# U-Type High Speed Shifting PPU

| Code | Type | Transfer Direction |
|---|---|---|
| ZBC21 | U-Type High Speed Shifting PPU | XZ Shaft |
| ZBC22 | | Servo Motor |



Product features:

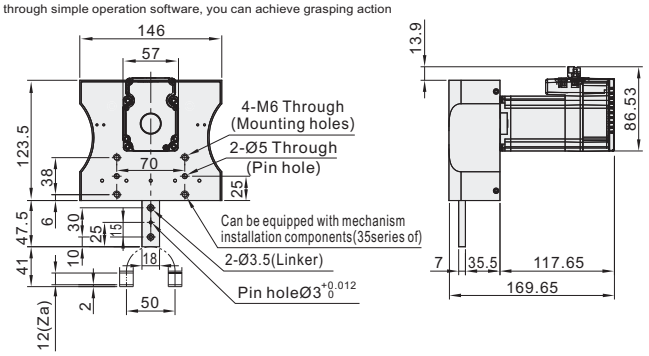
- U-shaped high speed shifting PPU: Unit of Pick and Place. The PPU is a pure CAM structure of the loading manipulator, in the integrated step servo.The actuators follow a predetermined trajectory.
- The control mode is optional: the u-type high-speed shifting PPU motor is an integrated step servo,the motor itself is integrated with a control card, you can choose pulse control or Software I/O control, factory default control mode is software I/O control. Software I/O control is through the Q program in the motor control card to the required multiple points For bit control, the engineer only needs to control the required working point through a few switch quantities; Compared with pulse control, the program is simple and not able to lose step and other characteristics; The only drawback is that each debugging requires editing through computer software, rather than debugging directly on the touch screen.

Use value:

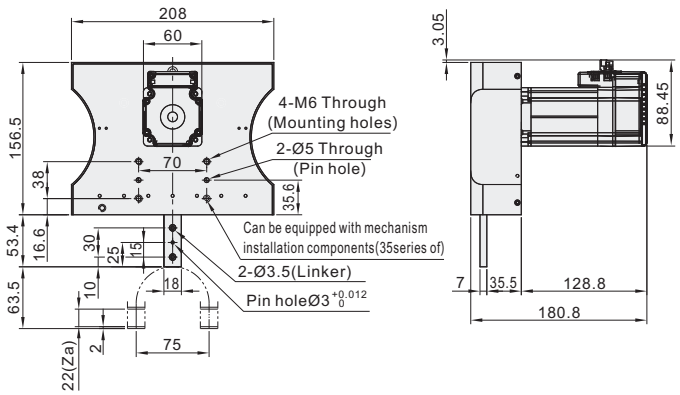
- Automatic transmission, feed and transfer of small parts in a confined space are realized, and these functions are realized by guiding the vertical and horizontal motion sequence
- It can be used with loading of linear feeder and vibratory bowl feeder, and unloading of the turntable. The linear guide has no backlash and has a recirculating needle roller bearing element, which ensures high precision and high rigidity.
- High stability: the combination of the stepper motor and CAM system of the built-in control system forms a compact unit for complete load shifting cycles
- Easy to use: directly to power the product, through simple operation software, you can achieve grasping action

XZ Shaft
ZBC21

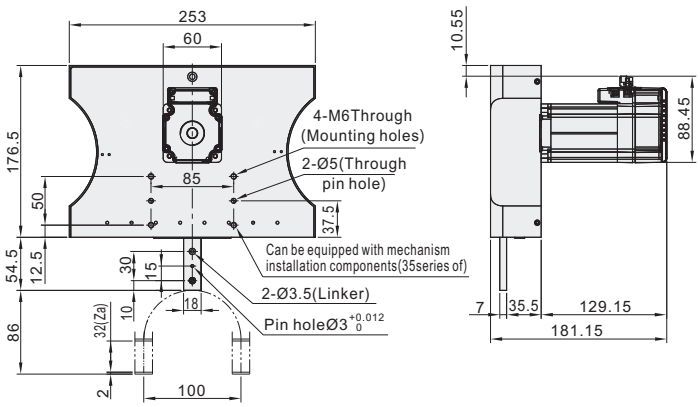
No.:50

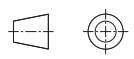



No.:75




No.:100



The first perspective

| Part Number Code | No. | The control mode | The output signal | Maximum straight stroke(mm) X axis | Z axis travel(mm) Z axis | Za | The terminal position repeat accuracy | Minimum cycle time(s) | Maximum torque (N/m) | Maximum load (Kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| ZBC21 | 50 | Not specified (pulse control) | Not specified(NPN) | 50 | 41 | 12 | ±0.05 | 0.8 | 1.4 | 0.6 |
| | 75 | A (software I/O control) | P(PNP) | 75 | 63.5 | 22 | | 1.0 | 2.8 | 0.8 |
| | 100 | | | 100 | 86 | 32 | | 1.2 | 3.6 | 1.0 |

