STABILA®

How true pro's measure

GREEN BEAM

LAX 60 G

Operating instructions

www.stabila.com

Contents

1. Intended use

Congratulations on the purchase of your STABILA measuring tool.
The STABILA LAX 60 G is an easy-to-use cross line laser for horizontal and vertical levelling. It is self-levelling within a range of ± 4°.
The laser lines are pulsed, which makes it possible to work over greater distances using a special STABILA line receiver. Receivers must be suitable for green laser beams. For more information refer to the operating instructions for the line receiver.
The green colour of the laser beams also ensures that you can see them perfectly, even in bright light conditions.

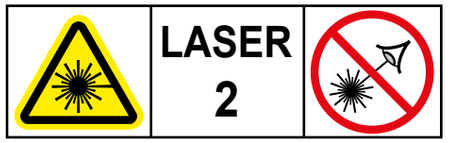
If you still have questions after reading through the operating instructions, you can obtain advice by telephone:

+49 63 46 3 09 0

Equipment and functions:

- Pulsed laser lines
- 1x vertical laser line
- 1x horizontal laser line
- Manual mode
- Mounting with rare-earth magnets
- 1/4" tripod socket
- Target plate
- Fabric bag

2. Safety instructions for laser units



IEC60825-1: 2014
EN 60825-1: 2014 / A11: 2021

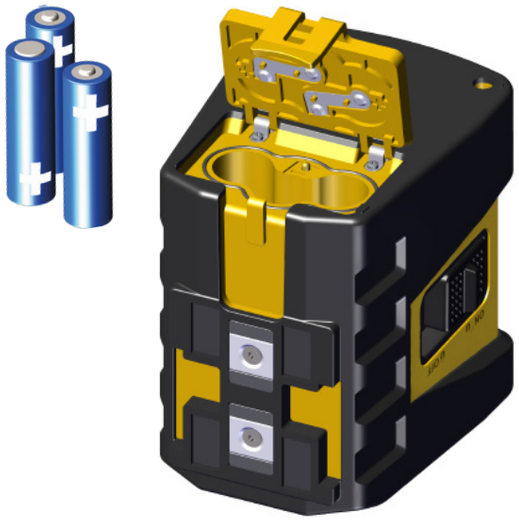
In Class 2 laser units, your eyes are usually protected from accidental, short-term exposure to the laser beam by the eyelid-closing reflex and/or the natural reaction to turn one's head. If a laser beam hits your eye, deliberately close your eyes and immediately move your head out of the path of the beam. Do not look into the direct or reflected beam. The STABILA laser goggles available for our laser units are not safety glasses. The goggles are designed to improve the visibility of the laser beam.

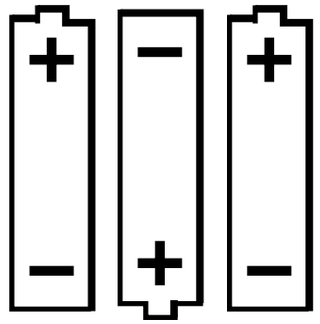
- Do not aim the laser beam directly at people.
- Avoid dazzling other people.
- Keep the unit out of reach of children.
- If operating or adjustment equipment that has not been specified here is used, or if the unit is not operated in the ways described here, this may result in hazardous exposure to radiation!

3. Description of the unit

3.1 Components of the unit

1 Laser unit
2 Exit window: horizontal and vertical laser line
3 LED: operating status
4 Button: laser lines and manual mode ON/OFF
5 LED: pulse mode
6 Button: pulse mode for receiver operation
7 Magnet surface
8 Sliding switch: ON/OFF, mechanical lock
9 Battery compartment cover
10 Serial number
11 1/4” tripod socket





