

Vacuum Robot

RR481 SERIES



Image: RR481L230

The RR481 boomerang arm vacuum robot (dual arms) realizes high positioning repeatability and highly reliable vacuum partition performance by adopting DDM (vacuum direct drive motor) for the drive section. The arm mechanism driven by the steel belt enables the use of long end effector despite of the small rotation area.

Features

- Small rotation area (small footprint)
- Transferring of the long finger and long distance
- Corresponding to the narrow gate opening size (15 mm)
- High accuracy
- Corresponding to ultrahigh vacuum
- High throughput
- Corresponding to the AWC option (wafer position compensation)

Main specifications

- Work size to be handled

300 mm works, 200 mm works, 150 mm works
and square substrates

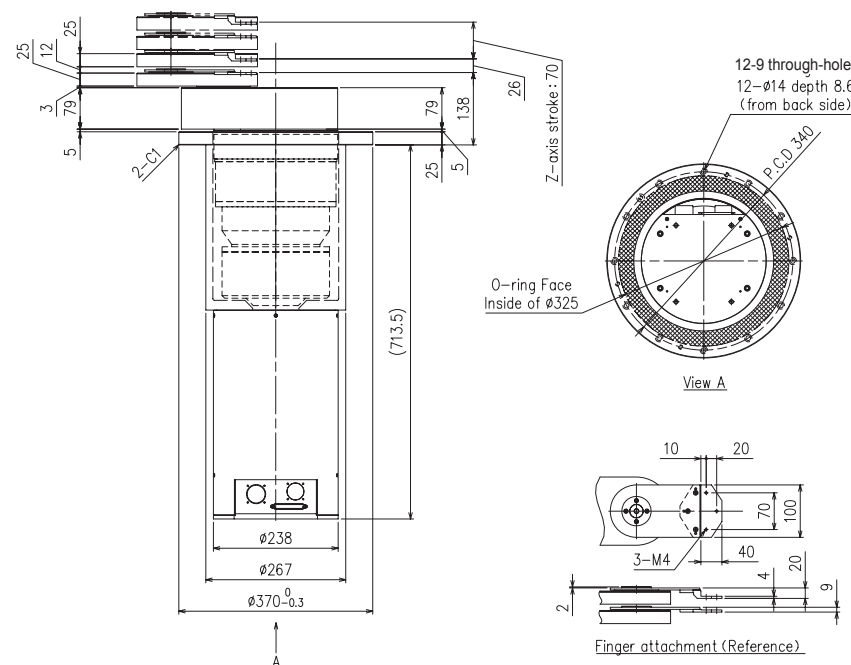
- ### ■ Repeatability

R direction	± 0.1 mm
θ direction	$\pm 0.03^\circ$
Z direction	± 0.05 mm

- Operating range

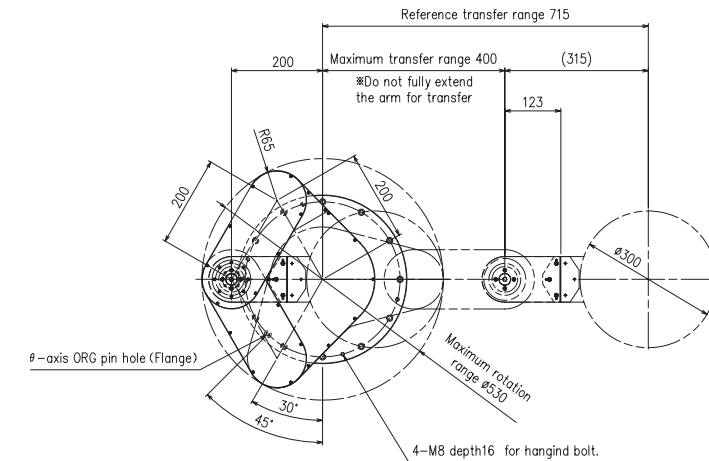
Arm length	L300	L230	L200
Minimum rotation range	φ 730	φ 590	φ 530
Distance of reached work center	1110 mm	830 mm	710 mm
Z-axis	70 mm or 140 mm		

Outside dimensions (common to each arm length)

