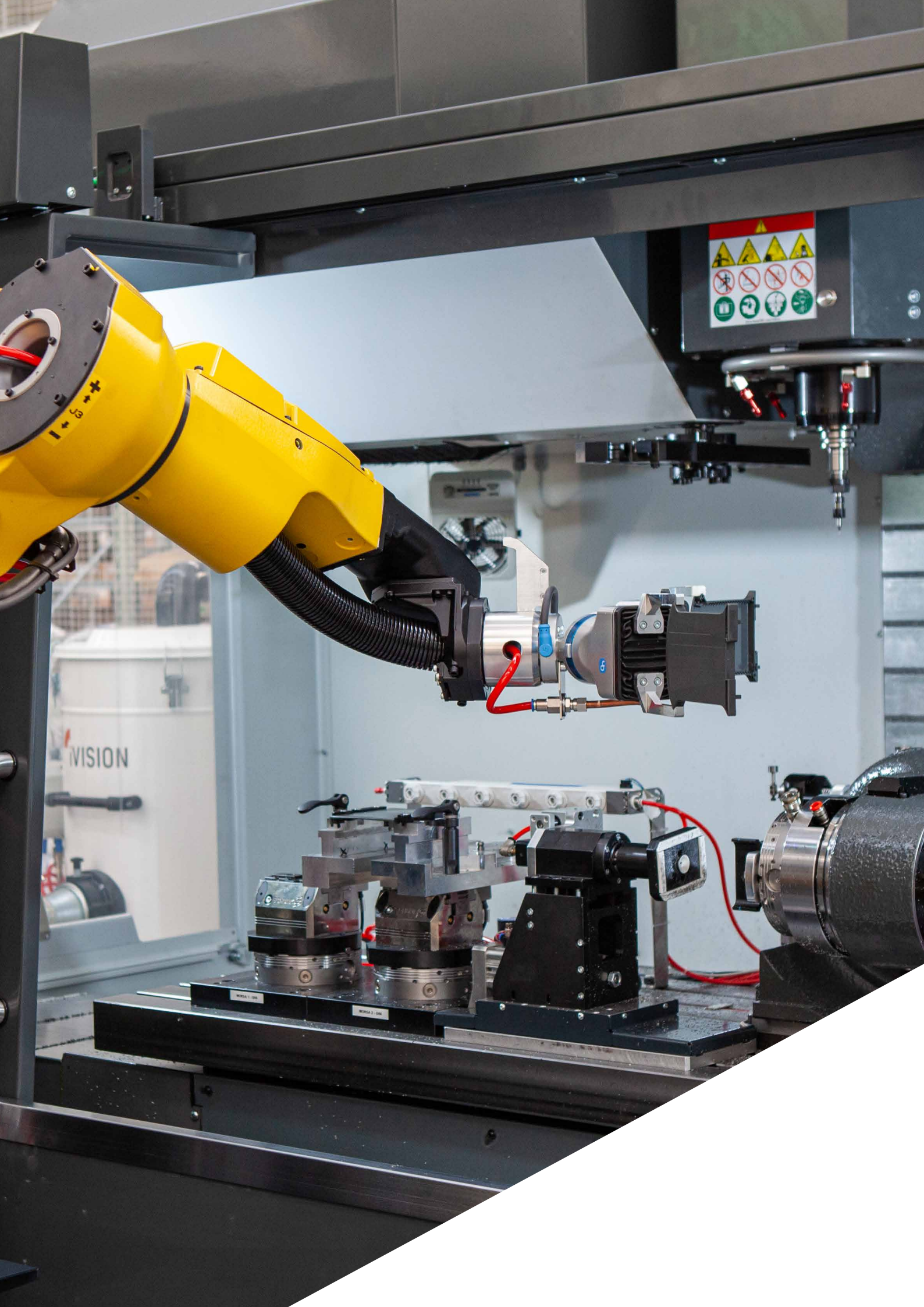
ENGLISH

italtronic
enclosures for electronics

Customization Services


J3
VISION

italtronic
enclosures for electronics

Discover our services for a product tailored to your needs

At ITALTRONIC, we take pride in offering a **comprehensive range of services** that refine the product to meet your mechanical and aesthetic needs precisely.

Our technical team is here for you: we translate your ideas into detailed drawings and prototypes, ensuring that every detail perfectly reflects your specific requirements. Many of these services are completely FREE.

Additional services, such as custom project development or the adaptation of production standards, are offered at very affordable rates.

