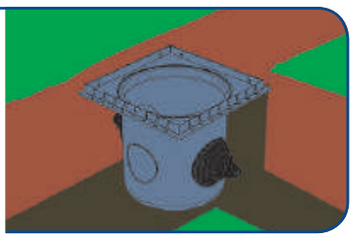
3. Manually fit the pieces, pushing until it touches the bottom of the bag.



4. Cut with a stylet the seal of the inlet of the universal adapter using the existing markings according to the gauge to be used.

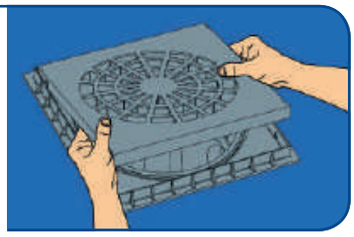


5. Position the TIGRE Floor Electrical Junction Box at the location specified by the project.



6. Fit the piping specified by the project using the TIGRE Lubricant Slurry.

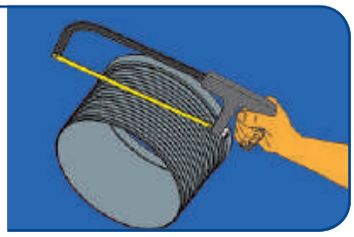
7 nish with the placement of the cover and the backfill.



8 If necessary, to adjust the depth, use extender(s).

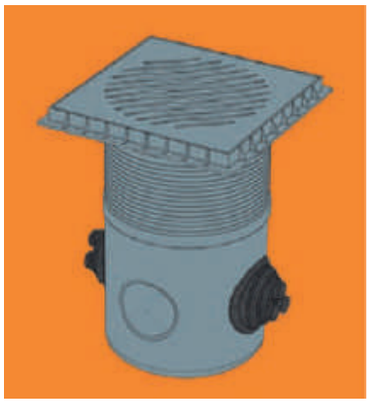
10.4.2. Assembly / Installation of the Extender

1 If necessary, cut the extender without entering the indicated location, using a saw bow. The extender can be cut every centimeter.



2 Manually fit the extender into the tank with TIGRE Plastic Adhesive, pushing until it touches the bottom of the bag.

Example of Electrical Junction Box with Extender



Important
If the soil is not well compacted, the tank may rupture, when subjected to light vehicle traffic, it is essential to prepare a firm (compacted) base to seat the product.

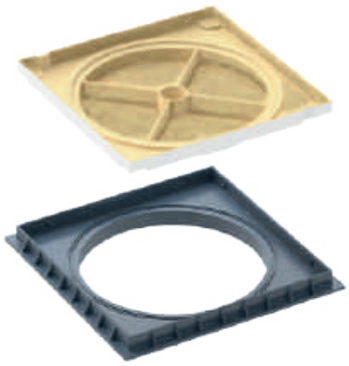
10.5. Instructions

10.5.1. Covers for Electrical Junction Boxes

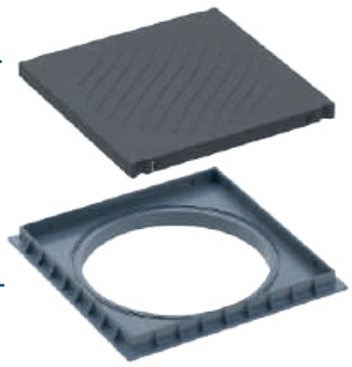
For finishing with the floor, choose from the options of reinforced cover or formwork cover that best fits your project.

The formwork cover allows you to use the same finish as the floor or the surface of the place where the tank is installed, which can be ceramic, gravel, cemented floor, among others.

Light Formwork Cover
for loads up to 100 kg



Reinforced cover
for loads up to 500kg



10.5.2. Maintenance

The TIGRE Floor Electrical Junction Box requires no preventive maintenance. If properly installed, it does not require maintenance or component replacement.

The product allows quick and easy access to the buried electrical installation, simply by undocking the top cover for access to the network.

