



DOOSAN ROBOT M-SERIES





KEY FEATURES

Master⁺ Safety

The high-tech torque sensor is capable of detecting subtle force changes of up to 0.2 N, providing the best collision sensitivity level for safety in the industry

Master⁺ **Force Control**

6 high-tech torque sensors capable of sophisticated tasks contribute to high-level force control and compliance control

Master⁺ Setup

The Smart Setup function allows quick system installation and immediate operation, as it automatically measures inclination angles, tool position and weight

0.2_N

Torque

12 Minutes

MAIN APPLICATIONS



Assembly

Traditional assembly tasks like screw driving and gear assembling



Machine Tending

Feed the CNC machine and load/unload the subject into the pallet



Welding

Welding parts like skilled welder by various paths with certain quality



Polishing & Deburring

Burr removal and surface polishing after processing



Gluing & Bonding

Spraying of consistent amount of adhesive for gluing and bonding



Plastic Injection Support

Detaching item from mold of injection molding machine and loading onto/unloading from pallet



Press Forming

Picking up panel for loading onto/unloading from press machine



Service

Safely and repeatedly performs pre-defined tasks in accordance with user needs in service industries like medical and F&B

DOOSAN HERITAGE

Super SAFE

· Five workspace settings to fully protect the operator

Five workspace settings protect the operator's safety and improve work efficiency.

- Collaborate zone
- Collision detection mute zone
- Protected zone
- Limited tool Orientation zone
- Customized collision sensitivity zone



Outstanding product safety certified by international organizations

Doosan robots have received prestigious safety certifications worldwide as well as safety certifications from NRTL in the U.S., CE in Europe and KCs in Korea.

Super **EASY**

· One-touch programming in just 20 seconds

Doosan robots automatically recognize attached peripherals and suggest ideal work process in forms of various templates from simple material handling to machine tending. It also provides pre-programed skills, commonly used in the field, which makes it very easy to teach the robot even for beginners.



· Cockpit to quickly and easily teach robots

Through the cockpit (Direct teaching button) on Doosan robots, it is possible to select various teaching modes as well as to save coordinates with simple button operations, allowing easy direct teaching.

Super **FLEXIBLE**

Doosan Mate maximizing the utilization of Doosan robots

Doosan Mate is comprised of a variety of industry-leading partner products from grippers to electric tools machines, sensors and software, providing the best automation solutions optimized for customer needs. All registered products are highly compatible with Doosan robots, allowing easy and fast set-up and immediate operation.

Convenient communication connections

Doosan robots support the latest communication technologies, even without a gateway, allowing seamless connections with various types of industrial equipment and systems.

*Supported Communications: RS232/485, TCP/IP, Modbus TCP (Master/Slave), Modbus RTU (Master), PROFINET IO Device, EtherNet/IP Adapter

DOOSAN ROBOT LINE-UP

Almighty

A-SERIES

A0509 · A0509s · A0912 · A0912s

A-SERIES can go anywhere! With its superior speed and cost-effectiveness, A-SERIES promises a simple solution and a satisfaction to whom may be hesitant to get a cobot