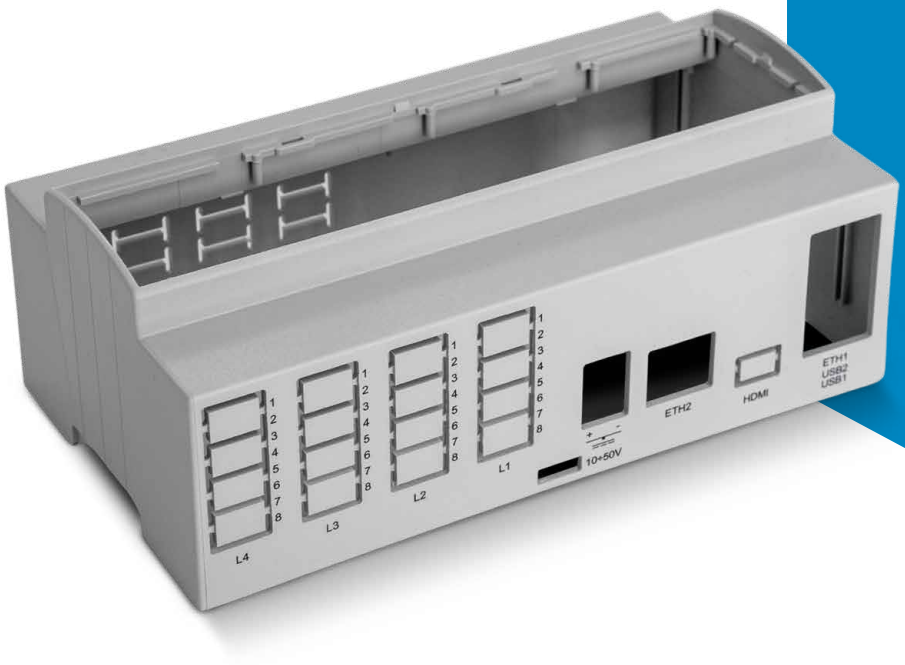
To facilitate a quick, easy, and cost-free management process (aside from basic equipment costs), we have created a clear guide outlining the minimum requirements.

With us, achieving perfection is within your grasp.

MECHANICAL CUSTOMIZATION

GRAPHIC CUSTOMIZATION

MECHANICAL CUSTOMIZATION



Processed materials:

ABS
PC/ABS
PPO
PC
PMMA
PA

Why Italtronic

Complete technical support

We offer technical consulting and assistance in design.

Versatility in machining

We can create any type of opening: slots, holes, pockets, and countersinks.

Precision

We guarantee precise machining with tolerances as per the UNI EN 22768|1-M standard.

REQUIRED TECHNICAL DOCUMENTATION

File: .pdf quoted in mm, .dwg, .dxf or STEP format of the product and/or PCB

Dimensions: Scale 1:1

DXF

with measures PDF

STEP

NOTES with measures

EXTRA COST

If the technical documentation provided is in a different format than requested, or if only the PCB file is supplied, there will be additional costs for reconstructing the ready-to-use file.

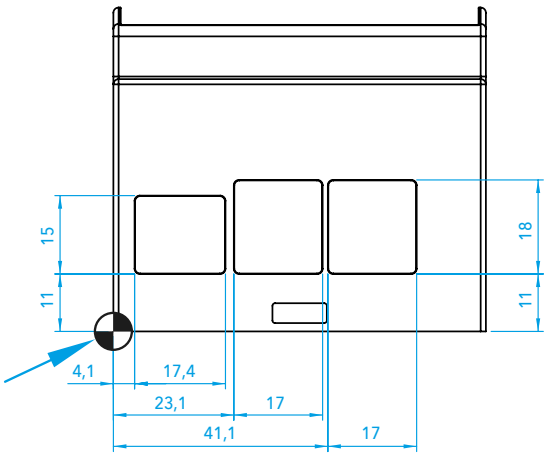
HOW TO QUOTE THE DIMENSIONS OF THE WORK

The measurements should be taken from the **zero point** reference.

