

# ZMDSeries

## Heavy Duty Hollow Rotating Platform

Model Number

|     |     |   |    |   |  |     |
|-----|-----|---|----|---|--|-----|
| ZMD | 130 | L | 15 | P |  | ( ) |
|-----|-----|---|----|---|--|-----|

- ⑦ Motor size
- ⑥ Standard (None/Non-standard) T A
- ⑤ Precision class
- ④ Reduction ratio
- ③ series
- ② Specifications and size
- ① Code (Serial Number)

- Advantages of high precision, high efficiency, high reduction ratio, high torque, and low wear
- Sliding rotation, transmission accuracy up to 30 arcseconds
- Transmission efficiency up to 96%
- Gear geometric tolerance  $\leq 0.002\text{mm}$
- JISO standard
- Suitable for large disc diameters, large inertia, and rotary designs requiring rapid positioning



- The advantages of high precision, high efficiency, high reduction ratio, high torque, and low wear
- Rotation in sliding mode, transmission accuracy can reach 30 arc seconds
- Transmission efficiency up to 96%
- Gear geometric PR  $\leq 0.002\text{mm}$
- JISO standard
- Suitable for large disk diameter, large inertia, and fast positioning rotation design

### Dimensional Drawings

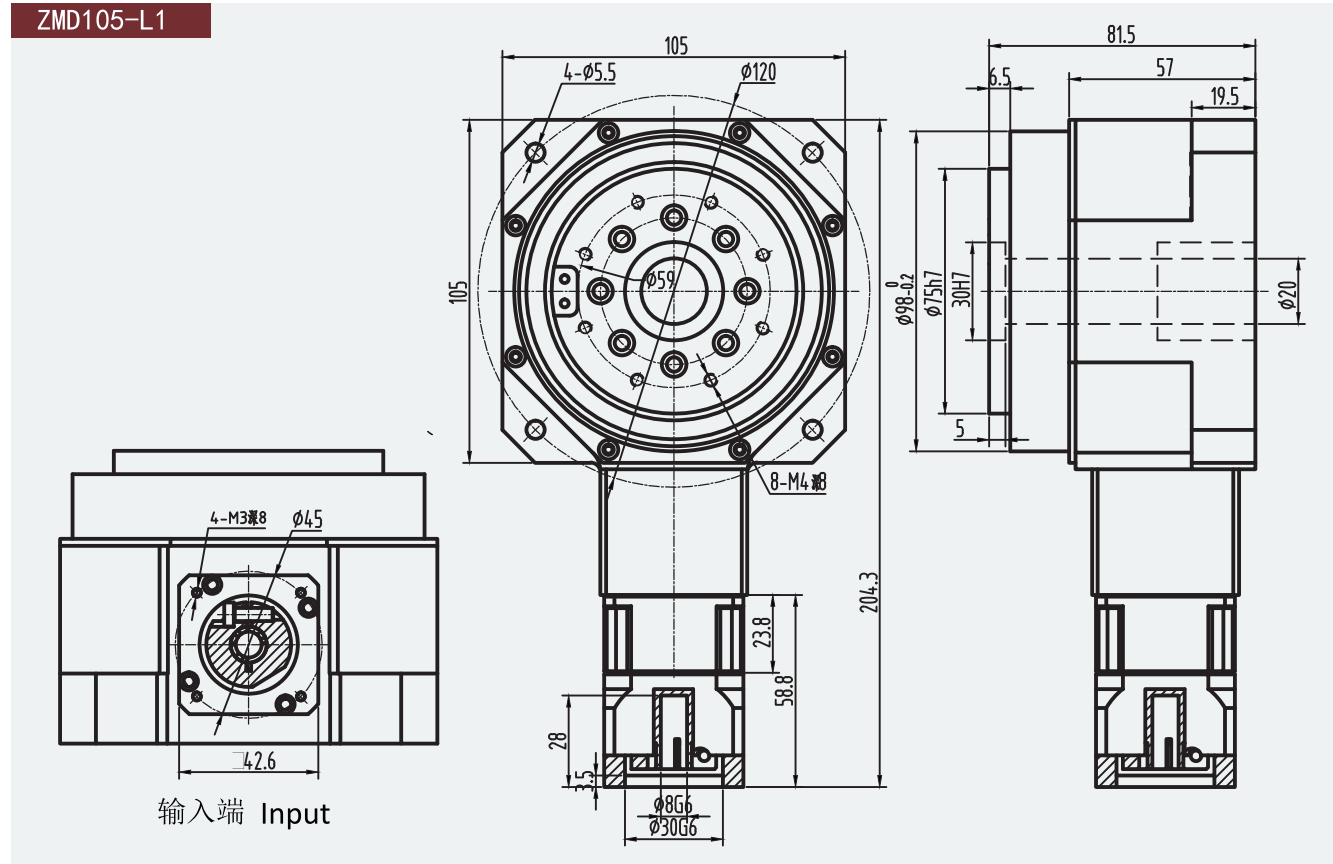
| Product Model                    | Unit      | ZMD105                                 | ZMD130 | ZMD180 | ZMD225 | ZMD260 | Slow Down | Series             |
|----------------------------------|-----------|----------------------------------------|--------|--------|--------|--------|-----------|--------------------|
| Rated output torque T2N          | Nm        | 25                                     | 55     | 130    | 380    | 1220   | 9         | Level 1            |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 12        |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 15        |                    |
|                                  |           | 16                                     | 48     | 160    | 370    | 1370   | 21        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 27        |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 30        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 36        | Level 2            |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 45        |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 48        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 60        |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 75        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 84        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 90        |                    |
|                                  |           | 55                                     | 125    | 340    | 790    | 2430   | 105       |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 120       |                    |
|                                  |           | 55                                     | 125    | 340    | 370    | 2430   | 150       |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 210       |                    |
|                                  |           | 50                                     | 110    | 280    | 700    | 2120   | 300       |                    |
| Maximum output torque T2N        | Nm        | 2 Times rated output torque            |        |        |        |        |           |                    |
| Bearing structure                |           | Cross roller bearing                   |        |        |        |        |           |                    |
| Moment of inertia                | Kgcm2     | 0.19                                   | 0.66   | 0.39   | 1.28   | 6.24   |           | Levels 1, 2, and 3 |
| Rated input speed                | rpm       | 3000                                   |        |        |        |        |           |                    |
