Collobro®

The Cobot of The Future
Doosan M Series

The ideal automation partner for human – robot collaboration

M0609
6 kg payload capacity, 0.9 m reach radius
Optimized for quick and repetitive tasks in small spaces

Payload : 6 kg
Reach : 900 mm

M1509
Industry's largest payload capacity of 15 kg, 0.9 m reach radius
Suitable for handling heavy objects that pose risk to humans

Payload : 15 kg
Reach : 900 mm

M1013
10 kg payload capacity, 1.3 m reach radius
Versatile model adequate for all work processes

Payload : 10 kg
Reach : 1,300 mm

M0617
6 kg payload capacity, industry's largest reach radius of 1.7 m
Most efficient for handling more than two work processes or carrying out tasks to require long reach

Payload : 6 kg
Reach : 1,700 mm

Technical Specification

Arm

Performance

Tool Speed	1m/s
Repeatability	± 0.1mm
Temperature	5 ~ 45°C

Joint Movement (Range : ° / Speed : °/s)

	M0609	M1509	M1013	M0617
J1	±360 / 150	±360 / 150	±360 / 120	±360 / 100
J2	±360 / 150	±360 / 150	±360 / 120	±360 / 100
J3	±150 / 180	±150 / 180	±160 / 180	±165 / 150
J4	±360 / 225	±360 / 225	±360 / 225	±360 / 225
J5	±360 / 225	±360 / 225	±360 / 225	±360 / 225
J6	±360 / 225	±360 / 225	±360 / 225	±360 / 225

Other Features

Installation Position	Any (Floor / Ceiling / Wall)
Protection Rating	IP54
Digital I/O – Flange	6 In / 6 Out
I/O Power Supply	DC 24V / Max. 3A

Controller

Interfaces	Ethernet (TCP/IP) / RS232 / USB / GPIO / Wi-Fi
Fieldbus	Modbus TCP*
Dimensions	490 x 390 x 287mm
Weight	9kg
Protection Rating	IP20
I/O Port – Digital I/O	16 / 16
I/O Port – Analog I/O	2 / 2
I/O Power Supply	DC24V
Rated Supply Voltage	100 ~ 240(50~60Hz) VAC
Cable Length (Arm)	6.0m
Cable Length (TP)	4.5m

*Network gateway can be used for wider variety of communication methods

Teach Pendant

Protection Rating	IP20
Dimensions	264 x 218 x 42mm
Weight / Screen Size	0.8kg / 10.1inch

Switch on the Future
Doosan Robotics

The **Cobot** of The **Future**

The ideal automation partner for human-robot collaboration

reddot award 2017 winner

reddot award 2018 winner

- **Sensitive & Safe**

  Enhanced functional safety based on highly sensitive torque sensor

- **Talented & Skillful**

  Precise and versatile force control for remarkable performance

- **Reliable & Innovative**

  Leading-edge control algorithm upon a robust software platform

- **Intuitive & Simple**

  Ultra-intuitive usability like smart devices

▶ State-of-the-Art | Controller

- Top-notch control platform for perfect and reliable robot control
- Maximize performance of torque sensor through innovative and advanced motion control algorithm and robot language
- Providing the latest communications technology to ensure compatibility with other automation environment
- Icon-based Skills* for easy and simple teaching of complicated robot motions

Robust platform with Real-time OS and 1msec. communication speed of EtherCAT, ensuring perfect performance even in tough environments

Easy and simple robot teaching by various types of Skills and Templates

* Ethernet, Fieldbus, Serial, Wifi, etc.

▶ Human-Centered | Teach Pendant

- Capacitive touch and high resolution 1280x800 screen for friendly user experience
- Light-weight and ergonomic design enabling inherently-comfortable grip
- Ultra-intuitive usability by simple graphic-informative communication

Intuitive Card View to monitor all information on robot operation environment at a glance

Simple and easy robot teaching with icon drag-and-drops

▶ Value-Adding | Enhancers

Direct Control Unit-Cockpit
- Convenient solution for direct teaching without teach pendant
- 5 buttons for selecting various teaching modes and coordinate input

Mobile Base
- Mounted with robot and controller for easy movement and relocation
- Spacious and convenient storage available for tools and peripherals

Dress Pack
- Allows efficient operation by organizing various cables attached to end effectors
- Built-in bracket inside tube holder makes it easier to reinstall

Stain-Resistant Model
- Enhanced anti-stain finish enabling easy maintenance against dirt and stain

※ Enhancers are optional items, not included in the basic robot system.

※ Water Jacket option is available for prevention of moisture and stain

Robot Jacket

Protects robot from contamination by liquids used during cutter support work, etc. PU coating forms a 2-stage water barrier which ensures Doosan robot to maintain optimum operation conditions.