20AWG wire

Silicone-insulated wire, 1 metre
User manual



Read the safety instructions in Chapter 3 before soldering and wiring.

www.rotorama.com

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1. Product description

1.1 Intended use

20AWG wire with silicone insulation, sold in a length of **1 metre**. It is used for wiring electronics in models and FPV drones. The 20AWG size is particularly suitable for connecting motors to electronic speed controllers (ESC) – for example when extending or replacing motor wires.

The silicone insulation is flexible, so the wire is easy to route through the model's frame. The wire is supplied without connectors; prepare and solder the ends as required.



Close-up of the wire with the marking on the insulation

1.2 Specifications and package contents

Product designation	20AWG wire (1 metre)
Conductor size	20AWG
Insulation	silicone
Colour	black
Length	1 m
Marking on insulation	20AWG 200°C
Package contents	1 metre of wire
Not included	connectors, heat-shrink tubing, solder, tools

※ No maximum current or rated voltage is specified for this wire. Choose the current load according to the recommendations of the manufacturer of the connected components (motor, ESC).

2. Use

2.1 What you will need

- a soldering iron with a suitable tip and solder with flux,
- wire strippers or a sharp knife, and side cutters,
- heat-shrink tubing of a suitable diameter,
- a multimeter for checking the joints.

2.2 Preparing the wire

① Measure the required length. Allow a small reserve for bends, but avoid unnecessary loops.

② Cut the wire to length with side cutters.

③ Strip only as much insulation as the solder pad or connector requires. Take care not to nick the conductor.

④ Lightly twist the exposed conductor and tin the end.

⑤ If you are joining the wire to another wire or to a connector, slide heat-shrink tubing onto it beforehand.

2.3 Soldering

- Tin both the solder pad and the wire end beforehand; the joint then only needs to be heated briefly.
- Do not move the wire while the solder is cooling.
- A good joint is smooth and shiny, and the solder flows well around the conductor. Redo any dull, grainy or ball-shaped joint.
- Do not overheat the solder pads on the ESC or flight controller (FC) board – they may lift off the board.
- Insulate joints between wires and with connectors with heat-shrink tubing.

2.4 Checking and routing the wire

- Before connecting a battery for the first time, use a multimeter to check that there is no short circuit between adjacent joints or to the frame.
- We recommend making the first battery connection through a current limiter (smoke stopper).
- Route the wire away from the propellers so that it does not rub against sharp edges of the frame. Secure it with a cable tie and avoid sharp bends at the soldered joint.
- On a motor, the order of the three phase wires determines the direction of rotation. You can reverse it by swapping any two wires or in the ESC settings.

3. Safety and storage

3.1 Safety instructions

- Always solder and modify wiring with the **battery disconnected**.
- The soldering iron tip and freshly soldered joints are hot – risk of burns.
- Solder in a well-ventilated area and do not inhale flux fumes. Wear safety glasses when cutting and soldering.
- A short circuit in a circuit powered by a Li-Po battery can cause a fire. Always check the joints before connecting power.
- Do not use a wire with damaged insulation; replace it.
- Keep wire and insulation offcuts out of the reach of children and animals.

3.2 Storage and inspection

- Store the wire in a dry place away from direct sunlight.
- Check the insulation before use – do not use a wire that is cut or otherwise damaged.
- Inspect the wiring in your model regularly, especially after a crash.

※ The law of the country in which you use the product is decisive for its use. The legal references in Chapters 4 and 5 are based on Czech law, as the product is sold by a Czech company.

4. Information for the EU and Czech Market

4.1 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

4.2 Disposal



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu.

5. 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 4.1.
- 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.