| Maximum input speed              | rpm       | 5000                                   |        |        |        |        |           |                    |
| Maximum permissible radial force | N         | 5850                                   | 6760   | 11000  | 16350  | 26750  |           | Levels 1, 2, and 3 |
| Maximum allowable axial force    | N         | 5850                                   | 6760   | 11000  | 16350  | 26750  |           |                    |
| Maximum overturning moment       | N         | 440                                    | 640    | 1450   | 2780   | 5350   |           |                    |
| Torsional stiffness              | Nm/arcmin | 0.7                                    | 1.8    | 4.4    | 9.2    | 26.7   |           |                    |
| Full load efficiency             | %         | Level 1: 96% Level 2: 94% Level 3: 90% |        |        |        |        |           |                    |
| Positioning accuracy             | arc-min   | ±0.5                                   |        |        |        |        |           | Level 1            |
|                                  |           | ±1                                     |        |        |        |        |           | Level 2            |
|                                  |           | ±1                                     |        |        |        |        |           | Level 3            |
| Repeatability                    | arc-sec   | ≤ 10                                   |        |        |        |        |           | Level 1            |
|                                  |           | ≤ 15                                   |        |        |        |        |           | Level 2            |
|                                  |           | ≤ 15                                   |        |        |        |        |           | Level 3            |
| Rotary platform center runout    | mm        | 0.002                                  |        |        |        |        |           | Levels 1, 2, and 3 |
| Rotary platform end runout       |           | 0.01                                   |        |        |        |        |           |                    |
| Rotary platform radial runout    |           | 0.01                                   |        |        |        |        |           |                    |
| Noise                            | dB        | ≤ 55                                   | ≤ 58   | ≤ 60   | ≤ 65   | ≤ 70   |           | Levels 1, 2, and 3 |
| Lifespan                         | h         | > 20000                                |        |        |        |        |           |                    |
| Operating temperature            | ℃         | -20℃ ~ +90℃                            |        |        |        |        |           |                    |
| Lubrication Method               |           | Long-lasting lubrication               |        |        |        |        |           |                    |
| Protection Rating                | IP        | IP65                                   |        |        |        |        |           |                    |
| Installation Method              |           | Any angle                              |        |        |        |        |           |                    |
| Weight                           | kg        | 2.3                                    | 4.5    | 11.2   | 21.5   | 41.9   |           | Level 1            |
|                                  |           | 2.4                                    | 4.7    | 11.5   | 23.4   | 46.9   |           | Level 2            |
|                                  |           | 2.5                                    | 4.9    | 11.9   | 25.4   | 51.9   |           | Level 3            |

