



for a greener tomorrow



**MITSUBISHI
ELECTRIC**

Changes for the Better

FACTORY AUTOMATION

MITSUBISHI ELECTRIC COLLABORATIVE ROBOT MELFA ASSISTA

e-Factory



MELFA

as*s*ista

GLOBAL IMPACT OF MITSUBISHI ELECTRIC



Through Mitsubishi Electric's vision, "Changes for the Better" are possible for a brighter future.

Changes for the Better

We bring together the best minds to create the best technologies. At Mitsubishi Electric, we understand that technology is the driving force of change in our lives. By bringing greater comfort to daily life, maximizing the efficiency of businesses and keeping things running across society, we integrate technology and innovation to bring changes for the better.

Mitsubishi Electric is involved in many areas including the following:

Energy and Electric Systems

A wide range of power and electrical products from generators to large-scale displays.

Electronic Devices

A wide portfolio of cutting-edge semiconductor devices for systems and products.

Home Appliance

Dependable consumer products like air conditioners and home entertainment systems.

Information and Communication Systems

Commercial and consumer-centric equipment, products and systems.

Industrial Automation Systems

Maximizing productivity and efficiency with cutting-edge automation technology.

The new future of automation made possible by next-generation intelligent robots and e-F@ctory



Providing improvements in productivity, quality, environmental protection, safety and security to help reduce companies' TCO* and boost their corporate value

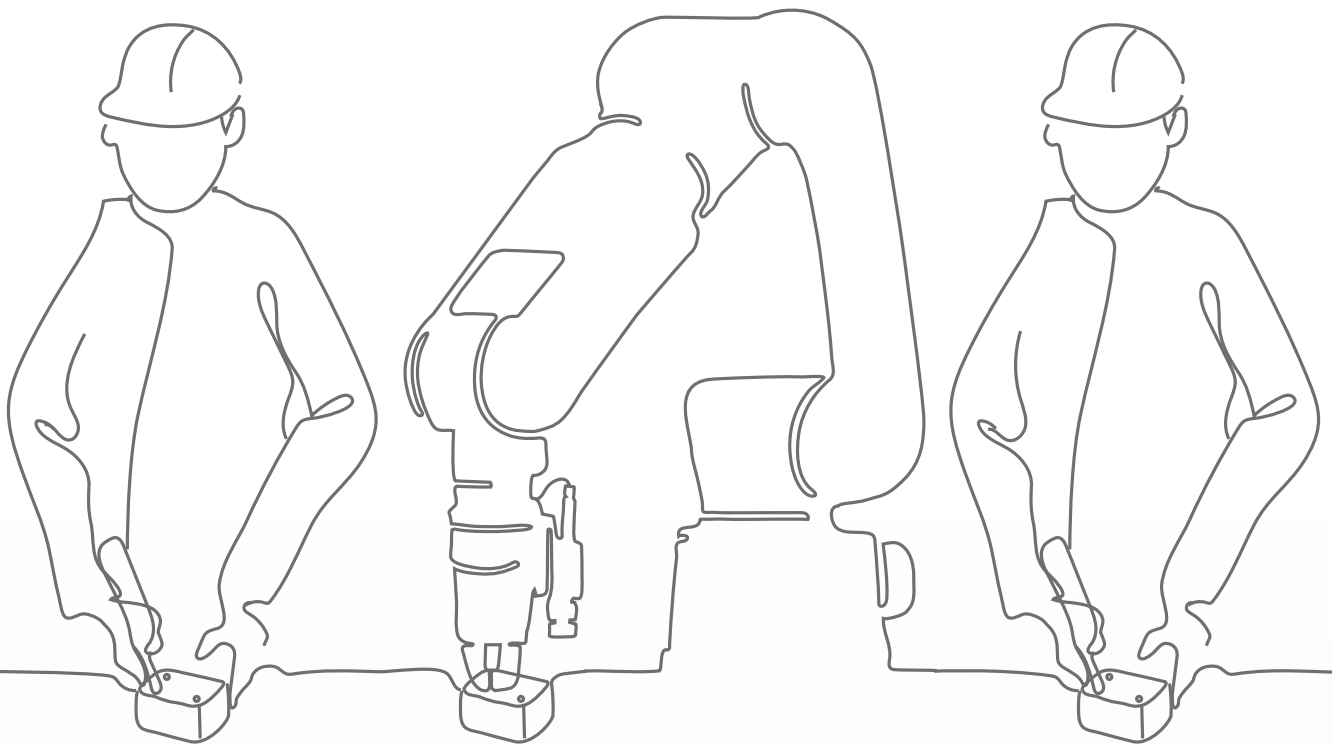
We offer solutions that use FA technology and IT to reduce total costs in everything from development through to production and maintenance, supporting customers to continuously improve their business operations and achieve truly cutting-edge manufacturing.