Example of an accepted measurement:

0,1 mm accepted

0,01 mm not accepted



DIMENSIONAL TOLERANCES

From 0,5 to 3 mm	**±0,1 mm**
From 3 to 6 mm	**±0,1 mm**
From 6 to 30 mm	**±0,2 mm**
From 30 to 120 mm	**±0,3 mm**
From 120 to 400 mm	**±0,5 mm**

according to general tolerances **UNI EN 22768/1 media (m)**

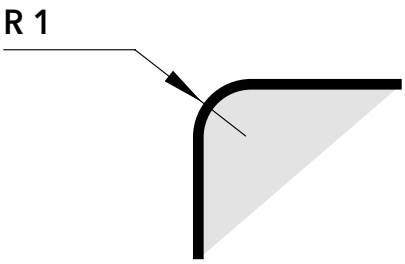
TECHNICAL SPECIFICATIONS

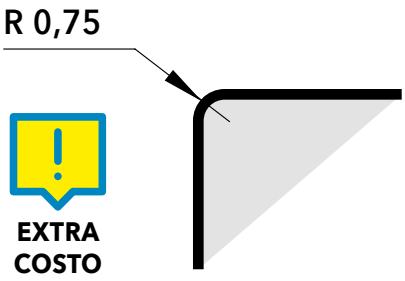
Fillet

The **recommended minimum radius** for machining is **1 mm**.

Exceptionally, upon evaluation by the technical department, it is possible to go down to a minimum of 0.75 mm, subject to additional costs

Our technical office reserves the right to assess the feasibility of non-standard requests.



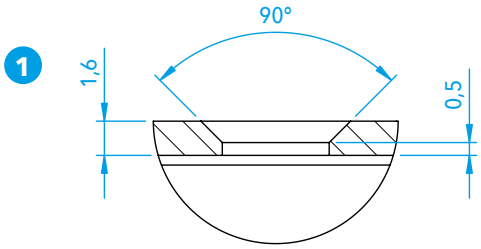


EXTRA COSTO

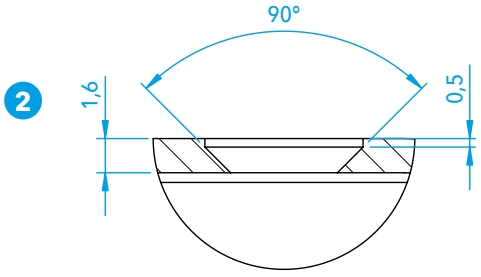
Chamfers and recesses

Types of intervention:

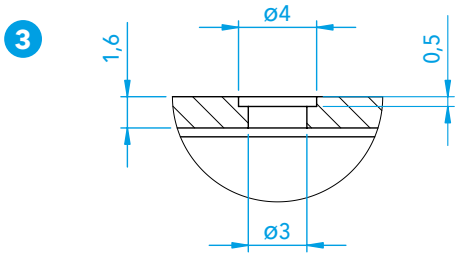
1. Flaring with lower collar to ensure the precise diameter.



2. Flaring with upper collar for screw head housing.



3. Reduction for component housing (es. Light pipes).

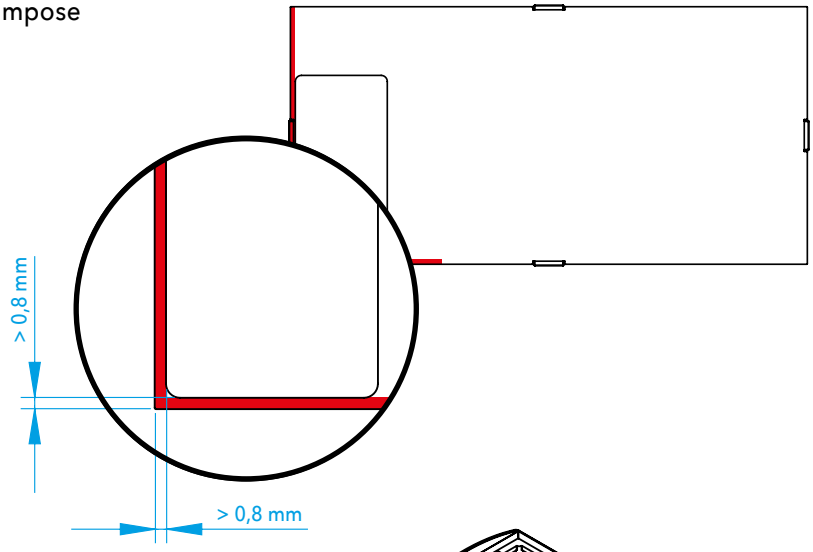


LIGHT PIPES

Provide technical specifications/samples for sizing slots and production testing.

