

A white and grey industrial robot arm, the NACHI MZ07, is shown in a dynamic pose against a dark background. The robot arm is illuminated with bright blue light trails that suggest rapid movement. The NACHI logo is visible on the upper arm, and the model number MZ07 is printed on the lower arm. The overall aesthetic is futuristic and high-tech.

NACHI

***Introducing
the World's Fastest
Lightweight,
Compact Robot – MZ07***

Fastest robot in the world*

*Maximum speed by the motion of all axes

Light arm and latest motion control technology enabled the fastest robot in the world. This contributes to the improvement of productivity.

Standard Cycle Time Evaluation (go and back) *1



*1 In the case of 1KG payload

Smart Cable Routing

Cable and tubes can be routed through hollow wrist



Conventional wrist
overhanging cables

Cable routing improved

avoids interference with peripheral equipment
allows the arm to enter tight spaces
improved reliability with stable cable behavior during high speed operation



Hollow wrist
cables are stored inside wrist

Basic specification of robot

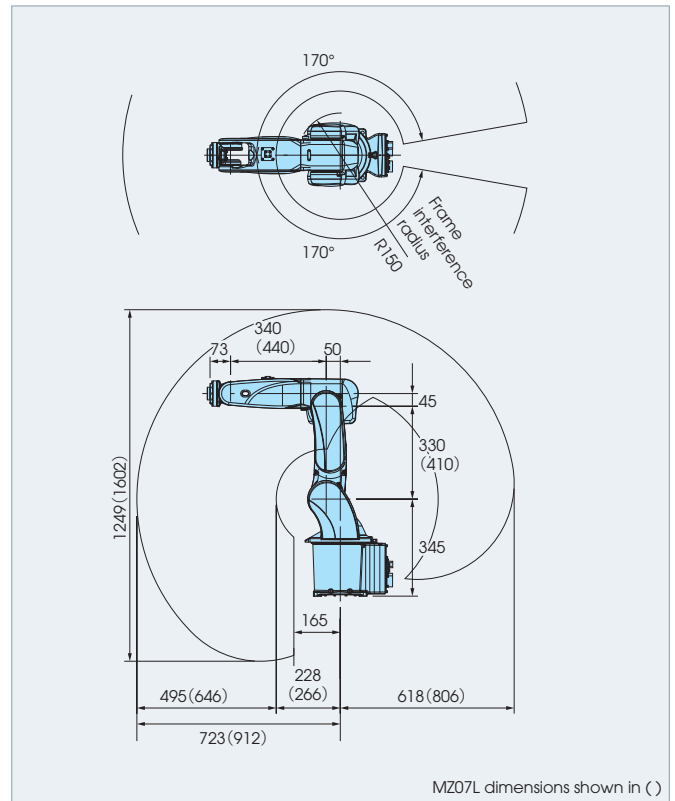
Item		Specification		
Robot Model		MZ07-01	MZ07L-01	
Number of Axis		6		
Drive System		AC Servo Drive		
Max. Speed	Arm	J1 Swivel	7.85 rad/s (450°/s) 5.24 rad/s (300°/s)	
		J2 Forward/Backward	6.63 rad/s (380°/s) 4.89 rad/s (280°/s)	
		J3 Upward/Downward	9.08 rad/s (520°/s) 6.28 rad/s (360°/s)	
	Wrist	J4/J5 Rotation 2/Bend	9.60 rad/s (550°/s)	
		J6 Rotation 1	17.5 rad/s (1000°/s)	
		Max. Payload	7 kg	
Allowable Static Loading Torque	J4/J5 Rotation 2/Bend	16.6 N·m		
	J6 Rotation 1	9.4 N·m		
Position Repeatability*2		±0.02 mm	±0.03 mm	
Ambient Conditions		0~45°C		
Installation		Floor / Wall / Tilted / Invert mount		
Robot Mass		30 kg	32 kg	
Max. Reach		723 mm	912 mm	
Dust Proof, Drip Proof		IP67		

1 (rad)=180/π (°), 1 (N·m)=1/9.8(kgf·m) *2 JIS B 8432 compliant.

Specification of controller

Item	Specification
Controlled Axis	6-Axes
Maximum Control Axis	7-Axes
Program Number	9,999 programs
Memory Capacity	256MB (2,560,000 program steps equivalent)
Memory Device	USB Port
External Dimension	369(W)×490(D)×173(H)
Weight	Approx. 1.7kg
Primary Power Supply	3-Phase AC200-230V ±10% Single Phase AC200-230V ±10%
Consuming Power	0.4KVA
Dust Proof, Drip Proof	IP20
Ambient Temperature	0~40°C
Ambient Humidity	20~85% (Non-condensing)

Robot dimensions and Working envelope



MZ07L dimensions shown in ()

Application Examples



Machine Loading



Assembling



Deburring



Packing

●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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