SUNX

Laser Marker

Product Range

CO_2 LASER TYPE

Entry-level model with a full range of basic functions

LP-300 SERIES

Highlights:

Superb ease of operation

Thorough attention has been given to ease of operation to make this series a laser marker that is as easy to use as a printer. Data such as the characters to be marked and their sizes can be set using a computer and then sent to the laser marker. The laser marker can store up to 120 types of marking settings (files). These settings can be read and marked when required.

Accurate and distinct marking

Allows distinct characters to be positioned accurately with no missing characters or rough or blurred characters.

Compact, lightweight, and easy to set up

Because it has a compact size with the controller integrated in the main unit, it can be mounted vertically and at an angle as well as horizontally. This makes it easier to change from previous marking devices.

Applications:

Cable

IC package

Switch (resin part)

Terminal block (resin)

Label

Connector

CD

Printed circuit board

Specifications LP-300 Series

Item			
Designation		CO_2 laser marker entry-level model	
Type		FDA regulations conforming type	CE marking conforming type
Set Model No.		**LP-310-A**	**LP-310-C**
Work distance (Note 1)		145mm	
Scanning method		Galvano-scanning method	
Marking laser		CO_2 Laser Class 4 (Laser oscillator output: Average 12W · Max. 40W, Peak emission wavelength: 10.6μm)	
Marking range		50x50mm	
Basic dimensions of characters (Note 2)		Height and width: 0.2 to 50mm, Interval / position of marked characters: settable at 0.01mm interval	
Scanning speed		2,000mm/sec. max.	
Array of characters		Straight line, fan-like, tilted straight-line, mirror-reflection	
Marking condition		Stationary	
Type of characters		English capital and small characters, Symbols, Katakana, Hiragana, Kanji (JIS first level) Characters, User-defined characters (up to 50 types)	English capital and small characters, Symbols, user-defined characters (up to 50 types)
Marking setting	Number of files	120 files max.	
	Setting condition	30 types	
I/O terminal	Input	Laser radiation stop, file No., trigger, counter reset, external interlock (Power supply box)	
	Output	Alarm, marking ready, counter end	
External communication port	RS-232C	For external devices only	
	USB Ver.1.1	For setup software only	
Setting software		Windows® XP / 2000, Screen resolution: 800 x 600 or more	
Cable length		5m (between head and power supply box)	
Installation direction		Omnidirectional	
Cooling method		Forced-air cooling (Head and power supply box)	
Supply voltage		90 to 132VAC or 180 to 264VAC (auto-changing) 50 / 60Hz	
Power consumption		700VA or less	
Functions		• Lot marking • Current date / time marking • Expiration date / time marking • Counter marking • CAD marking • Correction of intersection • Guide laser • Bold character marking • Marking image display • Saved file list • Test marking • File transfer / File reading • Error history display	
Ambient temperature		0 to + 40°C (No condensation or frost), Storage: -10 to + 50°C	
Ambient humidity		35 to 85% RH, Storage: 35 to 85% RH	
Weight		Head: 13kg approx., Power supply box: 5kg approx.	

Note 1) The work distance has an individual error of 2mm from product to product.
Note 2) The actual character size varies depending on the work.

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Legend:


Marking of moving objects

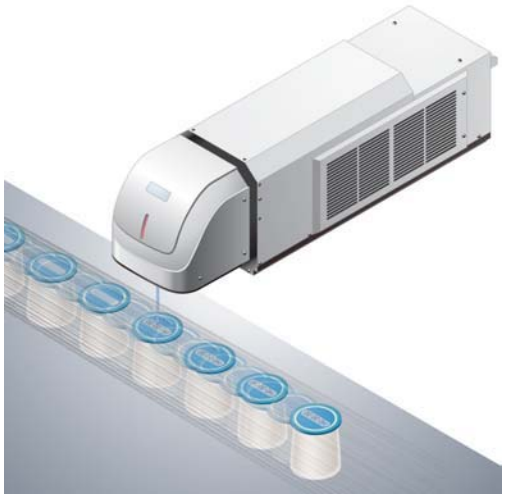
High speed marking


Guide light


Color marking of resin


Focus adjustment

LP-400 Series



CO_2 LASER TYPE

High functionality, high-grade model

LP-400 SERIES

Highlights:

Super-high-speed marking

Compatible with high-speed 240m/min lines. Inline marking can be carried out for articles such as packing boxes, PET bottles, and cables.
Laser markers from the LP-400 Series are equipped with a ultra-fast galvanometer scanner which makes it possible to print 700 characters in 0.99 seconds.