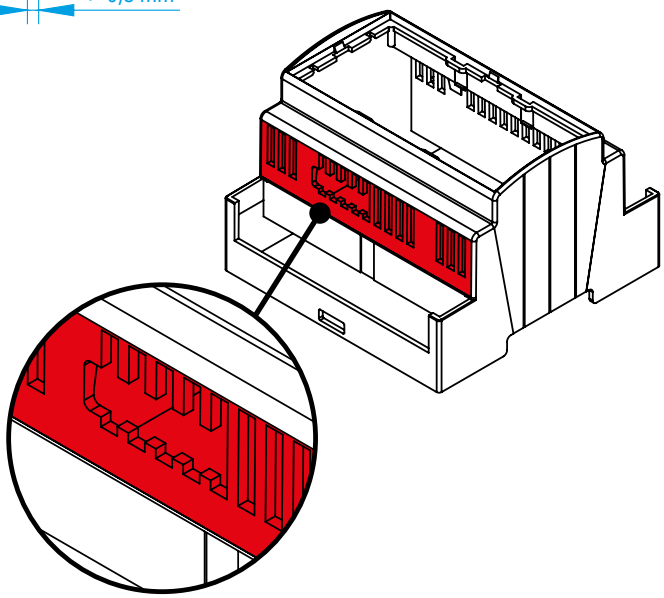
RESTRICTIONS

The characteristics of the equipment may impose restrictions on the feasibility of some works.



Panels:

The minimum distance from the edge must **be greater than 0.8 mm.**



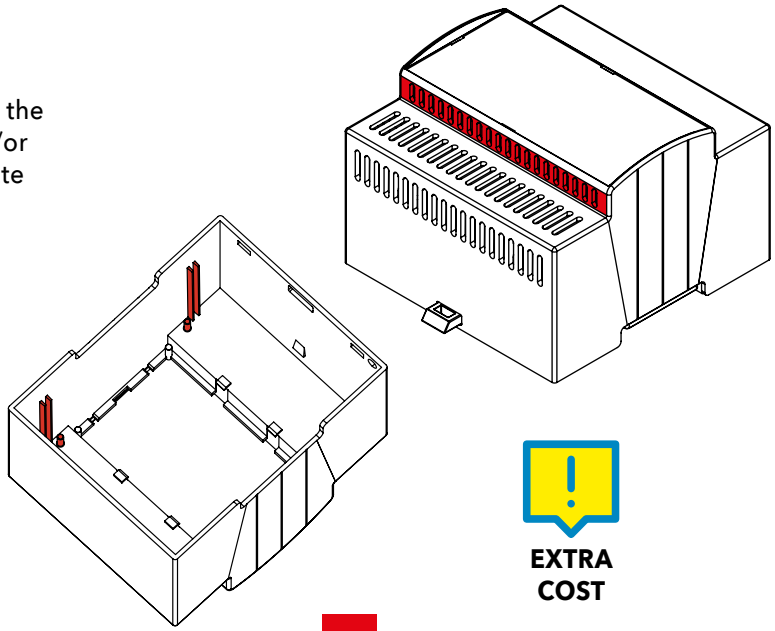
Correspondence with sensitive points:

We do not recommend any work in correspondence for example to the quarries of ventilation.

Areas of intevention:

Our technical support has the right to evaluate the feasibility of special requests (processing and/or removal of product details) and to communicate possible **extra cost for interventions in non-standard areas.**

If the recommendations received from the technical office will not be taken into consideration and the customer will decide to proceed anyway, the company will not accept any complaints on quality.



EXTRA COST

NON-STANDARD AREAS OF INTERVENTION

GRAPHIC CUSTOMIZATION

1. **DIGITAL PRINTING MULTICOLOR**
2. **LASER MARKING**
3. **PAD PRINTING MONOCHROME**
4. **COATING**

With laser marking and digital printing, we can handle productions with QR codes and serial numbers.

Why Italtronic

Brillant colors

To transform the product into a communication tool and capture users attention.

Direct printing

Direct printing on containers eliminates the risk of misalignment and avoids the need of labels.

Durable inks

Resistant to weather and chemicals, they ensure graphics that won't peel, swell, or scratch.

TECHNICAL DOCUMENTATION REQUIRED

All content must be editable (generally, non-vector files are not editable).

Otherwise, costs will be charged based on the complexity of creating a print file. To create a print file, it is necessary to have a drawing/sketch that includes all construction features.

