

LABTIE 45 TUBE SNAP CAP POWDER DISPENSER CONVERTER MEASUREMENTS - ACCURATE MODULAR POWDER DISPENSER

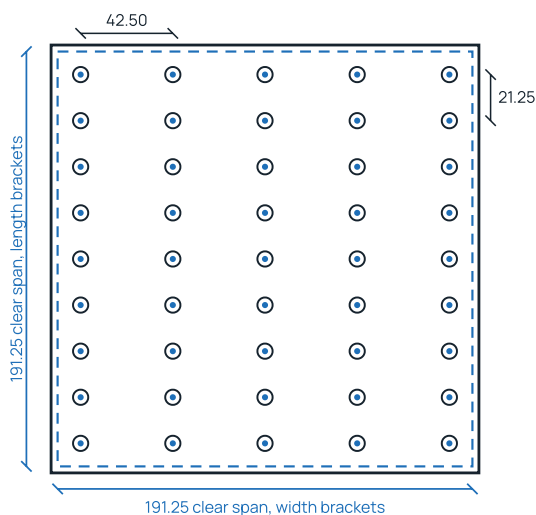
CP-45W-21.25x42.5mm-P-6.6mm.STEP

V-45W-42.5x21.25mm-D10.6mm-H30mm.STEP

SolidWorks 2021 · Millimetre

The LabTIE 45 Tube Snap Cap Powder Dispenser is an accurate modular powder dispenser for snap cap tubes. This datasheet covers the 45-Tube (Snap cap) Converter and the vial holder it closes around: the hole pitch, the clear span between brackets, the holder hole size, and the snap cap tubes that fit. All figures are taken from the two released STEP solids, and the views are generated from that same geometry.

FIG. 01 · TOP VIEW FROM THE STEP MODEL



THE LABTIE 45 TUBE SNAP CAP POWDER DISPENSER



The modular powder dispenser as supplied, dosing straight into snap cap tubes held by the vial holder.

Outlets	45, 5 × 9
Grid pitch	42.50 × 21.25 mm
Clear span	191.25 × 191.25 mm
Converter bore	Ø7.00 to Ø6.00 mm
Holder hole	Ø11.00 mm, 30.00 deep

MEASUREMENT 1

Distance between the holes

42.50 mm across
21.25 mm along

Centre to centre, identical on the converter and the holder. 45 positions in a 5 × 9 grid, five columns on exact 42.500 steps and nine rows on exact 21.250 steps, so the across pitch is exactly twice the along pitch and the grid measures 170.00 × 170.00 mm from first to last centre. Each converter position is a Ø7.00 mm bore stepping down to a Ø6.00 mm outlet; the file name states 6.6 mm, which sits between the two.

MEASUREMENT 2

The Dispenser (converter) dimensions clear span between brackets

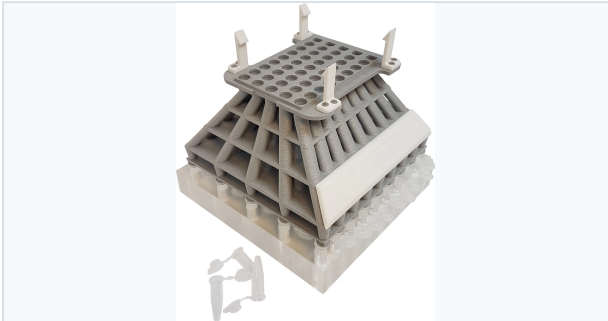
191.25 mm length
191.25 mm width

Inner face to inner face across the brackets on the bottom part, square on both axes. The bracket outer faces measure 197.25 × 197.25 mm, so each bracket is 3.00 mm thick.

