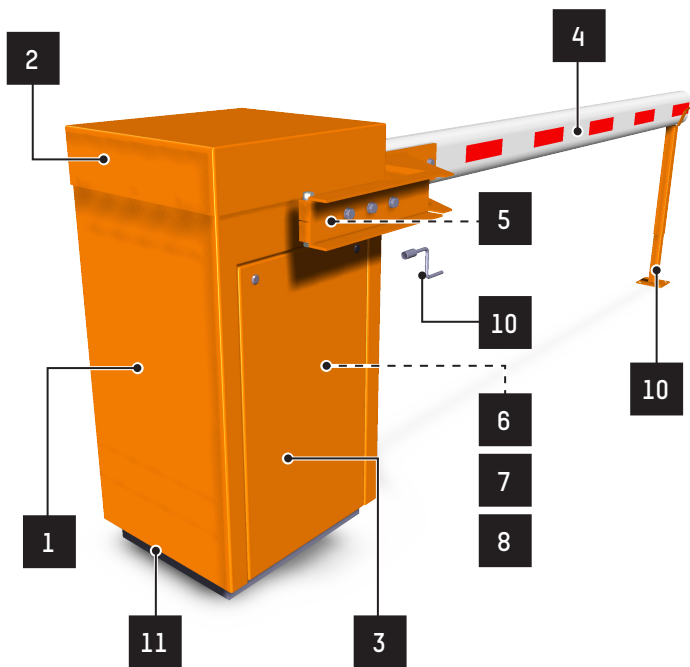


BL 53

Technical datasheet

Rev. B • Update 06/2026



The **BL 53** rising barrier is a heavy-duty high security barrier, with reinforced oval boom arm section, specially developed for installation where a high level of security is required.

STANDARD RAL COLOURS



RAL 2000
Orange

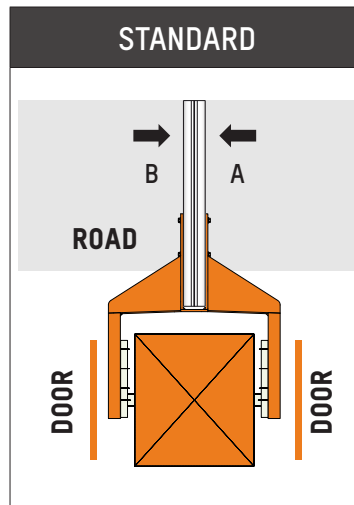
Note: All other colors must be specified when ordering.

DESCRIPTION:


1. Housing made of curved and welded steel plates, $\frac{1}{8}$ " to $\frac{3}{8}$ " (3 to 10 mm) thick, with welded steel profile framework.
2. Removable top cover.
3. Two side doors with peripheral weather seals and a key lock to insure easy access to the internal mechanism.
4. Aluminium tube barrier arm with reinforced oval section of 4"x7" (100 x 175 mm), white lacquered finish with red reflective stripes and end-sealing cap.
5. Arm shaft mounted on two life-lubricated ball bearings.
6. Electro-mechanical assembly comprising:
 - Three-phase asynchronous motor,
 - Worm gear speed reducer, lubricated for life,
 - Safety torque limiter with adjustable friction,
 - Pulley-and-V-belt drive system, allowing adjustment of the operating speed according to the boom length,
 - Motion transmission through a crank-and-connecting-rod mechanism with ball-joint clevis articulations, ensuring smooth acceleration and deceleration without shock, as well as mechanical locking of the boom in the end positions,
 - Limit switches activated by adjustable cams.
7. Barrier arm balanced by a compression spring.
8. Programmable electronic control logic allowing various control operations and/or complementary accessories (see related technical data sheet). The logic is protected from dust and condensation by a removable top cover. Electrical protection is secured by a bipolar circuit-breaker.
9. Emergency crank with safety cut-out for manual barrier operation in the event of power failure.
10. Tip support (optional).
11. Fixing frame made of threaded rods fixed in the customer provided concrete base.



CONFIGURATIONS



STANDARD TECHNICAL CHARACTERISTICS

Power supply	Single-phase 120 VAC, 50/60 Hz + Grounding. ^[1]
Nominal power consumption	475 W without heating 925 W with 450 W heating 1275 W with 800 W heating
Motor	3-phase asynchronous, 375 W
Gearbox	Worm gear, lifetime lubricated
Thermostatic heater	450 - 800 W.
Ambient operation temperature	From 14 to 122 °F (-10 to +50 °C).
Boom arm balancing	By adjustable spring(s)
Useful length of boom arm (L)	From 177 ³ / ₁₆ " to 315 ¹⁵ / ₁₆ " (4.5 to 8 meters).
Position of boom arm	Central
Operation time	8 to 12 sec. according to the boom's range and the installed options
Tolerated relative humidity	95%, without condensation
Net weight (without boom arm)	± 750 lb (340 kg)
MCBF (Mean Cycle Between Failure)	1,500,000 cycles, in compliance with recommended maintenance
Protection index	IP44
Limit switch sensor	IP65
	Product Approved under SPE-1000:21 ² .

