

ROBfin Kayak Cross Buoy System

Stable, safe and durable buoy system for Kayak Cross



Developed and tested in real whitewater conditions.

Product Introduction

The **buoy suspension system** is designed for Kayak Cross courses.

Developed in accordance with the requirements of the Czech Canoe Union Czech Kayak Cross National Team. Homologated system by ICF for all official venues.

The goal of the development was to eliminate the long-term issues of conventional systems — damage to suspension components, risk of injury to athletes, complicated installation, and buoy instability after impact.

Designed for maximum stability, safety, and long life span.



Key Advantages of the ROBfin Kayak Cross

Designed for extreme loads. Tested and proven by the Czech national team.



Faster stabilization after impact.

After contact with the athlete, the buoy immediately returns to its original position — similar to hinged slalom gates in alpine skiing.



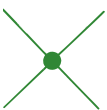
Enhanced safety for athletes

Exceptionally smooth welds minimize the risk of hand and arm injuries.



Durable construction with long service life

The impact energy is distributed between eight metal eyelets and the aluminum frame by means of an elastic cord.



Lightweight and easily disassembled suspension frame

Quick assembly and disassembly, with easy transport.



Tested in extreme conditions

The buoys are tested to twice the recommended working pressure (25,000 Pa).



Robfin Kayak Cross Configuration

Kayak Cross Racing Buoy

Kayak Cross Buoy – Green

Length: 2050 mm

Diameter: 240 mm

Buoy weight: 2.00 kg

Weight including suspension frame: 5.95 kg

Working pressure: 25,000 Pa

Color: GREEN, BLACK, WHITE



Kayak Cross Buoy – Red

Length: 2050 mm

Diameter: 240 mm

Buoy weight: 2.40 kg

Weight including suspension frame: 6.35 kg

Working pressure: 25,000 Pa

Color: RED, BLACK, WHITE



Kayak Cross Buoy – Rollzone

Length: 6010 mm

Diameter: 240 mm

Buoy weight: 4.50 kg

Working pressure: 25,000 Pa

Color: YELLOW, BLACK



Suspension System

Suspension Frame

4 rods, each 1000 mm in length

Rod diameter: 30 mm

Frame weight: 3.95 kg

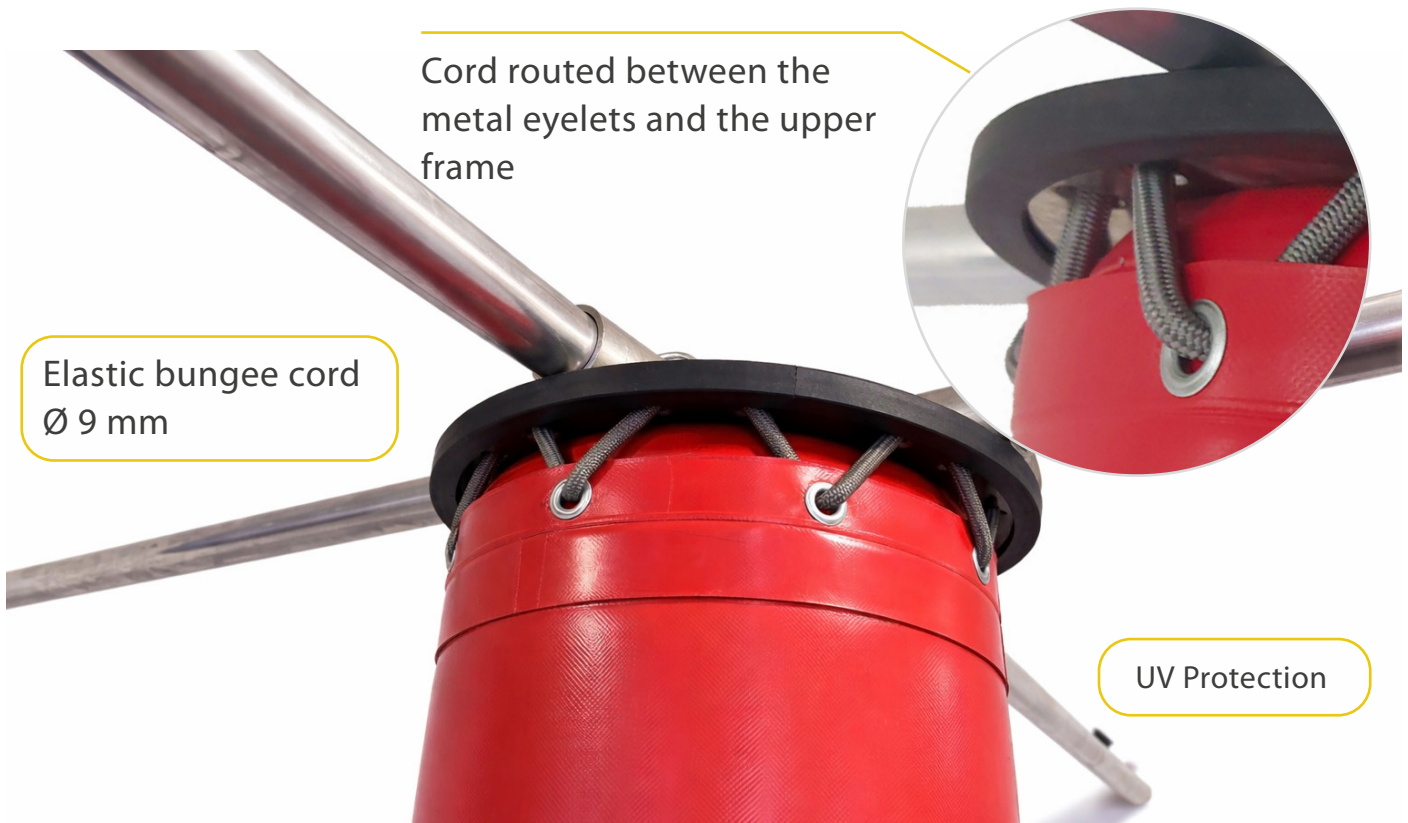
Hook spacing for cable attachment: 1450 mm



The upper frame is made of aluminum and consists of a circular section attached to the buoy and four aluminum arms. Attachment to the slalom course cables is secured using standard hooks.

Suspension System and Inflation

Buoy Attachment to the Frame



Safe Inflation System

The buoy is inflated with air to a nominal working pressure of 0.25 bar.

The system is tested to withstand up to twice this pressure (e.g., when exposed to sunlight).

The valve is a plastic HK type, developed specifically for ROBfin.



References

Kayak Cross buoys have so far been delivered to Italy, Slovakia, France, and the Czech Republic as training models.

"Finally, a gate that always stays in place without swinging!"

Jakub Krejčí

Czech K1 National Team

"I appreciate that I no longer need to wear gloves to protect my hands and arms."

Matyáš Novák

Czech K1 National Team

"A lightweight and durable system that is easy to install and dismantle. Paddler-friendly design with a securely positioned buoy."

Jiří Prskavec

Coach of the Czech National Team

Manufacturer

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