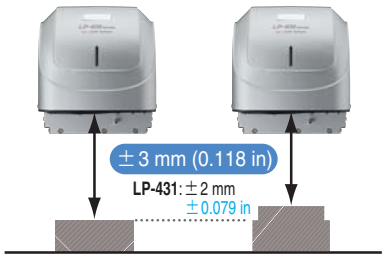
High power and high stability

The 30W CO_2 laser ensures stable marking from low power to high power.

Easy setup

The unique head rotation mechanism allows the user to set the head at any angle, making setup very easy. In addition the lasermarker has an automatic focus adjustment and a dual pointer.

Focus adjustment function



Head rotation mechanism

Applications:

Marking Applications

Rice cracker

Stainless steel

Oil filter

Connector

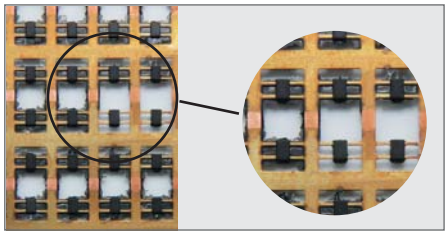
Aluminium plate (ALUMA Mark)

PET bottle

Processing Applications

Insulation removal

Keypad cutting



IC burring

Specifications LP-400 Series

Product name / Items / Model		General-purpose type	Small spot type
		LP-430	**LP-431**
Work distance		185mm (Note 1)	111mm (Note 1)
Marking method		Galvanometer scanning method	
Marking laser		CO_2 laser –=10.6µm Class 4 laser product	
	Ave. output	30W	
	Max. output	75W (Note 2)	
	Output	+/-3% (Note 3)	
Guide laser, pointer		Semiconductor laser –=650nm Class 2 laser product	
Marking range		110mm x 110mm	55mm x 55mm
Scanning speed		Max. 12,000mm/s	
Flying speed		240m/min or less (Note 4)	
Character size (height & width)		0.2 to 110mm(adjustable in increments of 0.001mm)	0.2 to 55mm (adjustable in increments of 0.001mm)
Marking spacing (spacing & pitch)		0 to 110mm(adjustable in increments of 0.001mm) +/-180˚ on fan-like (adjustable in increments of 0.01˚)	0 to 55mm (adjustable in increments of 0.001mm) +/-180˚ on fan-like (adjustable in increments of 0.01˚)
Character array		Straight line, proportional, typewriter fonts, fan-like	
Installation direction		All directions	
Character type		English capital & small characters, Figures, Katakana, Hiragana, Kanji (JIS level-1 & level-2), Symbols, User defined characters (up to 50 types)	
Logo/shape		BMP / DXF / HPGL / JPEG	
Cooling method		Forced-aired cooling	
Power voltage supply		90V to 132VAC, 180V to 264VAC, 50/60Hz	
Power consumption		800VA or less	
Input		Remote, Trigger, Encoder (A), Encoder (B), Shutter control, Laser pumping, Alarm reset, Emergency stop, Laser stop, Confirmation end, Number, Timehold	
Output		Power supply (+12V), Remote, Marking ready, Marking, Marking finish, Laser pumping, Warning, Alarm, Confirmation end, Counter finish	
Marking condition		Stationary, moving	
Functions		• Intersection offset • Counter marking • Current date marking • Expiry date marking • Lot marking • Logo data marking • Font creation/edition • Fixed spacing location • System offset • Common setting • Guide laser • Dual pointer • Focus adjustment • Multi-layer marking • Backup • Marking of moving objects • Font select • Bold marking • Proportional marking • Marking image display • Marking time measurement • Work image display • Power speed setting per line/ logo file • Operator adjustment • Rank marking • Offset marking • Time delay • Step & Repeat • Error history display • I/O check monitor • Barcode (CODE39, CODE128, ITF, NW-7, JAN, EAN, UPC, QR, Micro QR, Data matrix)	
Emergency stop switch		Provided on the controller	
Ambient temperature		0 to + 40˚C (-10 to +60˚C at storage) (No condensation or frost)	
Ambient humidity		35 to 85% (No condensation or frost)	
Weight		Head: Approx. 20kg Controller: Approx. 11kg	

(Note 1): Work distance has an individual error of approx. +/-2mm per product.
(Note 2): Max. output represents the maximum value that laser transmitter outputs laser beam.
(Note 3): Value of product 20% or larger, and at 10 min. passed after starting-up.
(Note 4): The line speed varies depending on the workpiece to be marked.