File: vector .pdf, .svg, .ai, .eps

Dimensioni: Scala 1:1

EXTRA COST

If the technical documentation provided is in a different format than requested, there will be an additional charge for reconstructing the ready-to-use file. If logos, symbols (such as image files in .jpg format with a minimum resolution of 300 dpi), or any special characters cannot be supplied, there may be minor discrepancies.

Additional cost for project reconstruction.

DIMENSIONAL TOLERANCES

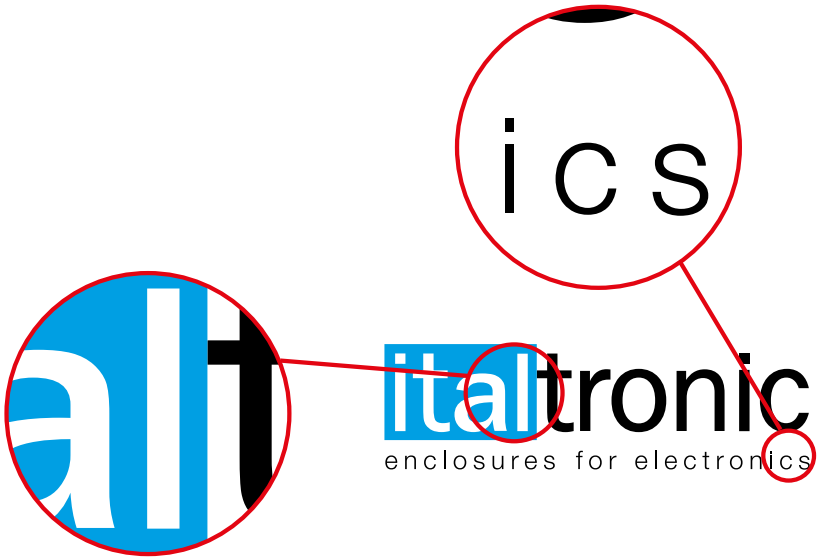
From 0,5 to 3 mm	**±0,1 mm**
From 3 to 6 mm	**±0,1 mm**
From 6 to 30 mm	**±0,2 mm**
From 30 to 120 mm	**±0,3 mm**
From 120 to 400 mm	**±0,5 mm**

According to general tolerances **UNI EN 22768/1 media (m)**

THE OPTIMAL PRINT FILE

1 Vector

Example of a vector file that does not show pixels when enlarged, as it is resolution-independent.



2 Non Vector

Example of a raster/bitmap image file (<300 dpi).

MULTICOLOR DIGITAL PRINTING

Digital printing is particularly suitable when many colors, gradients, and fast executions are required at low costs, for quantities ranging from low to medium-high.

The UV digital printing process with photographic quality easily provides maximum flexibility to create any type of multicolor graphics at an affordable price, even for small batches.
This is a four-color inkjet printing process that is subsequently cured by UV light, featuring a very small pixel size, which may not guarantee the exact color shade requested (RAL or Pantone scale).

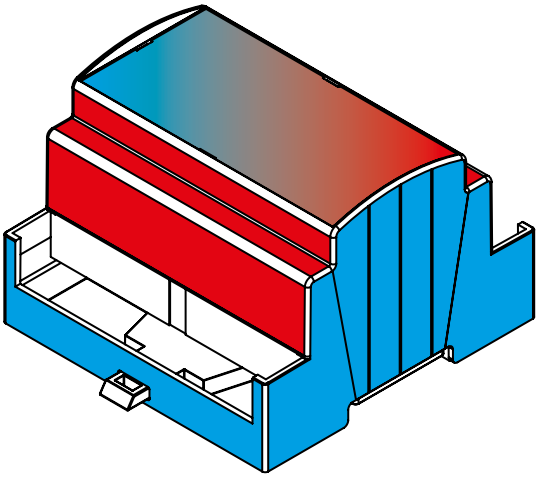
Technical specification

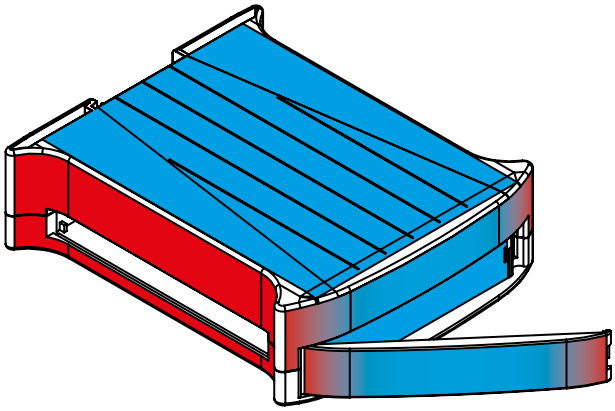
Surfaces: printing on ABS, PC/ABS, PPO, PC
Maximum height difference: 2 mm
Colors: CMYK + white
Resolution: up to 1440x1200 dpi
Printing area maximum: 700x500 mm