\*The above technical parameters are for reference only. Actual technical parameters and dimensions will be provided based on the data provided by the customer.

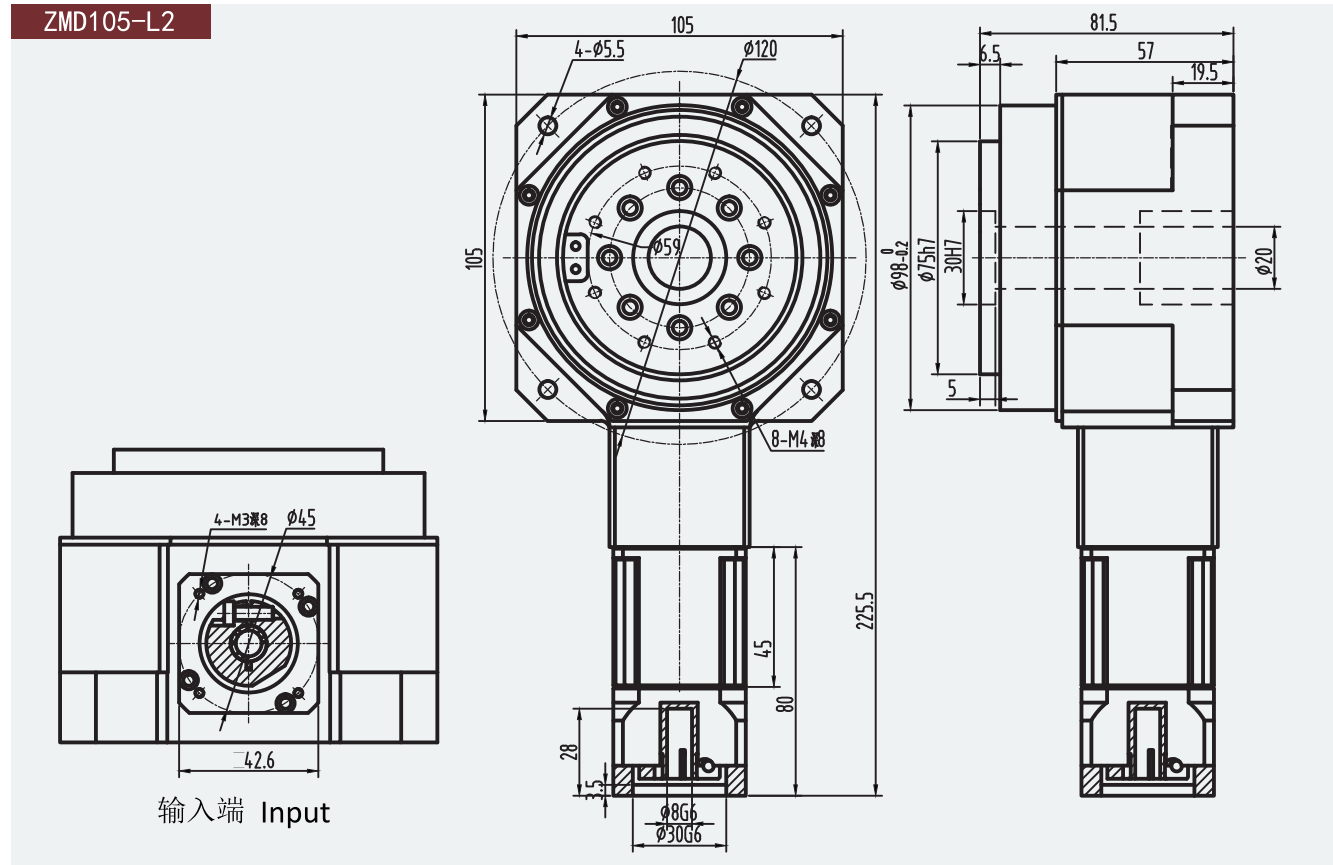
# ZMD Heavy-Duty Hollow Rotary