*TCO: Total Cost of Ownership

e-F@ctory is Mitsubishi Electric's trademark and registered trademark.



Integrate.

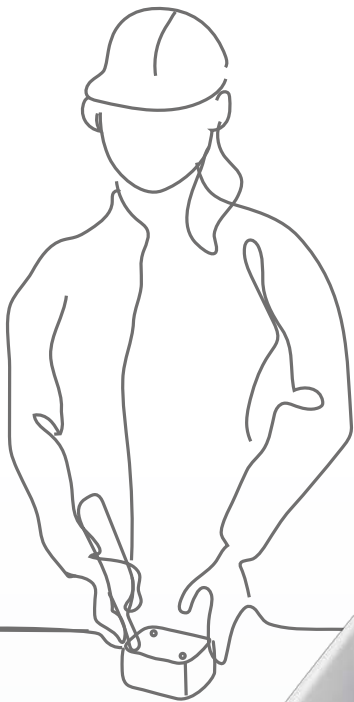


Mitsubishi Electric Collaborative Robot - ASSISTA

MELFA

as **∩** ista

Collaborate.



Simpler and Easier



Mitsubishi Electric Collaborative Robot - MELFA ASSISTA
can share a workspace with humans.
Simpler, Easier and more flexible.
This robot will change your perception of what a "ROBOT" is.

Easy operation with
the Operation button.

Easy Control



No robot programming expertise required.

Easy Programming



MELFA assist



Easy connectivity with
a wide variety of components.

Easy Connecting

Easy Control

Move Easily with
the Operating Buttons



The operating buttons on the robot arm provide you with easy control for ASSISTA and the teaching pendant for programming and teaching is no longer needed. The LED on the robot arm display the status of the robot.



Easy Programming

Easy Control

Easy Connecting

DIRECT TEACHING
TEACH
HAND
RESET
START
ENABLE LOCK

 MITSUBISHI
ELECTRIC

Easy

Programming

No Expertise
for Robot Required.

You can create programs visually using intuitive operations with RT VisualBox. "Visual Programming"

- This software allows operators to simply program this robot with a "train by demonstration" programming interface. This allows them to move the robot arm position and set way-points easily.



