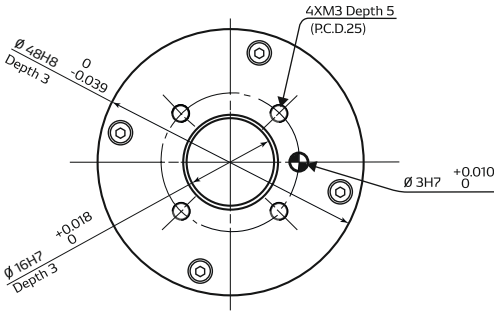
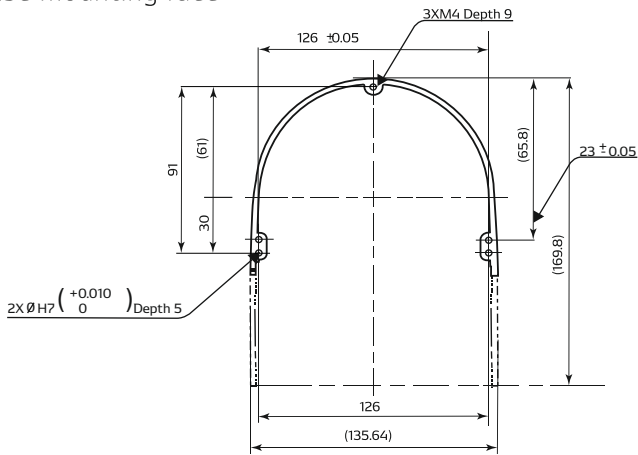


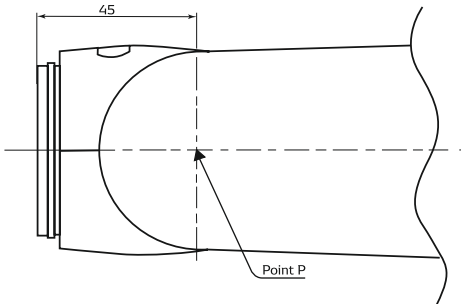
Detailed drawing of end-effector mounting face



Detailed drawing of base mounting face



Without gripper



|                                                          |          |                                     |                               |
|----------------------------------------------------------|----------|-------------------------------------|-------------------------------|
| Gripper weight:                                          | 0.20 kg  | Payload                             |                               |
| Camera weight:                                           | 0.213 kg |                                     |                               |
| *Convert to 0.15 kg when camera is attached as option on |          | All directions (No limit of angles) | Wrist downward (+-10 degrees) |
| 1) Gripper: No<br>Camera: No                             |          | 0.50 kg                             | 0.70 kg                       |
| 2) Gripper: Yes<br>Camera: No                            |          | 0.30 kg                             | 0.50 kg                       |
| 3) Gripper: No<br>Camera: Yes                            |          | 0.35 kg                             | 0.55 kg                       |
| 4) Gripper: Yes<br>Camera: Yes                           |          | 0.15 kg                             | 0.35 kg                       |

# COBOTTA

COLLABORATION ROBOT TECHNOLOGY FOR ARM




PARTS FEEDING



ASSEMBLY OF 3-COLOUR PENS



EDUCATION

|                                                                                                       |                                                                                                                    |                                                                                                                       |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| European Headquarters:                                                                                | Contact us:                                                                                                        | DENSO<br>Inventor of the QR Code                                                                                      |
| DENSO Robotics Europe<br>DENSO EUROPE B.V.<br>Waldeckerstr.9, 64546<br>Moerfelden-Walldorf<br>Germany | t: +49 (0) 6105 27 35 150<br>f: +49 (0) 6105 27 35 180                                                             |                                                                                                                       |
| www.densorobotics-europe.com                                                                          | Commercial information:<br>info@densorobotics-europe.com<br>Technical support:<br>support@densorobotics-europe.com | <br>OR Code to our COBOTTA video |

**DENSO**  
Crafting the Core

# COBOTTA

Anywhere, anytime, always safe



A robot that collaborates with everyone

/ Alles Easy /

# COBOTTA

/ For Human Robot Collaboration /



## INHERENTLY SAFE DESIGN & FUNCTIONAL SAFETY

The unique design of COBOTTA has no sharp edges or pinch points and ensures safe collaboration with humans. In addition, there are sensors built into the six axis for constant monitoring of speed and torque, to guarantee functional safety as well.

## BUILT-IN CONTROLLER

COBOTTA features a controller fully integrated in the robot arm – a unique DENSO Robotics design. This offers many advantages including a low total weight of only 4 kg, a small operation area and easy transportation. The controller also facilitates consolidated control with other devices.



## OPEN PLATFORM

The integrated controller consists of an open platform, allowing developers to create their own applications in the environment they choose (OSS version). In addition to DENSO Robotics' standard OS and programming possibilities, the robot is compatible with various programming languages for individual development environment (Linux ROS) and can be connected to all kinds of devices via ROS. ORiN is supported as standard.



## EASY TO USE

COBOTTA offers a direct teaching function and an intuitive GUI for easy programming. The built – in A/F camera and the built-in electrical gripper combined with the standard programming Apps allows creating new applications quickly – even for users not yet familiar with robots.



