



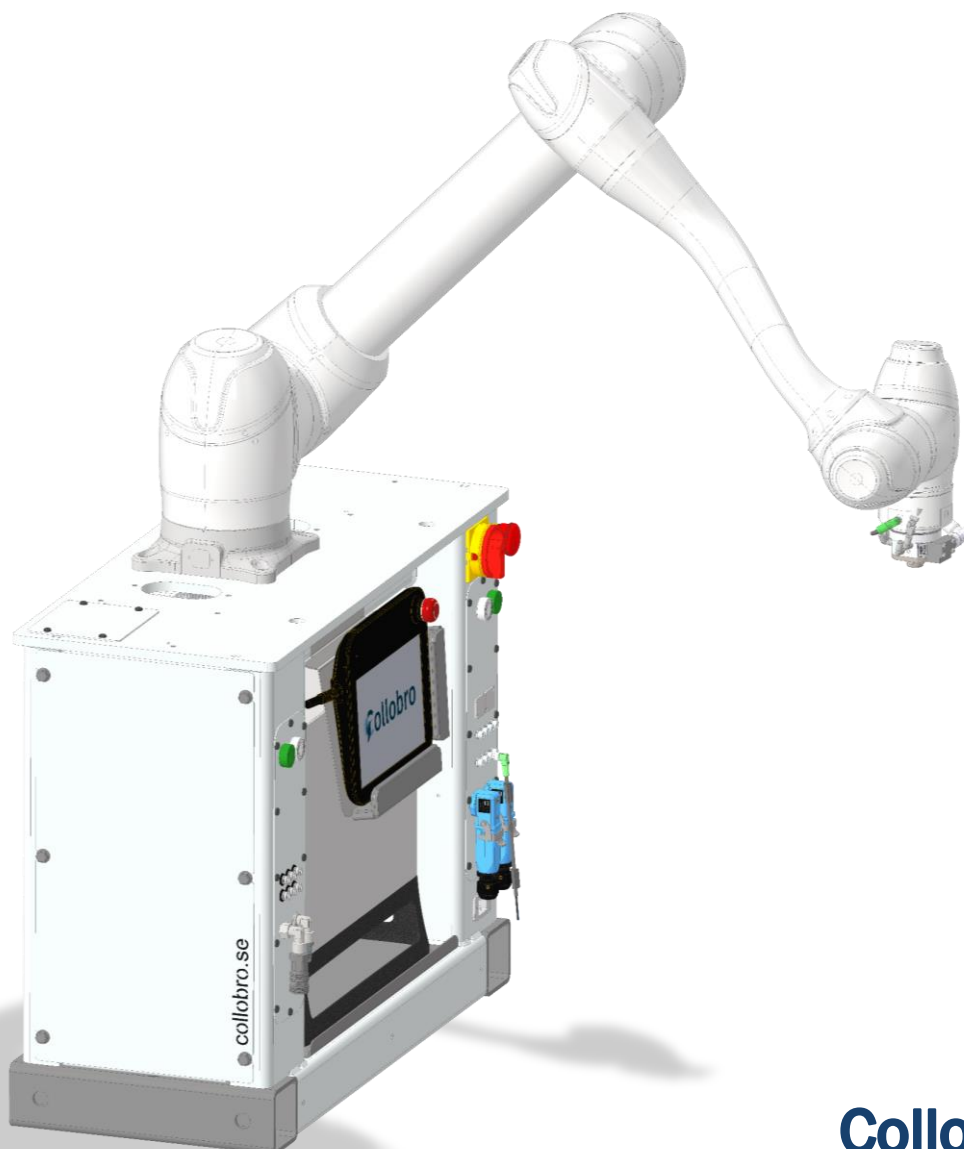
## Collobro Colla 1013

# CC 1013

Safe - Flexible - Compact

Matchlessly compact yet fully comprehensive  
Flexible for shifting workstations, applications  
Ideal for collaborative mode tasks

**SICK**  
Sensor Intelligence.



10 kg

1300mm

## Collobro Endure

*"Instant profitability"*



## Some Feature Highlights

# Collobro Colla 1013

# CC 1013

Safe - Flexible - Compact

*“The most compact yet comprehensive Cobot Concept ever”*

### Direct control unit,

- Free move of arm
- Save positions
- Control move in X/Y plane
- Control move in Z axis
- \*Optional

### Automatic Tool Changer,

- Fits all Collobro tools
- 4x 3/2 valves
- 3 digital inputs
- 3 digital outputs
- Power +24/-0 VDC

### Teach pendant touch panel

- Simple robot teaching
- Icon drag & drop based
- Ready skills & templates

### Programmable buttons,

- Start/stopp/control

### Pneumatic outputs,

- Program controlled
- 3x 5/2 valves

### Air supply connection,

- Incoming air supply

### Air supply connection,

- Feeding of external equipment.