LP-V10 Series

FAYb LASER TYPE

New FAYb laser marker

LP-V10 SERIES

Highlights:

High speed and high precision

SUNX developed a galvanometer scanner with a response time two times faster than previous models, which reduces the cycle time.

Improvement of productivity

With their super-high-speed marking laser markers from the LP-V10 series contribute greatly to an increase in productivity. Printing 700 characters in 0.99 seconds shortens the cycle time significantly.

Deep marking

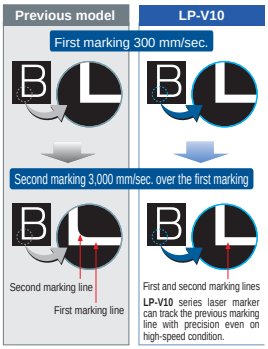
The short pulse FAYb laser has a low-heat-effect on objects, making it possible to deep-mark metals. The LP-V10 series laser marker is the ideal replacement for engraving machines.

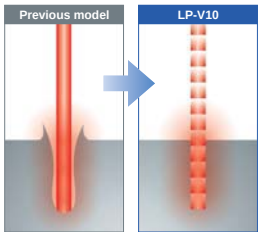
Brings out the capability to perform deep marking

The short pulse type FAYb laser is excellent for deep marking on metals. Please adopt the LP-V10 series laser marker when replacing an engraving machine.

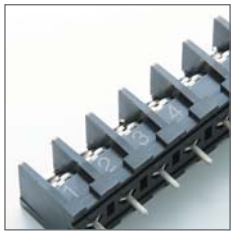
Improved Handling

- Focus adjustment function
- Dual pointer





Applications:



Terminal block (resin)

