

MT SERIES **MACHINE TENDER**

5kg Payload Collaborative Robot

The mobile tender, equipped with the collaborative CMZ12 robot, accurately tends to machines and assists in various automation tasks. Easily move the cart between workstations with a quick disconnect option.



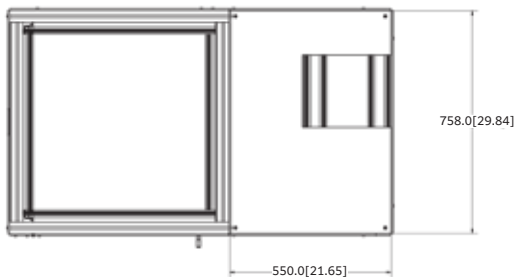
Basic Specification of Robot

Item		Specification
Model		CMZ12-01
Structure		Articulated robot
Axis		6
Drive system		AC servo motor
Maximum motion range	J1	$\pm 2.97\text{rad}(\pm 170^\circ)$
	J2	Initialization
	J2	MAX
	J3	$-1.75 \sim +0.70\text{rad}(-100 \sim +40^\circ)$
	J4	$-2.36 \sim 1.40\text{rad}(-135 \sim +80^\circ)$
	J5	$-2.68 \sim 2.74\text{rad}(-153 \sim +157^\circ)$
Maximum Velocity	J4	$\pm 3.32\text{rad}(\pm 190^\circ)$
	J5	Initialization
	J5	MAX
	J6	$\pm 1.57\text{rad}(\pm 90^\circ)$
	J6	$\pm 2.09\text{rad}(\pm 120^\circ)$
	J6	$\pm 6.28\text{rad}(\pm 360^\circ)$
TCP speed	J1 [with 12kg payload]	$4.71\text{rad/s} (270^\circ/\text{s}) [2.09\text{rad/s} (120^\circ/\text{s})]$
	J2 [with 12kg payload]	$3.14\text{rad/s} (180^\circ/\text{s}) [2.09\text{rad/s} (120^\circ/\text{s})]$
	J3 [with 12kg payload]	$5.41\text{rad/s} (310^\circ/\text{s}) [3.14\text{rad/s} (180^\circ/\text{s})]$
	J4	$7.68\text{rad/s} (440^\circ/\text{s})$
	J5	$7.68\text{rad/s} (440^\circ/\text{s})$
	J6	$12.22\text{rad/s} (700^\circ/\text{s})$
TCP speed		Non-collaborative [with 12 kg payload] 3000mm/s [1000mm/s]
Collaborative		1000mm/s
Payload weight		8kg(Max.12kg)
Maximum static load torque	J4	$20\text{N}\cdot\text{m}$
	J5	$20\text{N}\cdot\text{m}$
	J6	$10.4\text{N}\cdot\text{m}$
Maximum moment of inertia	J4	$0.60\text{kg}\cdot\text{m}^2$
	J5	$0.60\text{kg}\cdot\text{m}^2$
	J6	$0.20\text{kg}\cdot\text{m}^2$
Position repeatability		$\pm 0.025\text{mm}$
Maximum Reach		1214mm
Air tubes		$\phi 6 \times 2$ (3 solenoid valves installed as standard) Available pressure range: 0.1 ~ 0.5MPa
Application cables		20 core or 12 core (Depends on option selection)
LAN		None, 8 core 1 line, 8 core 2 line (Depends on option selection)
Installation		Floor/Inverted
Mounting Condition		Ambient Temperature: 0 ~ 40°C Ambient Humidity: 20 ~ 85%RH (No dew or frost allowed) Vibration: Not more than 0.5G (4.9m/s ²)
Protection class		IP67 equivalent (dust-proof, liquid-resistant)
Clean rating		Equivalent ISO CLASS 5
Noise level		75dB
Robot weight		66kg

1[rad]=180/π[°], 1[N·m]=1/9.8[kgf·m]

- Note that the information represented in this document, such as rated values, specifications, and dimensions, is subject to change without notice to improve the product.
- An explosion-proof version is not available.

Cart Dimensions



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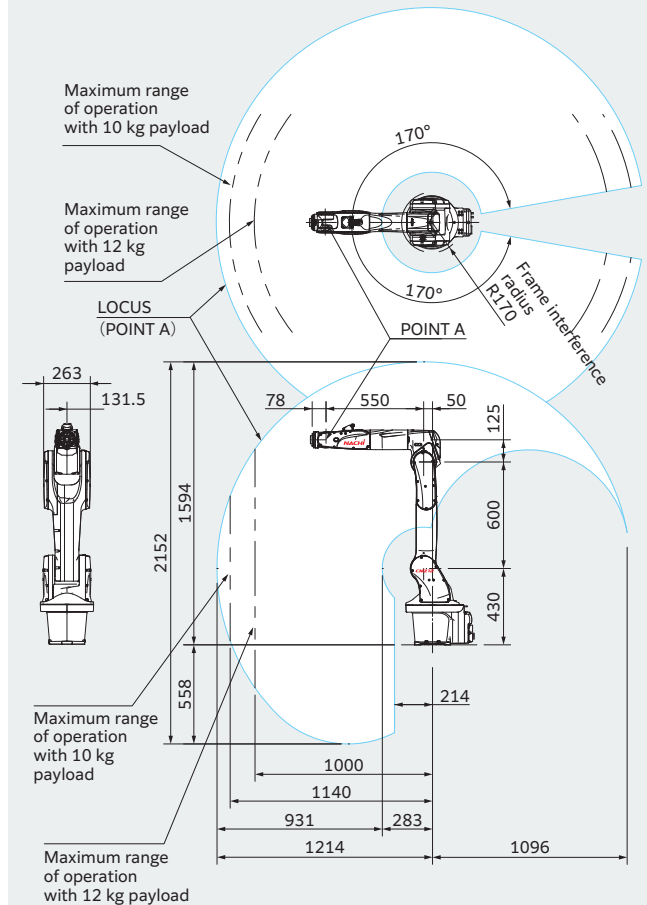
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- The specifications are subject to changes without notice.
- In case that an end user uses this product for military purpose or production of weapon, this product may be liable for the subject of export restriction stipulated in the Foreign Exchange and Foreign Trade Act. Please go through careful investigation and necessary formalities for export.

Dimensions and operating range



- When using the robot for collaborative operation, ensure that its stand is rigid and firmly secured.
- If parts such as the stand or installation vibrate due to robot operation or the surrounding circumstances, the collision-detection system of the CMZ12-01 might erroneously detect a collision.