

MULTI-AXIS ROBOTS

Yaskawa – POWERED BY ARBURG
Handling weight: 12-25 kg

ARBURG

MULTI-AXIS ROBOTS

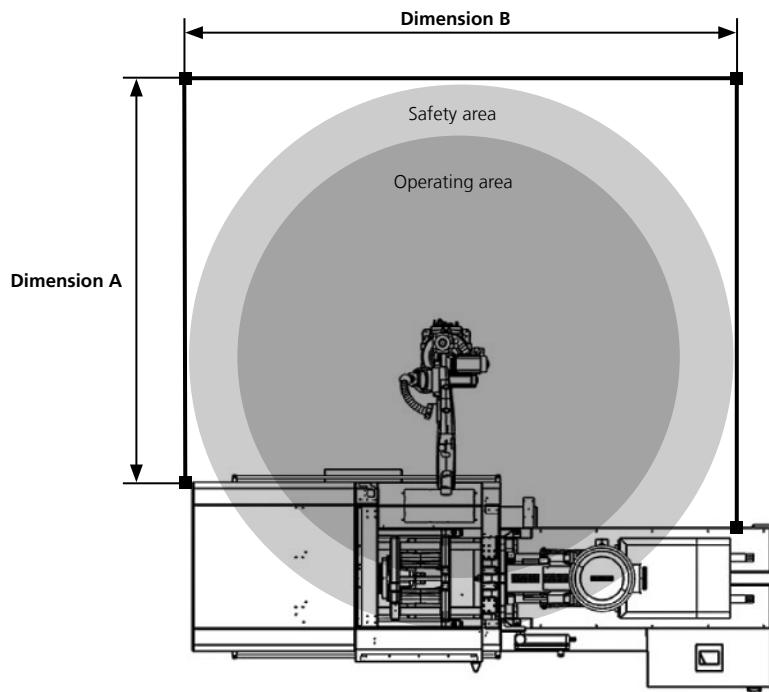
| Multi-axis robots | | ALLROUNDER machine sizes / models | | | | | | | | | | | | |
|-------------------|-------------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---|---|
| Yaskawa - | powered by ARBURG | Nominal load ¹ [kg] | 270 | 370 | 470 | 520 | 570 | 630 | 720 | 820 | 920 | 1120 | V | T |
| GP12 | 12 | | • | • | • | • | | | | | | | • | • |
| GP20 | 20 | | • | • | • | • | • | • | • | • | • | | • | • |
| GP25 | 25 | | • | • | • | • | • | • | • | • | | | • | • |

1) Depending on the centre of gravity of the gripper

MULTI-AXIS ROBOTS

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|-----------------------------|---------------------------------|-----------------------------------|--------------------|------|------|------|------|------|------|------|------|
| Yaskawa - powered by ARBURG | Nominal load ¹⁾ [kg] | Operating area - radius [mm] | In-line wrist [mm] | 270 | | 370 | | 470 | | 520 | |
| | | | | A* | B* | A* | B* | A* | B* | A* | B* |
| GP12 | 12 | 1440 | 100 | 2633 | 3620 | 2457 | 3820 | 2427 | 4020 | 2427 | 4120 |
| GP20 | 20 | 1802 | 105 | 3300 | 4354 | 3124 | 4554 | 3194 | 4754 | 3194 | 4854 |
| GP25 | 25 | 1730 | 100 | | | 2947 | 4400 | 3017 | 4600 | 3017 | 4700 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Installation dimensions A and B



^{*)} Installation dimensions A and B in mm

1) Depending on the centre of gravity of the gripper

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|--------------------------------|------------------------------------|-----------------------------------|-----------------------|------|------|------|------|------|------|------|------|------|----|
| Yaskawa - powered by ARBURG | Nominal load ¹⁾ [kg] | Operating area - Radius [mm] | In-line wrist [mm] | 630 | | 720 | | 820 | | 920 | | 1120 | |
| | | | | A* | B* | A* | B* | A* | B* | A* | B* | A* | B* |
| GP12 | 12 | 1440 | 100 | | | | | | | | | | |
| GP20 | 20 | 1802 | 105 | 2930 | 5074 | 3120 | 5254 | 3170 | 5454 | 3120 | 5654 | | |
| GP25 | 25 | 1730 | 100 | 2753 | 4920 | 2943 | 5100 | 2993 | 5300 | | | | |

*) Installation dimensions A and B in mm

1) Depending on the centre of gravity of the gripper

EQUIPMENT | MULTI-AXIS ROBOTS

An ARBURG ALLROUNDER is required in order to use the multi-axis robot.

Pneumatic valves for grippers

- Pneumatic valve for actuating functions, such as grippers, gripper tongs, cylinders, lifting and units (see additional information):
 - 1 with blocked middle position (5/3)

- Additional pneumatic valves (maximum 15) in any combination of the following versions (see additional information):
 - with blocked middle position (5/3)
 - with vented middle position (5/3)
 - with spring return (2 x 3/2)

Pneumatic maintenance unit

- One pneumatic maintenance unit
- Manually adjustable filter pressure reducing valve for adjusting the pressure level
- Pressure level monitoring
- Electric switch on/switch-to-standby function

Control system

- Mobile GESTICA or Mobile SELOCIGA
- Implemented user interfaces
 - Uniform operating system: graphic sequence programming for machine and robotic system
 - Teach-in function
 - Screen selection via function and shortcut keys
 - Robotic system can be moved set-wise analogously to the cycle
 - Programmable sequence branches
- Interface between robotic system and injection moulding machine (EUROMAP 67)
- Varan interface for extended real-time communication with the injection moulding machine and:
 - Single data set for injection moulding machine and robotic system
 - Coordinated movement to home position
 - Separation of test samples, reject parts and sprue
 - Creation of individual sequences for the first and last cycle
 - Cycle time reduction by movement into the mould from stroke position marker
 - Communication with more than two core pulls possible

Inputs/outputs for grippers

- Interface with 8 freely programmable inputs for querying sensors for gripper functions. All inputs connected to plugs, including mating plugs
- Additional interfaces (up to 3) for querying up to 24 sensors (in total)
- Freely programmable outputs for controlling pneumatic valves for gripper functions. All outputs directly connected to pneumatic valves

Inputs/outputs for peripheral equipment

- Additional interfaces (24V DC) with freely programmable inputs and outputs (up to 60). Not potential-free. Connected to socket on control cabinet, including mating plug
- Conveyor belt interfaces (maximum of 2, 230 V AC) for a conveyor belt to be supplied separately. Mating plug included.

Additional options

- Clean-room version
- Base for multi-axis robotic system
- Material for fastening the robot to the floor

Additional information

- 5/3 pneumatic valve with blocked middle position for gripper functions, the position of which should be maintained when not actuated, e.g. if the safety door is open, EMERGENCY STOP
- 5/3 pneumatic valve with vented middle position for gripper functions, which should be depressurised when not actuated, e.g. to ensure gentle transfer of parts by the ejector of the machine
- 2 x 3/2 pneumatic valve with spring return for gripper functions with spring return, e.g. for sprue grippers or single-acting pneumatic cylinders

■ Basic machine

○ Option

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