



robo|flex®

CONNECTIVITY UNDER EXTREME CONDITIONS



FIELD OPERATIONS



Roboflex® Solutions for Field Operations

Roboflex® Solutions for Field Operations are applicable across various industries such as **mining, agriculture, logistics, and port operations.**

We tailor mobile devices to the specific nuances of each sector, providing **connectivity, protection against extreme conditions, and integration of sensors and devices.**

Our robust solutions **transform mobile devices into onboard computers** that withstand extreme environmental conditions and the rigors of diverse operations, thus **extending the devices' lifecycle.**

Roboflex® tablet cases feature **protection ratings ranging from IP54 to IP65**, making them resistant to drops, impacts, and vibrations, ensuring connectivity in extreme environments, allowing connections and integrations with various devices, sensors, and software.

Roboflex® ecosystem mounts are versatile, with mounting options that **can be installed in different environments and equipment.**

Across all areas, Roboflex® solutions adapt through expertise in hardware and technology, providing **solutions that maximize efficiency, quality, and profitability in field operations.**

Field Operations in Agriculture

- Turn your tablet into an agricultural **GPS**, planting monitor, and **other equipment for process control**;
- Customization of **electrical harnesses** based on machine-to-machine demands and configurations;
- **Connectivity of antennas**, exclusive generic communication modules for agricultural operations such as **ISOBUS and derivatives**;
- Line of fixation supports for dedicated equipment equivalent to the market, delivering **high performance and cost reduction in acquisition (domestic product)**.



Field Operations in Mining


- **Connections and Integrations** - Sending and receiving data to/from the tablet, enabling **telemetry module readings, GPIO sensors, RJ45 connections, and peripheral usage in operations;**
- Simultaneous device charging and data transfer **without interference or signal loss;**
- Responsive ecosystem - The entire product chain complies with standards for field **usability under extreme conditions, providing mechanical and electrical equipment protection;**
- **Protection Rating up to IP65** - Dust Resistance, including fine-grained materials like ore, sand, and other debris;
- System integration with hardware to **provide necessary resources for continuous operation;**
- Digital and Analog Signals - **Wired signal reading with inputs and outputs** for dedicated operations such as tilting and automatic point capture.





Field Operations in the Port Sector

- **Transform the tablet into an onboard computer (VMTs)** for data logging and dispatching on equipment such as Terminal Tractors and RTGs (Rubber-Tired Gantry Cranes);
- **Utilize our responsive ecosystem in dockside operations.** The entire product chain is compliant with standards for field usability under extreme conditions.
- Products with protection rating up to IP65 and tested for drop, impact, and vibration to protect mobile devices in any environment, **including specific operation-related weather conditions such as corrosion, liquid, and solid object exposure;**
- The Roboflex® ecosystem enables **mobility for terminal operations** as well as **equipment connectivity with our products through signal conversion (RS232, RJ45, RS485, and CAN).**



Field operations in Logistics and Transport

- Installation of hardware without damaging vehicles, **fixing without risk of falling due to vibrations and other characteristics of the operation**;
- Greater connectivity between sensors and devices, **through wired communication technologies using communication modules and hardware** from the Roboflex® ecosystem;
- **User interaction in check-list, inspection and operational tools resources** with the ecosystem of supports, accessories and protections;
- Transform the tablet into an on-board computer for use in **journey control, telemetry, routing and video monitoring systems**;
- Use of Roboflex® supports to **fix fatigue sensors, preventing vandalism, changes in positioning and even theft.**

Mount the ideal Roboflex® solution for your operation

Customize a suitable solution for your operation.

1 Choose a case for your mobile device

Choose the Roboflex® case that meets your business needs

2 Choose the base to attach to the case

Choose the base that will secure the case to the arm

3 Choose the arm

Choose the arm of the appropriate size for the installation location's needs

5 Choose how the device will be charged and data transferred

Choose the best way to charge the device and transfer data

4 Choose a base to mount on the surface

Choose the base that will keep your device securely in place at the desired installation location



Build the ideal Roboflex® solution for your operation

Customize a suitable solution for your operation

1 Cases



Sealed case without attachment

Case without base for rear attachment, ideal for greater mobility in field operations.