3x 1.5V alkaline
AA, LR6, Mignon

4. Commissioning

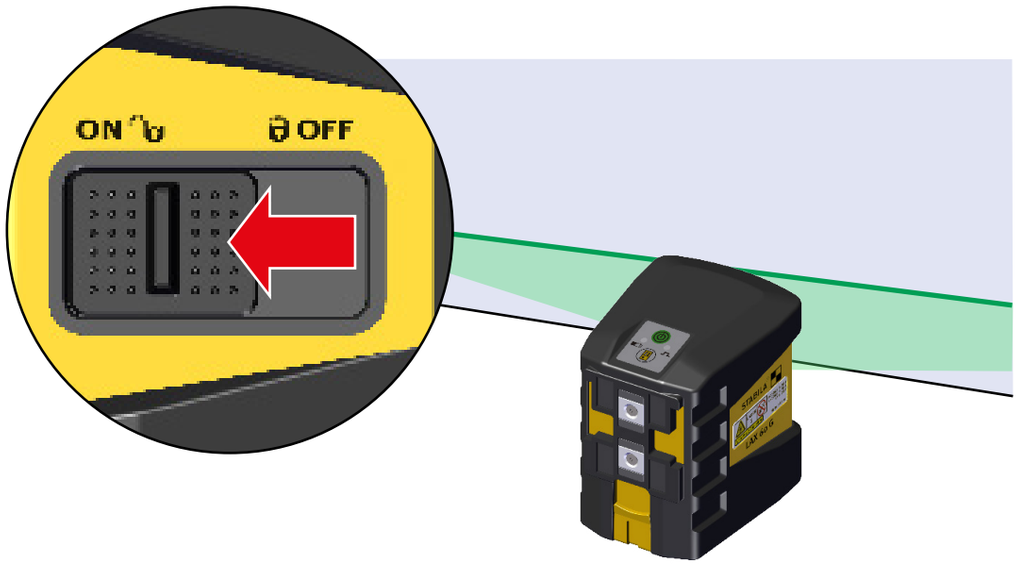
4.1 Inserting/replacing batteries

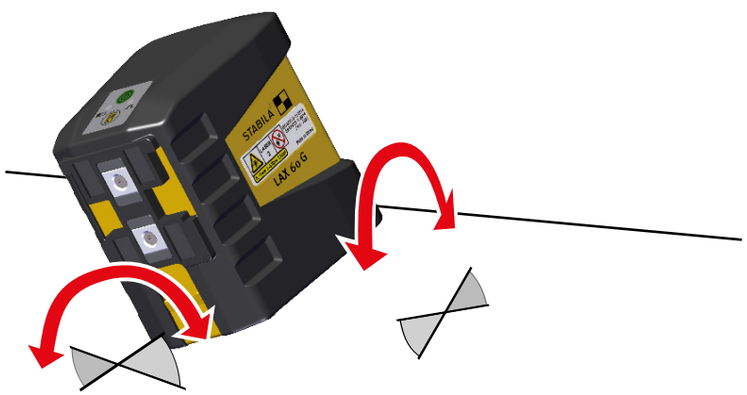
Open the battery compartment cover, insert new batteries into the battery compartment according to the symbol.

Used batteries should be disposed of at appropriate collection points! Do not dispose of in household waste! Do not leave batteries in unit! Remove batteries if you do not intend to use the unit for some time!