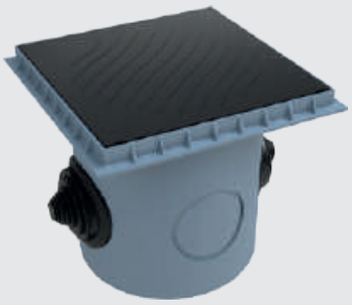
10.5.3. Storage

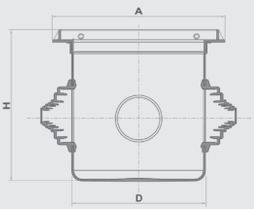
The material must be stored in a covered and properly ventilated place. Remove the product from the packaging only at the time of its installation, thus avoiding the loss of any component.

The maximum stacking is 10 boxes, preferable on pallets that are isolated from any soil moisture.

10.6. Floor Electrical Junction Box Line Items

• Floor Electrical Junction Box

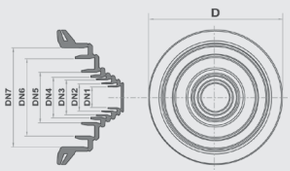




DIMENSIONS (MM)

CODE	A	D	H
33042507	388	300	343

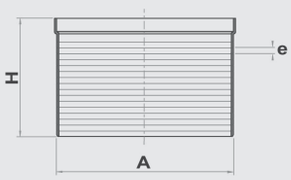
• Universal Adapter



DIMENSIONS (MM)

CODE	D	DN1	DN2	DN3	DN4	DN5	DN6	DN7
37428957	149,5	3/4"ou 25	1"ou 32	1.1/4"	1.1/2"	2"	3"ou 90	4"

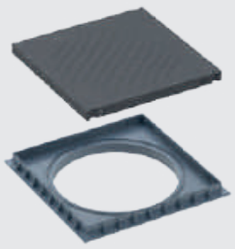
• Extender without Entry

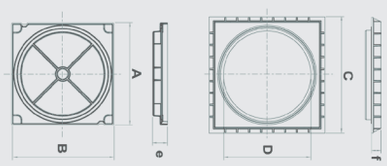


DIMENSIONS (MM)

CODE	A	e	H
27801552	300	10	200

• Reinforced Cover with Cover Holder

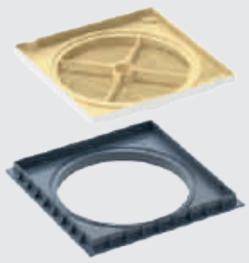


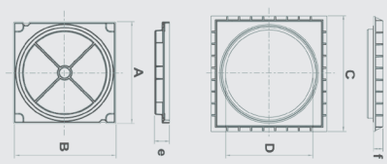


DIMENSIONS (MM)

CODE	A	B	C	D	E	F
27801340	348	348	388	293	50	31

• Reinforced Cover with Cover Holder





DIMENSIONS (MM)

CODE	A	B	C	D	E	F
27801404	348	348	388	293	50	31

• Lubricating Paste

INFORMATION

CODE	DESCRIPTION
53201814	Lubricating Paste - 160g
53201830	Lubricating Paste - 400g
53201849	Lubricating Paste - 1000g

Notes

DryFix®

11. Floor Electrical Junction Box

No improvisation and adaptations when installing the electrical energy in the plasterboard walls. The Tigre Drywall Electrical Box is another technological innovation.

11.1. Function/Application

Provide mechanical protection for low voltage electrical installations in the plasterboard system (Drywall) and can be applied in any type of work, whether industrial, commercial or residential.

11.2. Benefits and Differentials

Ease of Installation
Because they do not require improvisations and adaptations and also because of their design, DryFix® parts are very easy to install. The electrical boxes already come with the eyebolts and markers for drilling the plates that greatly speed up and make their installation firm and precise.

Versatile
All parts of the DryFix ® Tigre line can be installed in uprights of any size (48, 70/75 and 90 mm).