USB connector

Tweezers

Blister package

Button cell

Battery pack

Bearing

IC package

Cylinder head

Golf club

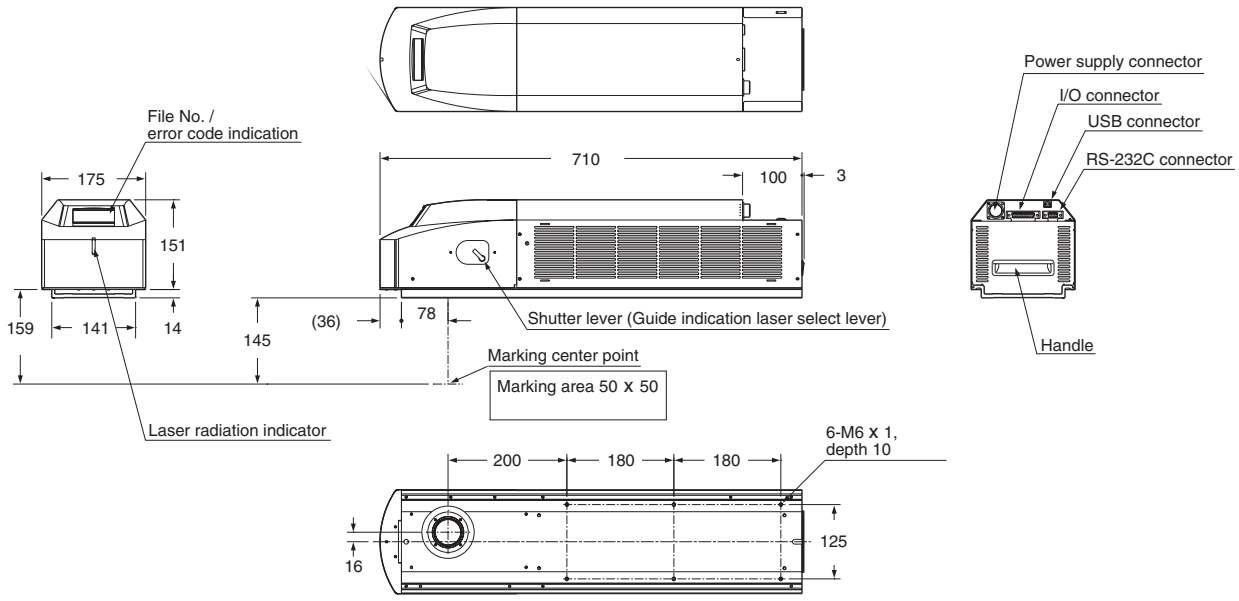
Specifications LP-V10 Series

Product name / Item	Model	FAYb laser marker **LP-V10**
Work interval		190mm (Note 1)
Marking method		Galvanometer scanning method
Marking laser		Fiber laser ⇒1.06μm Class 4 laser product
	Ave. output	12W
	Max. output	15W (Note 2)
Guide laser, pointer		Laser diode ⇒655nm Class 2 laser product
	Max. output	1mW
Marking range		90mm x 90mm
Scanning speed		Max. 12,000mm/s
Line speed		240m/min or less (Note 3)
Character setting (height & width)		0.2 to 90mm (adjustable in increments of 0.001mm)
Marking spacing (spacing & pitch)		0 to 90mm (adjustable in increments of 0.001mm) arc: +/-180˚(adjustable in increments of 0. 01˚)
Character array		Straight line, fan-like, proportional and typewriter fonts
Character type		English capital & small characters, Figures, Katakana, Hiragana, Kanji (JIS level-1 & level-2), Symbols, User defined characters (up to 50 types)
Logo/shape		BMP / DXF / HPGL / JPEG
Cooling method		Forced-aired cooling
Power voltage		90 to 132VAC or 180 to 264VAC (automatic switching), 50/60Hz
Consumption power		390VA or less (at 100VAC)
Input		Remote, Trigger, Encoder (A), Encoder (B), Shutter control, Laser pumping, Alarm reset, Emergency stop, Laser stop, Confirmation end, Number, Timehold
Output		Power supply (+12V), Remote, Marking ready, Marking, Marking finish, Laser pumping, Warning, Alarm, Confirmation end, Counter finish
Marking state		Stationary, moving
Functions		• Marking order optimizing • Intersection offset • Counter making • Current date marking • Expiry date marking • Lot marking • Logo data marking • Font creation/edition • Fixed spacing location • Operation screen updating display • System offset • Common setting • Guide laser • Dual pointer • Focus adjustment • Overwriting marking • Backup • Font selection • Bold marking • Proportional marking • Marking image display • Marking time measurement • Work image display • Power speed setting per line/logo file • Operator adjustment • Rank marking • Offset marking • Time delay • Step & Repeat • Logo data USB transfer • I/O check monitor • I/O simulate • Error history • Serial data marking • Power check correction • Barcode (CODE39, CODE128, ITF, NW-7, JAN, EAN, UPC, RSS14, RSS Limited, RSS Expanded, QR, Micro QR, Data matrix)
Emergency stop switch		Provided on the controller
Ambient temperature		0 to +40˚C (-10 to 60˚C at storage) (No condensation or frost)
Ambient humidity		35 to 85%RH (No condensation or frost)
Weight		Head section: Approx. 9kg Controller section: Approx. 22kg

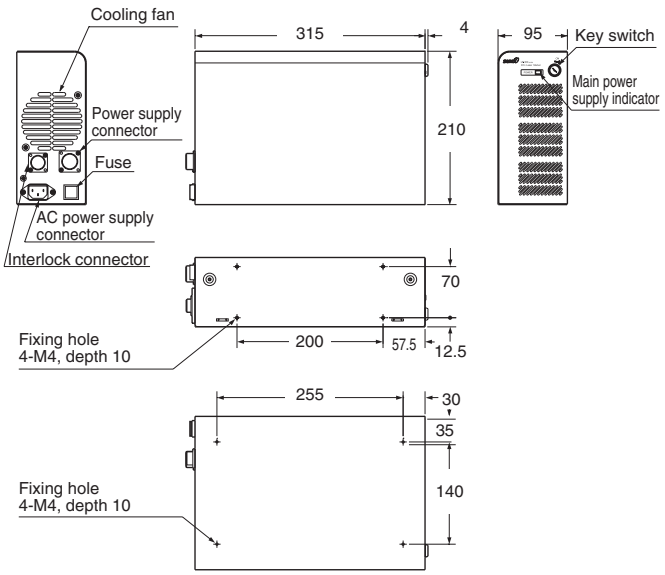
(Note 1): Work distance has an individual error of approx. +/-2mm per product.
(Note 2): Max. output represents the maximum value that laser transmitter outputs laser beam.
(Note 3): The line speed varies depending on the workpiece to be marked.