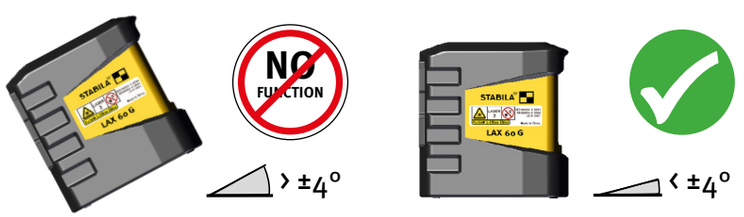
4.2 Switching the unit on

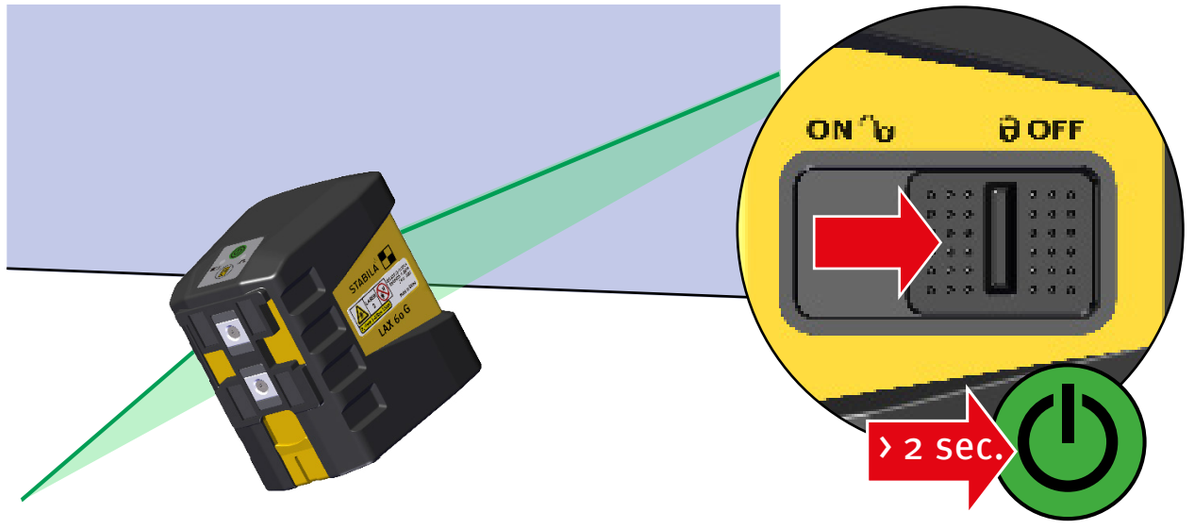
Move the laser unit to the working position and switch on using the sliding switch.
The LAX 60 G always starts in horizontal mode and levels itself automatically.





The laser beam flashes if the inclination of the laser unit is too steep.
The laser unit is outside the self-levelling range and cannot level itself automatically.

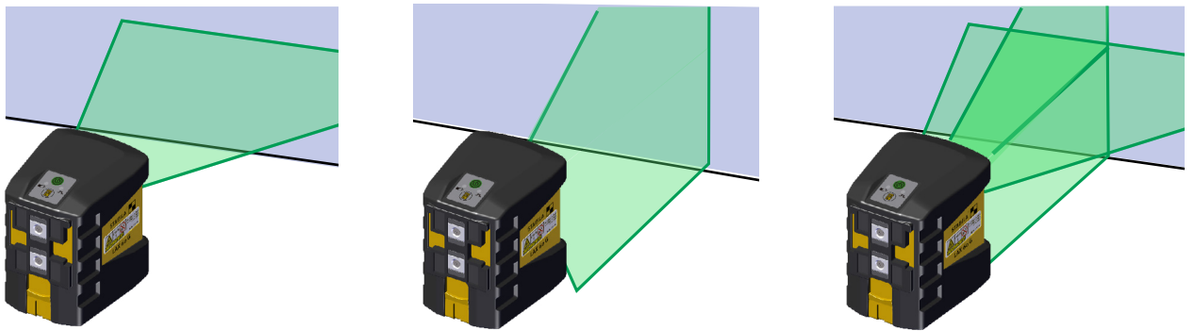




4.3 Commissioning without the levelling function

Marking function mode can only be switched on with the "Manual mode" button. To do this, press and hold it for more than 2 seconds. The laser beam flashes 2x every 5 seconds.
The LAX 60 G is not in self-levelling mode and can only be used in this mode for marking and alignment!

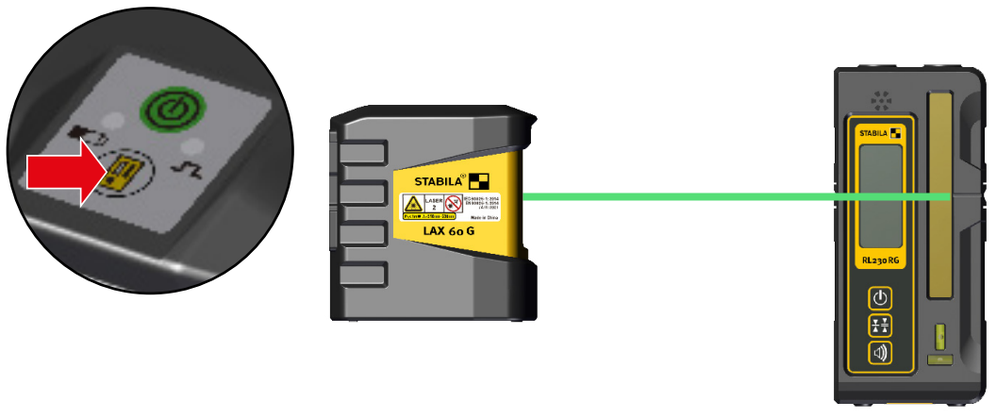
Always use the centre of the laser line when marking and aligning!