Please order as shown

| Part Number Code | No. | The control mode | The output signal |
|---|---|---|---|
| ZBC21 | 50 | — | — |
| | 75 | A | P(PNP) |

ZBC21—75—A—P

| Part Number Code | No. | The control mode | The output signal |
|---|---|---|---|
| ZBC21 | 50 | Not specified | Not specified |
| | 75 | A | P(PNP) |

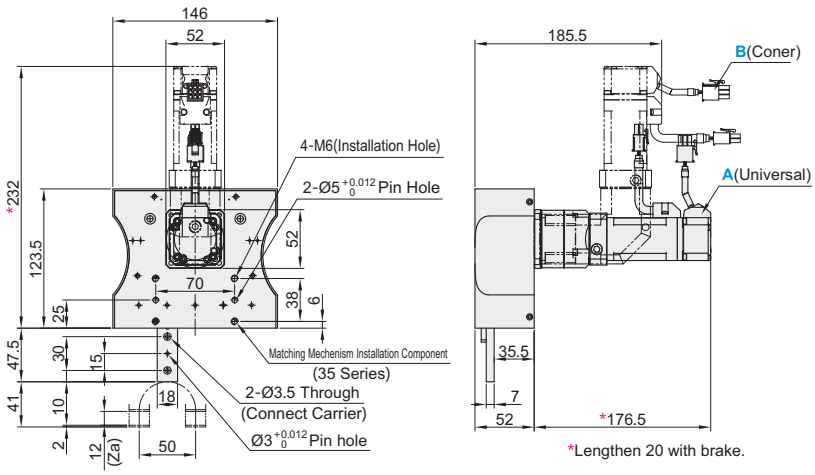
ZBC21—75

Discount price

| Per | 1~5 | 6~ |
|---|---|---|
| Price | 100% | Additional quotation |

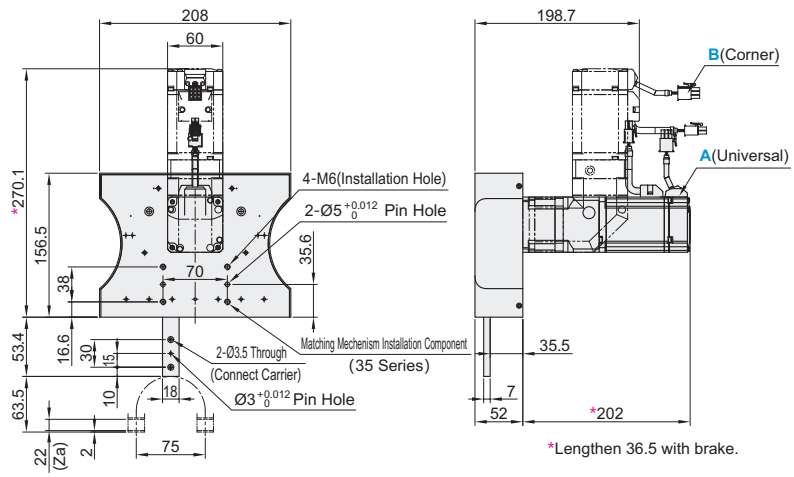
# U-Type High Speed Shifting PPU

Servo Motor
**ZBC22**
Spec: 50



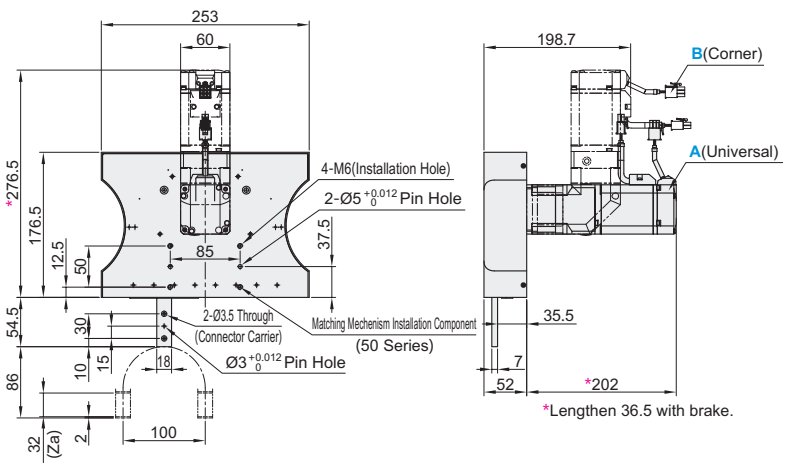

*Lengthen 20 with brake.

Spec: 75




*Lengthen 36.5 with brake.

Spec: 100




*Lengthen 36.5 with brake.

