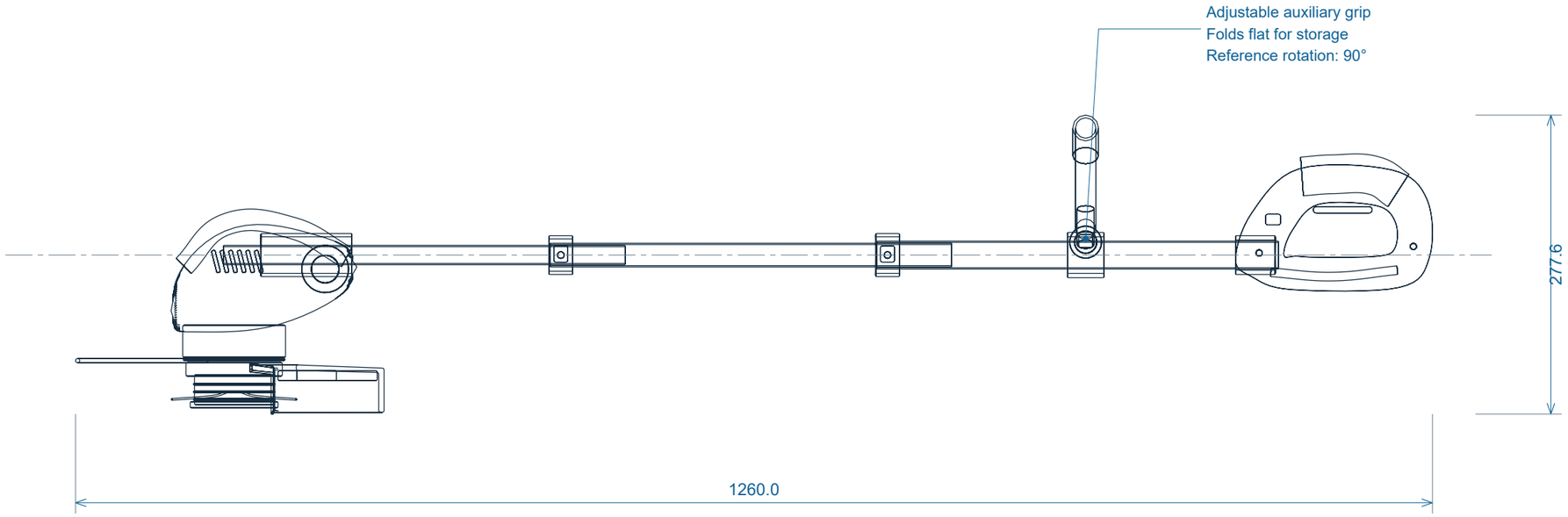
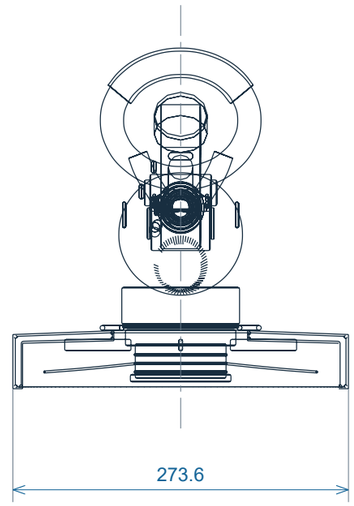
SLIM 250 / 02 - Concept General Arrangement

Extended state. Component contours are retained without production-grade hidden-line removal. The 250 mm cutting diameter is a design reference.

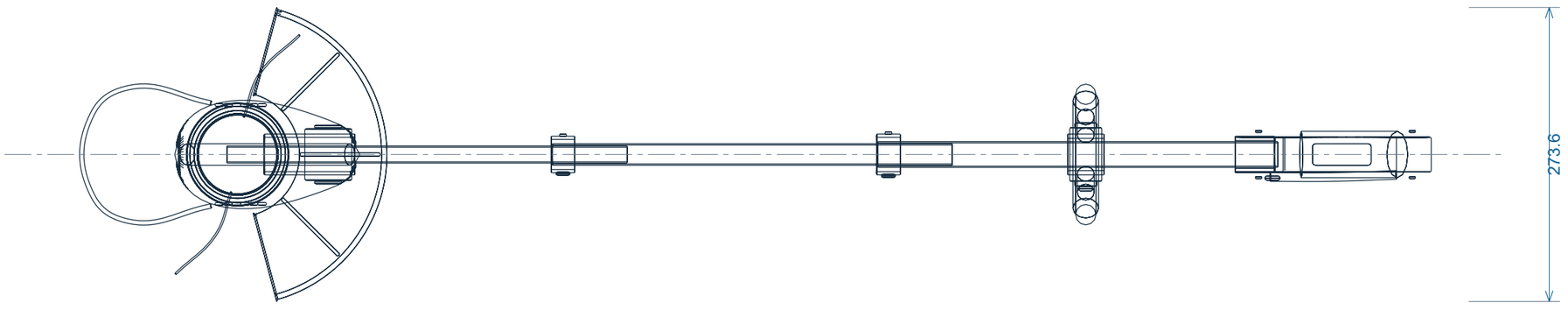
Side view



Front view



Top view



Datum: cutting centre X=0.
Shaft axis reference Z=155.
Full guard envelope retained.
See renders for the mains lead.