MEASUREMENT 3

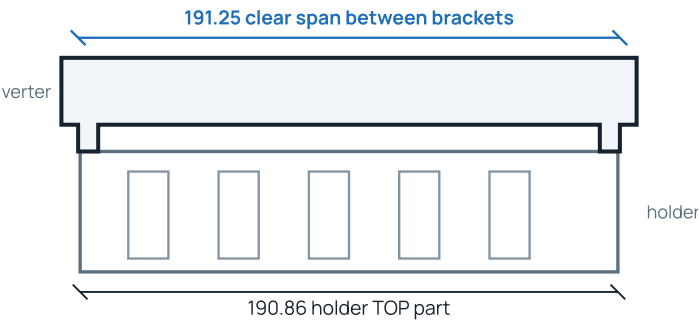
FIT ON THE VIAL HOLDER

FIG. 02 · THE DISPENSER (CONVERTER)



The Dispenser (converter) as shown on the product page. The flat top part carries the 45 outlets on the 42.50 × 21.25 mm grid; the brackets sit on the underside and close around the holder's upper section, shown in section opposite.

FIG. 03 · SECTION: HOW THE BRACKETS ENGAGE THE HOLDER



The brackets close around the holder's upper section, not its base. The holder steps out to 197.26 mm at the base; the upper section is the dimension that governs the fit. The span is square, so the same section applies on both axes.

The holder fits, with the brackets closed on both axes

AXIS	CLEAR SPAN	HOLDER TOP PART	MARGIN	PER SIDE
Length	191.25	190.86	+0.39	0.20
Width	191.25	190.86	+0.39	0.20

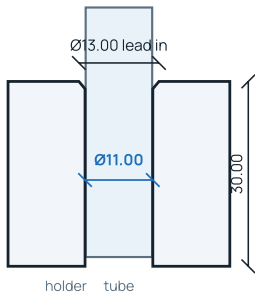
VERIFIED FIT both axes within +2.00 mm

Both figures are measured, the span from the converter solid and the upper section from the holder solid, so this row is not derived. Where a third party rack is published with a 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.

MEASUREMENT 4

THE VIAL HOLDER HOLE SIZE AND THE SNAP CAP TUBES THAT FIT

FIG. 04 · HOLDER HOLE, SECTION DETAIL



Holes	45, 5 × 9
Hole size	Ø11.00 mm
Depth	30.00 mm, through
Nominal vial	Ø10.60 mm

SNAP CAP TUBES THAT FIT THE Ø11.00 MM HOLE

BRAND AND CATALOGUE NO.	BODY Ø	CLEAR	FIT
Eppendorf 0030120086 · Safe-Lock 1.5 mL, snap cap	10.80 Format	+0.20	Verified fit
Eppendorf 0030120094 · Safe-Lock 2.0 mL, snap cap	10.80 Format	+0.20	Verified fit
Sarstedt 72.690.001 · reaction tube 1.5 mL, snap cap	10.80 Format	+0.20	Verified fit
Sarstedt 72.691.001 · reaction tube 2 mL, snap cap	10.80 Format	+0.20	Verified fit
Sarstedt 72.694.600 · screw cap micro tube 2 mL	10.80 Vendor	+0.20	Verified fit
Greiner Bio-One 616201 · micro tube 1.5 mL, snap cap	10.80 Format	+0.20	Verified fit
Corning Axygen MCT-150-C · MaxyClear 1.5 mL, snap cap	10.80 Format	+0.20	Verified fit

Vendor · diameter published by the manufacturer. **Format** · the Ø10.80 mm body shared by the 1.5 and 2.0 mL microcentrifuge format, which is what the Ø11.00 mm hole is dimensioned on, so every brand in that format fits, snap cap and screw cap alike. Tube bodies run 39 to 44 mm long against a 30.00 mm hole, so they stand proud of the holder and lift out by hand. Brand names are given so you can recognise your own labware; LabTIE is not affiliated with these manufacturers.

RESULT

The 45-Tube (Snap cap) Converter is square, 191.25 mm clear span on both axes, closing around its vial holder with 0.20 mm per side. The holder carries 45 Ø11.00 mm holes on the same 42.50 × 21.25 mm grid as the outlets, 30.00 mm deep with a Ø13.00 mm lead in, so a standard Ø10.80 mm snap cap microcentrifuge tube drops in with 0.20 mm clearance and every outlet lands over a tube mouth.

THE ONE FIGURE TO CONFIRM

Tube body diameter is the figure to confirm: up to Ø11.00 mm enters the holder. Anything wider, such as a Ø12.00 mm cryovial, needs a holder made to that diameter. Tube not listed? Send the name or part number with your quote request.