

YA-RJ

6-axis

● Maximum payload 2 kg

● Longest Reach R545 mm

Note. The YA series does not comply with the EU RoHS directive.



Ordering method

YA-RJ	4L	YAC100	N			
Model	Power cable length 4L: 4m	Controller	Safety standard N: Normal	Language setting JE: Japanese/English JC: Japanese/Chinese EJ: English/Japanese EC: English/Chinese	Option I/O N, P: Standard I/O 28/28 N1, P1: 56/56 points N2, P2: 84/84 points N3, P3: 112/112 points N4, P4: 140/140 points	Network option No entry: None CC: CC-Link DM: DeviceNet master DS: DeviceNet slave PB: PROFIBUS EP: EtherNet/IP™ PM: Profinet master PT: Profinet slave ES: EtherCAT slave

Note. This unit is ideal for small tabletop devices or for education.
 Note. The ultra-light, compact YA-RJ features portability and easy installation for simplified system integration.
 Note. Each axis uses a motor of 80 W or less.
 Note. This unit can also be used in combination with a travel axis or other external axis. Please contact us.

Specifications

Controlled Axis	6	
Payload	1 kg (max. 2 kg ^{Note 1})	
Repeatability	±0.03 mm	
Range of Motion	S-axis (turning)	-160° to +160°
	L-axis (lower Arm)	-90° to +110°
	U-axis (upper arm)	-290° to +105°
	R-axis (wrist roll)	-180° to +180°
	B-axis (wrist pitch/yaw)	-130° to +130°
	T-axis (wrist twist)	-360° to +360°
Axis with brake^{Note 2}	L-axis, U-axis	
Maximum Speed	S-axis (turning)	2.79 rad/s, 160°/s
	L-axis (lower Arm)	2.27 rad/s, 130°/s
	U-axis (upper arm)	3.49 rad/s, 200°/s
	R-axis (wrist roll)	5.23 rad/s, 300°/s
	B-axis (wrist pitch/yaw)	6.98 rad/s, 400°/s
	T-axis (wrist twist)	8.72 rad/s, 500°/s
Allowable Moment	R-axis (wrist roll)	3.33 N·m
	B-axis (wrist pitch/yaw)	3.33 N·m
Allowable Inertia (GD²/4)	R-axis (wrist roll)	0.058 kg·m ²
	B-axis (wrist pitch/yaw)	0.058 kg·m ²
Mass	R-axis (wrist roll)	0.98 N·m
	T-axis (wrist twist)	0.005 kg·m ²
Ambient Conditions	Ambient Temperature	During operation: 0 to +40°C, During storage: -10 to +60°C
	Relative Humidity	90% max. (non-condensing)
	Vibration Acceleration	4.9 m/s ² or less
	Others	<ul style="list-style-type: none"> Free from corrosive gasses or liquids, or explosive gasses Free from exposure to water, oil, or dust Free from excessive electrical noise (plasma)
Power Requirements^{Note 3}	0.5 kVA	

Note 1. When a load is more than 1 kg, the motion range will be smaller. Use the robot within the recommended motion range. (See diagrams below)
 Note 2. The S-, R-, B-, and T-axes do not have any brakes. Make sure that the operation does not require brakes.
 Note 3. Varies in accordance with applications and motion patterns.
 Note. SI units are used for specifications.

