

**NACHI**

NACHI EUROPE GmbH

**OUR SYNERGY  
YOUR PERFORMANCE**

**MZ10LF**

**LONG | PRECISE | HIGH-SPEED**

CELEBRATE THE POLE POSITION



**NEW**

**MZ10LF**

# MZ10LF – LONG | PRECISE | HIGH-SPEED

The MZ10LF achieves a significant payload improvement, longer reach as well as higher speed and precision while maintaining the MZ07 features: lightweight, compact body and hollow wrist.

BASIC SPECIFICATION OF ROBOT		
Item	Specifications	
Robot model	MZ10LF-01	
Structure	Articulated	
Number of axes	6	
Max. reach	1202mm	
Installation	Floor, inverted mount	
Drive system	AC Servodrive	
Max. working envelope	J1	$\pm 2.97\text{rad}$ ( $\pm 170^\circ$ )
	J2	$-2.36\text{--}1.40\text{rad}$ ( $-135\text{--}80^\circ$ )
	J3	$-2.37\text{--}4.71\text{rad}$ ( $-136\text{--}270^\circ$ )
	J4	$\pm 3.32\text{rad}$ ( $\pm 190^\circ$ )
	J5	$\pm 2.09\text{rad}$ ( $\pm 120^\circ$ )
	J6	$\pm 6.28\text{rad}$ ( $\pm 360^\circ$ )
Max. speed*1	J1	5.24rad/s (300°/s)
	J2	3.49rad/s (200°/s)
	J3	5.76rad/s (330°/s)
	J4	8.20rad/s (470°/s)
	J5	8.20rad/s (470°/s)
	J6	12.92rad/s (740°/s)
Payload (max.)	Wrist	10kg
Allowable static load torque	J4	20N·m
	J5	20N·m
	J6	10.4N·m
Allowable moment of inertia*2	J4	0.6kg·m <sup>2</sup>
	J5	0.6kg·m <sup>2</sup>
	J6	0.2kg·m <sup>2</sup>
Position repeatability*3	$\pm 0.025\text{mm}$	
Air piping	$\varnothing 6 \times 2$	
Application signal wires	20 wires	
Ambient conditions	Ambient temperature: 0-45°C*4 Ambient humidity: 20-85% RH (No dew, nor frost allowed) Vibration: Not more than 0.5G (4.9m/s <sup>2</sup> )	
Dust-proof/ Drip-proof performance*5	IP67 equivalent (dust proof and moisture resistant)	
Noise*7	75dB or lower	
Robot mass	55kg	

\*1 Maximum velocity in this table is the available maximum value and will change depending on the work-program and the wrist load condition.  $1 \text{ [N·m]} = 1/9.8 \text{ [kgf·m]}$

\*2 Maximum moment of inertia of a wrist changes due to the load condition.

\*3 JIS B 8432 conformance.

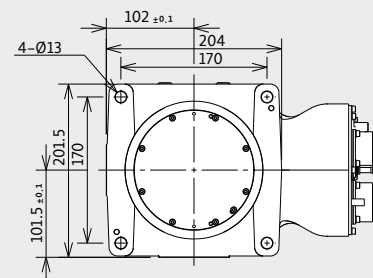
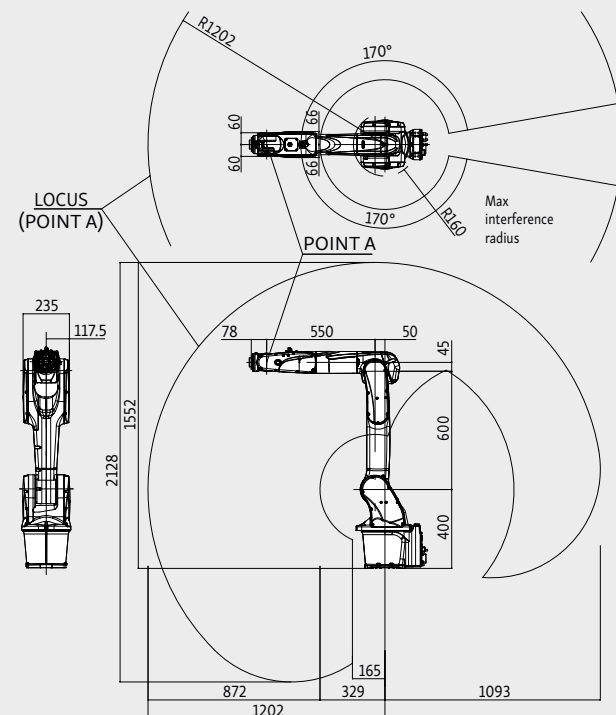
\*4 Using at 1000m or lower sea level. Ambient temperature has limitations when allowable altitude is exceeded.

\*5 Liquid such as organic compound, acidity, alkalinity, chlorine or gasoline cutting fluid which deteriorates the seal material are not available to use.

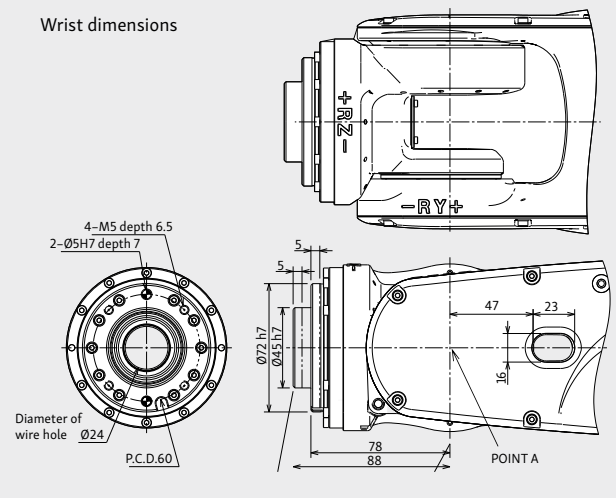
\*6 This is based on an internal assessment in accordance with ISO 14644-1. To ensure cleanliness, install in a clean room with downflow. Robot is not packaged in dust-proof, so when bringing in a clean room, it is necessary to remove dust and dust from robot and wipe clean.

\*7 Robot noise is A-weighted equivalent sound level measured under "JIS Z 8737-1" (ISO 11201) with maximum payload and maximum velocity.

## ROBOT DIMENSIONS AND WORKING ENVELOPE



### Wrist dimensions



Note: Explosion-proof version is not available.  
Specifications are subject to change without prior notice for technical changes.

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