Platform

## Dimensional Drawings

ZMD105-L1

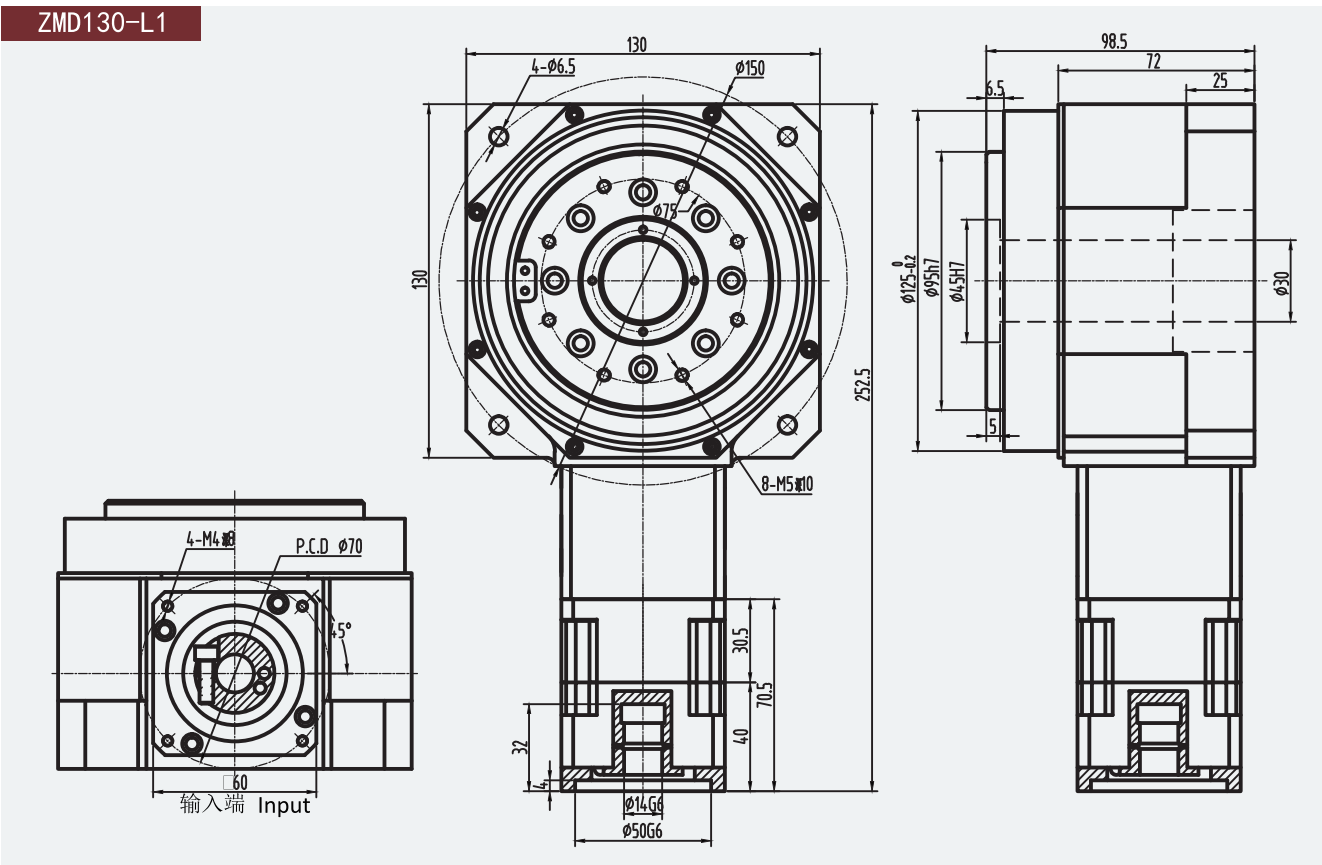


ZMD105-L2

