



# DOOSAN ROBOT M-SERIES



**Doosan Robotics**

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**Doosan Robotics**

# Masterpiece M-SERIES

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

## M0609

Payload 6kg  
Reach 900mm

## M0617

Payload 6kg  
Reach 1700mm

## M1013

Payload 10kg  
Reach 1300mm

## M1509

Payload 15kg  
Reach 900mm

## KEY FEATURES

### Master<sup>+</sup> 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

**0.2** N

### Master<sup>+</sup> Force Control

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

**6** Torque  
Sensors

### Master<sup>+</sup> Setup

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

**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**

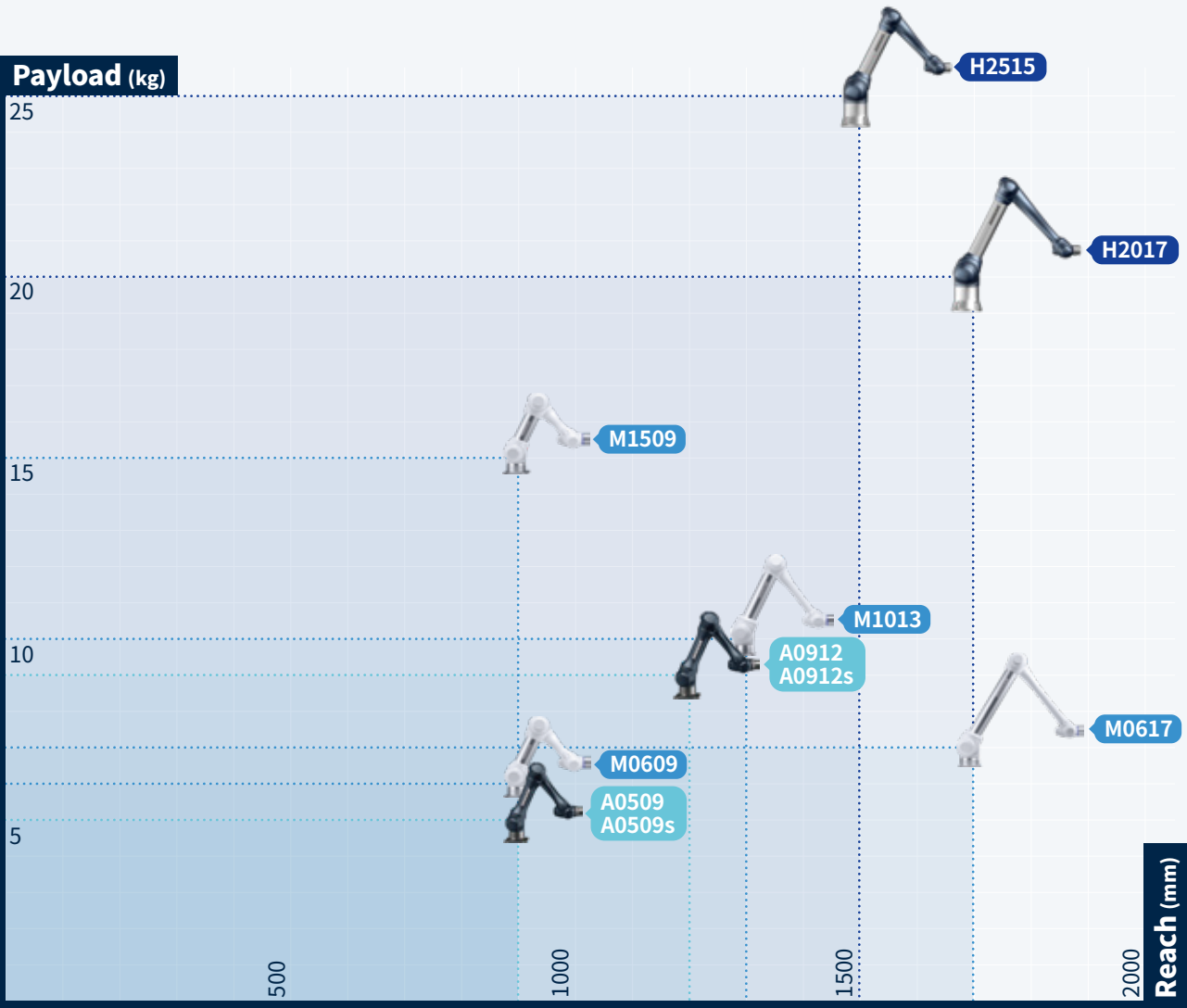
H2017 · H2515

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	6 kg (13.2 lb)	6 kg (13.2 lb)	10 kg (22 lb)	15 kg (33 lb)
	Reach	900 mm (35.4 inch)	1,700 mm (66.9 inch)	1,300 mm (51.1 inch)	900 mm (35.4 inch)
	Weight	27 kg (59.5 lb)	34 kg (74.9 lb)	33 kg (72.7 lb)	32 kg (70.5 lb)
	Performance				
	Tool Speed	1 m/s	1 m/s	1 m/s	1 m/s
	Repeatability	±0.05 mm	±0.1 mm	±0.05 mm	±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	±360 / 150 °/s
Controller	J3	±150 ° / 180 °/s	±165 / 150 °/s	±160 ° / 180 °/s	±150 / 180 °/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 Position	Any (Floor / Ceiling / Wall)			
	Protection Rating	IP 54			
	Flange Interfaces	Digital I/O 6 In / 6 Out			
	I/O Power Supply	DC 24 V / Max. 3 A			
	Interfaces	Serial (RS232) / USB 3.0 (RS422/485*), TCP/IP *Requires a USB to RS422/485 converter			
Teach Pendant	Industrial Network**	Modbus-TCP (Master/Slave) / Modbus-RTU (Master) / EtherNet/IP (Adapter) / PROFINET IO (Device) **Install a gateway for other communication support			
	Dimensions	490 x 390 x 287 mm			
	Weight	13 kg			
	Protection Rating	IP 30			
	I/O Port – Digital I/O	16 / 16			
	I/O Port – Analog I/O	2 / 2			
	I/O Power Supply	DC 24 V			
	Rated Supply Voltage	100~240 VAC, 50~60Hz			
Teach Pendant	Cable Length (Arm)	6.0 m			
	Protection Rating	IP 40			
	Dimensions	264 x 218 x 42 mm			
	Weight / Screen Size	0.8 kg / 10.1 inch			
Teach Pendant	Cable Length (TP)	4.5 m			

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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Applications