## PORTABLE BODY

The COBOTTA arm with the integrated controller only weighs 4 kg, providing easy portability and maximum flexibility, i. e. to combine the robot with mobile platforms. The integrated controller reduces both the wiring and the required working space. Transporting and installing COBOTTA anywhere anytime is simply easy.

## EASY PROGRAMMING

Cobotta World is a teaching assistant application exclusively designed for COBOTTA. The application helps you easily and quickly teach COBOTTA a desired job. Moving your COBOTTA directly, you can teach a desired job sequence by simply selecting and aligning jobs from the preset job items.



## Specifications

|                                                           |                                                                                                                                                                     |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Axes                                                      | 6+1 (for an electric gripper) (1)                                                                                                                                   |
| Drive motor / brake                                       | All axes AC servo motor/J1 to J5 with brake                                                                                                                         |
| Total arm length<br>(1st arm + 2nd arm)                   | 342.5 (165 + 177.5) mm                                                                                                                                              |
| Rated load capacity<br>(Maximum payload)                  | 0.5 kg (*0.7 kg wrist direction downward within +- 10 degrees) (2)                                                                                                  |
| Position repeatability                                    | +/-0.05mm (3)                                                                                                                                                       |
| Maximum composite speed<br>(center of tool mounting face) | Default 500 (min. 100 to max. 1000) mm/s                                                                                                                            |
| Protected type                                            | IP30                                                                                                                                                                |
| Software                                                  | Standard type: COBOTTA dedicated software, OSS type: none (3)                                                                                                       |
| Power supply specifications<br>(AC adaptor)               | Input: single-phase 230 V /Output: 24 VDC (approx. 180 W)                                                                                                           |
| External signal                                           | System fix input: 12 ports/ System fix output: 8 ports<br>User open input: 8 ports / User open output: 10 ports<br>Additional external switch emergency stop device |
| External communication                                    | Ethernet x 1 line, USB x 2 lines, VGA output x 1 ch<br>Prepared for EtherCAT                                                                                        |
| Weight                                                    | Approx. 4 kg                                                                                                                                                        |
| Standards for safety                                      | ISO 10218-1:2011<br>ISO/TS 15066:2016<br>ISO 13849-1:2015 PL d Cat. 3                                                                                               |

(1) Options. (2) Without electric gripper. (3) At fixed ambient temperature or lower.

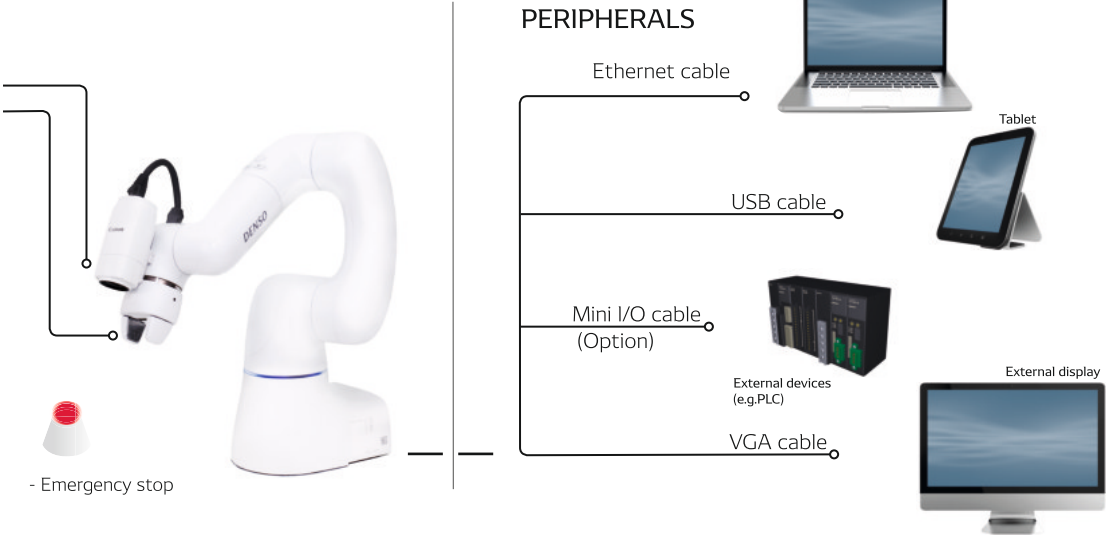
## System configuration

### OPTION

- AF camera <sup>1</sup>
- Electric gripper for COBOTTA
- Mini I/O cable
- VGA relay cable <sup>2</sup>

### STANDARD INCLUDED ITEMS

- AC adapter / AC cable <sup>3</sup>
- Manual disc
- Software DVD for COBOTTA
- COBOTTA World (App) <sup>4</sup>
- WINCAPS III <sup>5</sup>, remote TP (App) <sup>4</sup>
- EVP (Easy Vision Picking) <sup>5</sup>



<sup>1</sup>. The hub must have a PoE supply function for use. <sup>2</sup>. Used to display the COBOTTA development screen when using the OSS version.  
<sup>3</sup>. To be selected matched to power outlets in the country of use. <sup>4</sup>. Android OS applications can be downloaded from Google Play Store. <sup>5</sup>. To be installed in a tablet or PC.