



| Model | | TH180A |
|-------------------------------------|--------------------------|--------------------------------------|
| Type | | Horizontal multi-joint |
| No. of controlled axes | | 4 |
| Arm length | | 180 mm (70 mm+110 mm) |
| Working envelope | Axis 1 | ±120° |
| | Axis 2 | ±140° |
| | Axis 3 (Z-axis) | 120 mm |
| | Axis 4 (Z-axis rotation) | ±360° |
| Maximum speed | Axis 1 | 533°/s |
| | Axis 2 | 480°/s |
| | Axis 3 (Z-axis) | 1013 mm/s |
| | Axis 4 (Z-axis rotation) | 1186°/s |
| Composite | | 2.6 m/s |
| Standard cycle time (with 1kg load) | | 0.35 s ^{*1} |
| Maximum payload mass | | 2 kg (rated: 1 kg) |
| Allowable moment of inertia | | 0.01 kgm ² * ³ |
| Positioning repeatability | X-Y | ±0.01 mm * ⁴ |
| | Z (Axis 3) | ±0.01 mm * ⁴ |
| Axis 4 (Z-axis rotation) | | ±0.005° * ⁴ |
| Hand wiring | | 5 inputs / 4 outputs |
| Hand piping | | 4 pcs. (φ4) |
| Robot controller cable | | 3 m (optional: maximum 10 m) |
| Power Capacity | | 0.5 kVA |
| Mass | | 9 kg |

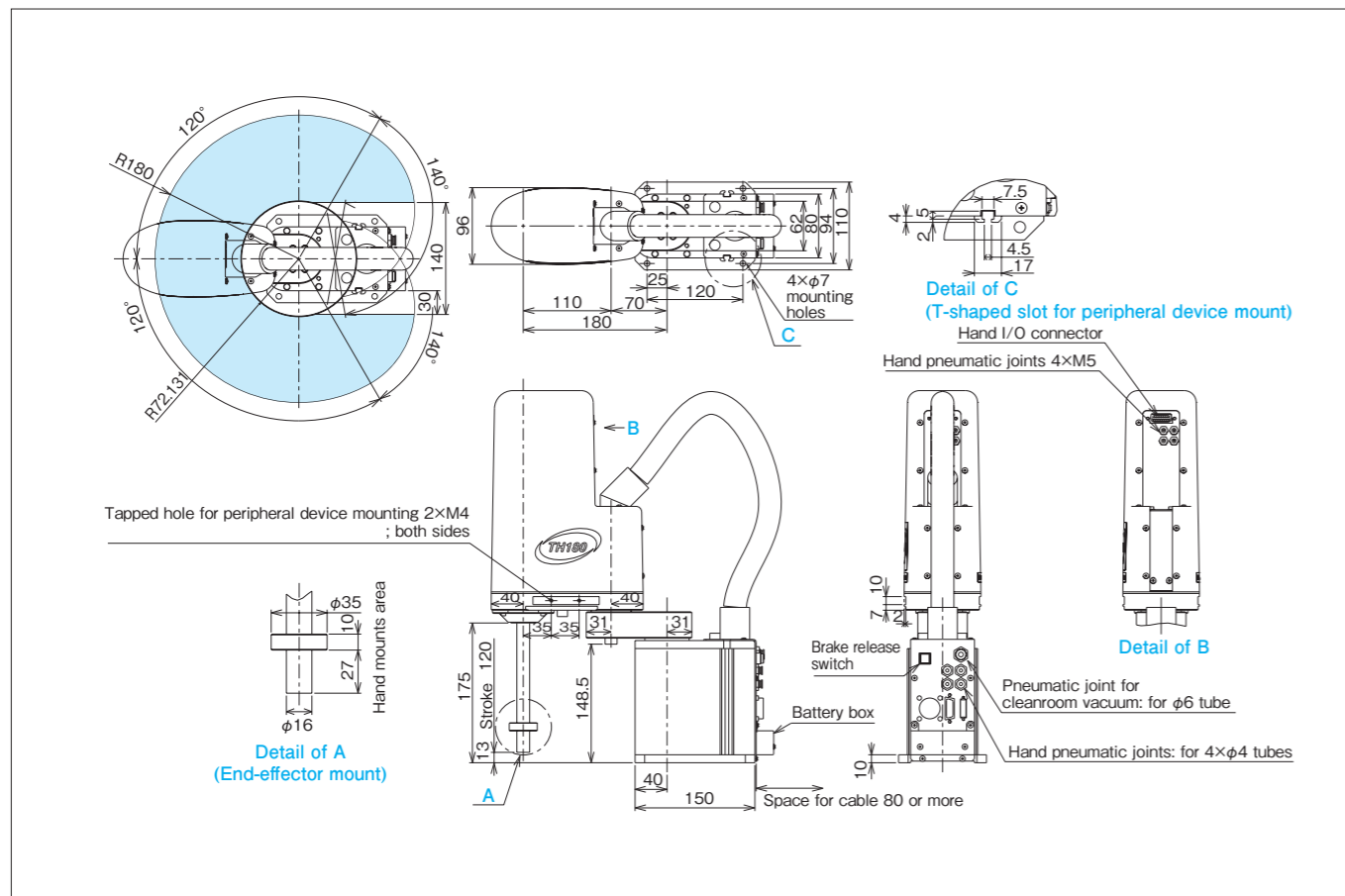
■ This model is used with the controller TS1000 or TS3000. Please see the Controller Combinations table on page 6 for the combinations of robot models and controllers.
 ■ For *1, *3 and *4, see page 5.



| Model | | TH250A |
|-------------------------------------|--------------------------|---------------------------------------|
| Type | | Horizontal multi-joint |
| No. of controlled axes | | 4 |
| Arm length | | 250 mm (125 mm+125 mm) |
| Working envelope | Axis 1 | ±115° |
| | Axis 2 | ±140° |
| | Axis 3 (Z-axis) | 120 mm |
| | Axis 4 (Z-axis rotation) | ±360° |
| Maximum speed | Axis 1 | 540°/s |
| | Axis 2 | 540°/s |
| | Axis 3 (Z-axis) | 1120 mm/s |
| | Axis 4 (Z-axis rotation) | 1143°/s |
| Composite | | 3.53 m/s |
| Standard cycle time (with 1kg load) | | 0.41 s ^{*2} |
| Maximum payload mass | | 3 kg (rated: 1 kg) |
| Allowable moment of inertia | | 0.017 kgm ² * ³ |
| Positioning repeatability | X-Y | ±0.01 mm * ⁴ |
| | Z (Axis 3) | ±0.01 mm * ⁴ |
| Axis 4 (Z-axis rotation) | | ±0.005° * ⁴ |
| Hand wiring | | 5 inputs / 4 outputs |
| Hand piping | | 4 pcs. (φ4) |
| Robot controller cable | | 3 m (optional: max. 10 m) |
| Power Capacity | | 0.9 kVA |
| Mass | | 14 kg |

■ This model is used with the controller TS1000 or TS3000. Please see the Controller Combinations table on page 6 for the combinations of robot models and controllers.
 ■ For *2, *3 and *4, see page 5.

External view



External view