### Panel and cable holder



**Collobro Colla Heart,**  
 - Connect it to Collobro peripherals and tools and you get unlimited user possibilities  
 - Delivered fully connected

**Doosan Cobot Controller,**  
 - Delivered fully connected to all functionality

### Doosan's awarded 6 axis Cobot,

- Doosan Cobot M1013

\*See further separately specified details

### Dress Pack,

- Robot hose organizes tubes and cables connected to tool changer as well as additional

### Main Power Switch

- Empowers front sign light showing machine power status

### Emergency stop button

- Programmable buttons, Start/stopp/control

### Ethernet, USB connections

- Ethernet, Fieldbus, Serial, Wifi

### Digital input connections

- 4x for external devices

### Digital output connections

- 4x for external devices

### Power drive connections

- 2x 4 Amp, program controlled by relays, for external device drive

### Main power connection

- Typ F (CEE 7/4) IEC 60320, C19
- 230 VAC, 16 Amp



## Integrated Cobot – Doosan M1013

# CC 1013

Safe - Flexible - Compact



### ► 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

\* Ethernet, Fieldbus, Serial, Wifi, etc.



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

### ► 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



## Doosan M1013 – Performance

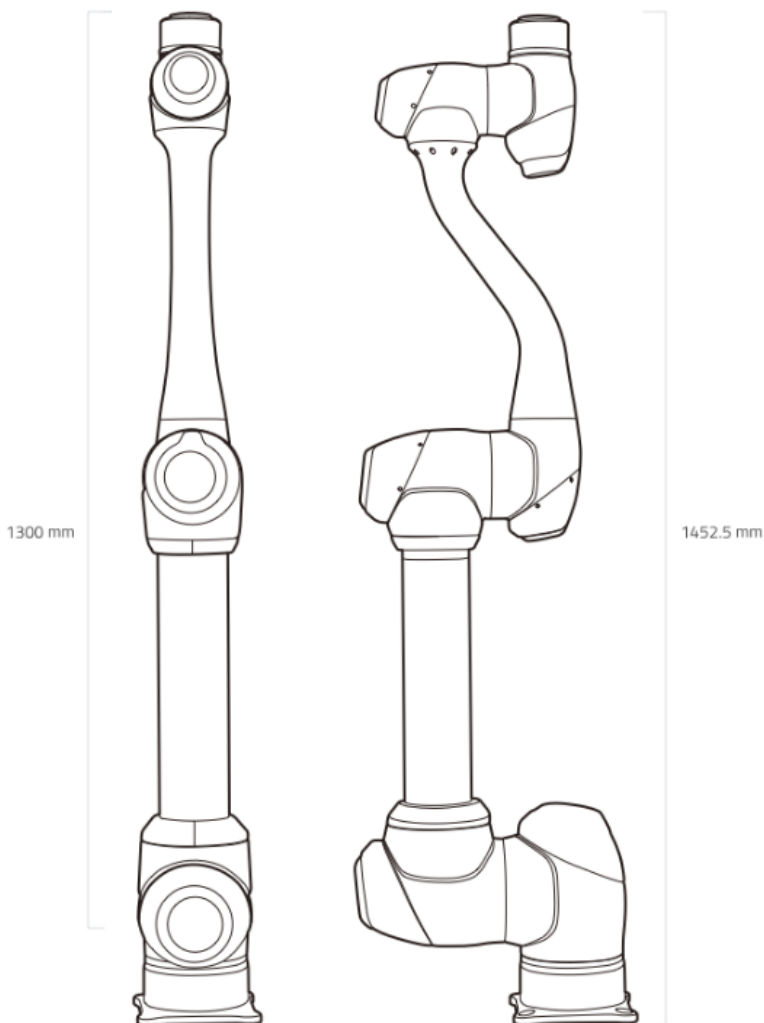
# CC 1013

*Safe - Flexible - Compact*

### Arm

### Controller

### Teach Pendant



### Performance

|                    |          |
|--------------------|----------|
| Degrees of freedom | 6        |
| Rated payload      | 10 kg    |
| Max.reach          | 1,300 mm |
| Tool speed         | 1 m/s    |
| Repeatability      | ± 0.1 mm |
| Temperature        | 0-45°C   |

