

500 kg payload capacity for optimal handling of large and heavy loads

SC500

100
200
300
400
SC500
600
700
可搬質量 (kg)



500kg Payload

- Heaviest payload in the industry designed to be used to transfer large and heavy parts such as automobile bodies

Large Horizontal Range

- A 2,700mm horizontal stroke allows heavy and large parts to be easily moved without interfering with robot's body

High Moment of Inertia

- The allowable moment of inertia is sufficient for heavy guns and grippers

High Load Allowance

- Additional payload (30kg to 60kg) is permitted on the upper arm

SC500

◆ Robot specifications

Item		Specifications
Robot model		SC500
Structure		Articulated
Number of axes		6
Drive system		AC servo system
Max. operating area	Arm	J1 Swivel $\pm 2.62\text{rad}(\pm 150^\circ)$
		J2 Forward/backward $+0.96 \sim -1.31\text{rad}(+55^\circ \sim -75^\circ)$
		J3 Upward/downward $+0.52 \sim -2.18\text{rad}(+30^\circ \sim -125^\circ)$
	Wrist	J4 Rotation2 $\pm 5.24\text{rad}(\pm 300^\circ)$
		J5 Bend $\pm 2.09\text{rad}(\pm 120^\circ)$
		J6 Rotation1 $\pm 6.28\text{rad}(\pm 360^\circ)$
Max. velocity	Arm	J1 Swivel $1.40\text{rad/s}(80^\circ/\text{s})$
		J2 Forward/backward $1.40\text{rad/s}(80^\circ/\text{s})$
		J3 Upward/downward $1.40\text{rad/s}(80^\circ/\text{s})$
	Wrist	J4 Rotation2 $1.57\text{rad/s}(90^\circ/\text{s})$
		J5 Bend $1.57\text{rad/s}(90^\circ/\text{s})$
		J6 Rotation1 $2.53\text{rad/s}(145^\circ/\text{s})$
Payload	Wrist	500kg
	Forearm	30kg
Allowable static load torque	J4 Rotation2	$1960\text{N}\cdot\text{m}$
	J5 Bend	$1960\text{N}\cdot\text{m}$
	J6 Rotation1	$980\text{N}\cdot\text{m}$
Max. allowable moment of inertia	J4 Rotation2	$200\text{kg}\cdot\text{m}^2$
	J5 Bend	$200\text{kg}\cdot\text{m}^2$
	J6 Rotation1	$147\text{kg}\cdot\text{m}^2$
Repeatability		$\pm 0.5\text{mm}$
Ambient temperature		$0 \sim 45^\circ\text{C}$
Installation		Floor
Robot mass		3000kg
Operating Range Cross Sectional Area		4.4m^2

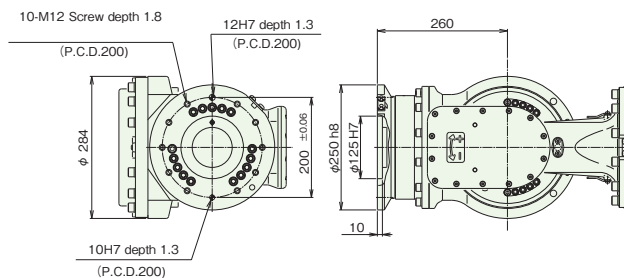
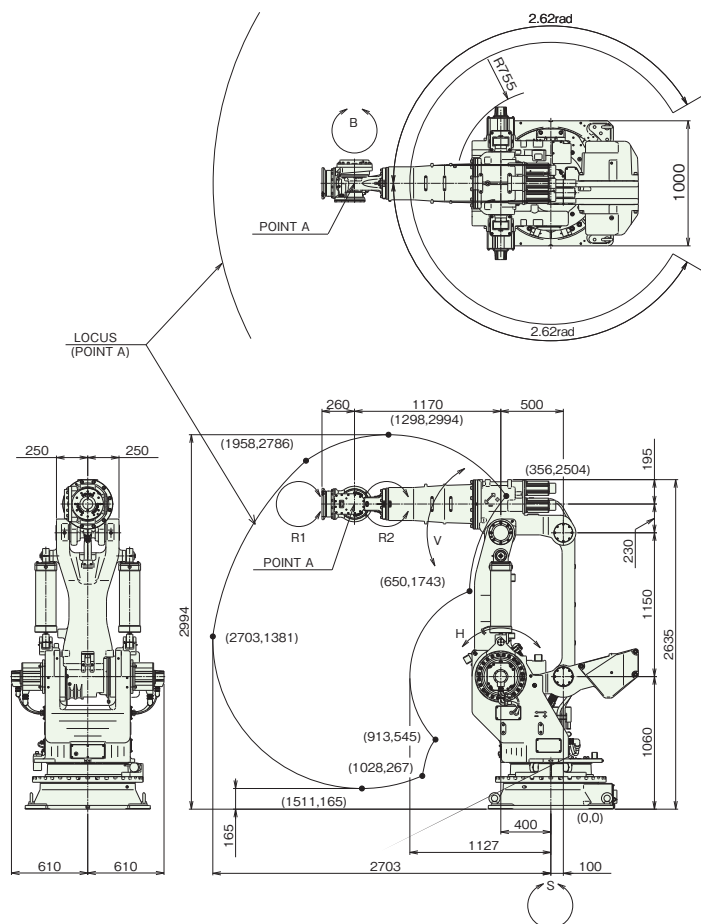
1[rad] = $180/\pi$ [°], 1[N·m] = 1/9.8[kgf·m]

※1 : This value varies from the installed position and the wrist load mass.

※2 : Note that wrist moment of inertia varies depending on wrist load conditions.

※3 : JIS B 8432 compliant.

◆ Exterior dimensions and operating envelope



•The specifications are subject to changes without notice.

•In case that an end user uses this product for military purpose or production of weapon, this product may be liable for the subject of export restriction stipulated in the Foreign Exchange and Foreign Trade Control Law. Please go through careful investigation and necessary formalities for export.

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