Types of Sine Bar Chucks

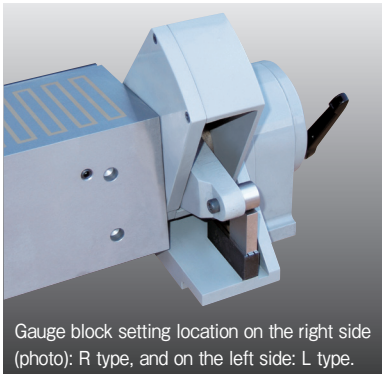
# The sine bar chucks are used to set accurate angles of workpieces for highly precise grinding or as an inspection fixture. This is a type of chuck that utilizes angle setting by a sine bar and the chuck work face can be set to a desired angle efficiently.

## ■Feature

The sine bar chucks come in various types such as electromagnetic, water-cooled, permanent electromagnetic, permanent magnetic and in various sizes.

| Type | Model | Features | Remarks |
|---|---|---|---|
| Tilt electromagnetic | SBE-U | Dust cover provided on gauge block | |
| Tilt water-cooled electromagnetic | SBC-U | High precision water-cooled type | |
| Tilt permanent electromagnetic | SBEP-U | Momentary power application for minimized heat generation | |
| Tilt permanent magnetic | SBP-U | Dust cover provided on gauge block | |
| Sine bar chuck compound type | SBP-R･LS | Thin compound type | |
| Sine bar chuck single type | SBP-R･S | Thin single type | |
| | SBP-R･L | Tilting in longitudinal direction | |


※The rotary tilting sine bar chuck comes with a gauge block (for 0° setting) of 25.882 mm of JIS Class B.


Gauge block setting location on the right side (photo): R type, and on the left side: L type.

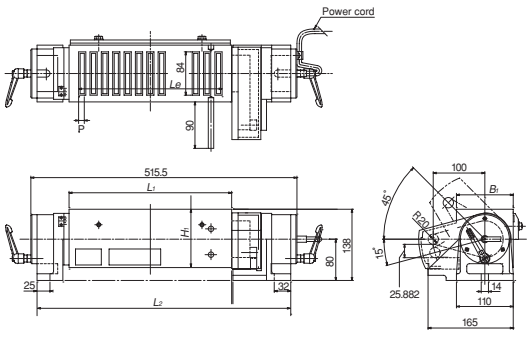

The lock lever is installed on both sides.

## Model SBE-U TILT TYPE ELECTROMAGNETIC SINE BAR CHUCK

Environmentally friendly


SBE-1131UFR-C

**Chuck controller required additionally**




[Application]

Suitable for high precision angle grinding of molds and jigs.

[Features]

- The gauge block can be set on either the right side (R) or left side (L) to meet the rotating direction of the grinding wheel of the grinder.
- The chuck can be smoothly tilted and easily operated.
- An angle can be set finely by one try with the clamp system.
- The position can be changed and secured by pulling the lever in the axial direction.
- When the dustproof cover of the gauge block is opened beyond about 60 degrees, it is locked to facilitate setup and cleaning.
- A resin-bonded structural face plate having little environmental burden is employed.

[mm (in)]

| Model | Nominal Size | Work Face $B_1$ | Work Face $L_1$ | Work Face $Le$ | Work Face $H_1$ | Pole Pitch $P$ | Mounting Length $L_2$ | Height Angle 0° Min. | Height Cover fully open, Max. | Tilt Angle | Angle Accuracy | Voltage | Current | Mass | Electro Chuck Master | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBE-1131UFR-C | 110 (4.33) × 315 (12.4) | 110 (4.33) | 315 (12.4) | 278 (10.9) | 113 (4.44) | 11 (3+8) 0.43 (0.11+0.31) | 492 (19.3) | 138 (5.43) | 210 (8.26) | −15° – +45° | 0.007/100 max. | 90 VDC | 0.3A | 36kg/ 79 lb | ES-M103B ES-M305B EH-V305A | ※For types with a combination of a rectifier and demagnetizer, see pages of "Chuck Controllers." P17–P20 |
| SBE-1131UFL-C | | | | | | | | | | | | | | | | |

※The type having the gauge block setting area on the right side is indicated by "R" and that on the left side indicated by "L".
※The chuck controller and clamp parts are not included. The KANETEC chucks work best when a KANETEC chuck controller is used.
※A gauge block (25.882 mm) for 0° is included. For the mechanism of angle setting, see the bottom part on page 51. The conversion table included with the product facilitates angle setting.