

LABTIE 48-WELL DISPENSER CONVERTER MEASUREMENTS — ACCURATE MODULAR BEAD DISPENSER

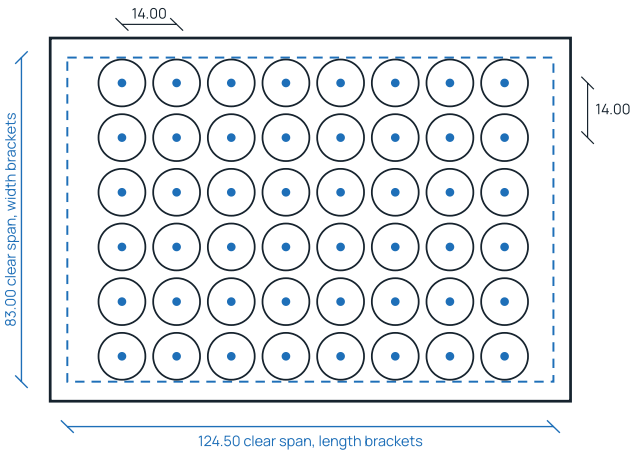
CP-48W-13x13mm-P-11.6mm.STEP

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Millimetre · single solid

The LabTIE 48-Well Dispenser is an accurate modular bead dispenser, and this datasheet covers its converter measurements. It gives the three dimensions customers ask for before ordering, the hole pitch, the clear span between brackets, and which 48-well plates the LabTIE 48-Well Dispenser fits. All figures are taken from the released STEP solid, and the views are generated from that same geometry, so what is drawn and what is dimensioned are the same model.

FIG. 01 — TOP VIEW FROM THE STEP MODEL



MEASUREMENT 1

Distance between the holes

14.00 mm

Centre to centre, equal on both axes. 48 positions in an 8 × 6 grid on exact 14.000 steps, each a Ø12.00 mm bore. Note the file name states 13 × 13 mm; the geometry measures 14.00.

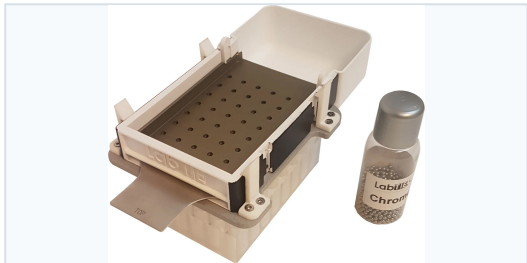
MEASUREMENT 2

The Dispenser (converter) dimensions clear span between brackets

124.50 mm length
83.00 mm width

Inner face to inner face across the four brackets on the bottom part. Each bracket is 4.00 mm deep, 3.00 mm thick and 23.00 mm long, within an overall outline of 133.27 × 93.00 mm.

THE LABTIE 48-WELL DISPENSER



The modular bead dispenser as supplied, with the converter fitted over a 48-well plate.

Outlets	48
Grid pitch	14.00 mm
Clear span	124.50 × 83.00 mm
Bore	Ø12.00 mm

MEASUREMENT 3

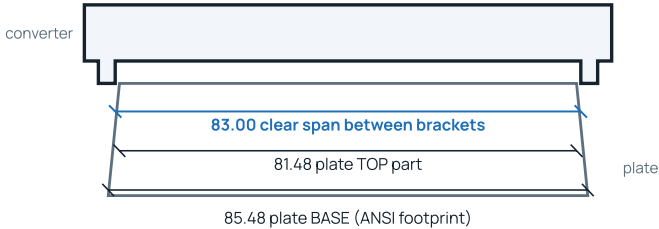
FIT ON THE PLATES

FIG. 02 – THE DISPENSER (CONVERTER)



The Dispenser (converter) as shown on the product page. The flat top part carries the 48 outlets on a 14.00 mm grid; the four brackets sit on the underside and close around the plate's upper section, shown in section opposite.

FIG. 03 – SECTION: HOW THE BRACKETS ENGAGE THE PLATE



The brackets close around the plate's upper section, not its base. The base is the ANSI footprint and is wider; the upper section is the dimension that governs the fit. The same section applies on the 124.50 mm axis.

The 48-well plate fits, with the brackets closed on both axes

AXIS	CLEAR SPAN	PLATE TOP PART	MARGIN	PER SIDE
Length	124.50	123.76	+0.74	0.37
Width	83.00	81.48	+1.52	0.76

FITS both axes clear

Plate top part is the upper section that enters between the brackets. Where a plate is published with its ANSI base footprint only, the upper section is taken as the footprint less the Bracket Taper Allowance (BTA) of 4.00 mm on each axis, per LabTIE. Against the base footprint of 127.76 × 85.48 the brackets would interfere; the taper is what makes the fit work.

The margins above are the governing case for the format: the ANSI/SLAS 48-well footprint is shared across manufacturers, so a plate built to it presents the same upper part and lands on the same figures. Where a manufacturer publishes its own upper dimensions, those are used instead, plate by plate, on page 3.

MEASUREMENT 3 · CONTINUED

WHICH 48-WELL PLATES FIT THE LABTIE 48-WELL DISPENSER

48-well cell culture, deep-well and elution plates on the ANSI/SLAS footprint, named by brand and catalogue number. Each is judged on its upper section against the clear span of 124.50 × 83.00 mm, never on the ANSI base footprint.

BRAND	CATALOGUE NO.	TYPE	TOP L × W	SOURCE	MARGIN	FIT
Eppendorf	Cell Culture Plate 48-well	Cell culture, rectangular	124.40 × 81.00	Vendor	+0.10 / +2.00	Verified fit
Greiner Bio-One	677180 / 677102	CELLSTAR, TC + suspension	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Greiner Bio-One	677980	Advanced TC	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Corning / Costar	3548	Cell culture, TC treated	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Thermo Nunc	48-well plate	Cell culture	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Sarstedt	48-well plate	Cell culture	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Caplugs Evergreen	48-well deep well	Deep well, collection	123.50 × 82.00	BTA *	+1.00 / +1.00	Verified fit
Mattek / Sartorius	P48G-1.5-6-F	Glass bottom, imaging	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit
Axion BioSystems	CytoView MEA 48	MEA / electrophysiology	123.76 × 81.48	BTA *	+0.74 / +1.52	Verified fit

Verified fit = margin within +2.00 / +2.00 mm on both axes. Fits, slack = clears but by more than 2.00 mm, so the brackets hold with play. Source gives the origin of the upper section: Vendor = published by the manufacturer, BTA * = derived from the ANSI footprint using the Bracket Taper Allowance. Brand names are given so you can recognise your own labware; LabTIE is not affiliated with these manufacturers. Plate not listed? Send the plate name or part number with your quote request.

RESULT

All 48-well plates listed fit the LabTIE 48-Well Dispenser. Each is checked against the same clear span, 124.50 mm on length and 83.00 mm on width, taken on the plate's upper section since that is what the brackets close around. The format is built on one footprint, so the Dispenser clears every upper section by roughly 0.37 mm per side on length and 0.76 mm per side on width.

THE ONE FIGURE TO CONFIRM

Upper length is the figure to confirm. Eppendorf, the one 48-well manufacturer publishing upper dimensions, gives 124.40 mm, leaving 0.10 mm total against the 124.50 mm span. The width axis has room either way.