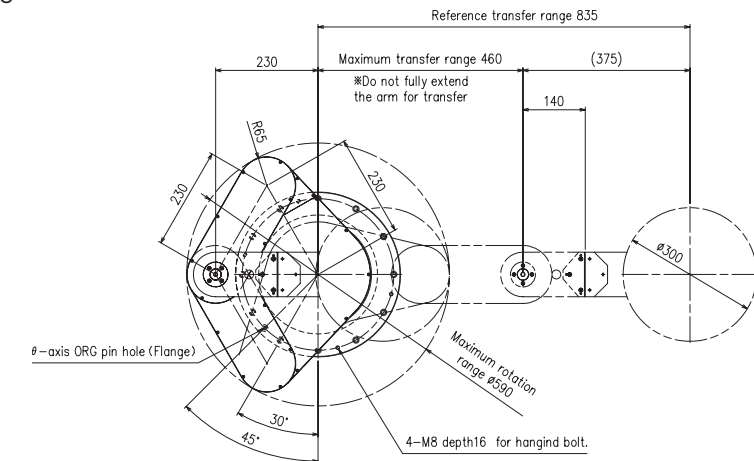


Outside dimensions

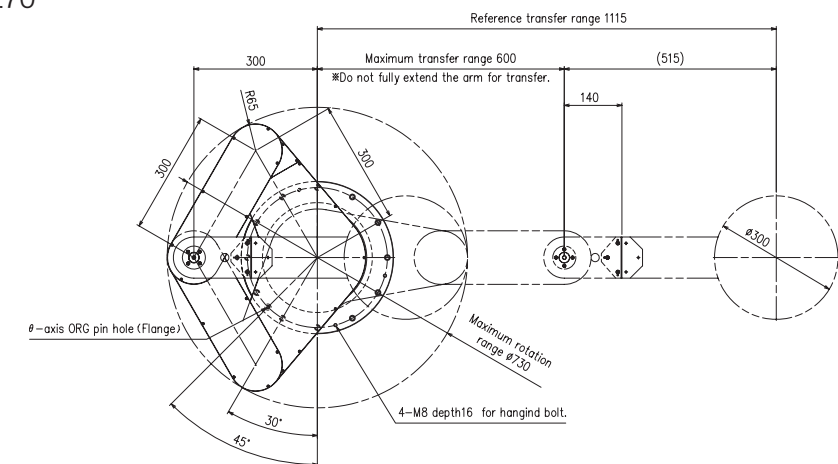
■ RR481L200Z70



■ RR481L230Z70



■ RR481L300Z70



RR491/RR492 SERIES

The RR491/RR492 frog leg arm vacuum robot realizes high positioning repeatability and highly reliable vacuum partition performance by adopting DDM (vacuum direct drive motor) for the drive section. The full-link arm mechanism realizes highly accurate positioning repeatability.

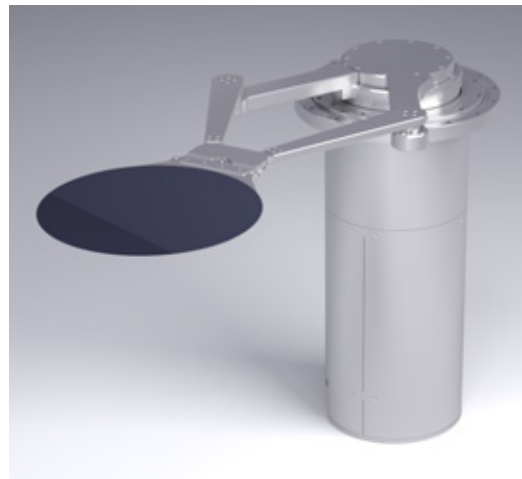


Image: RR491L300



Image: RR492L400

Features

- High accuracy
- Corresponding to ultrahigh vacuum
- High throughput
- Corresponding to the AWC option (wafer position compensation)

Main specifications (RR491)

- Work size to be handled
300 mm works, 200 mm works, and 150 mm works

■ Operating range

Arm length	L300
Minimum rotation range	φ 810
Distance of reached work center Note 1	770 mm
Z-axis	70 mm or 140 mm

■ Repeatability

R direction	± 0.05 mm
θ direction	± 0.03°
Z direction	± 0.05 mm

Note 1: The distance of reached work center can be customized by changing the arm length and finger length.