5. Functions

5.1 Selecting laser functions

Once the unit has been switched on, the “Manual mode” button can be used to switch between the various laser functions.



5.2 Working with the receiver

Pulsemode must be activated to work over larger distances or using a suitable receiver.

Note:
The receiver must be suitable for pulsed and green laser lines.

6. LED indicators

LED/laser beam lights up constantly

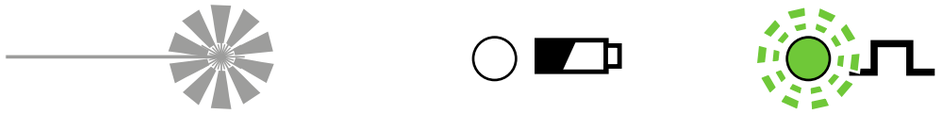
LED/laser beam flashes

Operation with levelling function

Operation without levelling function/outside the levelling range

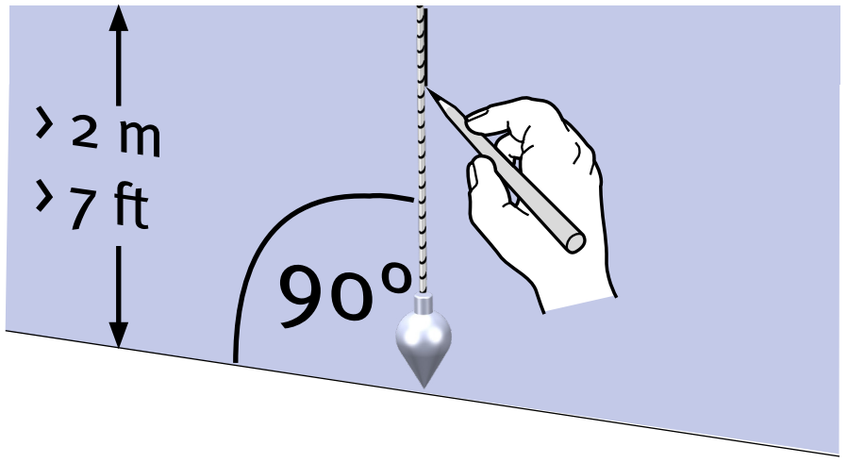
Operation with levelling function
Battery voltage low

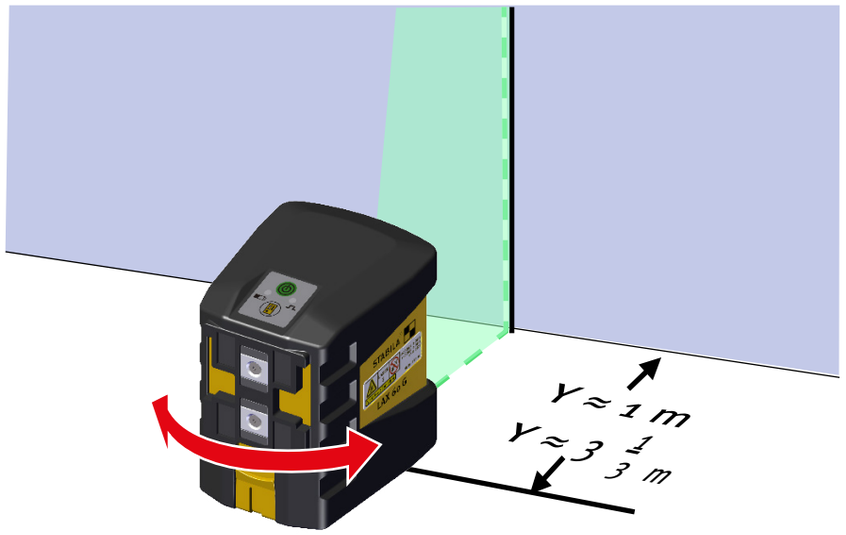
Operation with levelling function
Laser in pulse mode