Full line
The DryFix ® Electric line was designed and developed to bring solutions and technological innovation to electrical installations in plasterboard systems.

Resistant
The PVC used in the manufacture of parts and fittings of the DryFix ® line has an additive, which does not allow the parts to crack when they are screwed. It has an conduit fastener, ensuring solidity in the installation.

Safety
Made of flame retardant PVC.

11.3. Technical Characteristics

Material: Made of rigid PVC Poly(vinyl chloride), with an additive that prevents cracking of the parts when they are screwed, and also gives it the characteristic of not being a flame propagator.

Color: Green.

Amounts: All items can be installed in uprights of 48, 70/75 and 90mm, that is, the standard thicknesses.

Fixing: The boxes have movable eyebolts that adjust to the most varied board thicknesses, ensuring perfect fixation between the box and the board. The conduit is locked directly into the inlets of the box.

Tags: The electrical boxes have markers for the center of the bottom on their body.

Next, see the list of reference standards that govern the manufacture of DryFix ® and ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 5410	Low Voltage Electrical Installations.

11.4. Concepts

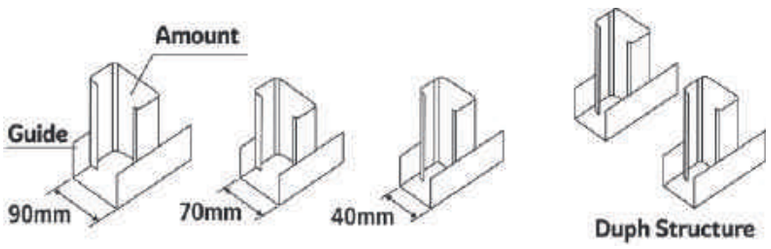
Plasterboard:
It is a board composed of plaster surrounded by two layers of duplex paperboard.

Metallic structure:
It consists of two types of metal profiles, called guides and uprights. The guides are U-shaped profiles, fixed directly to the floor in a horizontal direction. They are the foundation of the whole structure.

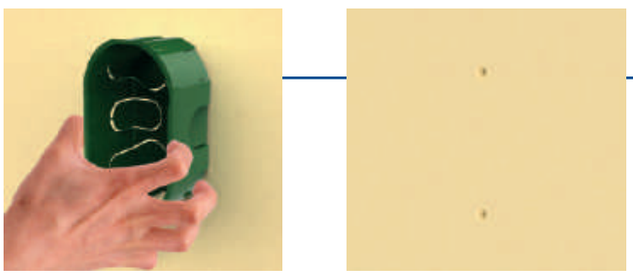
Another element of the structure is the upstream. It is also a U-shaped profile, and its attachment is perpendicular to that of the guide. In it will be fixed the plasterboards, which will form the wall. The material used to make the guides and uprights is galvanized steel. Below are the standard dimensions of the guides and the uprights.

11.5. Installation

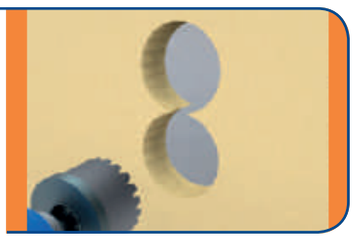
Due to the lightness, the parts are very easy to handle, especially if compared to other materials. However, they must be handled properly so as not to make them unsuitable for use.



1. Press the electrical box to be installed against the plasterboard so that the drilling centers with the cup saw are marked.



2. Having marked the centers, the plasterboard must then be drilled with the 60 mm cup saw or 2.3/8".

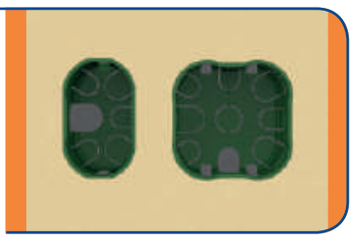


3 After the holes have been drilled, a small knife or knife must be scraped from the remaining corners, as shown in the figure on the side, so that there are no burrs left.

