

YuMi® docking station

Make YuMi even more flexible



The YuMi docking station makes YuMi mobile and allows the quick and precise connection to an assembly station.

Design

The YuMi docking station is built up of a solid base frame that is covered all around. Its 4 wheels make the docking station mobile, where two of them may be locked. The section below YuMi contains a mounting plate, which can be reached through a door on the right and on the left side. One side holds the interfaces to connect YuMi to the assembly station, while the other side might be equipped with individual extensions.

The FlexPendant is safely stored in a holder behind YuMi and might easily be used for station visualization purposes.

Flexibel height adaption

The height adjustable YuMi mounting allows working heights between 750 mm and 900 mm. This facilitates to connect the Robot to all kinds of established assembly systems.

Dock precisely

Two guiding bolts that slide easily into the adapter that is permanently mounted to the assembly station, two tension clamps and two lockable wheels make it possible to connect and disconnect the docking station with high repeatability within seconds. Two sensors allow the detection of the clamps' positions.

Variants

Standard interface

This version can be utilized when no electrical interface between the assembly station and YuMi is needed. Connectors for power and pressured air can easily be reached behind the right door.

All other connections at the YuMi base can be reached for commissioning or programming purposes by removing the upper covers of the table. Optionally an extended "integrated interface box" is available.

Integrated interface box

This variant contains additional components: A main switch, Service and WAN port and a 230 V service outlet can be found at the back side.

The interface behind the right door is additionally equipped with a socket to the Ethernet/IP or Profinet fieldbus adapter of YuMi and its LAN3 port.

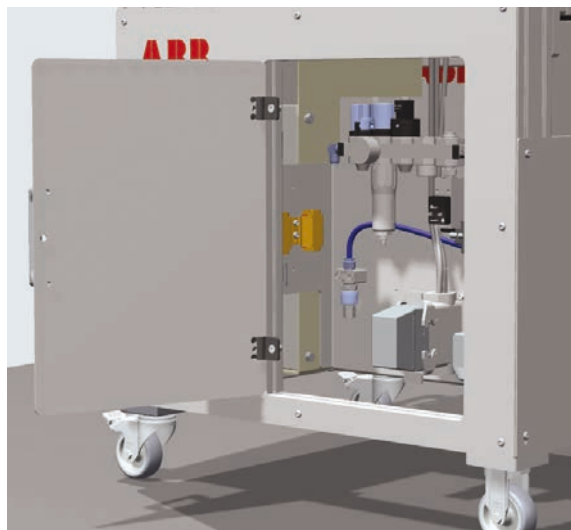
An extra 24 V DC power Supply (5 A), additional 8 digital in- and outputs as well as the emergency stop connection are available as dedicated sockets, too.



01 The optional integrated interface box provides additional connectors on the back.

02 Connectors for power and compressed air supply behind the right door.

03 The optional signal lamp.



Options

Extension docking adapter

The connecting points to be reached by the docking station depend on the individual design of the assembly station. Therefore, the adapter to fit the docking station to the assembly station can be selected with an extension of 100, 200 or 300 mm to achieve best possible reachability.

Additional adapters for additional assembly stations

The delivered docking station includes one adapter to be mounted to an assembly station. Additional adapters can be ordered, if the docking station should be connected to different assembly stations.

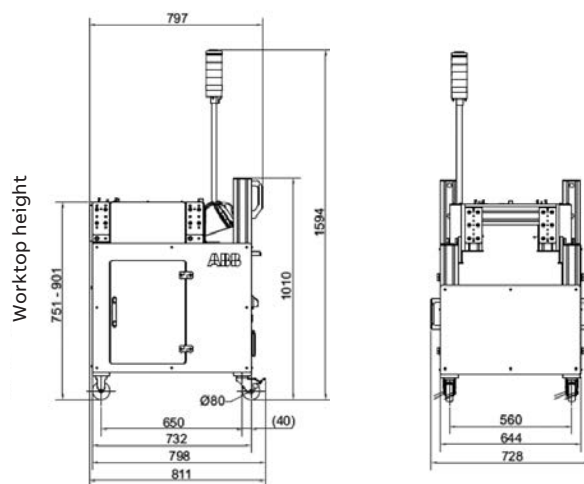
Pneumatic maintenance unit

The docking station might be equipped with its own pneumatic maintenance unit. This unit contains a manual on/off valve, a filter regulator, an on/off valve with solenoid coil 24 V DC, a pressure build-up valve and distributor module. The IO signals are connected to the internal customer signals of YuMi.

Signal lamp

The docking station can be equipped with a signal lamp. Colors are blue-red-yellow-green.

The IO signals are connected to the internal customer signals of YuMi.



Technical data

Working height

YuMi mounting adjustable in 50 mm steps
Fine adjustment on both adapter sides.

Weight

Without YuMi: 92 to 138 kg
With YuMi: 130 to 175 kg

Connections

Power supply 230 V ± 10 %, 50 Hz
Energy consumption: 1.2 kW
Pre-fuse 16 A
Supply 3 x 1.5 mm²

Compressed air

Air supply pressure: 3 to 16 bar
Pressure regulation range: 2.5 to 12 bar