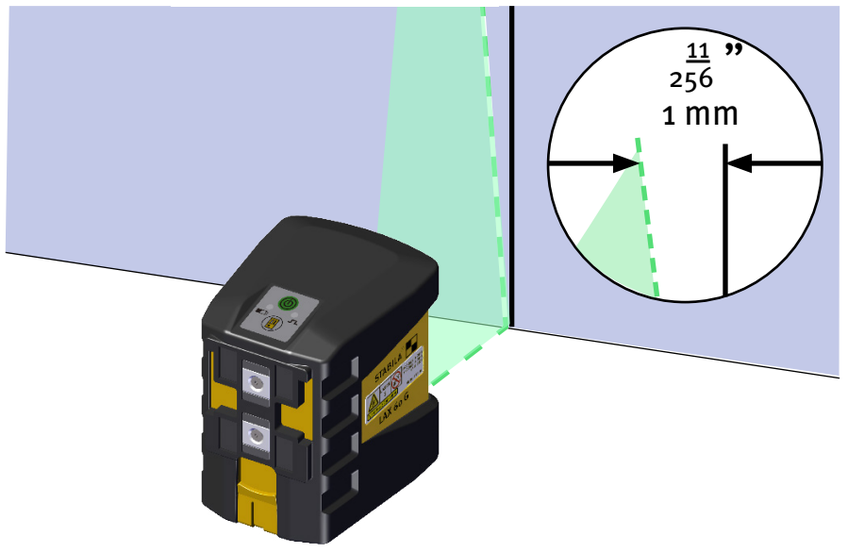


Operation activated
Unit temperature › 60°C / 140°F
Ensure the unit is in the operating temperature range

Laser error
Please contact customer service







7. Checking accuracy

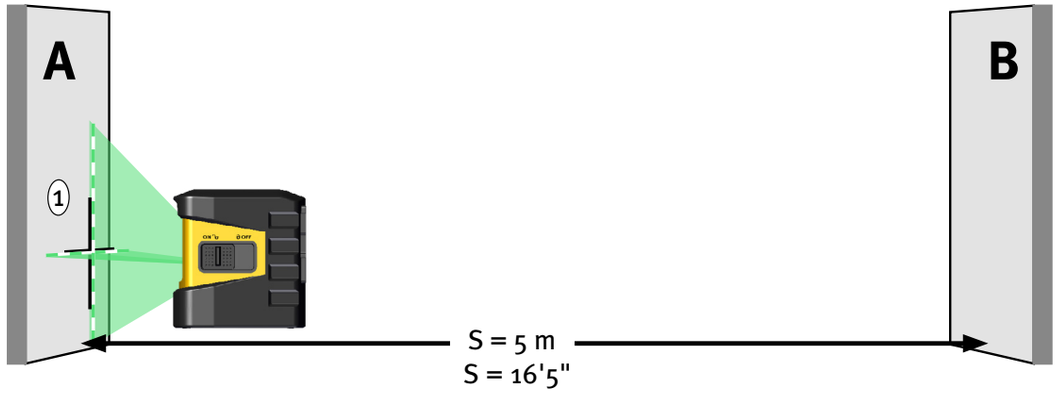
The LAX 60 G is designed for use on building sites and is perfectly adjusted before leaving our factory. As with all precision instruments, the calibration accuracy of the unit must be checked on a regular basis. Always check the unit before you start work, especially if it has been exposed to heavy vibrations.