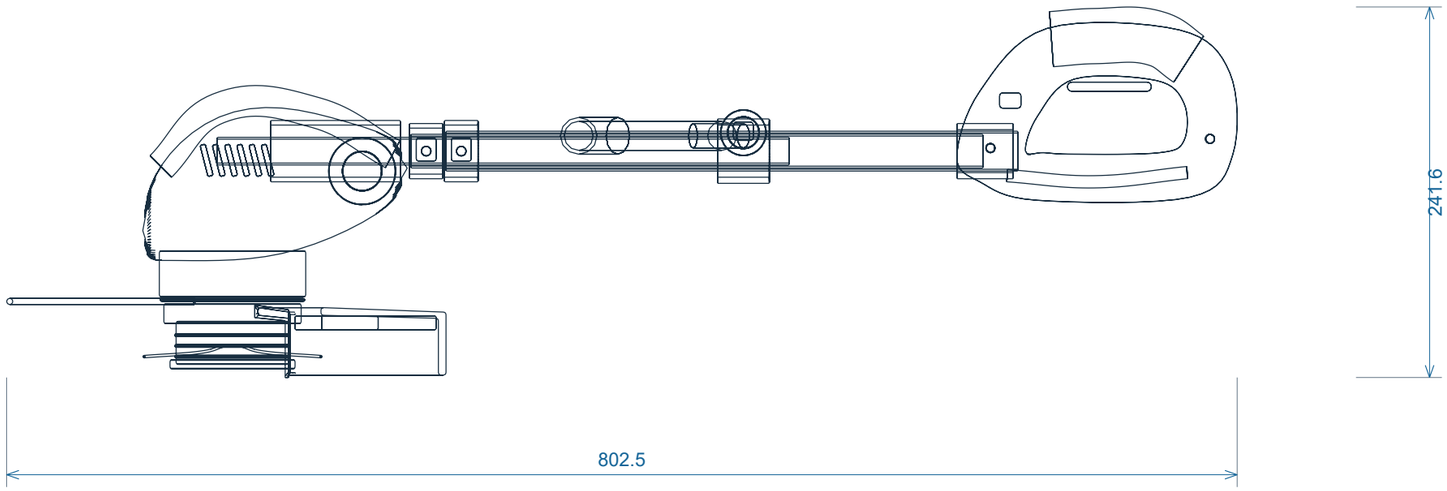
Design class: 230-240 V AC / 380 W. Input power, mass, temperature rise, vibration and cutting performance require functional-prototype verification.

SLIM 250 / 02 - AC Corded Grass Trimmer	**SL250-C01-001**	**Sheet size: A3**
Concept assembly / units: mm / full guard / loose mains lead excluded from envelope	REV C01 2026-11-03	Scale: 1:5
Dimensions measured from the Blender mesh. Not for tooling, machining or procurement release.	Blender 4.5.15 LTS / Cycles	Sheet 1 of 4