Dimensions LP-300 Series

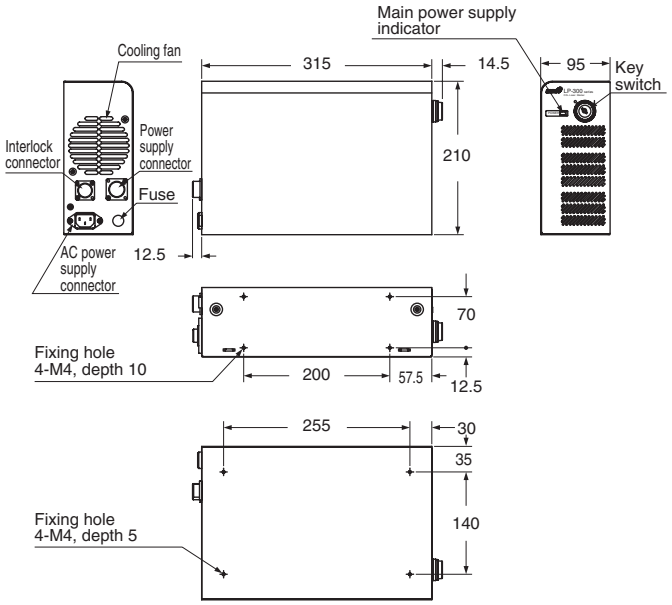
LP-310-A LP-310-C Head



LP-310-A Power supply box



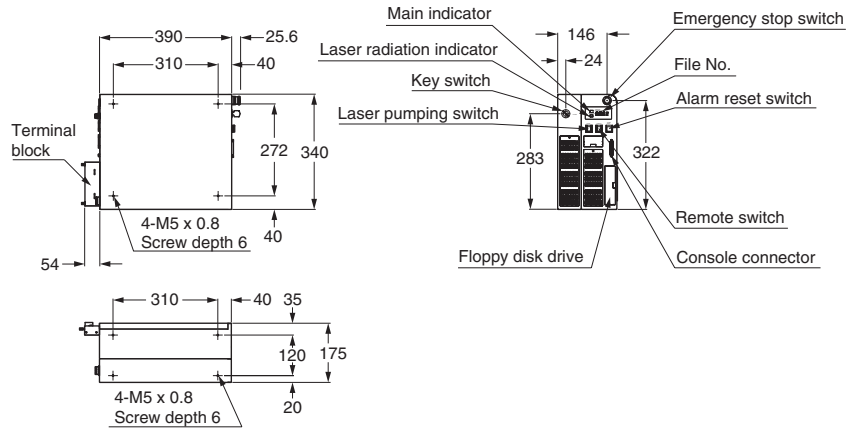
LP-310-C Power supply box



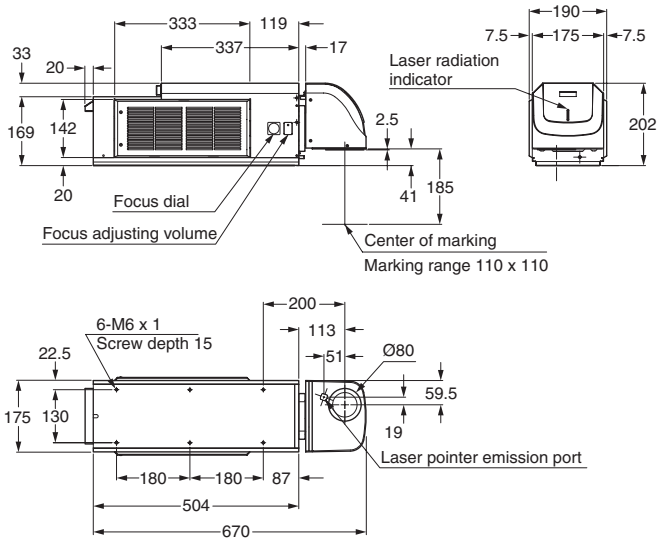
All dimensions are in mm.