AREAS WHERE DIGITAL PRINTING IS RECOMMENDED

AREAS WHERE DIGITAL PRINTING IS NOT ALLOWED

CRITICAL AREA (NO TEXT)



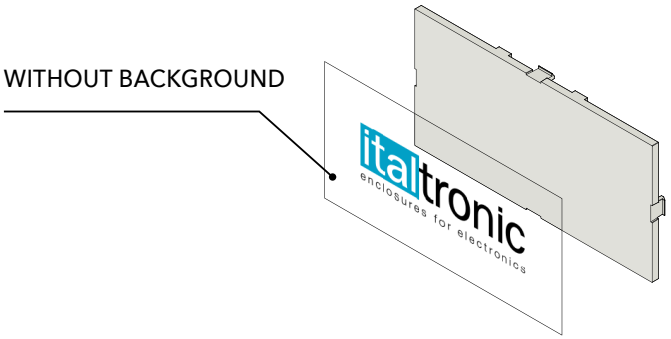


TYPES OF DIGITAL PRINTING

Digital printing is particularly convenient and allows the print of incremental codes.
Below we list **3 main levels** of complexity corresponding to different prices.

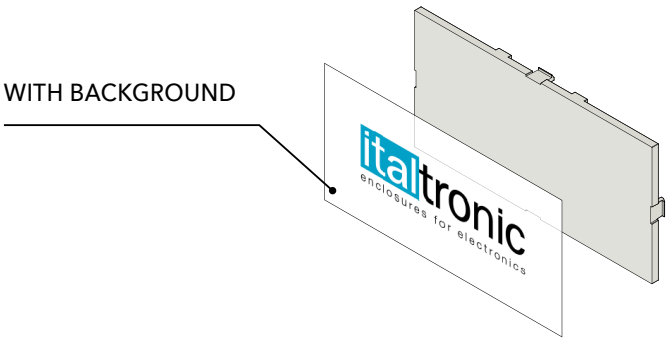
Type 2

Mono and multicolor print **WITHOUT BACKGROUND.**



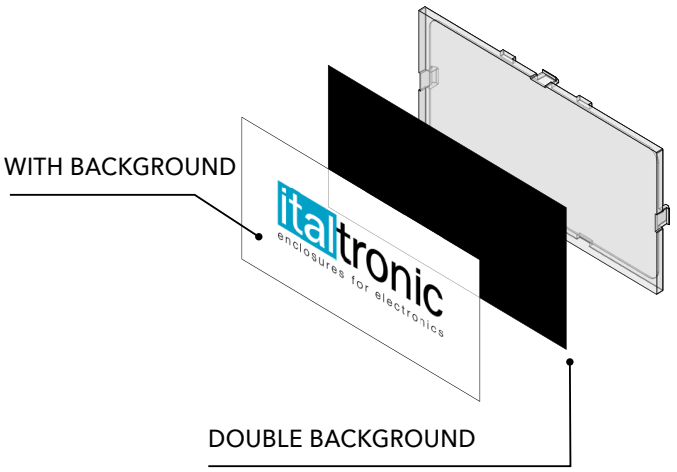
Type 3

Color print **WITH BACKGROUND** (on transparent, coverage is not 100% guaranteed in backlit areas)



Type 4

Color print with **double background.**
Coverage is 100% guaranteed.
Particularly recommended in the presence of light, to avoid cross lighting.



PAD PRINTING

Pad printing is recommended when only **one color** is enough and the printing depth (step) is greater than 2 mm.
We recommend the use of this technology for maximum of 1 RAL or Pantone scale color.

ATTENTION:
With this technology it is not possible to print large areas with full color.

