

# Super small-amount dispenser with two ultra-precision pump units. Automatic Dual-liquid Measuring Metered Dispenser

TWIN SOLID PUMP SYSTEM

# TSP Series

## Ultra-precision Measuring Compact

Featuring SOSEY-SOLID® pump system  
capable of dispensing super small amounts of  
**0.015 / 0.050 / 0.150 / 0.450 / 0.900ml.**

Perfect for low-gravity to high-gravity,  
low-viscosity to high-viscosity materials (\*),  
urethane, epoxy, silicon and other liquid materials.

(※)Depending on the type of material or filler,  
it may be unusable or part wear may be faster.



Comes with  
simple operation controller  
It can be used immediately.



It is extremely light and  
easy to incorporate onto a  
tabletop robot.  
※Robot sold separately.

### Use

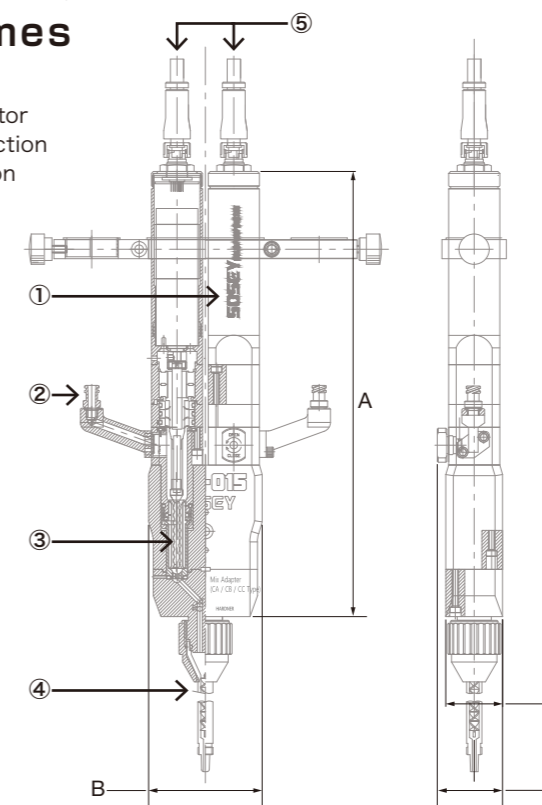
Adhesive chip on smartphone,  
potting inside electronic components, gap filler coating, etc.



### Dimensions / Part Names

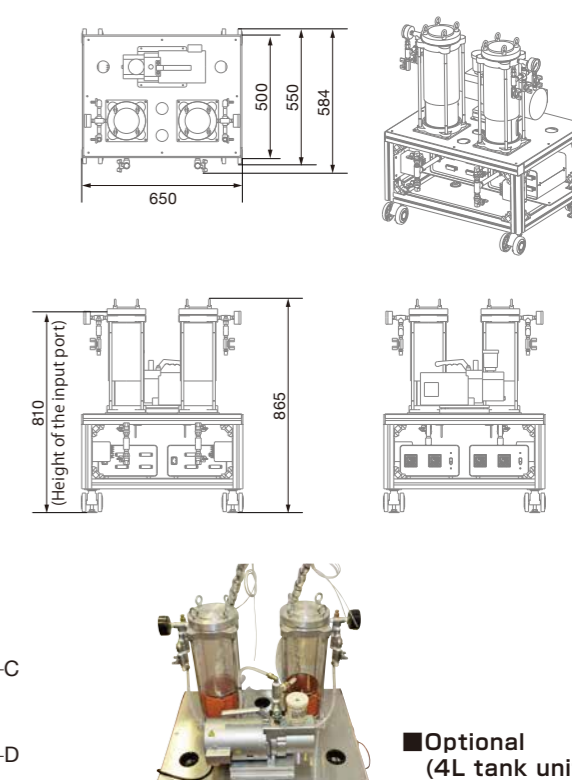
(Unit: mm)

- ① Pump drive motor
- ② Material connection
- ③ Metering section
- ④ Static mixer
- ⑤ Motor cable



Various sizes  
available

### SUPER SHOT SERIES [TSP Series]



Optional  
(4L tank unit)

### Main Unit Specifications

※Numerical value is the design theoretical value and does not warrant the performance of this device.  
※Possible to select according to mixture

| Name   | TSP-015  | TSP-050     | TSP-150     | TSP-500     | TSP-1000    |
|--|--|-------------|-------------|-------------|-------------|
| Pump size (one side)                                   | 0.015ml/rev                                      | 0.050ml/rev | 0.150ml/rev | 0.450ml/rev | 0.900ml/rev |
| Pump drive motor speed                                 | ~120rpm ※Differs by material                     |             |             |             |             |
| Maximum amount dispensed (one side, theoretical value) | 0.03ml/s   | 0.10ml/s    | 0.30ml/s    | 0.90ml/s    | 1.80ml/s    |
| Minimum amount dispensed (one side, theoretical value) | 0.0005ml/s                                       | 0.0017ml/s  | 0.0050ml/s  | 0.0150ml/s  | 0.0300ml/s  |
| Dispensing precision                                   | ±1% ※Differs by material                         |             |             |             |             |
| Material dispensing method                             | PT1/4 or Luer lock                               |             |             |             |             |
| Material supply pressure                               | ~0.6MPa  |             |             |             |             |
| Material viscosity                                     | ~200,000mPa·s                                    |             |             |             |             |
| Usable temperature                                     | ~50°C  |             |             |             |             |
| Pump drive motor                                       | Servo motor                                      |             |             |             |             |
| Unit weight  | 1.12kg   |             | 1.66kg      |             | 1.85kg      |
| Mixer  | Possible to select diameter / number of elements |             |             |             |             |
| A(mm)  | 235  |             | 283         |             | 319.5       |
| B(mm)  | 60   |             | 65          |             | 65          |
| C(mm)  | 30   |             | 32          |             | 32          |
| D(mm)  | 34.5   |             | 36.5        |             | 36.5        |

### Controller Specifications

|                                       |   |
|---------------------------------------|---|
| Power supply                          | Single phase 100VAC 50/60 Hz  |
| Power consumption                     | 200W  |
| Dispensed pattern memories            | 15 patterns ※Selectable by external I/O   |
| Operation mode                        | Timer dispensing / manual (continuous) dispensing / automatic cycle / ratio check                       |
| Air supply for syringe pressurization | Φ6 air supply Capable of adjusting air pressurization in the range of 0-0.6 MPa with built-in regulator |

※Specifications and outside appearance may  
change without advanced notice.  
※The device is not explosion- or water-proof.  
※Special specifications other than those noted  
above are available (optional). Please inquire  
with our sales representative if you wish to  
add optional specifications.