

50 YEARS

NACHI

NACHI EUROPE GmbH

OUR SYNERGY
YOUR PERFORMANCE

COMPACT AND MULTIPURPOSE ROBOT

MZ12



CELEBRATE THE POLE POSITION



NEW

**17%
SMALLER
FOOTPRINT**

Footprint is 17% smaller
than conventional robots.
Protection level: IP67.
Leads its class in speed
and precision.

COMPACT AND MULTIPURPOSE ROBOT MZ12

BASIC SPECIFICATION OF ROBOT

Item	Specifications	
Robot model	MZ12-01	
Structure	Articulated	
Number of axes	6	
Max. reach	1454mm	
Installation	Floor / Inverted mount / Tilted	
Drive system	AC Servodrive	
Max. working envelope	J1	$\pm 2.97\text{rad}(\pm 170^\circ)$
	J2	$+1.57\text{--}2.79\text{rad}(+90\text{--}160^\circ)$
	J3	$+3.67\text{--}2.57\text{rad}(+210\text{--}147^\circ)$
	J4	$\pm 3.32\text{rad}(\pm 190^\circ)$
	J5	$\pm 2.44\text{rad}(\pm 140^\circ)$
	J6	$\pm 6.28\text{rad}(\pm 360^\circ)$
Max. speed*1	J1	4.54rad/s(260°/s)
	J2	4.01rad/s(230°/s)
	J3	4.54rad/s(260°/s)
	J4	8.20rad/s(470°/s)
	J5	8.20rad/s(470°/s)
	J6	12.22rad/s(700°/s)
Payload (max.)	Wrist 12kg	
Allowable static load torque	J4	25N·m
	J5	25N·m
	J6	9.8N·m
Allowable moment of inertia*2	J4	0.7kg·m ²
	J5	0.7kg·m ²
	J6	0.2kg·m ²
Position repeatability*3	$\pm 0.04\text{mm}$	
Air piping	$\varnothing 6 \times 2, \varnothing 8 \times 1$	
Application signal wires	24wires (including wires for the optional solenoid valves)	
Ambient conditions	Ambient temperature: 0-45°C*4 Ambient humidity: 20-85%RH (without condensation) Vibration: Not more than 0.5G (4.9m/s ²)	
Dust-proof/ Drip-proof performance*5	IP67 equivalent (Protection Rating)	
Robot mass	150kg	

*: Explosion-proof version is not available.

*1: The maximum speed in the chart is a maximum value.
The maximum value may change depending on work programs and load conditions of the wrist.

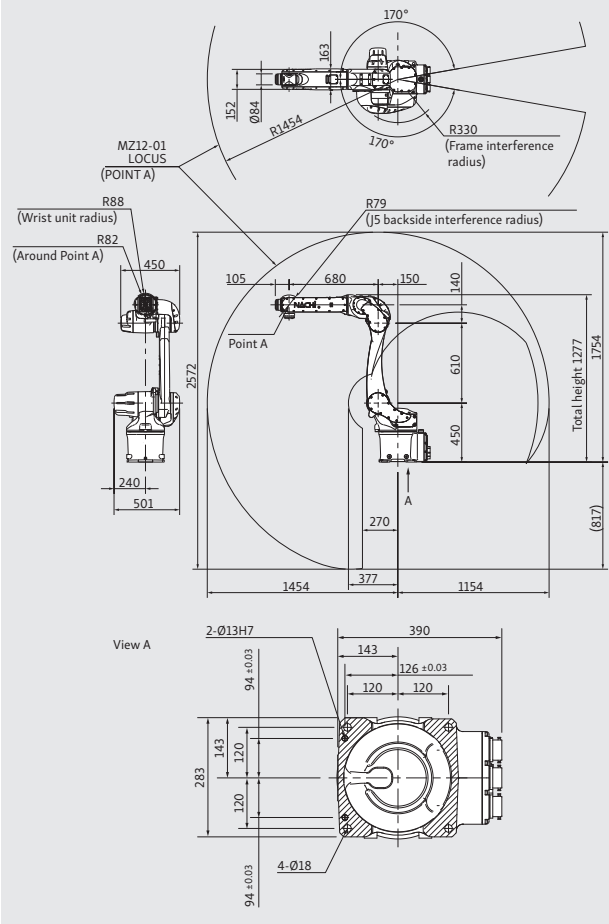
*2: The allowable moment of inertia of a wrist changes with load conditions of a wrist.

*3: JIS B 8432 compliant.

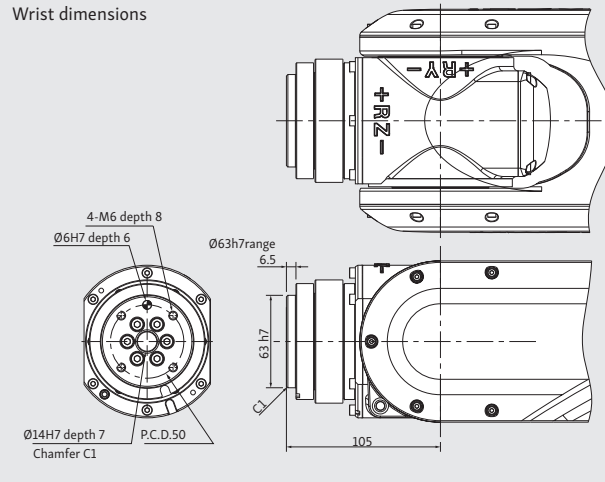
*4: Using at 1000m or less above sea level.
Ambient temperature has limitations when allowable altitude is exceeded.

*5: Fluids that cause the deterioration of sealants, such as gasoline-based cutting fluids, chlorine, alkali, acids, and organic solvents, cannot be used. The wire-harness portion is IP65 equivalent, and the robot controller is IP20 equivalent.

ROBOT DIMENSIONS AND WORKING ENVELOPE



Wrist dimensions



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