Easy Programming

Easy Control

Easy Connecting



Easy Connecting

A Wide Variety of
Components and
Applications

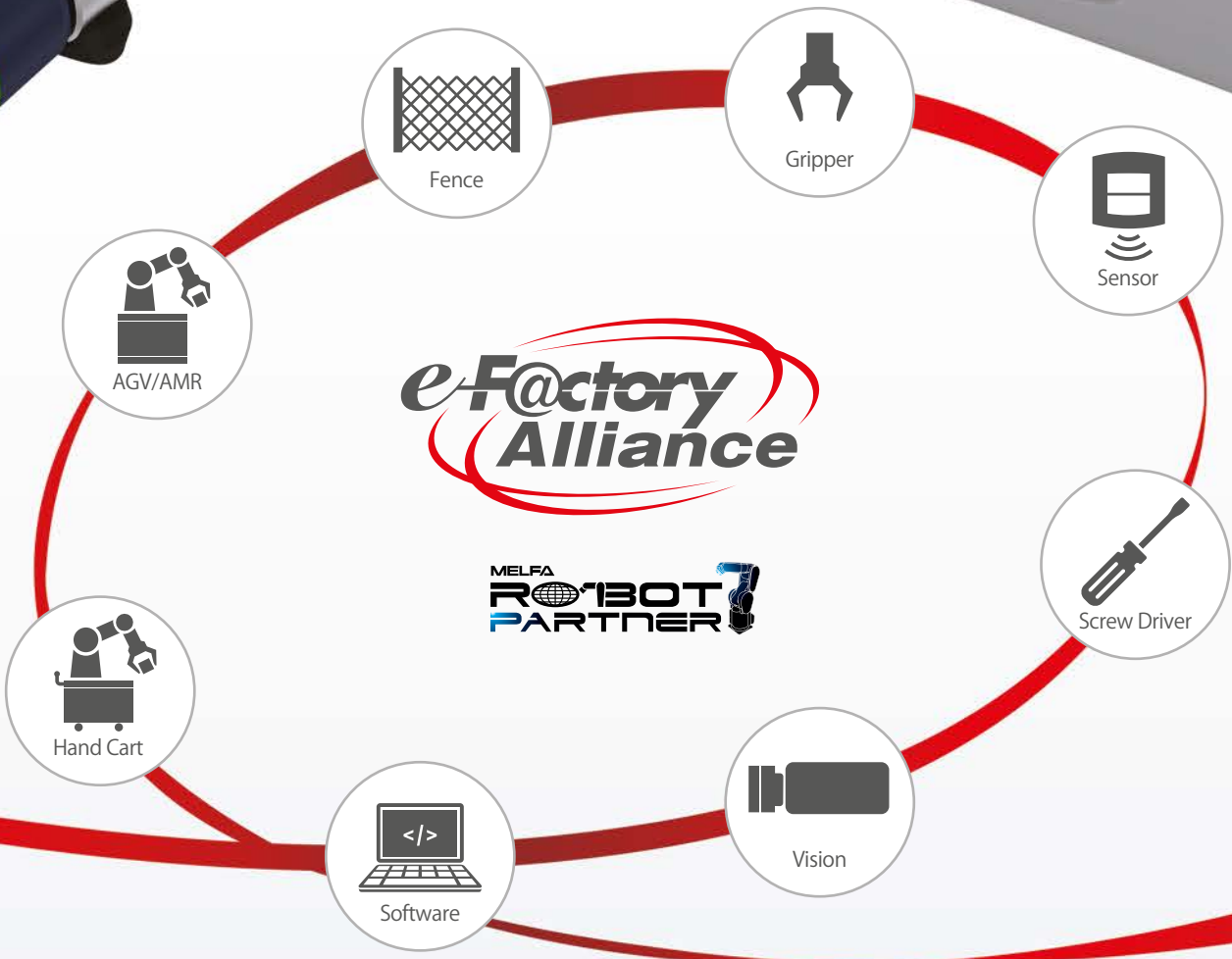
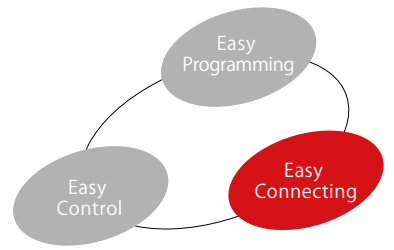


ASSISTA offers a wide variety of components—Grippers, Fingers, Vision and other peripherals—developed by a group of organizations known as MELFA Robot Partners.

These tools can easily be setup and configured for your application.

ASSISTA can also be configured to move freely as part of an AGV/AMR or as a mobile robot.

AGV: Automated Guided Vehicle
AMR: Autonomous Mobile Robot



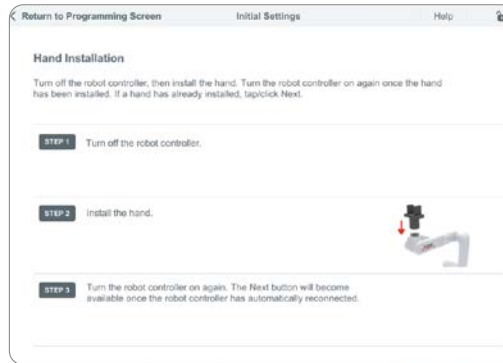
GRIP

with ASSISTA



Simply Connect Grippers to Robot Arm

The ASSISTA Set-up wizard provides operators with an easier more intuitive methodology for gripper configurations.



RT VisualBox (Engineering Software) lets operators set up grippers intuitively and easily.