Technical specification

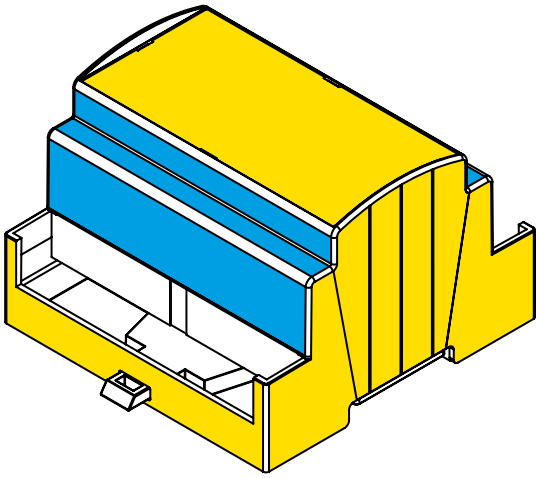
Surfaces: printing on ABS, PC/ABS, PPO, PC, PMMA, PA

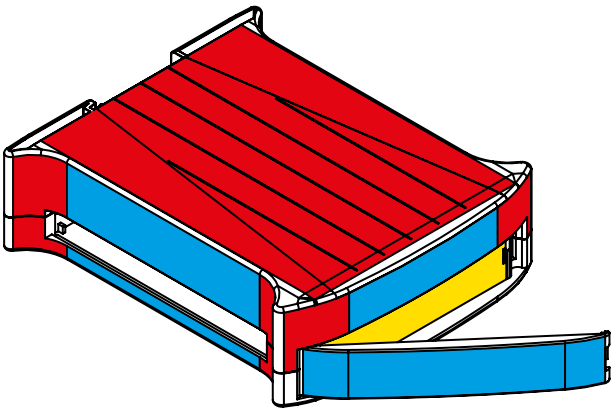
Colors: all

AREAS WHERE PAD PRINTING IS RECOMMENDED

AREAS WHERE WE RECOMMEND DIGITAL PRINTING

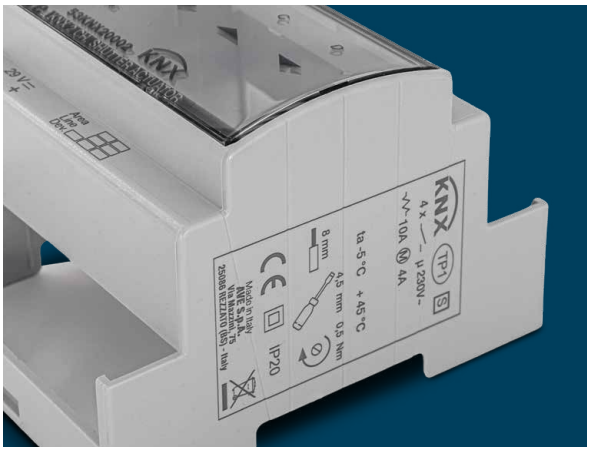
AREAS WHERE PAD PRINTING IS NOT ALLOWED AREAS





LASER MARKING

Laser marking is a technology that utilizes a light source to alter the color of the material. This process produces permanent monochromatic prints even with very fine lines.



Technical specification

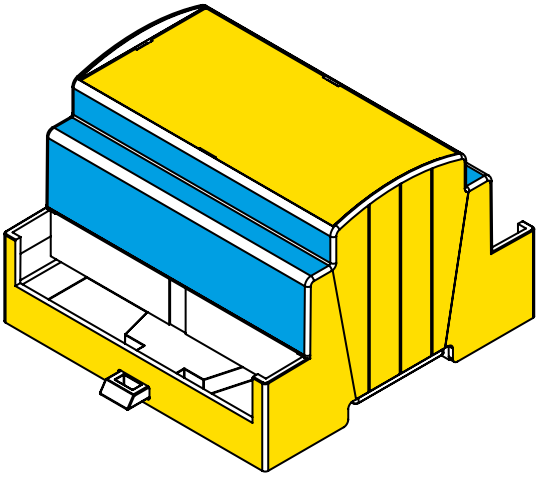
Surfaces: printing on ABS, PC/ABS, PPO
Focal 330 for laser print area Ø290 mm

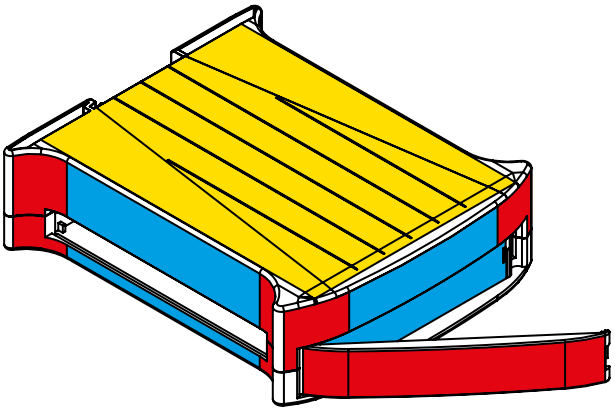
With this technology, it is possible to manage serial numbers, insert incremental numbers, and create incremental QR codes.