Screw-mounted case

Ideal for operations where the equipment will be fixed and will not need to be removed from site.



Magnetic case

Ideal for operations where equipment needs to be removed from site, during or at the end of the operation.

2 Base to attach to case



Screwed



Magnetic Base

3 Arms



Short arm



Long arm

4 Bases for fixing to the surface



Screwed



Tubular



Adhesive



Suction cup base

5 Device charging and/or data transfer



Cable



Magnetic



IP54 car charger



IP65 car charger

Roboflex® Case

Roboflex® cases are **designed for operations in extreme environments**. We use full coupling, fully protecting all tablet faces. All our lines meet standards for **protection and resistance to drops, impact, and vibration**.



High strength material



Product with responsive design



Protection against bad weather



Long life product



Roboflex® Standard



Robust ecosystem with a foundation of secure both mechanical and electrical connections

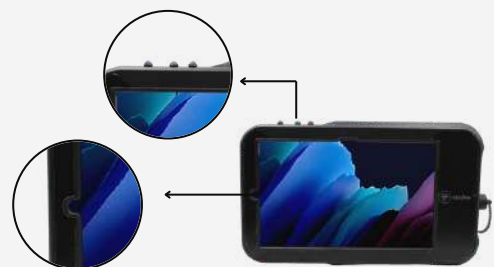


Offers charging capability to all cases even in extreme environments.

Includes protective film ensuring maximum preservation of screen integrity, guarding against scratches, smudges and other possible damage

Availability of all* device features, such as buttons and cameras

*Except to memory card and SIM card



Roboflex® Resources

One of the features offered by Roboflex® is the **customization of the connectors**, thus enabling the tablet to connect to the most varied equipment. These connectors **can be used for charging and/or data transfer**.



Roboflex® 4-pin connector

- For cases with IP54 protection



Roboflex® 4-pin connector

- For cases with IP65 protection



USB-A connector



Auxiliary input for P2



USB-C connector

Roboflex® Resources

The technologies used in Roboflex® solutions offer **compatibility for the use of sensors, reading of industrial signals, amplifier boxes and device cooling**, all integrated into an ecosystem of hubs, adapters and other peripherals.



Charging + Data

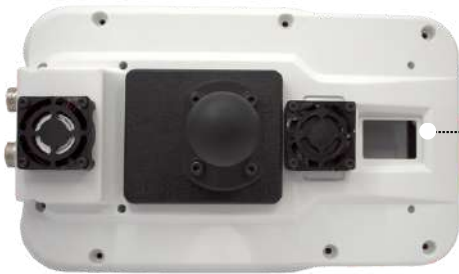


Anti-theft system



Industrial Connectivity
Greater durability and safety compared to standard connectors

Differentials



Ventilation

Option to incorporate a ventilation system for equipment constantly exposed to sunlight or high temperatures, ensuring improved functionality and an extended device lifespan.

*With this feature, the case will not have a specific degree of protection.



Audio output

Connection to audio devices such as headphones and speakers via P2 input

*With this feature, the case will not have a specific degree of protection.



Signal converters USB-C technology

Roboflex® signal converters are compatible with various devices such as I/O, ethernet, CAN, RS232, USB, P2 and others, helping to maintain the connectivity of the operation.



HUB

Roboflex® HUBs offer port expansion and a variety of connections for other devices, being able to add USB ports, industrial and vehicular communication protocols.

Roboflex® Magnetic Case

Ideal for operations in which **the equipment needs to be removed, during or at the end of the operation.**

The Roboflex® magnetic system was developed to withstand constant removal of equipment during operation. **Keeps the device charged when the plug is connected to the case.**

Possibility of including an industrial connector, USB-C or Micro USB inputs.

It offers robustness in field activities, withstanding extreme situations, such as vibrations, impacts, bad weather and repetitions as the product is constantly removed during the operation.