### Joint Movement

|                  |                |
|------------------|----------------|
| J1 Range / Speed | ±360° / 120°/s |
| J2 Range / Speed | ±360° / 120°/s |
| J3 Range / Speed | ±160° / 180°/s |
| J4 Range / Speed | ±360° / 225°/s |
| J5 Range / Speed | ±360° / 225°/s |
| J6 Range / Speed | ±360° / 225°/s |

### Other Features

|                       |                            |
|-----------------------|----------------------------|
| Weight                | 33 kg                      |
| Installation position | Any (Floor, ceiling, wall) |
| Protection Rating     | IP54                       |
| Digital I/O – flange  | 6 In / 6 Out               |
| I/O power supply      | DC 24 V / Max. 3 A         |

\* The above specification is subject to change without prior notice.



## Doosan M1013 – Performance

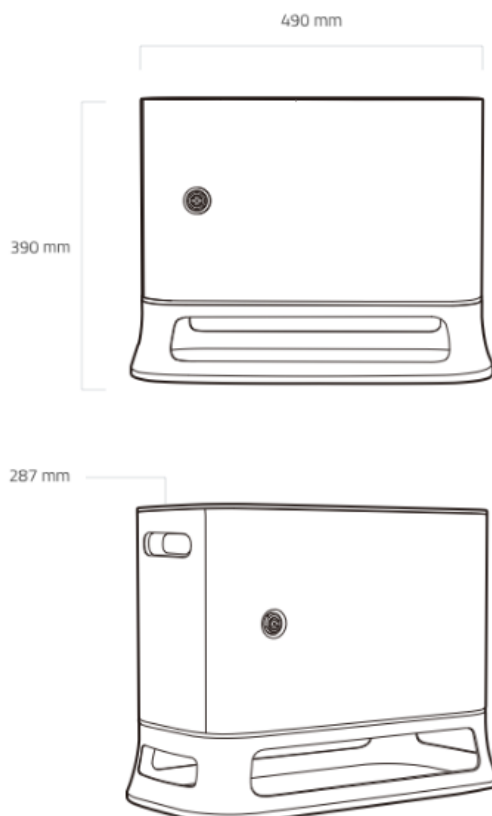
# CC 1013

*Safe - Flexible - Compact*

Arm

Controller

Teach Pendant



### Basic

|                   |  |
|-------------------|--|
| Interfaces        | Ethernet / Wifi /<br>RS232 / Modbus /<br>Ethernet TCP/IP |
| Dimensions        | 490 x 390 x 287 mm                                       |
| Weight            | 9 kg   |
| Protection Rating | IP20   |

### Other Features

|                        |                         |
|------------------------|-------------------------|
| I/O Port – Digital I/O | 16 / 16                 |
| I/O Port – Analog I/O  | 2 / 2                   |
| I/O power supply       | DC 24 V                 |
| Fieldbus               | Modbus                  |
| Rated supply voltage   | 100~240(50~60Hz)<br>VAC |

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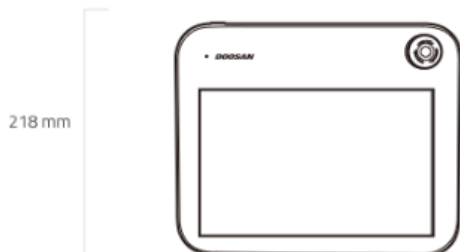
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*Safe - Flexible - Compact*

Arm

Controller

Teach Pendant



### Basic

|                      |                    |
|----------------------|--------------------|
| Protection Rating    | IP20               |
| Dimensions           | 264 x 218 x 42 mm  |
| Weight / Screen Size | 0.8 kg / 10.1 inch |
| Cable Length         | 4.5 m              |

\* The above specification is subject to change without prior notice.



## Doosan M1013 VALUE ADDING *of the COBOT*

# CC 1013

Safe - Flexible - Compact

### DM1013-01

Value-Adding | Enhancer

## Direct Control Unit : Cockpit

The optimal option to maximize user experience enables you to select a wide range of teaching modes and save coordinates with a simple five-button operation.



### DM1013-03

Value-Adding | Enhancer

## 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.





## Doosan M1013 VALUE ADDING *of the* COBOT

# CC 1013

Safe - Flexible - Compact

### DM1013-04

Value-Adding | Enhancer 03

### Stain-Resistant Model

The enhanced anti-stain function makes it easy to manage the appearance even in a work environment that is exposed to contamination.