High-Power

H-SERIES

H2017 · H2515

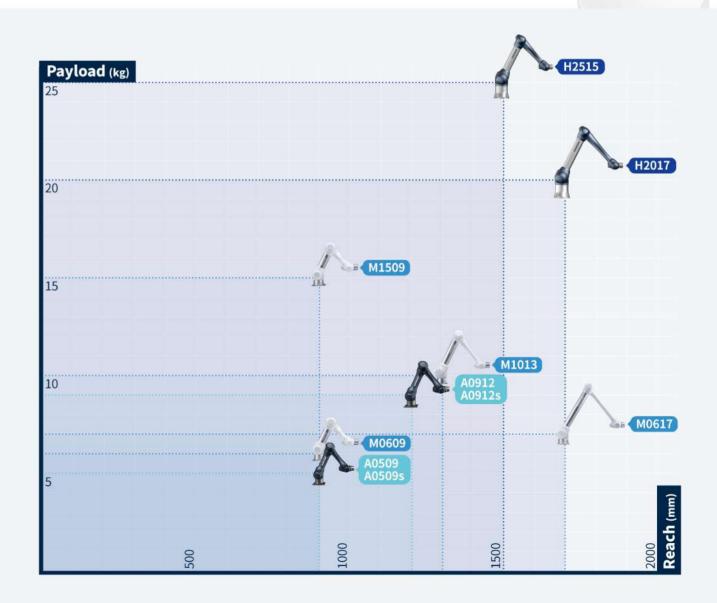
H-SERIES is the most powerful cobot in the market. Outstanding 25kg payload and 6 torque sensors brings safe work environment for any kind of application

Masterpiece

M-SERIES

M0609 · M0617 · M1013 · M1509

M-SERIES is the highest quality premium cobot!
6 high-tech torque sensors provide the highest dexterity for highly sophisticated tasks and ensure the upmost safety with the highest collision sensitivity



M-SERIES TECHNICAL SPECIFICATION

		M0609	M0617	M1013	M1509
Arm	Payload Reach	6 kg (13.2 lb) 900 mm (35.4 inch)		10 kg (22 lb) 1,300 mm (51.1 inch)	15 kg (33 lb) 900 mm (35.4 inch)
	Weight Performance	27 kg (59.5 lb)	34 kg (74.9 lb)	33 kg (72.7 lb)	32 kg (70.5 lb)
	Tool Coood	1 == /s	1 /	1 m/s	1 /
	Tool Speed Repeatability	1 m/s ±0.05 mm	1 m/s ±0.1 mm	1 m/s ±0.05 mm	1 m/s ±0.05 mm
	Temperature	0~45 °C	0~45 °C	0~45 °C	0~45 °C
	Joint Movement (Range: ° / Max Speed: */s)				
	J1	±360°/150°/s	±360/100°/s	±360°/120°/s	±360/150°/s
	J2	±360°/150°/s	±360/100*/s	±360°/120°/s	$\pm 360 / 150^{\circ}/\mathrm{s}$
	J3	±150°/180°/s	±165/150°/s	±160°/180° / s	±150/1 8 0°/s
	J4	±360°/225°/s	±360/225*/s	±360°/225°/s	±360/225°/s
	J5	±360°/225°/s	±360/225°/s	±360°/225°/s	±360/225°/s
	J6	±360°/225°/s	±360/225°/s	±360°/225°/s	±360/225°/s
	Other Features				
	Installation Pesitien Any (Fleor / Ceiling / Wall)				
	Protection Rating	IP 54			
	Flange Interfaces	Digital I/O 6 In /6	ut		
	I/O Power Supply	DC 24V/Max. 3 A			
Controller	Interfaces	Serial (RS232) / USB 3.0 (RS422/485), TCP/IP Requires a USB to RS422/485 converter			
	Industrial Network	Modbus-TCP (Master/Slave) / Modbus-RTU (Master) / EtherNet/I P{Adapter) / PROFINET IO {Device} Tinstall a gateway for other communication support			
	Dimensions	490 x 390 x 287 mm			
	Weight	9 kg			
	Protection Rating	I P 40			
	I/O Port – Digital I/O	16/16			
	I/● Port – Analog I/●	2/2			
	I/O Power Supply	DC 24 V			
	Rated Supply Voltage	100~240 VAC, 50~60)Hz		
	Cable Length (Arm)	6.0 m			
Teach Pendant	Protection Rating Dimensions	IP 40 264 x 218 x 42 mm			
	Weight / Screen Size Cable Length (TP)				

GLOBAL NETWORK

Doosan Robotics continues to expand its global network around the world!

Prompt service is available around the globe through dealer networks established in different countries



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