LP-430

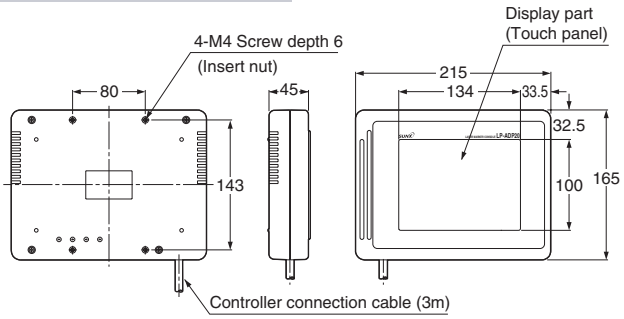
Controller



Head



Console LP-ADP20 (optional)

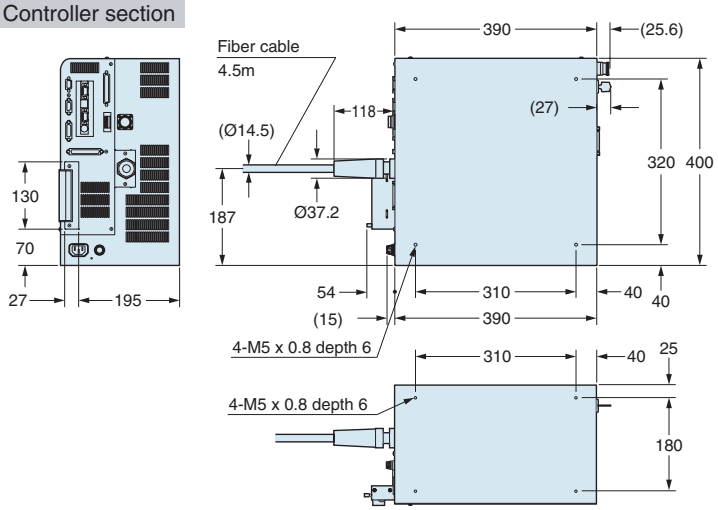


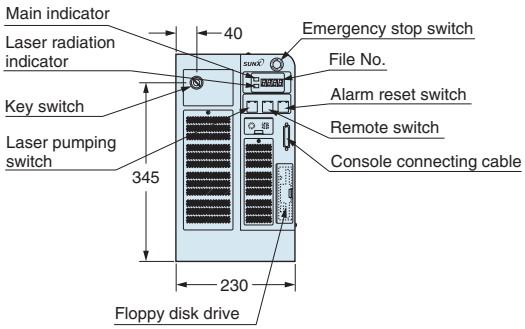
All dimensions are in mm.

Dimensions LP-V10 Series

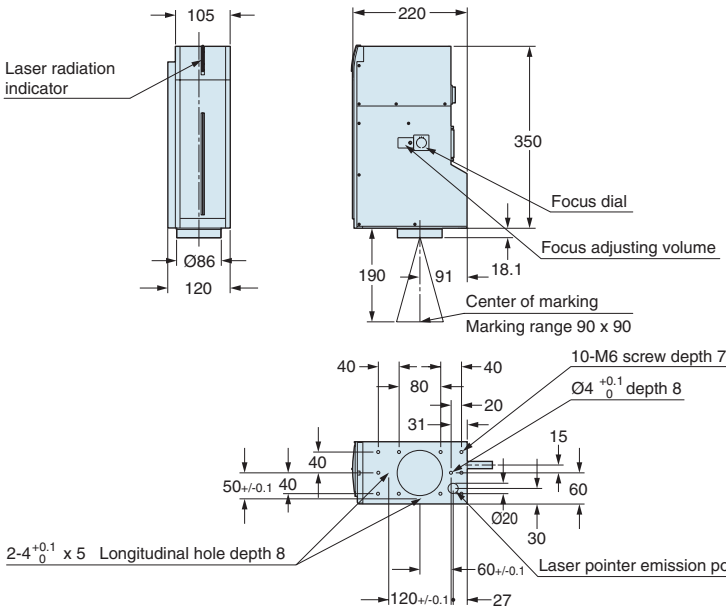
LP-V10

Controller section

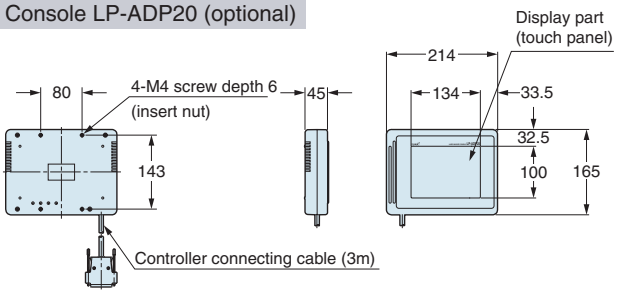




Head section



Console LP-ADP20 (optional)



All dimensions are in mm.