

TECHNICAL SPECIFICATIONS

The Vitop Roll Handle

The Vitop Handle is designed for insertion into cardboard boxes. The cardboard boxes required a special cut-out in the top flaps so once the handle is inserted, it cannot inadvertently be pulled out when the consumer lifts the box.

The Vitop Roll handle is a solution to feed handles into an automatic handle insertion machine.

1. Composition

The Vitop Roll handle is made of polyethylene (HDPE).

2. Color Options

Below is a table with the color options and corresponding codes.

CODE	DESCRIPTION
991983	BLACK – Roll Handle
991985	TRANSLUCENT (NATURAL) - Roll Handle
1188468	WHITE – Roll Handle



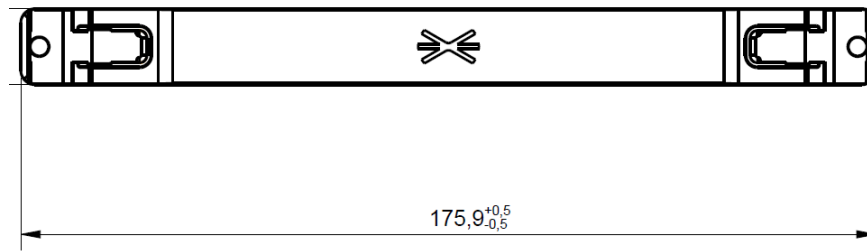
3. Performance

3.1 Weight

- Colored version: 3.4 ± 0.2 g
- Translucent (Natural) version: 3.3 ± 0.2 g

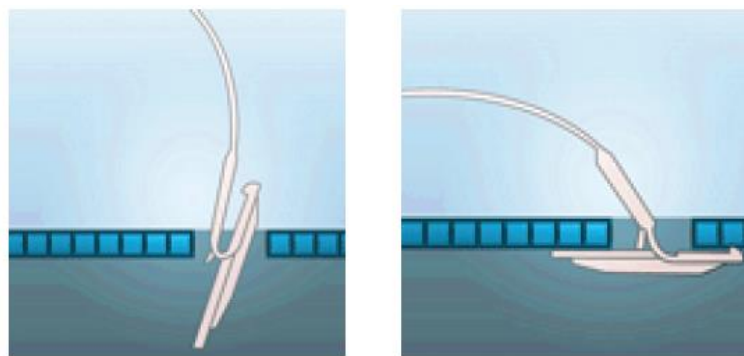
3.2 Overall dimensions

Below is an image of a handle. This shows the critical dimension necessary relative to handle insertion machines. Typical dimensions provided for information purposes. Non-binding and not to be considered as part of our technical specifications.



3.3 Resistance

Vitop handles are inserted into Bag-In-Box boxes or other boxes. The limiting factor as to the weight that can be supported is always the resistance of the box rather than the resistance of the handle. Generally the maximum box size that receives Vitop Handles is 5 liters (< 6 kg) and at this weight level there are no handle resistance issues, as long as the box is of an acceptable quality. If customers want to insert our handles into a package weighing over 6 kg they should test suitability of our handles to the specific boxes.



3.4 Residual Box Space

As the handle is inserted into a box there is need for a residual space sufficiently deep so that the handle does not touch the surface of the bag or internal package or product. For many applications, a residual box space of 30 mm is sufficient but customers must test this before any commercial launch. Please see our user recommendations.

4. Packaging

Partial shipment (container or truck):

- Number of units per roll: 3 392
- Number of roll per pallet: 36
- Number of units per pallet: 122 112
- Pallet size: 120 x 120 x 175 cm

Full 20' container:

- Number of units per roll: 3 072
- Number of roll per pallet: 36
- Number of units per pallet: 110 592
- Pallet size: 114 x 114 x 175 cm

Each roll is identified with a proper label with an identification code that includes the traceability code.

In order to guarantee a correct traceability system, the traceability code must be recorded by the manufacturers in their production records. Vitop's code must be retrievable when identifying a specific batch of a filled boxes with the traceability code used by the filler.

5. Storage specification and shelf-life

Store the handles only in the original packaging and keep them sealed until use.

In order to prevent damage to the handles, no pallet should be stacked on another one.

The temperature of the zone where the handles are stocked shall be over 4°C and less than 30°C with relative humidity under 75%. This storage area should be in an inside room that is dry, clean and exempt from odorous or poisonous compounds that could potentially contaminate our product.

Handles however should be brought to the temperature and humidity conditions prevailing in the room where they are to be converted into finished packages prior to any conversion.

Vitop suggests to use FIFO stock management.

The period of delivery of the handles by Vitop and their installation on the box by the filler shall not exceed one year. Also, the period between delivery of the handles by Vitop to the filler and their use by the final consumer must not exceed two and half years.

6. Reference certification

Vitop has adopted an appropriate Quality System and internal procedure certified by:

- **UNI EN ISO 9001** **(Quality Management System)**
- **UNI EN ISO 22000** **(Food Safety Management)**

7. Responsibility

The information provided above is supplied in good faith and it does not comprise a guarantee or warranty of any kind either expressed or implied. This data should be considered as average typical properties observed rather than a guaranteed specification.

It is the customer's responsibility to test the suitability of these products for its specific application.

Vitop cannot be considered responsible for any improper use of its products by the buyer and/or the final consumer and assumes no liability for any incidents that may arise from the use of this data.

As the regulations and products mentioned in this statement change over time, Vitop advises its customers to ask for a new declaration periodically.

It is the responsibility of the end user to assure compliance with any packaging regulations applicable to the end use for which the product is manufactured.

This declaration cancels any previous version.