4 Before placing the electrical box in the opening of the plate, the necessary number of inputs for the conduits must be broken. Using a pocketknife, cut the inlet junction.

5 Press the inlet until it breaks to release the conduit passage opening.

6 After scraping the remaining corners and breaking the necessary entries, fit the electrical box into the opening made in the plate.



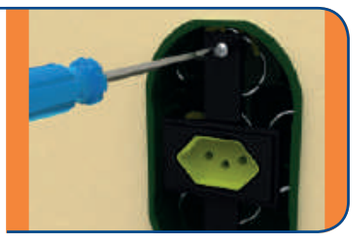
7 At this stage of installation, the movable eyes, parts responsible for fixing the box to the plate and the switch plate to the box, must be placed in the electrical boxes.

8 The eyebolts must be fitted to the electrical box in the position shown in the illustration by light pressing.

9 Within the eyelet guide, the movable eyelets can be adjusted to fit any plate thickness.

10 After fixing the box, the eyebolts and the connection of the electrical wires, the socket or the switch must be screwed into the eyebolts and then the switch plate.

11 Then, the conduit must be placed in the respective opening. The conduit is locked directly into the inlets of the box.



12 Applied product

11.6. Instructions

11.6.1. Maintenance

If there is a need to make any repairs or changes to the installed piping, the following guidelines must be adopted:

1. First, the existing coating on the site (texture, ceramics, etc.) must be removed, reaching the plasterboard.

2. Once this is done, remove the part of the plaster where the problem piece is positioned, always seeking to cut in a rectangular or square way

3. Now repair or replace the part.

4. For closure, a piece of plasterboard equivalent to the piece removed is first positioned.

5. The new plate is fixed to the existing plate with the aid of a special tape for this purpose (carcass tape).

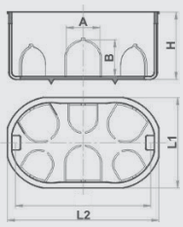
6. The service is concluded by applying the desired finish with emulsion, PVC paint or others.

11.6.2. Transport/Storage

- Strong impacts and friction with stones, metal objects and sharp edges in general should be avoided.
- In loading and unloading operations, shocks, knocks and friction must be avoided to prevent breaks and/or cracks.
- The storage location must be easily accessible and protected from the weather.

11.7. Dryfix ® Line Items

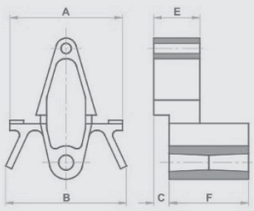
• Dryfix Electrical Box



DIMENSIONS (MM)

CODE	BITOLA	A	B	H	L1	L2
21007013	4"x 2"	26	28	47	63	105
21007110	4"x 4"	26	28	47	105	106,5

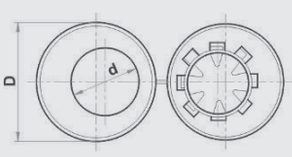
• DryFix® Eyebolt



DIMENSIONS (MM)

CODE	A	B	H	L1	L2
21007277	22	50	3	15,5	9

• DryFix ® Upstream Protector



DIMENSIONS (MM)

CODE	D	d
21007200	55,2	31,5

Insulating Tapes

12. TIGRE Insulating Tapes

Reliable product, more security. Tigre Insulating Tape is ideal for electrical installations that require high performance. Forms a protective cover of electrical cables and conductors. It does not propagate flames, is highly resistant to abrasion, in addition to its protection against the action of UV rays.

12.1. Function/Application

Carry out electrical insulation for power wires and cables in order to form a protective cover highly resistant to abrasion and also against the action of ultraviolet rays. Final coverage in splices and terminations of electrical wires and cables up to 750V in low voltage electrical installations of homes, businesses and industries.

