



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 pipes 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

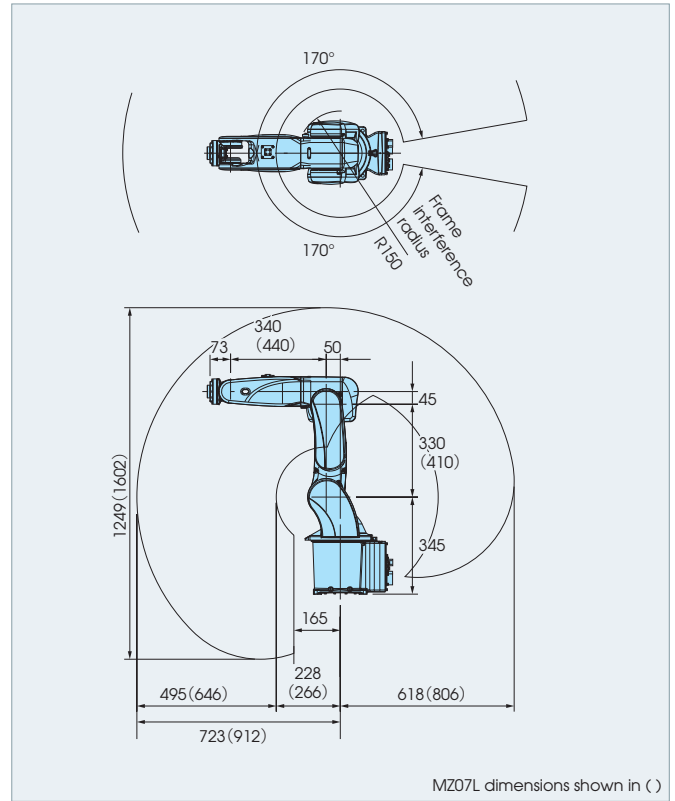
Item		Specification	
Robot Model		MZ07-01	MZ07L-01
Number of Axes		6	
Drive System		AC Servo Drive	
Max. Operating Area	Arm	J1 Swivel	7.85 rad/s (450°/s) 5.24 rad/s (300°/s)
		J2 Forward/Backward	6.63 rad/s (380°/s) 4.89 rad/s (280°/s)
	Wrist	J3 Upward/Downward	9.08 rad/s (520°/s) 6.28 rad/s (360°/s)
		J4/J5 Rotation 2/Bend	9.60 rad/s (550°/s)
		J6 Rotation 1	17.5 rad/s (1000°/s)
Max. Velocity		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 Temperature		0~45	
Installation		Floor / Wall / Tilted / Invert mount	
Robot Mass		30 kg	32 kg
Maximum Reach		723 mm	912 mm

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

Specification of controller

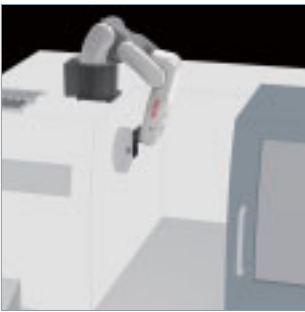
Item	Specification
Controlled Axes	6-Axes
Maximum Control Axes	7-Axes
Program Number	9,999 programs
Memory Capacity	256MB (2,560,000 program steps equivalent)
External Memory Device	USB Port
External Dimension	369(W)×490(D)×173(H)
Weight	Approx. 1.7kg
Power Specification	3-Phase AC200-230V ±10% Single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