Main specifications (RR492)

- Work size to be handled
300 mm works, 200 mm works, and 150 mm works

■ Operating range

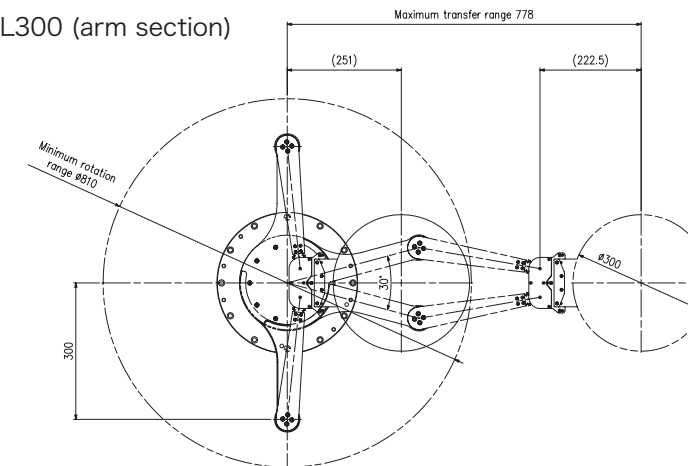
Arm length	L400
Minimum rotation range	φ 980
Distance of reached work center Note 1	1030 mm
Z-axis	70 mm or 140 mm

■ Repeatability

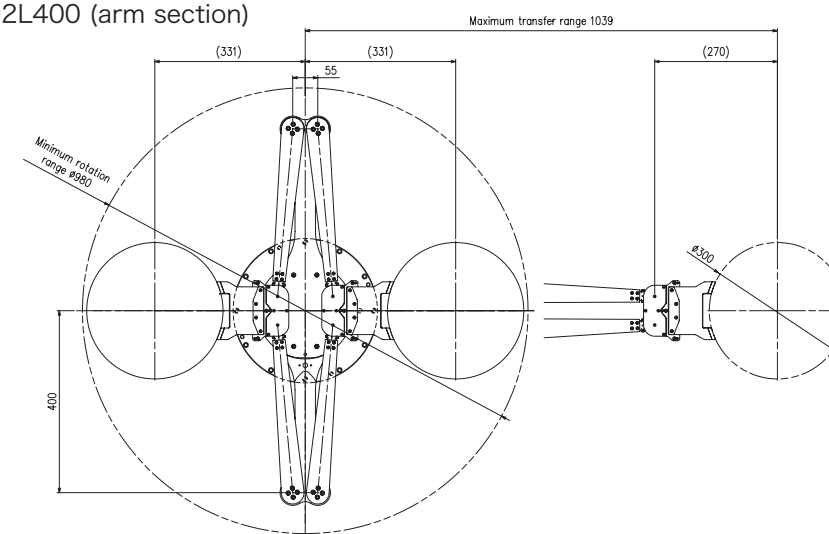
R direction	± 0.05 mm
θ direction	± 0.03°
Z direction	± 0.05 mm

Outside dimensions

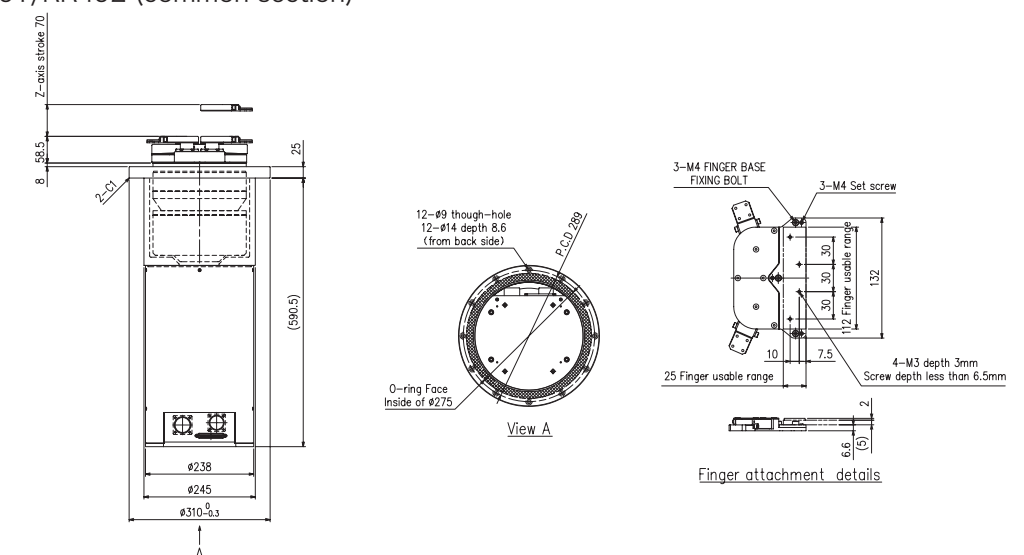
■ RR491L300 (arm section)



■ RR492L400 (arm section)



■ RR491/RR492 (common section)



Vacuum Robot

RR493 SERIES



Image: RR493L180

The RR493 SCARA arm vacuum robot (single arm) realizes high positioning repeatability and highly reliable vacuum partition performance by adopting DDM (vacuum direct drive motor) for the drive section. The link arm mechanism driven by the steel belt enables the use of long end effector despite of the small rotation area.