12.2. Benefits and Differentials

Ease of Installation
Flexibility of the tape ensures good handling under the various conditions of use.

High dielectric strength
Supports voltage variations.

Greater grip
Special formula ensures good fixation over time.

Resistant
Vinyl back with excellent mechanical strength.

Safety
Standardized product with certification in national and international standards. It has PVC film that does not propagate flames.

12.3. Technical Characteristics

Material: Rubber resin-based adhesive and product manufactured with non-flame propagating PVC-based film (self-extinguishing). Resistance to ultraviolet rays.

Classes: It has three certified insulation classes: A (Professional), (B Performance) and C (General Use).

Temperature of use: 0°C to 90°C.

Capacity: Electrical cable insulation up to 750V.

Add-ons: It has packaging to protect against possible contamination. Cardboard inner pipe.

Below, see the list of reference standards that govern the manufacture of Tigre Insulating Tapes and that ensure excellent performance, providing a high degree of safety to the facilities.

REFERENCE TECHNICAL STANDARDS	
NBR 5410	Low Voltage Electrical Installations.
NBR NM 60454-3-1-5	Pressure Sensitive Adhesive Tapes for Electrical Insulation Purposes

12.4. Professional Model Technical Characteristics (Class A)

- Color: black.
- Thickness: 0.18 mm.
- Width: 19 mm.
- Length: 20 m.
- Stretching: 200% minimum
- Tensile strength: 30.90 N/cm minimum.
- Meets RoHS standard – free of heavy materials and contains no lead
- Certified Product.

12.5. Performance Model Technical Characteristics (Class B)

- Color: black.
- Thickness: 0.1 5 mm.
- Width: 19 mm.
- Lengths: 20 m, 10 m and 5 m.
- Stretching: 150% minimum.
- Tensile strength: 27.30 N/cm minimum
- Meets RoHS standard - free of heavy materials and contains no lead.
- Certified Product.

12.6. General Use Model (Class C) Technical Characteristics

- Color: black.
- Thickness: 0.13 mm.
- Width: 18 mm.
- Lengths: 20 m, 10 m and 5 m.
- Stretching: 120% minimum.
- Tensile strength: 21.70 N/cm minimum.
- Meets RoHS standard – free of heavy materials and contains no lead
- Certified Product.

12.7. Color Model (Class C) Technical Characteristics

- Color: yellow, blue, white, green and red.
- Thickness: 0.13 mm.
- Width: 18 mm.
- Length: 10 m.
- Stretching: 120% minimum.
- Tensile strength: 21.70 N/cm minimum.
- Meets RoHS standard – free of heavy materials and contains no lead
- Certified Product.

12.8. Insulating Tape Application

Step 1: Make sure that any and all oil or grease residue in the area where the tape is applied has been removed.

Step 2: Cover the area to be protected by always applying 50% of the top layer of the tape over the bottom, overlapping layers of the material.

Step 3: Pull the tape, exerting a slight pressure on the material that has already been applied. This implies a safe and void-free coating.

Important:
We recommend checking the need to use Personal Protective Equipment (PPE) when dealing with any installation or electrical equipment.

12.9. Instructions

12.8.1. Insulating Tape Model Color

To make a complete insulation, it is suggested to apply 4 (four) layers of the tape always elongated 50% and half overlap at each turn.

12.8.2. Maintenance

It is always recommended to carry out a check on all splices and terminations to identify the need for any repair.

12.8.3. Storage

The product must be packed out of the reach of the weather and always in its original packaging. The storage temperature should not exceed 30°C for long periods. The maximum stacking must be carried out as follows:

- Professional Line: 8 boxes.
- Performance Line: 8 boxes.
- General Purpose Line: 8 boxes.
- Colored Line: 5 boxes.

The validity of the product, provided that the aforementioned conditions are respected, is 02 (two) years.