Ideal for operations such as:



Operational checklist;



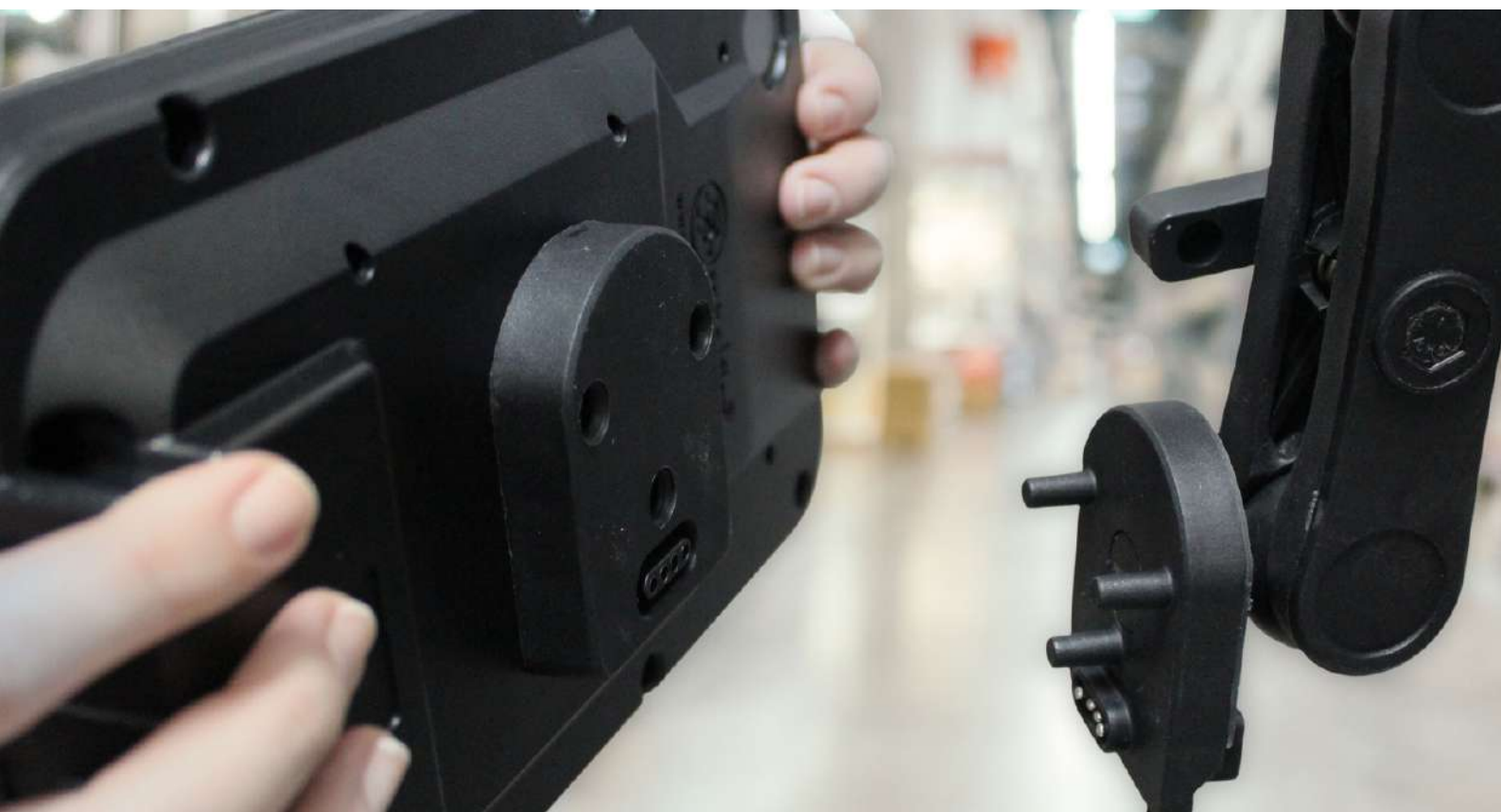
Need for decentralized notes of the fixation location;



Possibility of moving the device to another operating location.

