

HS-A1 Series

RC8A ▶P.42

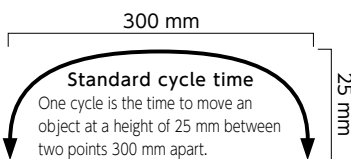
HS035 / 045 / 055

This is a fast, high-performance SCARA robot that specializes in high-speed movement in a small installation space and is suited to conveyance and assembly work.

| | |
|------------------------|--------------------|
| Maximum arm reach | 350 / 450 / 550 mm |
| Maximum payload | 5 kg |
| Standard cycle time | 0.29 sec |
| Position repeatability | ±0.015 / 0.02 mm |



HS045A1



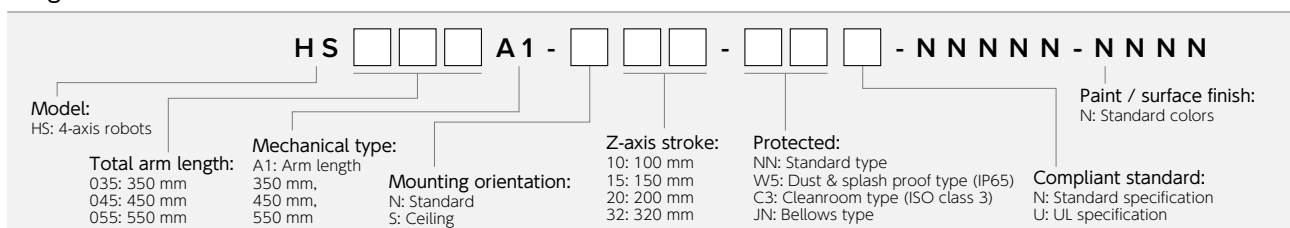
Specifications

| Item | | Specifications | | |
|--|----------------------------|---|--------------------|--------------------|
| Model ¹ | | HS035A1-N* | HS045A1-N/S* | HS055A1-N/S* |
| Axes | | 4 | | |
| Position detection method | | Absolute encoder | | |
| Drive motor / brake | | All-axis AC servo motor / Z- and T-axis with brakes | | |
| Total arm length (No. 1 arm + No. 2 arm) | | 350 (125 + 225) mm | 450 (225 + 225) mm | 550 (325 + 225) mm |
| Motion range and stroke | J1 (No. 1 axis) | ±155° | | |
| | J2 (No. 2 axis) | ±145° | | |
| | Z (No. 3 axis) | * = 10: 100 mm, * = 15: 150 mm, * = 20: 200 mm, * = 32: 320 mm, | | |
| | T (No. 4 axis) | ±360° | | |
| Maximum payload | | 5 kg | | |
| Maximum composite speed (center of end-effector mounting face) | Arm end | 7,200 mm/sec | 6,300 mm/sec | 7,100 mm/sec |
| | T | 2,400/sec | | |
| Maximum joint speed | J1 | 720 deg/sec | 450 deg/sec | |
| | J2 | 720 deg/sec | | |
| | Z | 2,000 mm/sec | | |
| | T | 2,400 deg/sec | | |
| Standard cycle time ² | | 0.29 sec | | |
| Position repeatability (center of end-effector mounting face) ³ | J1 + J2 | ±0.015 mm | ±0.02 mm | |
| | Z | ±0.01 mm | | |
| | T | ±0.005° | | |
| Maximum pressure input (downward, for up to 1 sec) | | 98 N | | |
| Maximum allowable moment of inertia | | 0.1 kgm ² | | |
| User air pipe(s) | | 4 systems (ø4 × 2, ø6 × 2) | | |
| User signal line(s) | | 19 (for proximity sensor signals, etc.) | | |
| Air source | Normal pressure | 0.05 to 0.35 MPa | | |
| | Maximum allowable pressure | 0.59 MPa | | |
| Airborne noise (equivalent continuous A-weighted sound pressure level) | | 80 dB or less | | |
| Protection grade | | Dust & splash proof type: IP65 (option) Cleanroom type: ISO class 3 (option) | | |
| Weight | | Approx. 25 kg | | |

1: An asterisk [] in a model name indicates Z-axis stroke. *2: Time required for a robot to move a 2 kg payload between two points 300 mm apart at a height of 25 mm.

*3: Position repeatability is the precision at constant ambient temperature.

Legend



The data listed on this page is for the standard type. For other options, see our website.