12.10. Tigre Insulating Tape Line Items

• TIGRE Professional Model Insulating Tape

DIMENSIONS (MM)

CODE	GAUGE
54502605	19 mm x 20 m

• TIGRE Performance Model Insulating Tape

DIMENSIONS (MM)

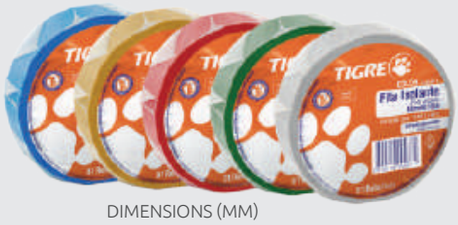
CODE	GAUGE
54502354	19 mm x 5 m
54502451	19 mm x 10 m
54502559	19 mm x 20 m

• TIGRE General Purpose Model Insulating Tape

DIMENSIONS (MM)

CODE	GAUGE
54502656	18 mm x 5 m
54502648	18 mm x 10 m
54502630	18 mm x 20 m

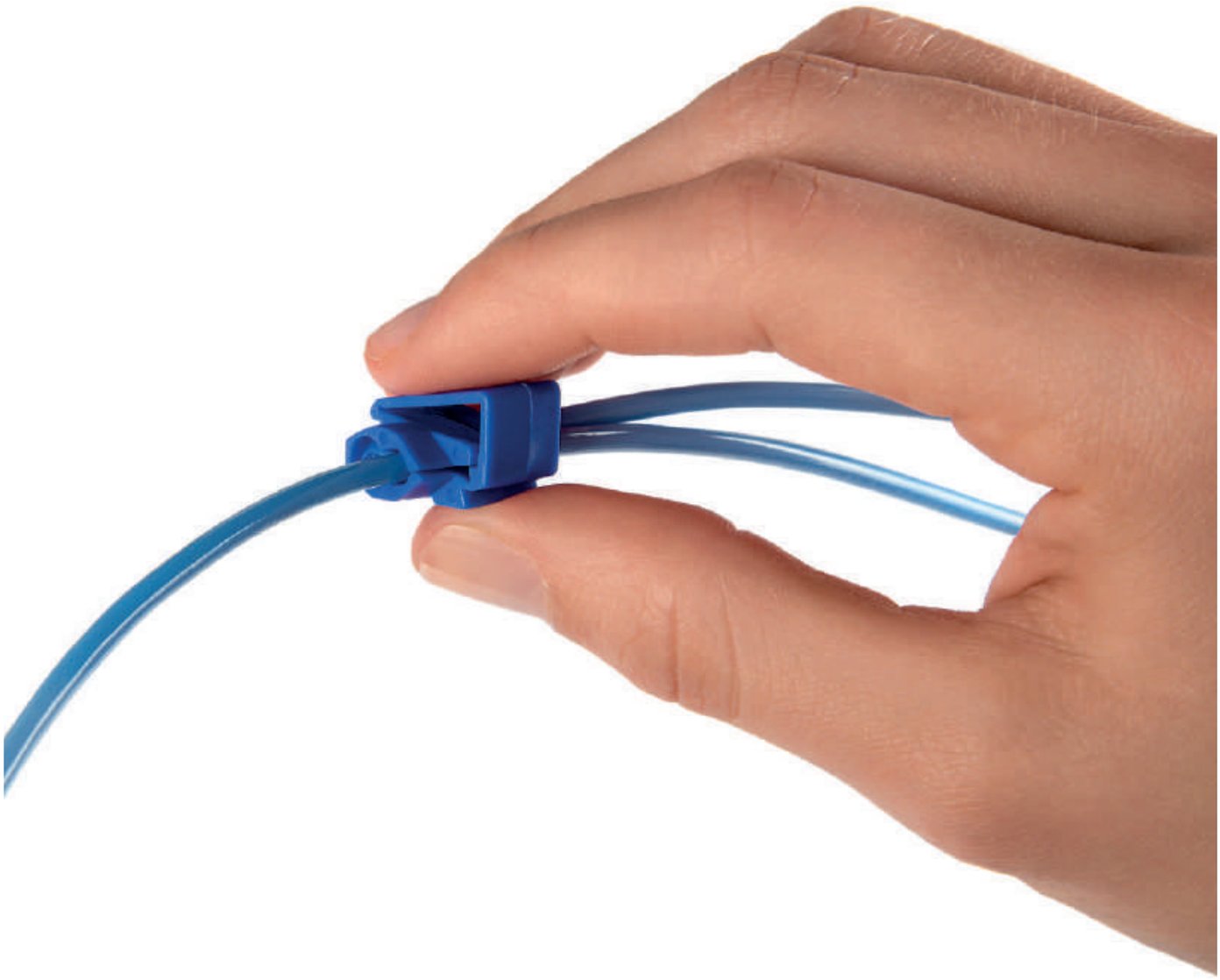
• TIGRE General Purpose Model Color Insulating Tape