The first perspective

| Part Number | | Motor Selection | | | Reducer Connect Type | Reduce Ratio | Output Signal | Maximum straight stroke(mm) | Z Axial Stroke (mm) | | Repeat Position Accuracy (mm) | Min Cycle Time (s) | Max Torque (N/m) | Max Load (Kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | No. | Adapted Servo Brand | Motor Power W | Brake Type | | | | X Axis | Z Axis | Za | | | | |
| ZBC22 | 50 | S(Panasonic) | 100 | U(No Brake) | A(Universal) | 5 | N(NPN) | 50 | 41 | 12 | ±0.05 | 0.6 | 1.0 | 0.8 |
| | 75 | | 400 | V(With Brake) | B(Corner) | | P(PNP) | 75 | 63.5 | 22 | | 0.8 | 1.27 | 1.2 |
| | 100 | | | | | | | 100 | 86 | 32 | | 1.0 | 1.27 | 1.5 |

Please order as shown

| Part Number | | Motor Selection | | | Reducer Connect Type | Reduce Ratio | Output Signal |
|---|---|---|---|---|---|---|---|
| Code | No. | Adapted Servo Brand | Motor Power W | Brake Type | | | |
| ZBC22 | 50 | S(Panasonic) | 100 | U(No Brake) | A(Universal) | 5 | N(NPN) |
| | 75 | | 400 | V(With Brake) | B(Corner) | | P(PNP) |

ZBC22—75—S—400—U—A—5—N

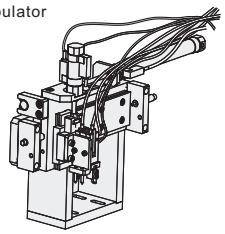
Discount price

| Per | 1~5 | 6~ |
|---|---|---|
| Price | 100% | Additional quotation |

# U-Type High Speed Shifting PPU

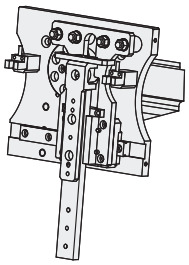
## Performance comparison between traditional manipulator and U - type high - speed shifting PPU

Traditional manipulator



- Complex structure, big size and high cost.

U-type high speed shifting PPU

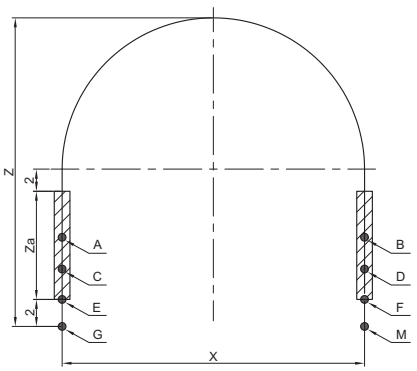


- Pure CAM drive ensures high - speed, stable and accurate action, which can replace the traditional uniaxial manipulator with travel range of 50-100 to reduce the design cost;
- Compact structure, easy installation, small space, beautiful appearance;
- Installation is simple, convenient and efficient.

## Brief description

In normal use, it is recommended to set five work points.

1. Origin point 2. Waiting position for picking 3. Waiting position for picking 4. Waiting position for picking 5. Feeding positionThese five points can form "zero wait.That is, the manipulator cycle realizes high-speed grasping: The PPU moves to the waiting position of the discharging position, (the waiting position of the discharging position can be set a distance from the discharging position), and returns to the waiting position of the feeding position (the waiting position of the discharging position can be set with the discharging position) (A certain distance), after the material is in place, continue to complete the next cycle to make loading and unloading faster. The BC segment is the recommended working interval. For details, please refer to the left diagram.

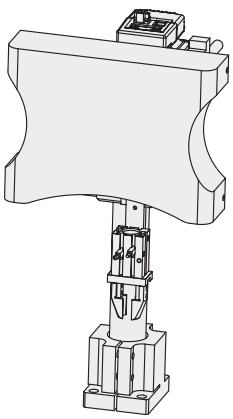



## Simple point description

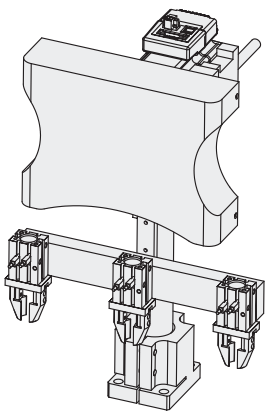
1、Point A and point B: pick waiting bit/place waiting bit (can be arbitrarily set between E and F);
2、Point C and point D: pick/place (anywhere between E and F);
3、Point E and point F: soft limit/origin bit (the origin bit and soft limit can be placed to the left or,(when point E is set as the origin bit, point F is the soft limit; When F is set to soft When limiting, point E is the origin);
4、G and M points: hard limit. G and M: hard limit

## Instructions for use

- Correct use
  Single link gripping unit has light load, low inertia, smooth movement, fast speed and high positioning accuracy, which can meet customers needs.



- Incorrect use
  Multi-link gripping unit has heavy load, high inertia, unstable movement, slow speed; and low positioning accuracy, which can not be used normally.



# U-Type High Speed Shifting PPU

EX
Example

