Tubing 25/12 mm

Heat-shrink tubing 1 m, transparent
User manual



Read this manual before use. The tubing is shrunk with hot air – observe the safety instructions in Chapter 2.1.

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1. Product description

1.1 What it is for

Transparent heat-shrinkable tubing **without adhesive** is used to insulate and mechanically protect electronics and connections. When heated, it shrinks and fits tightly around the object placed inside it. Thanks to the transparent material, the insulated component, its markings and indicator LEDs remain visible even after shrinking.

Given its size, the tubing is particularly suitable for insulating **larger RC receivers and video transmitters (VTX)**, or **smaller 2S batteries**. It is supplied in a length of 1 m, from which you cut the pieces you need. If you would like a longer length in one piece, please state this in the order note.



Heat-shrink tubing 25/12 mm – rolled-up piece, 1 m long

1.2 Technical data and package contents

Product designation	Heat-shrink tubing 25/12 mm, transparent
Type	heat-shrinkable, without adhesive
Diameter before shrinking	25 mm
Flat width	40 mm
Shrink ratio	2:1
Thickness	0.3 mm
Temperature resistance	125 °C
Length	1 m
Package contents	1 m of tubing

Not included in the package: a heat gun or any other heat source. Neither the manufacturer nor the material of the tubing is stated in the product documentation.

2. Use

2.1 Safety at work

- Shrink the tubing with a **heat gun**. Do not use an open flame (lighter, torch) – you can easily burn through the tubing, leave soot on it, and there is a risk of damaging or igniting the insulated electronics.
- The heat gun, the tubing and the insulated object are hot during work and for a while afterwards. Do not touch them and do not put the heat gun down on a flammable surface.
- Work in a well-ventilated area on a non-flammable surface. Overheated plastic gives off fumes – do not inhale them.
- Keep the tubing and tools out of the reach of children.

2.2 Choosing the size and preparation

- The object must **pass freely through the tubing before shrinking**. Its circumference must therefore fit within the inner circumference of the tubing, i.e. within twice the flat width (approx. 80 mm).
- With a 2:1 ratio, the tubing shrinks to no less than half of its original diameter. To hold firmly on the object, the object's cross-section must be larger than the fully shrunk tubing.
- Cut a piece slightly longer than the object to be insulated. The tubing may also shorten slightly in length when shrinking, so an overlap at both ends ensures that the object stays fully covered.
- Before sliding the tubing on, check the electronics to be insulated: cables and antennas should be connected and routed as they will be in operation, and no joint may be short-circuited.

2.3 Shrinking procedure

① Slide the tubing onto the object and centre it so that it overlaps at both ends.

② Hold the heat gun a few centimetres away and heat the tubing **evenly** – start in the middle and work towards the ends while rotating the object. This pushes the air out of the tubing and no bubbles remain.

③ As soon as the tubing fits snugly on the object, stop heating. Further heating will not shrink it any more; it only increases the risk of overheating the plastic and the insulated electronics.

④ Let the object cool down and check that the tubing fits tightly and is not burnt through or wrinkled anywhere.

2.4 Insulating receivers, video transmitters and batteries

- A **video transmitter (VTX)** heats up during operation. Do not cover its heatsink or the surface intended for heat dissipation with the tubing – cut an opening in the tubing above them.
- Leave antenna connectors, buttons and openings for indicator LEDs accessible. Carefully cut the opening into the cooled tubing with small scissors or a sharp knife without damaging the components underneath.
- **LiPo batteries** are sensitive to heat. Heat them for as short a time as possible with a gentle airflow, and shrink the tubing onto them at storage charge (3.8 V/cell, 7.6 V for a 2S battery). Never shrink tubing onto a damaged, swollen or hot battery.
- Tubing without adhesive is **not waterproof**. It protects against touch, dust and abrasion, but not against water and moisture.
- Do not expose the finished insulation to temperatures higher than the stated temperature resistance of 125 °C.

2.5 Removing the tubing

Shrunk tubing cannot be stretched again or reused. When replacing or repairing the insulated electronics, carefully cut the tubing lengthwise at a point where there are no components or wires underneath, and pull it off. Never remove the tubing by heating it again.

3. Information for the EU and Czech Market

3.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.com

3.2 Disposal

Heat-shrink tubing **is not electrical equipment** and is not subject to the take-back of waste electrical equipment.

- Dispose of offcuts and unused pieces of tubing in the plastics container or in mixed municipal waste in accordance with the rules of your municipality. If you are not sure where they belong, dispose of them in mixed waste.
- **Do not burn** tubing remnants – burning plastics produces harmful fumes.
- The electronics you have insulated with the tubing (receiver, video transmitter, battery) are electrical equipment or batteries. At the end of their service life, hand them over at a take-back point for electrical equipment and batteries, not in mixed waste.
- Dispose of the product packaging in sorted waste according to the type of material.

4. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 3.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.