SXK-BAC01

Carbon Fiber Foam Barrier Arm

A lightweight round barrier arm combining a carbon fiber tube, a cushioning foam sleeve and high-reflectivity red-and-white film for visible vehicle access control.



Carbon fiber mounting section with a foam-covered reflective arm

Reference length	Weight at 2.5 m（max 4m)	Carbon tube wall	Finished diameter
2.5 m	1.35 kg	1.5 mm	Ø80 mm

Product highlights

Super light. The 2.5 m reference arm weighs 1.35 kg, supporting convenient handling and a low moving mass.

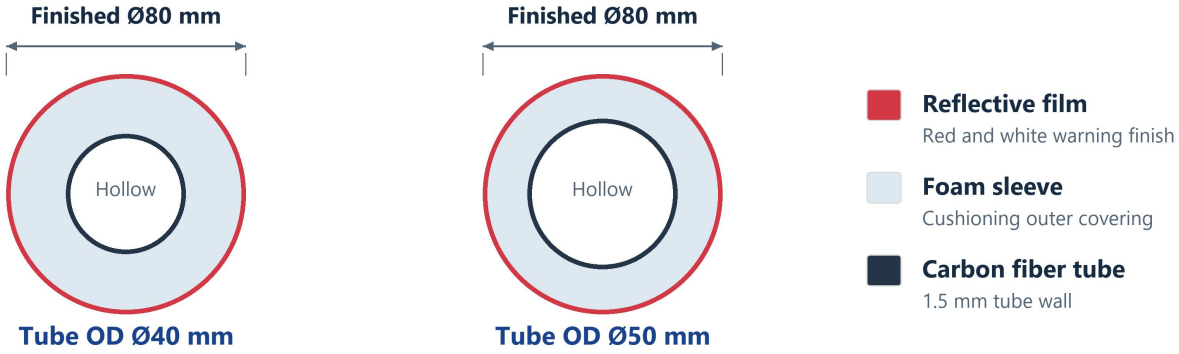
Stable construction. The 1.5 mm carbon fiber tube wall provides a rigid structural core.

High visibility. High-reflectivity red-and-white film makes the arm easier to identify under incident light.

Foam protection. The cushioning sleeve helps soften incidental contact along the covered section.

Construction and specifications

Choose a Ø40 mm or Ø50 mm carbon fiber tube. Both options have a finished outside diameter of Ø80 mm after the foam sleeve and reflective film are applied.



Conceptual cross sections | Film and layer details are illustrative | Not a manufacturing drawing

Parameter	Specification
Model	SXK-BAC01
Product type	Straight round boom barrier arm with protective foam covering
Structural material	Carbon fiber tube
Tube outside diameter	Ø40 mm or Ø50 mm
Tube wall thickness	1.5 mm
Finished outside diameter	Ø80 mm, including foam and reflective film
Reference arm length	2.5 m, max 4m
Reference arm weight	1.35 kg for the 50mm 2.5m length arm configuration
Protective covering	Foam sleeve around the covered arm section
Visibility finish	High-reflectivity film; alternating red and white
Mounting section	Exposed carbon fiber tube; holder and fastening pattern to be matched
Application	Compatible parking and vehicle access barrier operators

Diameter options

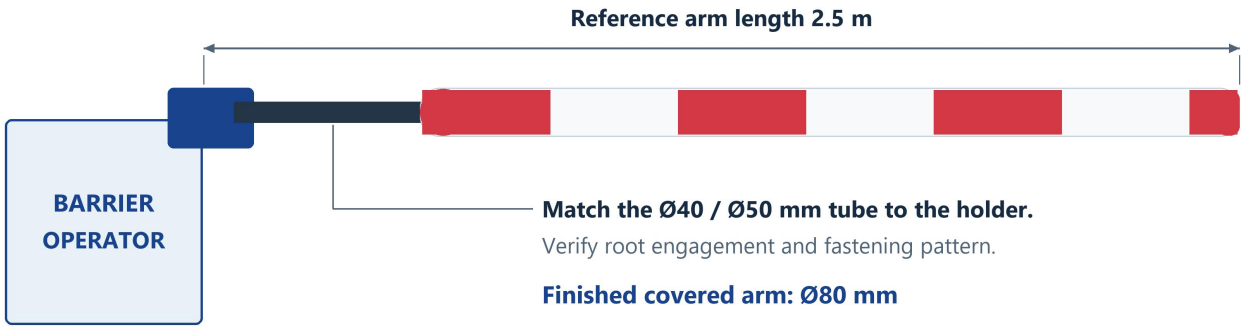
Tube OD	Tube wall	Finished OD	Calculated covering build
Ø40 mm	1.5 mm	Ø80 mm	20 mm radial build
Ø50 mm	1.5 mm	Ø80 mm	15 mm radial build

Covering build = (finished OD - tube OD) / 2. The calculated value includes foam and film together; it is not the foam-only thickness. Dimensional tolerances are to be confirmed.

Selection and installation

Match the tube and mounting interface to the barrier operator, then balance and commission the complete assembly according to the operator instructions.

ARM AND HOLDER INTERFACE



Conceptual mounting view; usable lane clearance depends on the installed holder and overlap.

Selection item	Check for the installation
Holder compatibility	Match the selected Ø40 mm or Ø50 mm tube to the approved clamp or adapter.
Root connection	Verify engagement length, fixing holes and fastening arrangement before fitting.
Arm balance	Set the spring or counterbalance for the actual arm and installed accessories.
Movement and clearance	Check travel limits and the arm path throughout opening and closing.
Protective functions	Retain and test the barrier system vehicle detection and obstruction protection.

Commissioning sequence

01 Confirm the configuration. Specify tube OD, finished OD, arm length and the operator holder interface.

02 Fit and balance. Secure the arm using the matched holder and fasteners. Adjust the operator balance for the installed assembly.

03 Verify movement. Set the travel limits and operating behavior, then check clearance through the full movement path.

04 Test vehicle protection. Verify the connected detection and obstruction functions before returning the lane to service.

Applications and care

Suitable for parking entrances, residential and commercial vehicle access lanes, and controlled entry or exit points when paired with a compatible barrier operator.

Keep the reflective surface clean. Inspect the foam covering, tube and holder for damage or loose fasteners, and replace damaged components according to the system maintenance instructions.

Foam adds cushioning to the covered arm. Complete system protection and movement performance depend on the barrier operator, its configuration and its safety devices.

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Specifications are subject to change without notice. Please confirm final configuration and certifications with our sales team before ordering.