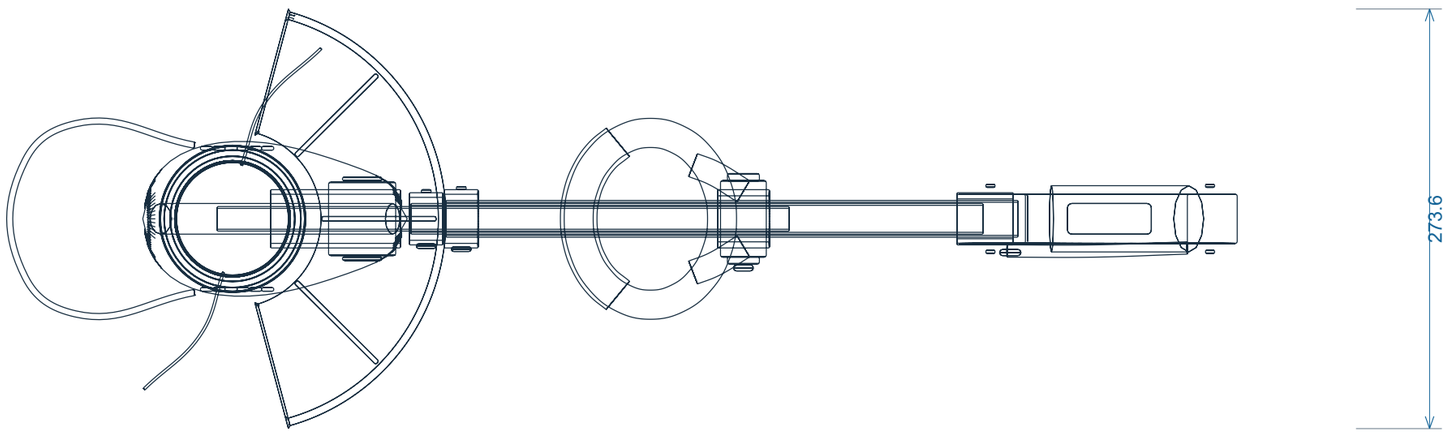
Retracted Storage State and Dimensions

Three tubes retract to clear the current external components; the auxiliary grip folds flat. Dimensions are measured from the current model.

Retracted side view / auxiliary grip flat



Retracted top view



The tubes are appearance surface models. Fit tolerances, plastic guide bushes, anti-rotation details and the internal cable-slack mechanism are not defined.

Current model envelope

Extended: 1260.0 x 273.6 x 277.6 mm
Retracted: 802.5 x 273.6 x 241.6 mm

Tube layout reference

Initial geometric length of each of the three tubes: approx. 373.0 mm.
Outer cross-section envelopes: 26 x 24 / 22 x 20 / 18 x 16 mm.
Adjacent overlap when extended: approx. 69.6 mm.
Two release buttons are located on the sides of the shaft.

Dimension update

The earlier 650 x 270 x 140 mm envelope was an appearance-stage target. With the full guard, auxiliary grip and lock clearances included, the current model does not achieve that target. Use the dimensions on this drawing for this revision.

Further packaging optimization

Optimize the main-handle opening, head height and lock stacking. Check tube stiffness, cable pinching and cable slack throughout telescopic travel. Freeze packaging dimensions after interference checks and prototype verification.

SLIM 250 / 02 - AC Corded Grass Trimmer

Concept assembly / units: mm / full guard / loose mains lead excluded from envelope

Dimensions measured from the Blender mesh. Not for tooling, machining or procurement release.