Co-act EGP-C40 -N-N-ASSISTA(SCHUNK)
Electric-powered Gripper

Weight: 885g (incl. attachments, fingers)
Grip Force: 35N (min)/140N (max) (4 levels)
Stroke: 6x2mm



HRC-03-099455 (Zimmer/Nabeya Bi-Tech Kaisha)
Electric-powered Gripper

Weight: 916g (incl. attachments, fingers)
Grip Force: 50N (min)/190N (max)
(4 levels, adjustable to 140N)
Stroke: 10x2mm



ROB-SET ECBPM ASSISTA(SCHMALZ)
Electric-powered Adsorption Gripper

Weight: 631g (incl. attachments, adhesive pads)
Vacuum Pressure: -60kPa, Flow rate: 1.6L/min



KIT-ASSISTA-G (GIMATIC)
Electric-powered Gripper (Gripper parts be prepared separately.)

Weight: 922g (incl. attachments)
Grip Force: 98N
Stroke: 17.5x2mm

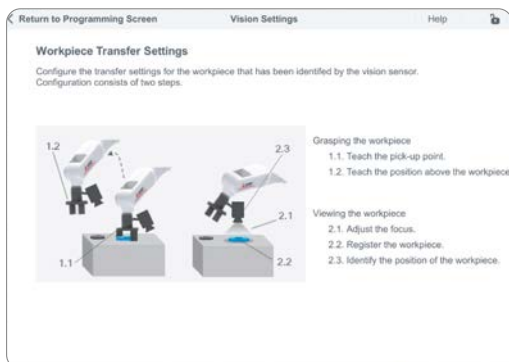
* These products may not be available in the region where you consider purchase. For details, please inquire at each company.

VIEW

with ASSISTA

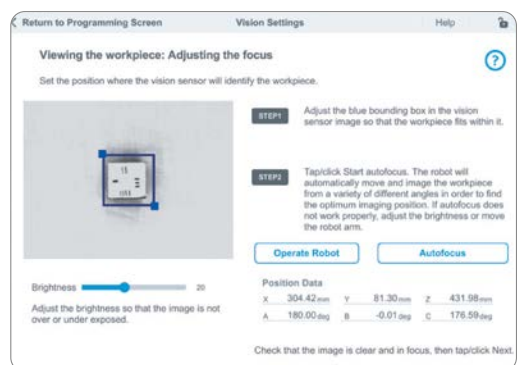
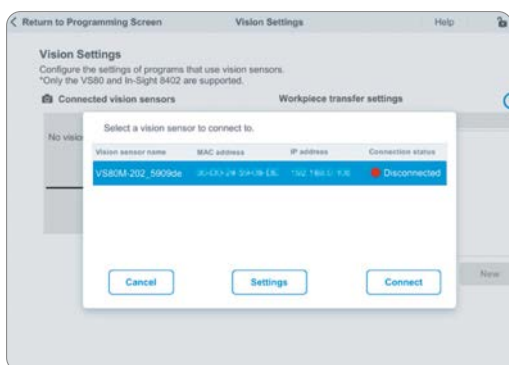


ASSISTA and the camera capture the target using the “RT VisualBox” auto-focus function.



“RT VisualBox” proprietary engineering tool

The vision camera focus adjustment and work registration can be configured simply by touching the screen. This means that you can use it even without special robot knowledge.



High-speed/High-precision
“PatMax RedLine®” built-in

Compact size/
Wire-saving type



Vision Sensor

The high-performance camera identifies the target and fixes position at high speed. Its compact size makes it ideal for attaching to the ASSISTA robot hand. This wire-saving type is equipped with PoE.

Model Name	Manufacturer	Inquiries, (as of April 2020)	Comments
In-Sight 8402M-363-50	COGNEX	COGNEX	—
In-Sight 8402M-373-50	COGNEX	COGNEX	Supports PatMax RedLine® PatMax RedLine® cannot be used in combination with RT VisualBox

* These products may not be available in the region where you consider purchase. For details, please inquire at each company.

ASSISTA MOVES



You can freely move ASSISTA
wherever needed whenever necessary.

An unmanned transport cart secures the safety of various sensors and coexists with the operator.
You can find out more from your Mitsubishi sales partner.

List of Collaborative Robot Partners

Gripper



SCHUNK GmbH & Co. KG

SchUNK offers the most extensive lineup of compact grippers and all-purpose grippers in the industry, and has full range of accessories for the perfect match between arms and tools, thereby enabling it to support the most diversified of needs.