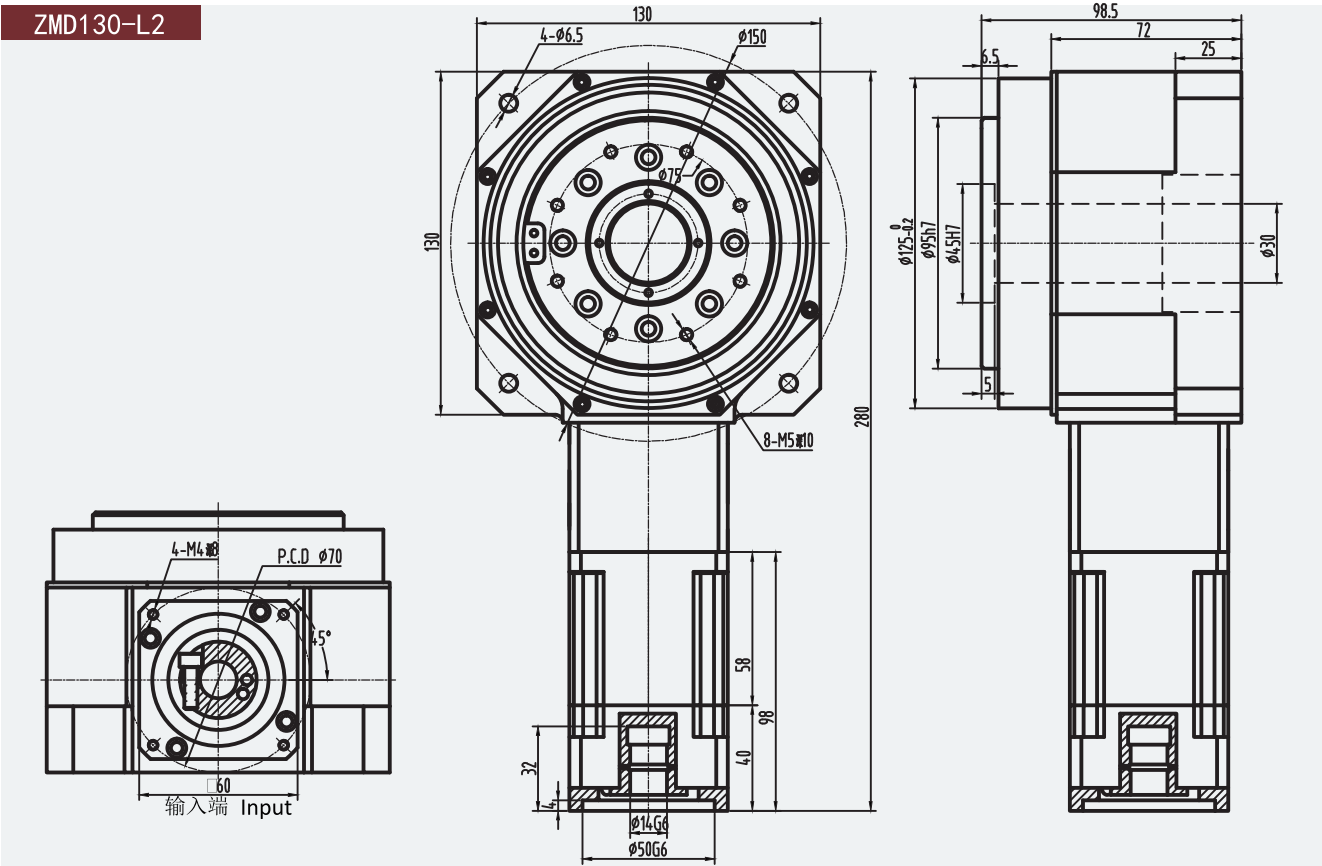


## Dimensional Drawings

ZMD130-L1



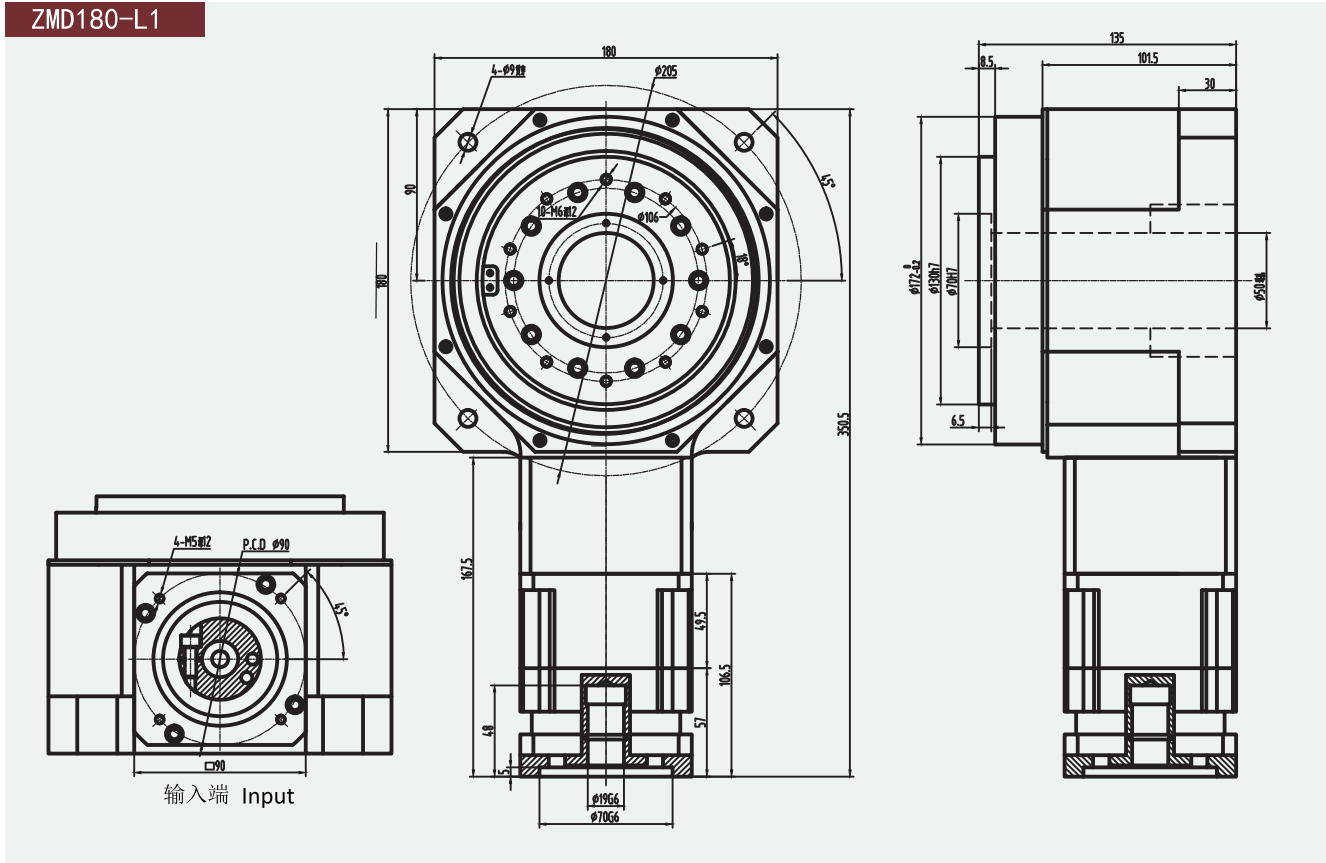