SL250-C01-002

REV C01 2026-11-03

Blender 4.5.15 LTS / Cycles

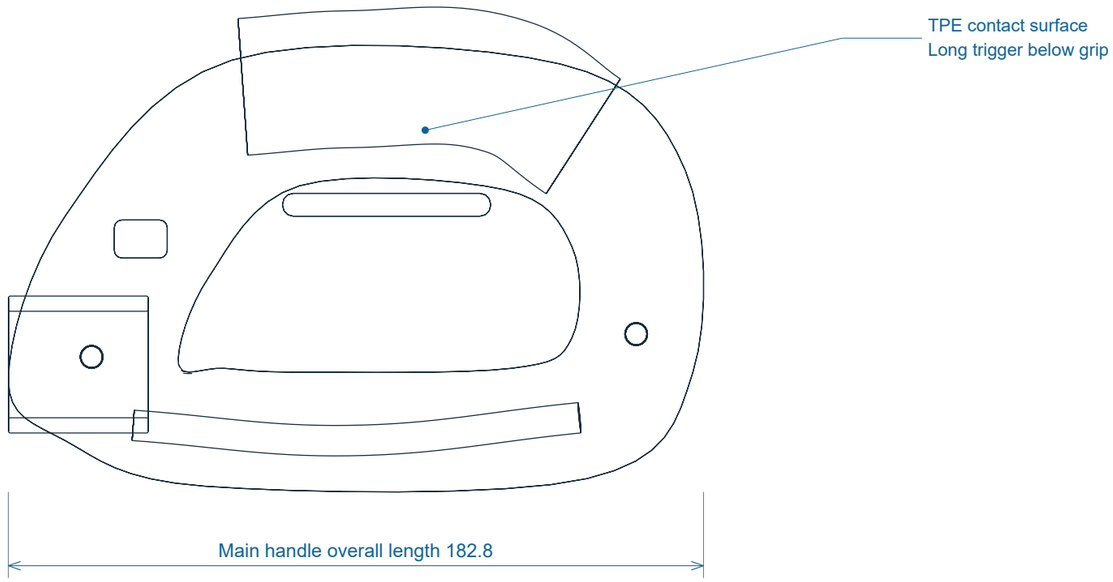
Sheet size: A3

Scale: 1:4

Main Handle and Auxiliary Grip Details

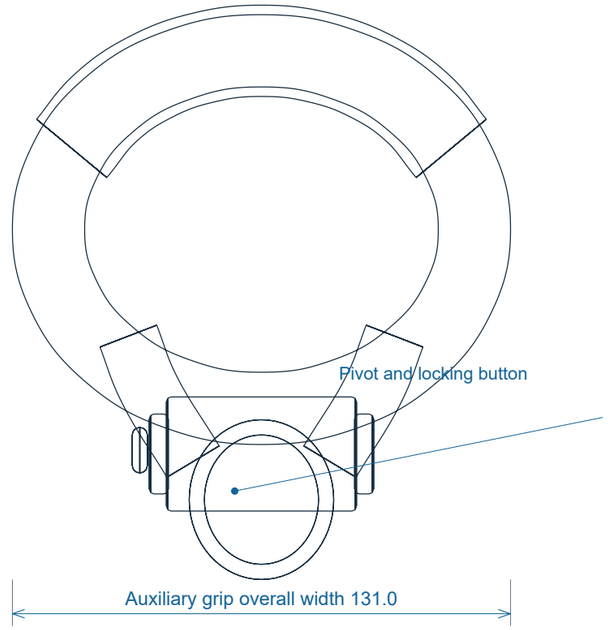
Pivot geometry and two positions explain the auxiliary grip. Detail projections show concept appearance, not production drawings for the locking mechanism.

A Main handle - side / approx. 1:1.6



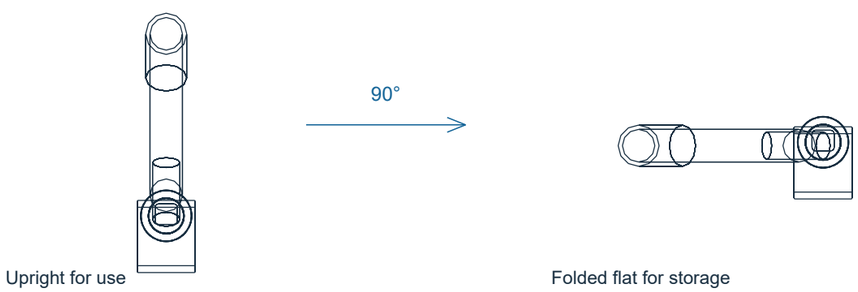
Grip section reference: approx. 30 mm. Hand clearance, trigger travel and gloved-hand fit require physical grip prototypes. Silver represents a surface finish; an all-metal part has not been specified.

B Auxiliary grip - front / approx. 1:1.6



The closed-loop auxiliary grip provides a front-hand hold. The circular pivots on both sides and the blue button are represented as separate objects in the 3D model.

C Auxiliary grip rotation



The auxiliary grip retains its closed-loop form when folded. Only motion positions and button appearance are modeled. Detent teeth, springs, locking pins, pinch clearances and locking strength require mechanical design.
Detail dimensions describe the complete grip-module mesh envelope and do not include manufacturing tolerances.

SLIM 250 / 02 - AC Corded Grass Trimmer	**SL250-C01-003**	**Sheet size: A3**
Concept assembly / units: mm / full guard / loose mains lead excluded from envelope	REV C01 2026-11-03	Scale: Details as marked
Dimensions measured from the Blender mesh. Not for tooling, machining or procurement release.	Blender 4.5.15 LTS / Cycles	Sheet 3 of 4

Blender Assembly and Model Groups

Rendered in Blender / Cycles. The editable .blend file contains separate WORK and STOW scenes.



Appearance materials

Silver-grey shells, dark TPE contact surfaces, navy structural parts and blue controls. Materials are visual representations. Resin grades, coating processes, flammability ratings and production mass are not confirmed.

Model module list

01	Head / spool / full guard
02	Three telescopic tubes / two locks
03	Main handle / trigger / lock-off
04	Adjustable grip / pivot / flat state
05	Mains lead / plug / strain-relief concept

Deliverables

SLIM_250_02_concept_EN.blend
SLIM_250_02_concept_EN.glb
Assembly PDF and CAD projection DXF
Individual orthographic SVG views
Three high-resolution Cycles renders

Model scope

Includes appearance, assembly layout and state relationships. Motor internals, double insulation, final wall thicknesses and fit tolerances are not modeled.

SLIM 250 / 02 - AC Corded Grass Trimmer

Concept assembly / units: mm / full guard / loose mains lead excluded from envelope

Dimensions measured from the Blender mesh. Not for tooling, machining or procurement release.

SL250-C01-004

REV C01 2026-11-03

Blender 4.5.15 LTS / Cycles

Sheet size: A3

Scale: 3D view: not to scale