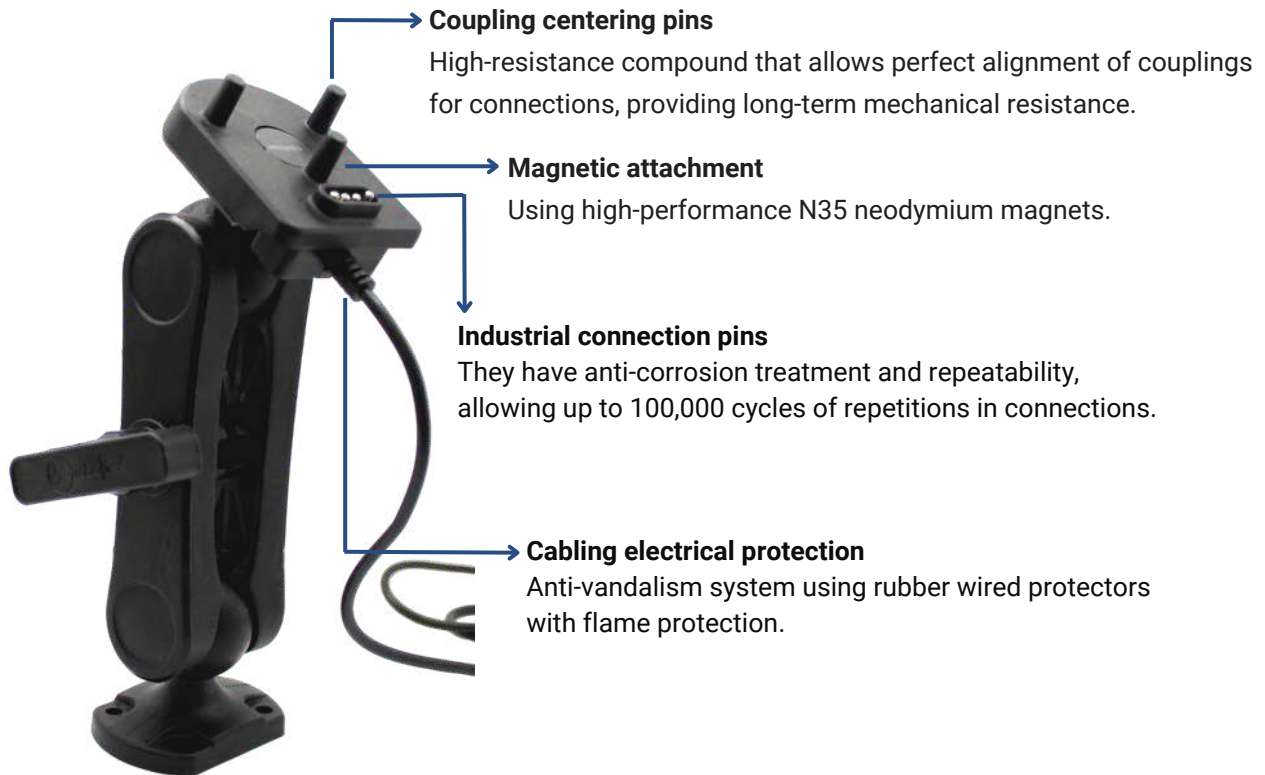


Magnetic plug technology

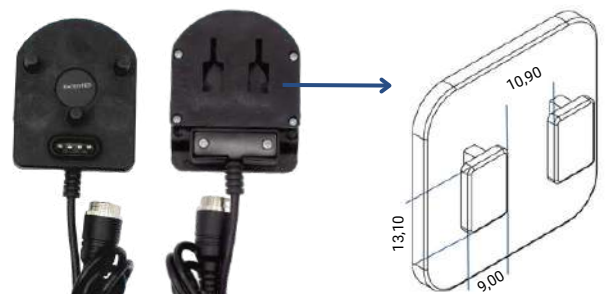


Roboflex® Magnetic System

The Roboflex® magnetic system is an **exclusive technology** that **allows devices to be fixed and charged** in Roboflex® ecosystem cases and was developed to **support the constant removal of equipment** during operation, keeping the device charged when the plug is connected to the case.