^[1] Not to be connected to a floating network or to high-impedance grounded industrial distribution network.

^[2] Such evaluation does not constitute certification but is an accepted form of approval of electrical products by the authority having jurisdiction

SURFACE TREATMENT

- Internal mechanical parts electro-galvanized.
- Complete housing: KTL coating + 1 coat of two-component epoxy anti-rust primer + 1 coat of two-component textured polyurethane finish. Standard color = orange, RAL 2000.

WORK TO BE PROVIDED BY OTHERS

- Anchoring.
- Power source cabling.
- Cabling and connection of access control devices.

Note: Follow the technical manual installation instructions.

OPTIONS

TIP SUPPORT

- Height-adjustable tip support.
- Electromagnetic tip support.
- Folding tip support.

SECURITY & SAFETY

- Safety edge under arm.
- Audible alarm during movement.

CONTROL & COMMAND

- Push button box - 2 buttons (opening / closing).
- Push button box - 3 buttons (opening / closing / stop).
- Push button box - 2 push buttons + 1 switch (3 positions).^[1]
- Key switch on the housing.^[2]
- Radio transmitter/receiver - 2 or 4 channels.
- Presence sensor on rail - Single channel or double channel.
- Photo-electric cell - Transmitter / Receiver.
- Support post for photo-electric cell (H = $27 \frac{9}{16}$ " (0.7 m)).
- Input / output (I/O) extension card for AS1620 logic board (AS1623)

ENVIRONMENT

- Heating (450 - 800 W).

SIGNALIZATION

- LEDs on arm - Per pair (red).
- LEDs on arm - Per pair (red/green).
- Traffic lights ($\emptyset 7 \frac{7}{8}$ " (200 mm)) - Red/green LEDs - Fixed on a support post on the barrier
- Traffic lights ($\emptyset 7 \frac{7}{8}$ " (200 mm)) - Red/green LEDs - Standalone unit.
- Traffic lights ($\emptyset 7 \frac{7}{8}$ " (200 mm)) - Orange LEDs - Standalone unit.
- Extension board AS1049 (electronic board for third-party traffic lights).
- Aluminum traffic sign ($\emptyset 15 \frac{3}{4}$ " (400 mm)).

AESTHETIC

- Non standard color.
- Treatment for aggressive saline environment.^[3]
- Raised base ($2 \frac{3}{8}$ " (60 mm) thick in RAL 9005 painted steel).

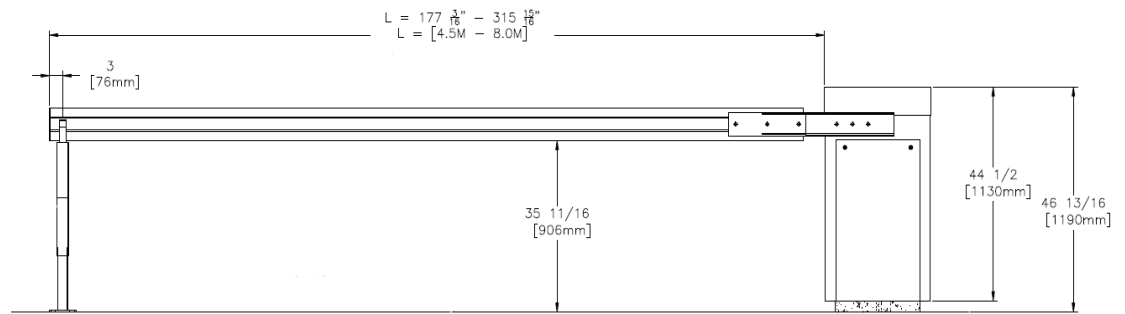
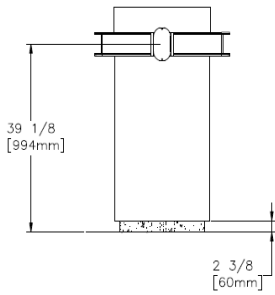
Note : For restrictions on options, please contact us.

^[1] Opening / Closing / Switch for Stop command.

^[2] Automatic / locked open / locked closed.

^[3] Recommended for an installation within 6.2 miles (10 km) of the coast: sandblasting + Alu Zinc plating 80µm outside (40µm inside) + polyzinc 80µm + 80µm powder coat.

STANDARD DIMENSIONS



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