AREAS WHERE LASER MARKING IS RECOMMENDED

AREAS WHERE DIGITAL PRINTING IS RECOMMENDED

AREAS WHERE LASER MARKING IS NOT ALLOWED





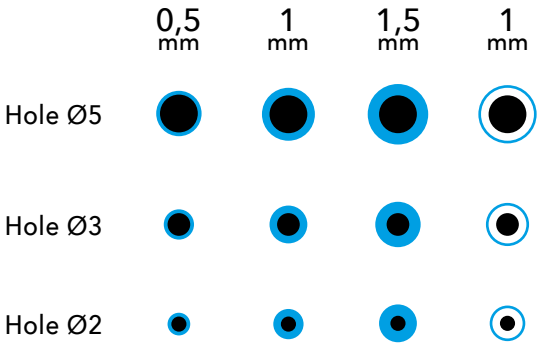
GENERAL GUIDELINES

Below are some general guidelines regarding graphic customization.

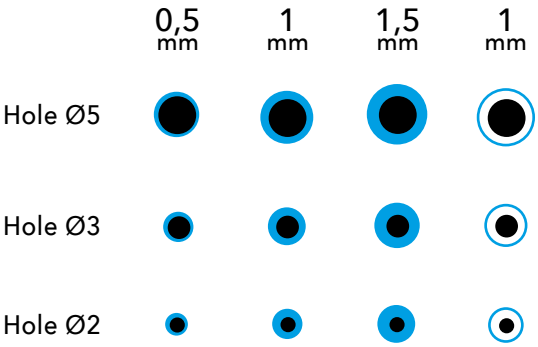
Edges, Outlines, and Distances

Graphic customizations associated with mechanical ones may exhibit some imperfections due to production tolerances.
It is indeed possible that the individual tolerances of the mechanical processing combine with those of the graphic customization, ultimately not guaranteeing the desired aesthetic perfection.

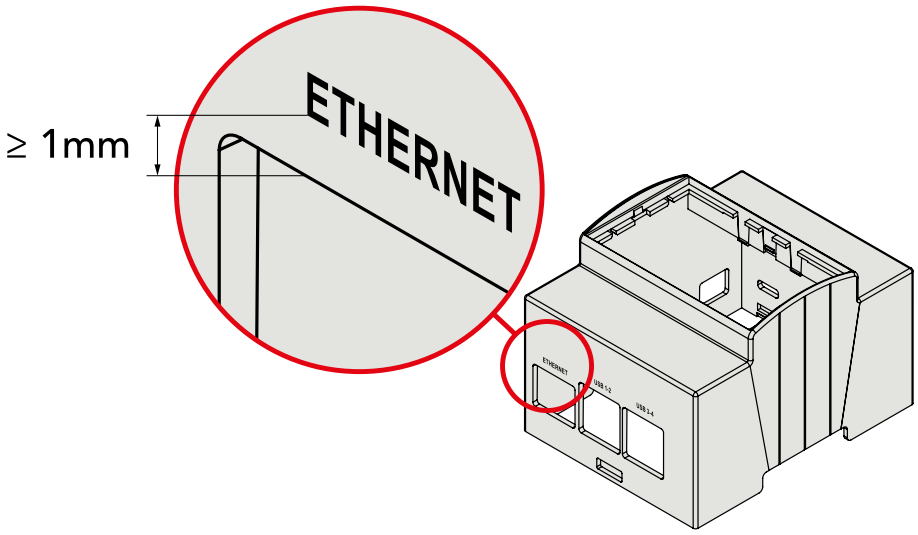
Concentric



Tolerance 0,1 mm



We recommend maintaining a general distance of **at least 1 mm** for text and perforations near the processed areas and edges of the product.



REV. 00

Excellence comes first.

In an increasingly fast-paced market, we keep up. The latest innovation is FastTronic, a "time-saving" service that allows you to receive our containers, complete with graphic and mechanical customizations, with a fast and guaranteed delivery in just six days from the order date.

High-Speed Customization.

For more information, scan the QR code:

fasttronic

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