Magnetic plug Size C (1.5")
Code: PLG040005
Weight: 180g



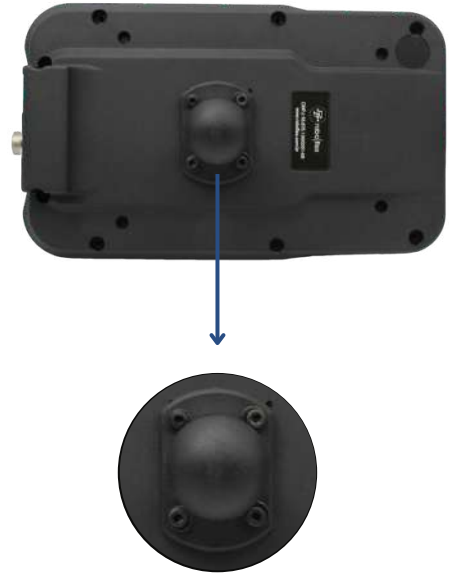
Magnetic plug with coupling
Code: PLG040007
Weight: 100g

Screw-mounted Case

Ideal for operations in which the equipment will be **fixed to supports**, whether on walls, columns, tables, etc. **and there is no need to constantly remove it**, allowing the equipment to be used by multiple users.

Produced with high-resistance and lightweight material, it is a great solution for **keeping your equipment safe without compromising adjustability**.

Possibility of including an industrial connector, USB-C or Micro USB inputs.



Fixed base compatible with the Roboflex® supports ecosystem

Case Without Attachment

Ideal for greater **mobility in field operations**. Case option without base for rear attachment. With the use of handles, they are **ideal for dynamic field operations that require constant mobility**.

Possibility of customizing the industrial connector, USB-C or Micro USB inputs.



Allows attachment of handles for greater mobility



Mobility

Roboflex® Cases allow the addition of handles for use in the field.

Compatible with all cases.



Handstrap



Wrist strap



Shoulder strap



Usability

Roboflex® Cases offer the possibility of adding support for the tablet's pen.

Check compatibility with our products



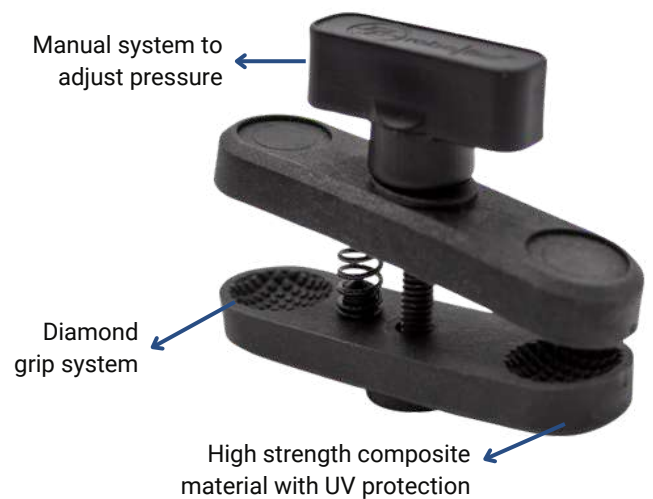
Pen support

Arms

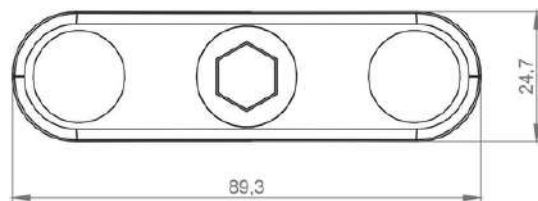
Roboflex® arms feature the diamond grip system, responsible for providing **maximum adherence to the base**.

In addition to this technology, the arms also incorporate the **knob adjustment** system, suitable for **calibrating the pressure between the product's components**.

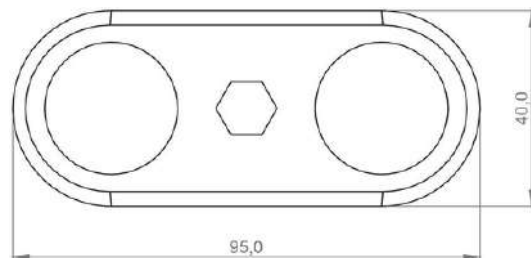
The arms are constructed from a material that offers **high strength and UV protection, which extends the product's lifespan and reduces its weight**.