ZMD130-L2



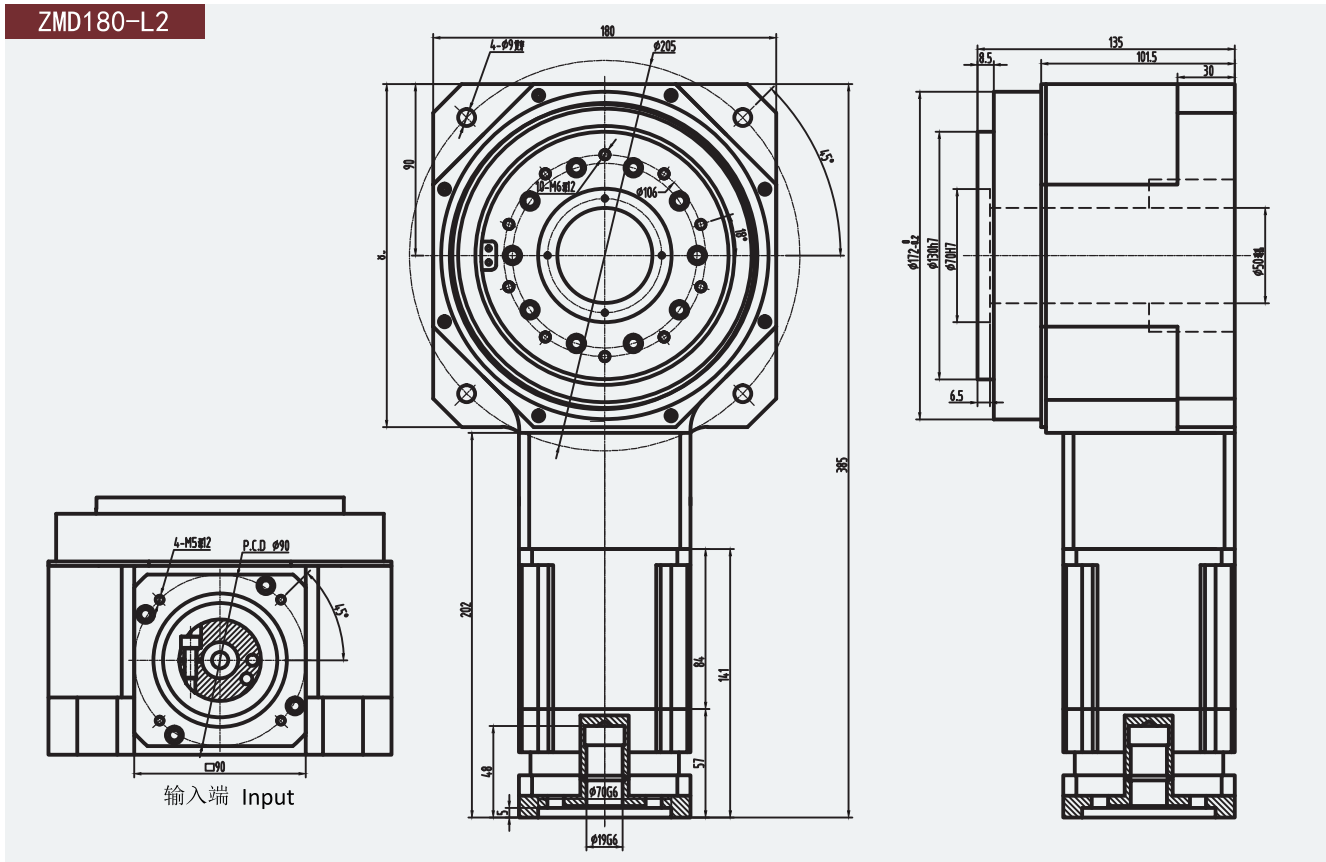
# ZMD Heavy-Duty Hollow Rotary Platform

## Dimensional Drawings

ZMD180-L1

