

Launch of MZ F series of high-speed, high-precision robots

1. Growth in the market for small robots

The purpose of improvement and efficiency in the field of manufacturing, productivity is driven by the need to alleviate labor shortages caused by decline in the production age population and rise in labor costs, Automation utilizing robots is accelerating. It is remarkable particularly in electric and electronic fields, and the introduction of the robot is rapidly expanding.

2. Our set

Starting with the launch of MZ07 in 2013, featuring high speed, compact size and light weight, we offer a lineup of MZ-series products since then expansion has been promoted, and efforts have been made to deepen the market for small robots worldwide. "MZ Series" has earned a high reputation for industrial machinery, electric and electronic a wide range of industries, and is contributing to the improvement of productivity at manufacturing sites.

In response to customer demands for higher precision further improving productivity and miniaturizing electrical and electronic components, we introduce MZ07F and MZ07LF with higher speed and precision MZ07. We will also add a slim, lightweight "MZ10LF" to the lineup for manufacturing sites where larger operating ranges are required above 7Kg of weights.

For more convenient applications as well as providing the optimal robots to suit the customer's production site we will promote development and contribute to improving the productivity and quality of our customers.

3. Outline of new products

(1) Features

①.MZ F Series (for MZ07F・MZ07LF・MZ10LF)

a.Class-leading level of high-speed and high-precision

Designed for both light weight and high rigidity, this product realizes class-leading high-speed, highprecision operation, contributing to improved productivity for customers.

In particular, MZ07F greatly enhances acceleration and deceleration performance through optimization of the inner structure. In continuous operation, tact time^{*1} was reduced by up to 43% compared to conventional products.

^{*1}: In our program, the time for continuous operation with 7kg gripped and without a timer is shortened from 6.9 seconds of conventional MZ07, MZ07F is reduced to 3.9 seconds.

b.Compatible with various applications

Wiring and piping required for various applications are installed as standard. By adopting a hollow structure, the robot body eliminates the need for external wiring and piping, improves convenience, and reduces the risk of interference with the surroundings.

c.High versatility

With top-level and powerful wrist torque in the same class, assembly of parts, including loading and transportation.

It is also equipped with a dust-proof and drip-proof (equivalent to IP67) function as standard. It is also compatible with environments where dust and water droplets are scattered. In cleanliness, it achieved Class4 by standards (ISO14644-1 standard) and meet requirements for the electric and electronic fields where high cleanliness is required.

②.MZ10LF

a.Long Reach and Slim Body at Top Level in Class

W10Kg,^{*2} it is one of the lightest in its class and has a slim body that realizes a long reach of 1202mm. It supports various applications such as parts supply to machine tools and picking.

(Body weight 55kg, installation area 200×204mm, frame interfering radius R160mm)

^{*2}: Excluding collaborative robots

(2) Product Specifications

	MZ07F	MZ07LF	MZ10LF
Model			
Maximum weight	7kg		10kg
Maximum reach	723mm	912mm	1202mm
Position repeatability	±0.015mm	±0.02mm	±0.025mm
Body weight	41kg	43kg	55kg

(3) Scheduled Launch and Sales Targets

a.Scheduled for release: March 2022

b.Price: Open Price

c.Sales target: MZ07F/MZ07LF 12,000 units/year (FY2022)
MZ10LF 2,000 units/year (FY2022)

4. Inquiries for new products

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[☞ “High speed & High precision robot MZ07F/MZ07LF” Product Page](#)

[☞ “Compact 10kg payload long reach robot MZ10LF” Product Page](#)