DIMENSIONS (MM)

CODE	GAUGE	Color
54502702	18 mm x 10 m	Yellow
54502710	18 mm x 10 m	Blue
54502729	18 mm x 10 m	White
54502737	18 mm x 10 m	Green
54502745	18 mm x 10 m	Red

ELECTRICAL CONNECTORS

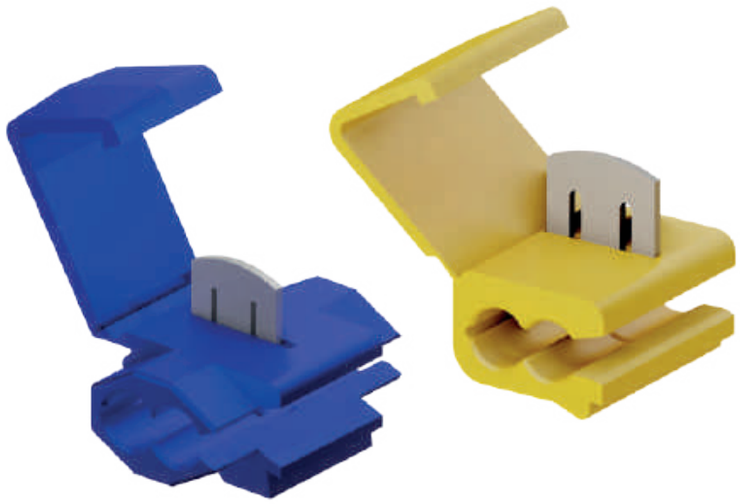


13. ELECTRICAL CONNECTORS

Tigre electrical connectors are safe, easy and quick to install. They replace the use of electrical tape and dispense with stripping the wires. The installation is up to 6 times faster than with insulating tape and brings the security of perfect and standardized splices.

13.1. Function/Application

Electrical connectors are used to join wires and cables into splices and taps, replacing the electrical tape. They make contact with the conductive parts and isolate the point of union between two cables, protecting the installation against external actions and current leaks. Ideal for building electrical installations in homes, businesses and industries. Do not use in electric showers and faucets.



13.2. Benefits and Differentials

Ease of Installation
You don't need duct tape or wire stripping.

Savings
Increased efficiency and profitability by reducing installation time.

Efficient
They guarantee the passage of the chain, do not oxidize and do not loosen.

Safety
Perfect and standardized splices, reducing the risk of human failures. Does not propagate flames.

13.3. Technical Characteristics

Insulation: Flame retardant polyamide.

Maximum voltage: 600 V.

Maximum current Blue: 0.75 to 1.5 mm2 -1 5A.

Maximum Yellow Current: 2.5 to 4 mm2 - 20a.

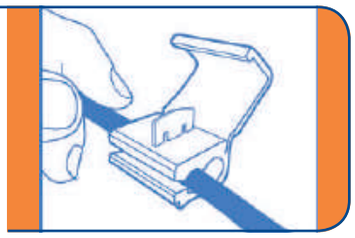
Contact: Tin brass U-blade.