Features

- Small rotation area (small footprint)
- Transferring of the long finger and long distance
- Corresponding to the narrow gate opening size (15 mm)
- High accuracy
- Corresponding to ultrahigh vacuum
- High throughput
- Corresponding to the AWC option (wafer position compensation)

Main specifications

■ Work size to be handled

300 mm works, 200 mm works, 150 mm works, and square substrates

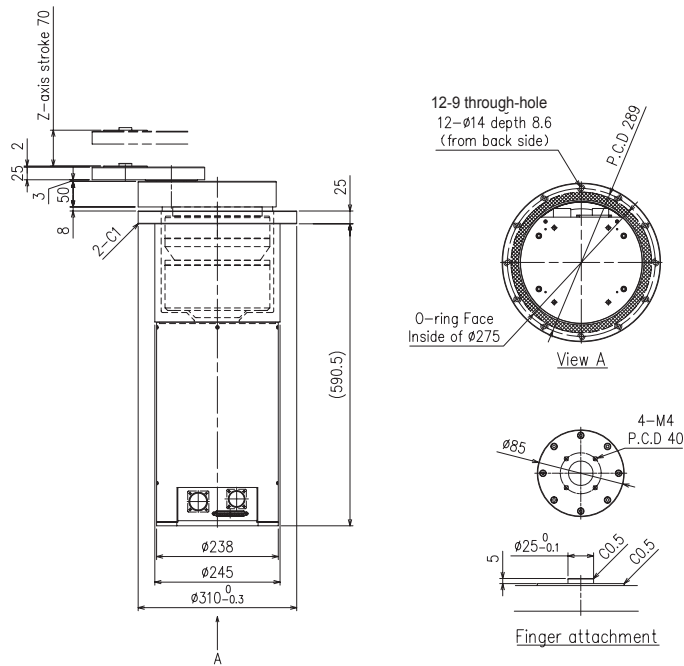
■ Repeatability

R direction	± 0.1 mm
θ direction	± 0.03°
Z direction	± 0.05 mm

■ Operating range

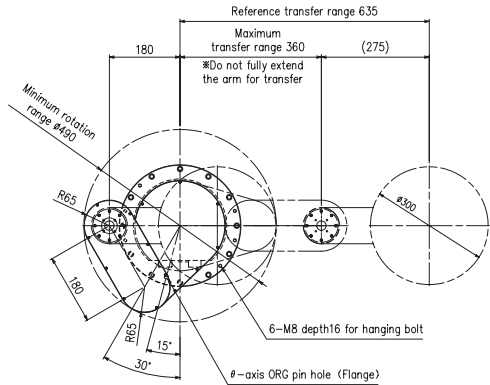
Arm length	L300	L230	L200	L180
Minimum rotation range	φ 730	φ 590	φ 530	φ 490
Distance of reached work center	1110 mm	830 mm	710 mm	630 mm
Z-axis	70 mm or 140 mm			

Outside dimensions (common to each arm length)

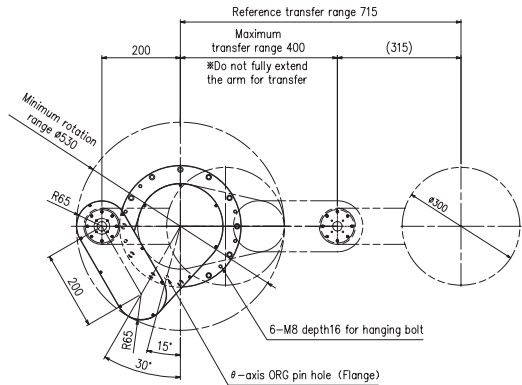


Outside dimensions

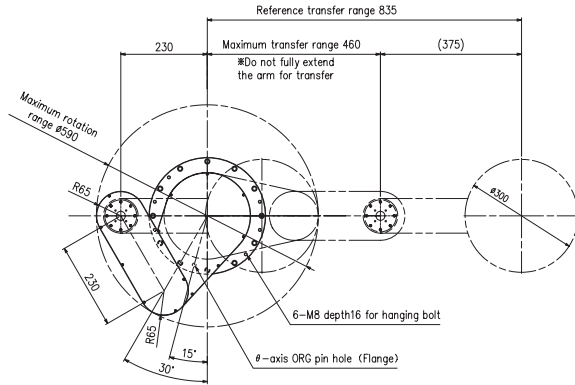
■ RR493L180Z70



■ RR493L200Z70



■ RR493L230Z70



■ RR493L300Z70