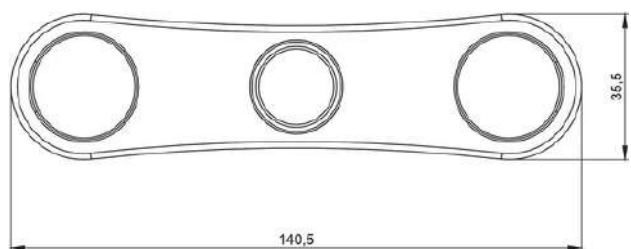
Short arm
Size B (1")
Code: BRC040003
Weight: 80g



Short arm
Size C (1.5")
Code: BRC040004
Weight: 140g



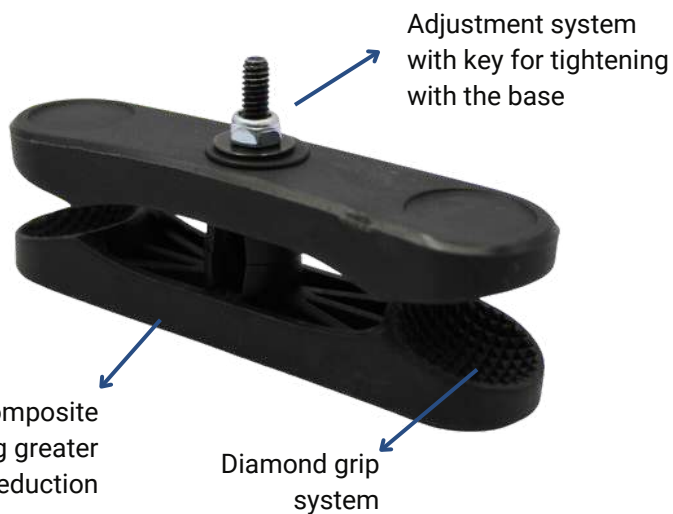
Long arm
Size C (1.5")
Code: BRC040002
Weight: 160g



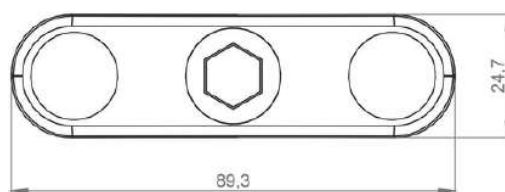
Self-locking arm

Unlike the traditional model, the self-locking model has an **arm adjustment system using a key**.

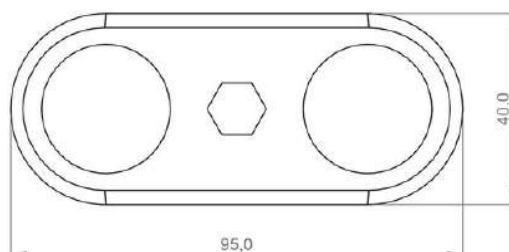
Ideal for **restricting the number of people who can perform adjustments on the piece** and preventing theft, theft, vandalism and sabotage.



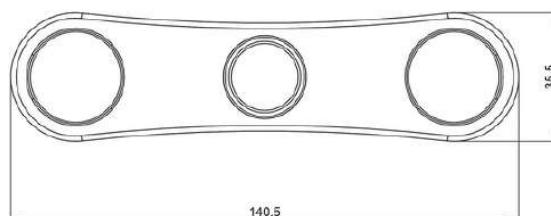
Short self-locking arm
Size B (1")
Code: BRC040006
Weight: 60g



Short self-locking arm
Size C (1.5")
Code: BRC040007
Weight: 140gr



Long self-locking arm
Size C (1.5")
Code: BRC040005
Weight: 140g



Tubular base

Tubular bases offer a practical and safe solution for fixing tubular objects and can be installed on **tubes up to 28mm**.

Ideal for installation on forklifts, tractors and other spaces with round tubes.



Tubular base
Size B (1")
Code: BSE040022



Tubular base
Size C (1,5")
Code: BSE040023



Double tubular base
Size B (1")
Code: BSE040025

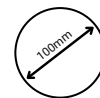


Double tubular base
Size C (1,5")
Code: BSE040024

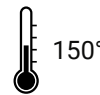
Adhesive base

The adhesive base allows application to the equipment **without the need to drill or alter the fixing surface**. It is the ideal option for cases where it will be necessary to remove the device after a period of time or cases where **the available surface does not allow drilling for fixation**.

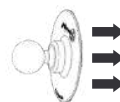
Developed with technology that **allows adaptation to irregular surfaces** where the base molds itself according to the application geometry, and **can be applied to plastics, glass and metals**.



