

NACHI

Compact and super fast robot
from NACHI

MZ04/MZ04E



- Smart cable routing in hollow wrist
- Compact with a wide working envelope
- Fastest operating speed in its class improves productivity

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				MZ04-01 (MZ04D-01)	MZ04E-01 ^{*3} (MZ04DE-01)
Number of Axis				6	
Drive System				AC Servo Drive	
Max. Speed [rad/s(°/s)]	Arm	J1	Swivel	8.38(480)	3.49(200)
		J2	Forward/Backward	8.03(460)	2.62(150)
		J3	Upward/Downward	9.08(520)	3.32(190)
	Wrist	J4/J5	Rotation 2/Bend	9.77(560)	
		J6	Rotation 1	15.71(900)	
Max. Payload [kg]				4	
Allowable Static Loading Torque [N·m]	J4/J5	Rotation 2/Bend		8.86	
	J6	Rotation 1		4.9	
Position Repeatability ^{*2} [mm]				±0.02	
Ambient Temperature [°C]				0~45	
Installation				Floor / Wall / Tilted / Invert mount	Floor / Invert mount
Robot Mass ^{*6} [kg]				26	25
Max. Reach [mm]				541	
Dust Proof, Drip Proof				IP40 equivalent ^{*4}	

1 (rad) = 180 / π (°), 1 (N·m) = 1 / 9.8 (kgf·m) *2 JIS B 8432 compliant.
^{*3} MZ04E (IP40) and MZ04DE (IP67) use 80w motors or less on all axes.
^{*4} MZ04 and MZ04E are IP40 protection class equivalent. MZ04D and MZ04DE are IP67 protection class equivalent.
^{*5} Wall mount Rear Connection Type +4kg Bottom Connection Type +6kg

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. 17kg
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)

Application Examples



Assembling



Picking



Packing



Deburring

NACHI
NACHI-FUJIKOSHI CORP.



Toshiba Enterprise Co., Ltd.
No. 66, Shitao Park St., Toyama City 93003, Toyama (JAPAN)
TEL: 056-2-22111 FAX: 056-2-22112
E-mail: nsc@toshiba-robot.com

Toshiba Enterprise (Shanghai) Co., Ltd.
No. 25, Lane 2588, Baoshan Highway, Baoshan District, Shanghai
TEL: 86-21-50190232 FAX: 86-21-50190242
E-mail: nsc@robotics.com

www.nachi.com

Head Office Shiodome Sumitomo Bldg. 17F, 1-9-2 Higashi-Shinbashi, Minato-ku, Tokyo 105-0021
Robot Division 1-1-1 Fujikoshi-Honmachi, Toyama 930-8511, JAPAN

Tel: +81-(0)3-5568-5247
Tel: +81-(0)76-456-2223

Fax: +81-(0)3-5568-5237
Fax: +81-(0)76-493-5251

NACHI ROBOTIC SYSTEMS INC.
NACHI AMERICA INC. HEADQUARTERS
NACHI CANADA INC.
NACHI MEXICO, S.A. DE C.V.
NACHI BRASIL LTDA.
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Michigan, U.S.A.
Indiana, U.S.A.
CANADA
MEXICO
BRASIL
GERMANY
THAILAND
SINGAPORE
INDONESIA
INDIA
N.S.W. AUSTRALIA
CHINA

Tel: +1-248-305-6545
Tel: +1-317-530-1001
Tel: +1-905-660-0088
Tel: +52-442-153-2424
Tel: +55-11-4793-8800
Tel: +49-(0)2151-65046-0
Tel: +66-2-714-0008
Tel: +65-65587393
Tel: +62-21-527-2841
Tel: +91-(0)12-4450-2900
Tel: +61-(0)2-9898-1511
Tel: +86-(0)21-6915-2200

Fax: +1-248-305-6542
Fax: +1-317-530-1011
Fax: +1-905-660-1146
Fax: +52-442-153-2435
Fax: +55-11-4793-8870
Fax: +49-(0)2151-65046-90
Fax: +66-2-714-0740
Fax: +65-65587371
Fax: +62-21-527-3029
Fax: +91-(0)12-4450-2910
Fax: +61-(0)2-9898-1678
Fax: +86-(0)21-6915-5427

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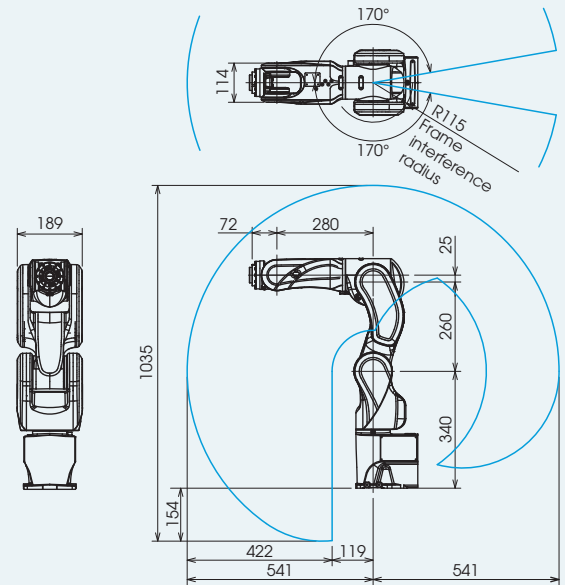
●The specifications are subject to changes without notice.

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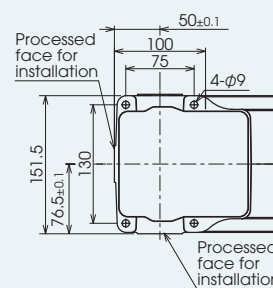
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●Robot dimensions and Working envelope



●Robot base dimensions diagram



●Detail of wrist