Below, see the list of reference standards that govern the manufacture of Tigre Electrical Connectors and that ensure excellent performance, providing a high degree of safety to the facilities.

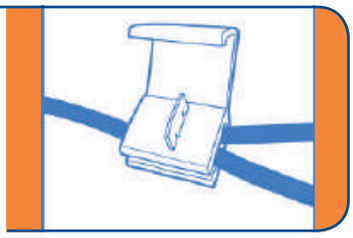
REFERENCE TECHNICAL STANDARDS
Passed tests performed based on **UL 486-A/B, UL 486-C e UL94.**

13.4. Installation

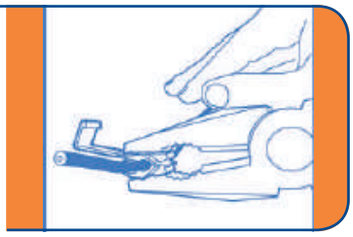
1. Place the main wire/cable without stripping on the channel opposite the hinge of the cover.



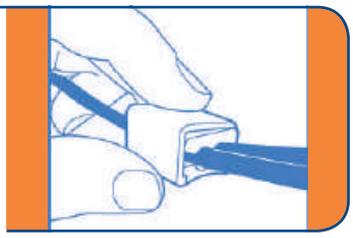
2 Place the main wire/cable without stripping on the channel opposite the hinge of the cover.



3 With universal pliers, tighten the metal blade until it is fully inside the connector body.



4 Close the cover with one click to ensure the insulation of the splice.



13.5. Instructions

13.5.2. Maintenance

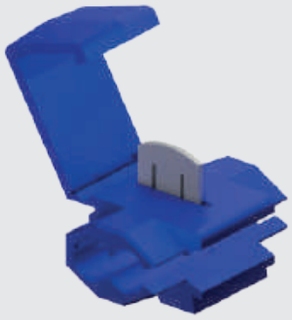
If installed correctly, the product should not require preventive or corrective maintenance.

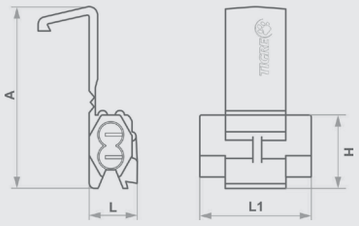
13.5.1. Transport / Storage

- The product must always be kept out of the reach of bad weather in its original packaging.
- The storage temperature should not exceed 30°C for long periods of time.
- The shelf life of the product under the aforementioned storage conditions (controlled temperature and humidity) is 5 years.

13.4. Electrical Connector Line Items

• Blue Electrical Connector 0.75 to 1.5 mm2

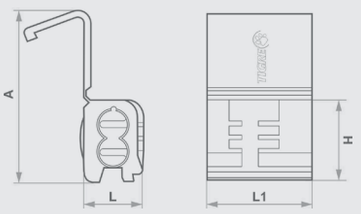




DIMENSIONS (MM)

CODE	A	L	H	L1	Part/Emb
300001630	31,5	12,4	13,5	19,3	10
300001699	31,5	12,4	13,5	19,3	300

• Yellow Electrical Connector 2.5 to 4 mm2



DIMENSIONS (MM)

CODE	A	L	H	L1	Part/Emb
300001631	31,6	15,6	14,8	19,4	10
300001700	31,6	15,6	14,8	19,4	300

Notes

Notes

Notes


Janesville, WI (United States)
Beaumont, CA (United States)
Celina, TN (United States)
Cota (Colombia)
Mosquera (Colombia)
Quito (Ecuador)
Lima (Peru)
La Paz (Bolivia)
Santa Cruz de La Sierra (Bolivia)
Lambaré (Paraguay)
Santiago (Chile)
Manaus
Escada
Marechal Deodoro
Indaiatuba
Rio Claro
São Paulo
Castro
Joinville
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