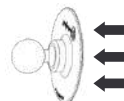
Malleable flat base with a diameter of 100mm. Allows attachment on flat and organic surfaces.



High-performance adhesive with durability up to 150 degrees after application.



High-tech adhesive for fixing. Can be reused with refill kit



Easy process of removing the product after its period of use



Adhesive base
Size B (1")
Code: BSE040020



Adhesive base
Size C (1.5")
Code: BSE040021

Screwed base

The screwed base is intended for operations where **the surface can be drilled** and easily accessed by all users.

Made of high-strength and lightweight material, it's a great solution **for keeping your gear safe without compromising adjustability.**



High-strength material



Protection against bad weather



Lightweight product and modern design



Long life product



2-hole base
Size B (1")
Code: BSE040010



2-hole base
Size C (1,5")
Code: BSE040011



4-hole base
Size B (1")
Code: BSE040007



4-hole base
Size C (1,5")
Code: BSE040008



7-hole base
Size B (1")
Code: BSE040003



7-hole base
Size C (1,5")
Code: BSE040004

Suction Cup base

The suction cup line is ideal for users who need to **constantly remove the equipment** during or at the end of the operation, offering **dynamism and ability to resist impacts and temperature** where it will be fixed.

The **fixing is long-term resistant**, even in operations that present high temperatures, **providing extra security for fixing to glass, metal, non-porous and groove-free surfaces**.



Roboflex® suction cups use instantaneous vacuum technology with a high level of absorption.



Suction cup base
Size B (1")
Code: BSE040016



Suction cup base
Size C (1.5")
Code: BSE040015



Double Suction Cup Base
Size B (1")
Code: BSE040017



Double Suction Cup Base
Size C (1,5")
Code: BSE040018



Triple Suction Cup Base
Size B (1")
Code: BSE040014



Triple Suction Cup Base
Size C (1,5")
Code: BSE040012

Adapters



Used to **extend the support length**, requiring the **use of two arms**.

Extender

Size C (1,5")

Code: BSE040026



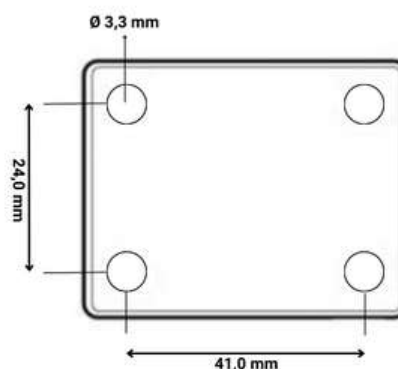
Base with a **1/4" screw size**, compatible with **international replacement bases**.

Base ball

Size B (1")

Screw 1/4"

Code: BSE040028



Adapter base

Size C (1,5")

Code: BSE040029

*Product outside the AMPS hole standard.

Cables and chargers

The cables and chargers **offer charging and data synchronization capabilities.**



Code: CB0040008

IP65 charging cable

O cabo de carregamento IP65 apresenta as seguintes especificações:

- Dust protection
- Protection against temporary immersion
- Resistance against corrosion due to sea spray
- Protection against water jets



Code: CB0040007

IP54 charging cable

The IP54 charging cable has the following specifications:

- Dust protection
- Protection against water jets
- Industrial connector



IP65 Charger

Code: CAR040004



IP54 Charger

Code: CAR040005

TECHNICAL CHARACTERISTICS

- Voltage range: 11 to 31V
- Voltage output : 5.5V
- Maximum current: 10A
- Regulatory:
 - EN 55032: 2015+AC:2016+A11:2020
 - EN 55035: 2017+A11:2020
 - EN IEC 61000-3-2:2019
 - EN 61000-3-3:2013+A1:2019
- Overcurrent and overvoltage protection
- High efficiency up to 95%
- Over-temperature shutdown, output short-circuit protection
- It has holes that allow the equipment to be fixed with screws.
- Cable length: 1m




**For more information
visit our website!**

We have redesigned our website to give our existing and potential customers an insight into our solutions and services offered. Stay tuned to our blog for information on technologies, industry news and our solutions.


For questions and information please contact our sales team.



Click [here](#) and go to our website or point your phone's camera at the QR Code.

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