

Getting Robots Closer with ASSISTA



» Features

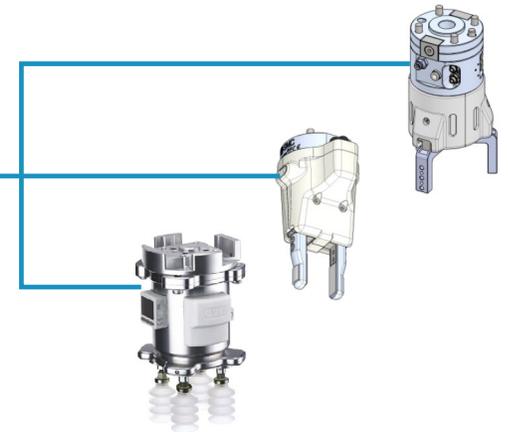
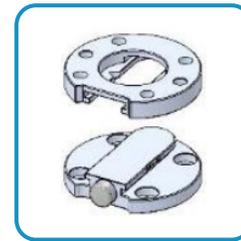
» Diagram

Intuitive software (RT Visual BOX) makes it easy for anyone to operate it

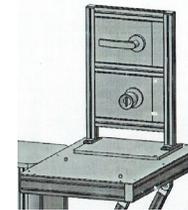
Reducing dramatically design time and start-up time with designated equipments for ASSISTA

Proposing deployment image for ASSISTA by four application scenes

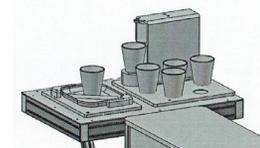
One-push type
One-touch attachment and removal



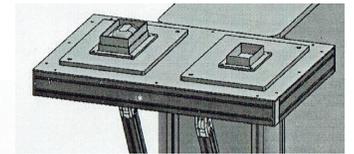
Bottling



Shape Check



Café server



Visual inspection

Getting Robots Closer with ASSISTA



» Features

» Diagram

Plugging and playing with one connector and setting automatically with one click with the exclusive model of ASSISTA

Automatic setup with one click for ASSISTA dedicated hand (RT VisualBox dedicated screen)

Plug and play with one connector if it's an ASSISTA exclusive hand (M 12 exclusive connector)

The dedicated adapter allows easy storage of connectors and cables



Dedicated Hand Adapter
(Connector Cable Storage)



① Contact ECP-C40-N-ASSISTA(SCHUNK)
Electric Gripping Hand 885g
(including mounting parts and fingers)
Gripping Force min.35 Nmax.140 N(4 Steps)
Stroke 6 x 2 mm

② HRC-03-08-05(ZIMMER/Nubatec Company)
Electric Gripping Hand 916 g
(including mounting parts and fingers)
Gripping Force min. 50 Nmax. 190 N
(4 levels adjustable to 140 N)
Stroke 10 x 2 mm



③ ROB-SET ECBPM ASSISTA(SCHMALZ)
Suction Type Hand 631 g
(including mounting parts and suction pads)
Vacuum pressure-60 kPa
Flow rate: 1.6 liters/min

④ KIT-ASSISTA-G(GIMATIC)
Electric gripping hand
(gripping part must be manufactured)
Mass 922 g(including fittings)
Gripping Force 58 N
Stroke 11.5 x 2mm

Getting Robots Closer with ASSISTA



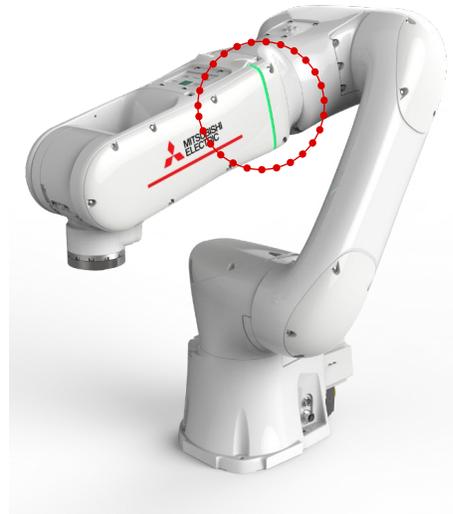
» Features

» Diagram

Safety equipment-free by display mounted on the arm as standard

No need to arrange or design safety equipment (indicator)

Easy understanding of the state of the robot with the indicator mounted on the arm



	Color scheme	ISO Standard	Lit	When flashing
1	No	Power OFF	-	-
2	Light blue	-	Servo OFF	Controller startup (Excluding S/W Reset)
3	Red	Emergency stop	Error Occurring (Low-level error)	Error Occurring (High Level Error)
4	White	Neutral	-	High-speed operation
5	Yellow	Abnormal	Error Occurring (Warning, slow/normal operation)*	Error Occurring (warnings, high-speed operation)
6	Green	Normal	Cooperative operation (Low Speed Operation)	cooperative operation (Standard Operation)
7	Blue	Force	Stop (Low Speed/Standard Operation)	Stop (High-speed Operation)

Getting Robots Closer with ASSISTA



» Features

» Diagram

Safety equipment is eliminated by safety setting including peripheral equipment in RT VisualBox dedicated screen

Safety parameter settings including peripherals can be set and changed in RT VisualBox

No need for dedicated S/W for Safety-PLC and safety programming settings

The screenshot shows the 'Safety Settings' window in RT VisualBox. The '安全設定' (Safety Settings) tab is active, with sub-tabs for '速度制限設定' (Speed Limit Setting), '安全入出力設定' (Safety I/O Setting), '位置制限設定' (Position Limit Setting), '監視モデル設定' (Monitoring Model Setting), and 'パスワード変更' (Password Change). The '安全機能パラメータ最終設定日時' (Safety Function Parameter Final Setting Date/Time) is 2020/03/06-17:19:42. The 'I/O setting for safety' section has two tabs: 'Input setting of safety' (selected) and 'Output setting of safety'. Under 'Assign safety input', there are four rows:

Input	Setting	Output
1	Collaborative driving	Safety area No.2
2	Safety stop(Servo off)	6
3	Safety stop(Servo on)	7
4	Safety area No.1	8

At the bottom, there are 'Restore' and 'Apply' buttons.

The screenshot shows the 'Safety Settings' window in RT VisualBox, specifically the '速度制限設定' (Speed Limit Setting) sub-tab. The '安全機能パラメータ最終設定日時' (Safety Function Parameter Final Setting Date/Time) is 2020/03/06-17:19:42. The 'Setting up a low-speed space' section is active, with the text 'It is possible to set the area for low speed operation sid during co-operative operation'. There is a checkbox for 'Enable even during high-speed driving'. A 3D visualization shows a robot arm in a green space with a blue cube representing a low-speed area. The settings for three areas are as follows:

Area	Diagonal point 1 (X, Y, Z)	Diagonal point 2 (X, Y, Z)
Area 1	(499.63, 0.00, 221.74)	(682.91, -209.57, 0.00)
Area 2	(800.00, 600.00, 1000.00)	(-500.00, -300.00, 0.00)
Area 3	(0.00, 0.00, 0.00)	(0.00, 0.00, 0.00)

At the bottom, there are buttons for '< To set speed limits', 'Robot operation', 'Restore', and 'Apply'.

Getting Robots Closer with ASSISTA



» Features

» Diagram

Robot programless by visual programming

Easy visual programming on the tablet screen

You can place program blocks freely by touch. You can scroll, zoom in, zoom out, and drag and drop. Moving, copying, and deleting program blocks is also easy. Touch the program block to display the settings.

