Getting Robots Closer with ASSISTA

Features

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

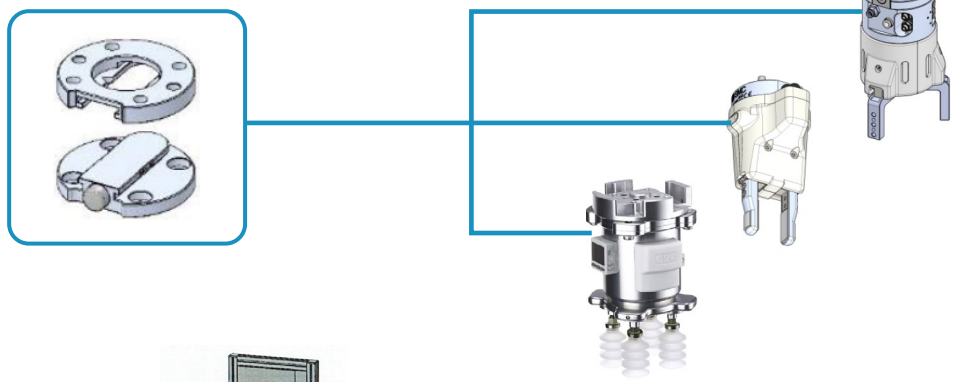
Reducing dramatically design time and start-up time with designated equipments for ASSISTA

Proposing deployment image for ASSISTA by four application scenes

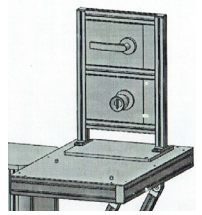
Diagram

One-push type

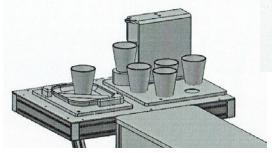
One-touch attachment and removal



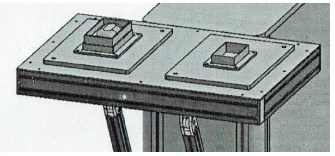
Bottling



Shape Check



Café server



Visual inspection

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Getting Robots Closer with ASSISTA

Features

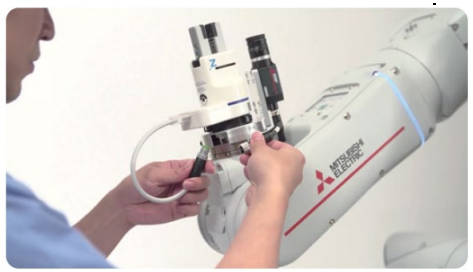
Diagram

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)

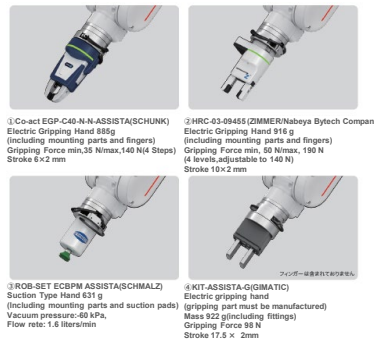
Plug and play with one connector if it's an ASSISTA exclusive hand (M 12 exclusive connector)

The dedicated adapter allows easy storag of connectors and cables



Dedicated Hand Adapter

(Connector Cable Storage)



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Getting Robots Closer with ASSISTA

Features

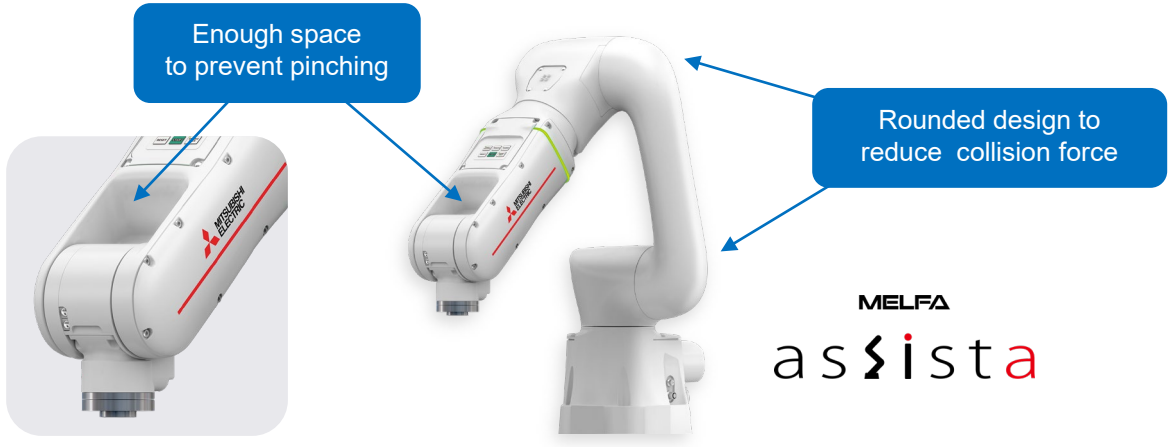
Diagram

Safety function (Torque monitoring/STR) based on TS 15066 realizes safety system

Intrinsic safety design that prevents fingers and hands pinching
(Minimum clearance is based on JIS B 9,711)

Rounded outshape design for the purpose of reducing the pressure in collision

Collision detection function by torque monitoring (STR)
(ISO/TS 15066 compliant)