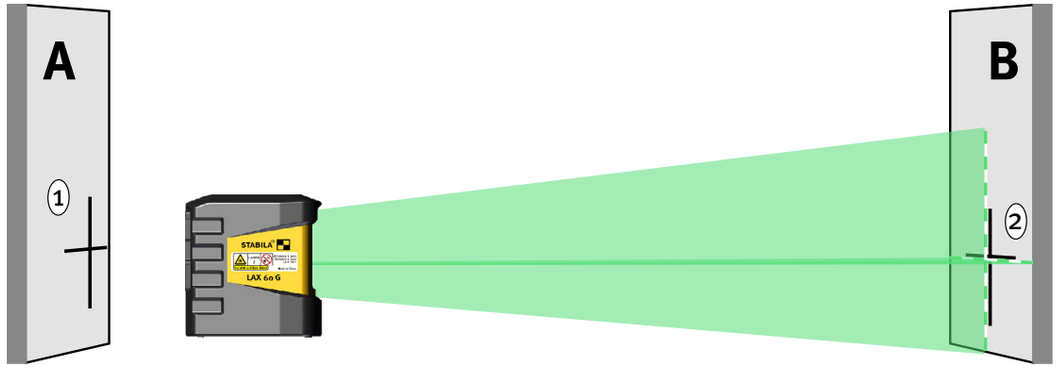
Vertical check
Horizontal check

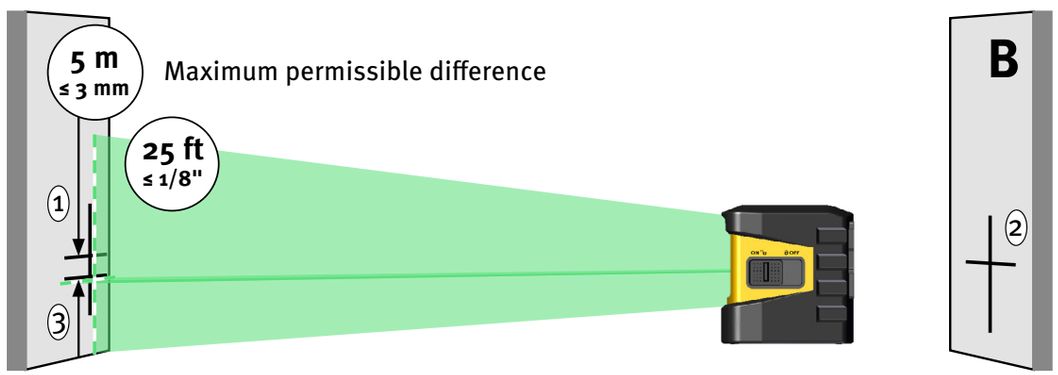
7.1 Vertical check

Checking the vertical laser line

1. Create a reference line, e.g. with a plumb line.
2. Set up and align the LAX 60 Gat distance Y in front of this reference line.
3. Compare the laser line with the reference line.
4. At a distance of 2 m / 7”, the laser line must not deviate from the reference line by more than 1 mm / 11/256”!







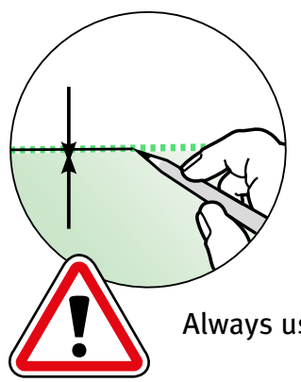
7.2 Horizontal check

Checking the line level of the horizontal laser line

2 parallel walls at least 5 m /16’5” apart (distance S) are required for the horizontal check.

1. Position the LAX 60 G as closely as possible to wall A on a horizontal surface.
2. Align the LAX 60 G with wall A using the exit window.
3. Switch on the laser unit.
4. Once automatic levelling has ended, mark the cross projected onto wall A. Point 1.
5. Rotate the LAX 60 G through 180° and align with wall B using the exit window. Do not adjust the height.
6. Once automatic levelling has ended, mark the cross projected onto wall B. Point 2.
7. Now reposition the laser unit so that it is directly in front of wall B. Align the LAX 60 G with wall B using the exit window.
8. Move the laser line cross by turning and adjusting the height until it precisely coincides with point 2.
9. Rotate the LAX 60 G through 180° and align with wall A using the exit window. Do not adjust the height.
10. Move the laser line cross by turning the casing until it precisely coincides with the marking line of point 1.
11. Once automatic levelling has ended, mark the cross projected onto wall A. Point 3.
12. Measure the vertical distance between points 1 and 3.

Distance S to the wall	Maximum permissible distance
5 m	3.0 mm
10 m	6.0 mm
15 m	9.0 mm
16’5”	1/8”
32’10”	1/4”
49’3”	3/8”



Always use the centre of the laser line when marking and aligning!

8. Technical data

Laser type:	Green diode laser, wavelength 510–530 nm
Power output:	‹ 1 mW, laser class 2, in accordance with IEC 60825-1:2014 EN60825-1:2014/A11:2021
Self-levelling range: approx.	± 4°
Levelling accuracy*: Laser line:	±0.3 mm/m / ±1/8” @ 30ft centre of laser line
Batteries:	3 x 1.5 V alkaline, size: Mignon, AA, LR6
Battery life:	≤ 15 h
Operating temperature range:	-10 °C to +50 °C / 14°F to 122°F
Storage temperature range:	-20 °C to +60 °C / -13°F to 158°F

* When operated within the specified operating temperature range

Subject to technical modifications.
2025

STABILA Messgeräte
Gustav Ullrich GmbH
Landauer Str. 45
76855 Annweiler
Germany

www.stabila.com