

MZ type 5kg Payload Collaborative Robot

CMZ05

Add collaborative robot functions to the high speed, high accuracy, and reliability of the MZ series

NEW



Collaborative Rated

- Compliant with various certifications to ensure safety as a collaborative robot (ISO13849-1, ISO10218-1, ISO/TS15066)
- Shape design and software functions that minimize the risk of getting caught

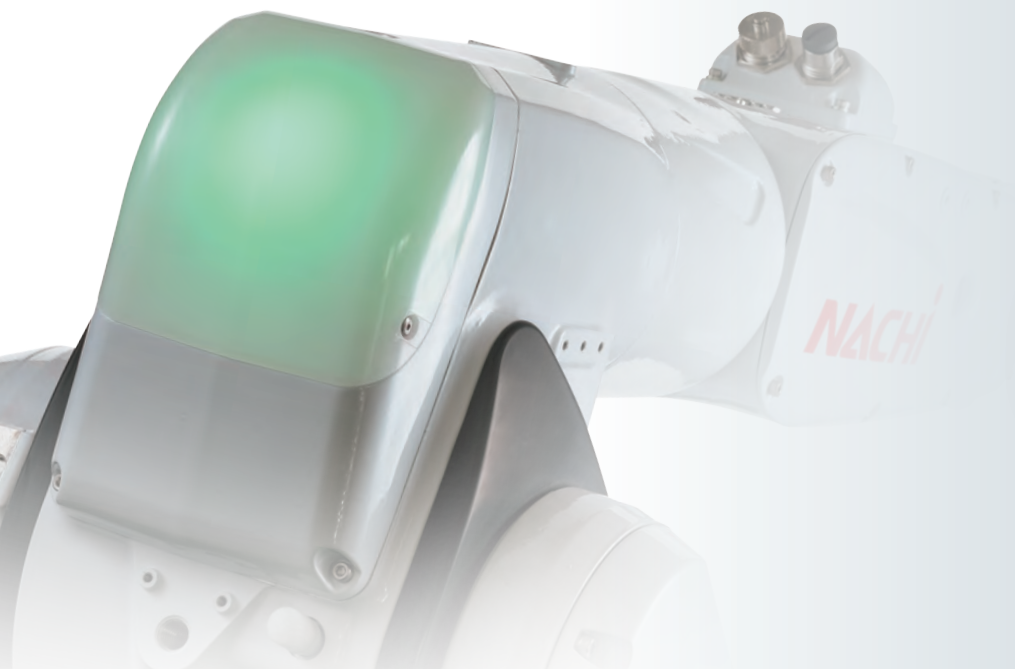
High speed & High precision

- Achieves top-class high-speed and high-accuracy (2500 mm/s when not collaborating) with the same mechanism as the MZF series.

Supports various industries

(protection grade: equivalent to IP67)

- The risk of contact with the workpiece is reduced by the hollow wrist and the wiring and piping inside the arm. Abundant applications for various industries



Basic Specification of Robot

Item	Specification	
Model	CMZ05-01	
Structure	Articulated robot	
Axis	6	
Drive System	AC servo motor	
Maximum motion range	J1	±2.97rad (±170°)
	J2	-2.36 ~ 1.40rad (-135 ~ +80°)
	J3	-2.37 ~ 4.71rad (-136 ~ +90°)
	J4	±3.32rad (±190°)
	J5	±2.09rad (±120°)
	J6	±6.28rad (±360°)
Maximum Velocity	J1	4.71rad/s (270°/s)
	J2	4.28rad/s (245°/s)
	J3	5.42rad/s (310°/s)
	J4	9.60rad/s (550°/s)
	J5	9.60rad/s (550°/s)
	J6	16.58rad/s (950°/s)
TCP speed	Non-collaborative	2500mm/s
	Collaborative	1000mm/s *
Maximum Payload	Wrist	5kg
Maximum static load torque	J4	16.9N·m
	J5	16.9N·m
	J6	9.4N·m
Maximum moment of inertia	4	0.49kg·m ²
	J5	0.49kg·m ²
	J6	0.15kg·m ²
Position repeatability	±0.020mm	
Maximum Reach	927 mm	
Air tubes	φ6×2 (3 solenoid valves installed as standard)	
Application cables	20 wires + LAN 8 wires	
Installation	Floor (Inclined installation +/- 30 degrees)	
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	IP 67 equivalent (dust-proof, liquid-resistant)	
Clean rating	ISO CLASS5	
Noise Level	Not more than 75.0dB	
Robot weight	53kg	

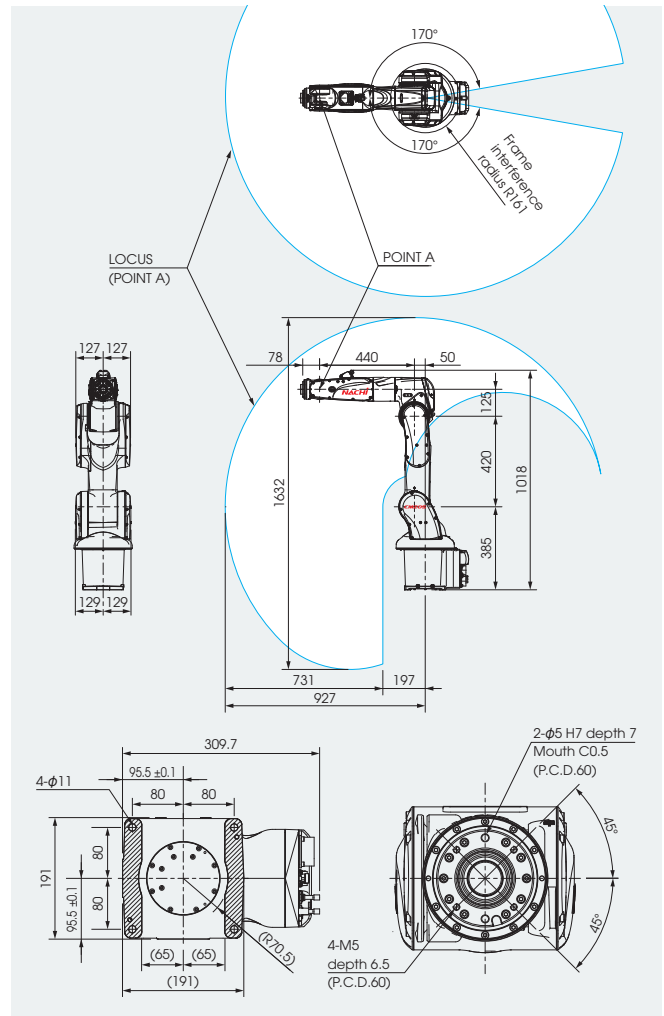
1(rad)=180/π(*), 1(N·m)=1/9.8(kgf·m)

* Specifications are subject to change without prior notice for technical changes.

* Explosion-proof version is not available.

* It is necessary to decide the operating speed according to the risk assessment.

Dimensions and operating range



I/O 20-core LAN port



Collaborative mode indicator lamp



Stopper cover that reduces the risk of getting caught



Offset shape that reduces the risk of getting caught

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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.

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