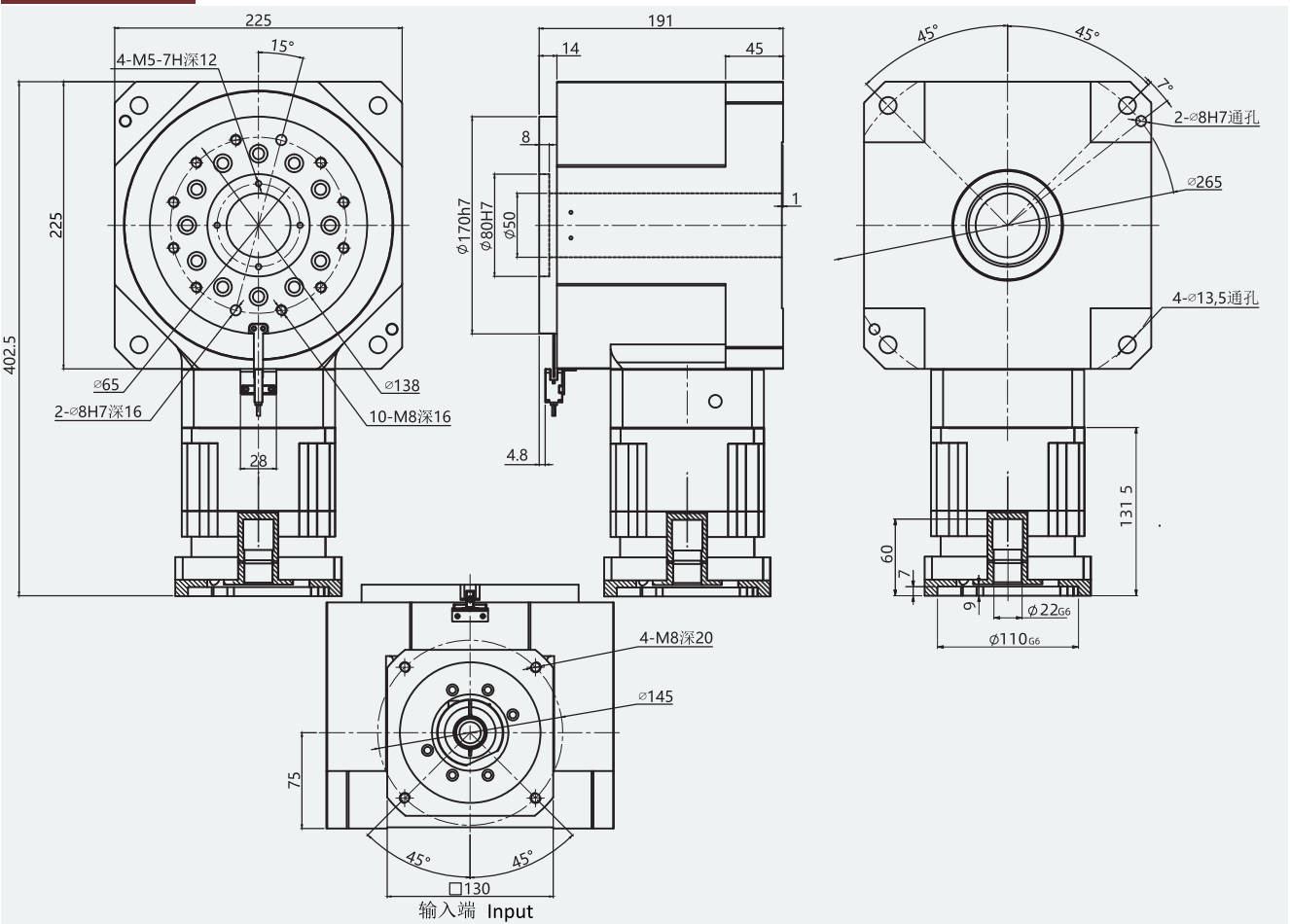


ZMD180-L2



## Dimensional Drawings

ZMD225-L1



ZMD225-L2