MELFA
assista

safety performance			
	Standard		EN ISO 10218-1:2011 ISO/TS 15066:2016 EN ISO 13849-1:2015 IEC 61800-5-1:2007 EN 61800-5-2:2017 EN 61000-6-7:2015 EN 61326-3-1:2017 IEC 61508-1:2010 IEC 61508-2:2010 IEC 61508-3:2010 EN 62061:2005/A2:2015 IEC 62061:2005/AMD1:2012/AMD2:2015
	Performance	STO	SIL2, Category 3, PLd (factory settings) SIL3, Category 4, PLe (when changing parameter settings)
		SS1, SOS, SS2, SLS, SLP, STR	SIL2, Category 3, PLd
	dangerous failure establishment	STO	PFH=1.40 × 10-8 〔1/h〕
		SS1, SS2, SOS	PFH=3.42 × 10-7 〔1/h〕
		SLS	PFH=3.42 × 10-7 〔1/h〕
		SLP	PFH=3.42 × 10-7 〔1/h〕
		STR	PFH=3.62 × 10-7 〔1/h〕

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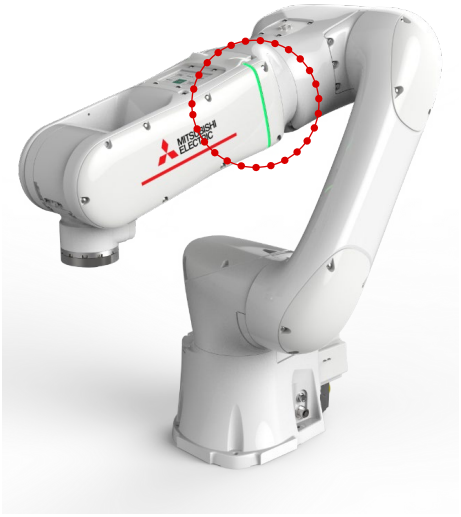
Getting Robots Closer with ASSISTA

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)

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Getting Robots Closer with ASSISTA

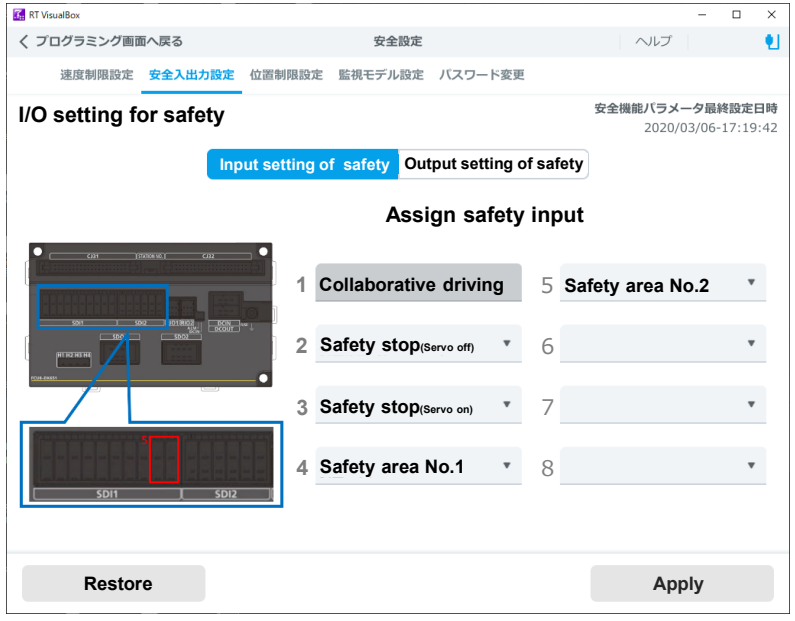
Features

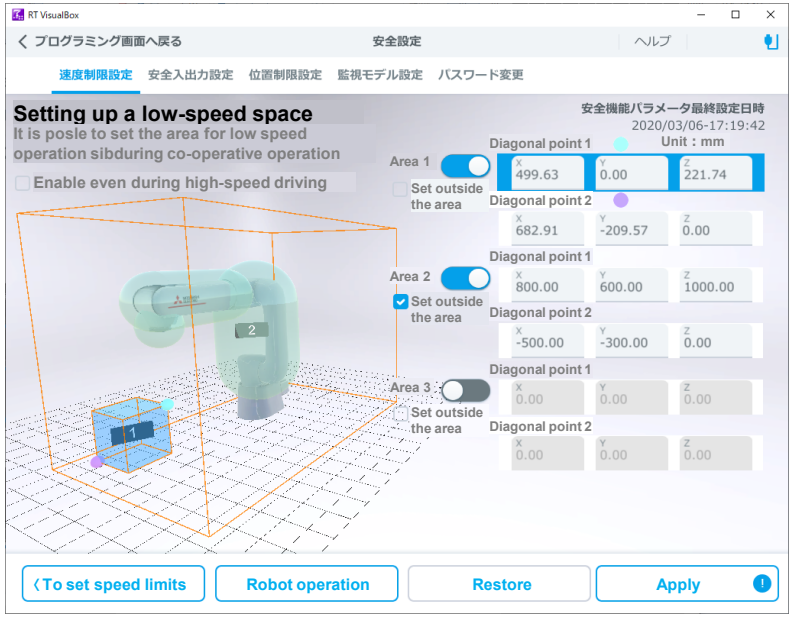
Diagram

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





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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.

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