Inquiry point (Europe)

SCHUNK GmbH & Co. KG
 Bahnhofstraße 106-134, D-74348 Lauffen/Neckar, Germany
 Tel.: +49-7133-103-0
 E-Mail: info@de.schunk.com

This two-clawed parallel electric gripper is manufactured exclusively for collaborative robots, and compliant with safety standard ISO/TS 15066. Its LED status display enables simple status monitoring in the field. The durable design includes 4-stage grip force adjustment.



Dedicated Model

Model	Co-act EGP-C40 N-N-Assista
Weight	885 g (including attachments and fingers)
Stroke	12 mm (Single-claw stroke 6 mm x 2)
Grip Force	35N, 70N, 105N, 140N (adjustable within 4 stages)



ZIMMER Group

As an authorized distributor for Zimmer products in Japan, it offers a vast lineup of air grippers/electric grippers with high grip force (maximum 1800N).

Inquiry point (Europe)

Zimmer Group
 Im Salmenkopf 5, 77866 Rheinau - Germany
 Tel.: +49 78 44 9139-0
 E-Mail: info@zimmer-group.de

This two-clawed parallel electric gripper is exclusively for collaborative robots and compliant with safety standard ISO/TS 15066. Its built-in controller and mechanical cell clock ensure that it will not drop workpieces it is holding, even in the event of a power outage.



Dedicated Model

Model	HRC-03-099455
Weight	916 g (including attachments and fingers)
Stroke	20 mm (Single-claw stroke 10 mm x 2)
Grip Force	50N, 90N, 140N, 190N (adjustable within 4 stages)

GIMATIC Gimatic Srl

As a gripper manufacturer, Gimatic offers a broad lineup of air and electric grippers, and can support the design, manufacture, and assembly of end effectors based on injection molded part extraction.

Inquiry point (Europe)

Gimatic Srl
Via Enzo Ferrari 2/4, 25030 Roncadelle (Bs) Italy
Tel: +39 030 2584655
E-Mail: info@gimatic.com

This parallel open/close plug-and-play gripper has a built-in driver. Maintenance is not required for 10 million cycles. Its original mechanism means that it does not consume power while the jaw is stopped, and it maintains its gripped state even in case of a power outage.



Dedicated Model

Model	KIT-ASSISTA-G
Weight	922 g (including attachments)
Stroke	35 mm (Single-claw stroke 17.5 mm x 2)
Grip Force	98N

SCHMALZ Schmalz GmbH

Schmalz is a vacuum transport device manufacturer founded in 1910. From highly versatile suction-type robot hands to suction pads, and high-performance vacuum generators, the company provides customers with a wide range of products that meet the needs of each industry, as well as vacuum know-how cultivated on a global scale.

Inquiry point (Europe)

J. Schmalz GmbH
Johannes-Schmalz-Str.1, DE-72293 Glatten
Tel: +49 7443 2403-0
E-Mail: schmalz@schmalz.de

This is the industry's most compact, lightweight electric vacuum pump. It achieves vacuum transport without using air or a hose. Its smart body also makes it perfect for bin picking.



Dedicated Model

Model	ROB-SET ECBPM ASSISTA
Weight	580 g (includes hand bracket)
Flow volume	1.6 L/min
Grip Force	-60 kPa (vacuum max. pressure)

Gripper



SMC was founded in 1959 as a general manufacturer of pneumatic devices. It currently manufactures and sells automatic control equipment. Support is provided via 54 domestic sales branches and 560 sales branches in 83 countries and regions.

Model	JMHZ2-16D-X7400B-ASSISTA
Weight	581 g (includes product attachment bolts and straight pins)
Stroke	10 mm (Single-claw stroke 5 mm x 2)
Grip Force	32.5N (at outer diameter grip/0.5 MPa) 43.5N (at inner diameter grip/0.5 MPa)

Inquiry point (Europe)

SMC Deutschland GmbH
Boschring 13, 15 63329 Egelsbach
Tel.: +49 (0) 61 03 / 402 - 0
E-Mail: info@smc.de

Based on the concept of "plug-and-play that can be used right away," it is equipped with an ISO9409-1-compliant robot brush and can be simply attached without requiring the manufacturing of attachments. Electrical cabling is connected simply using one connector and it can operate using just one air pipe.

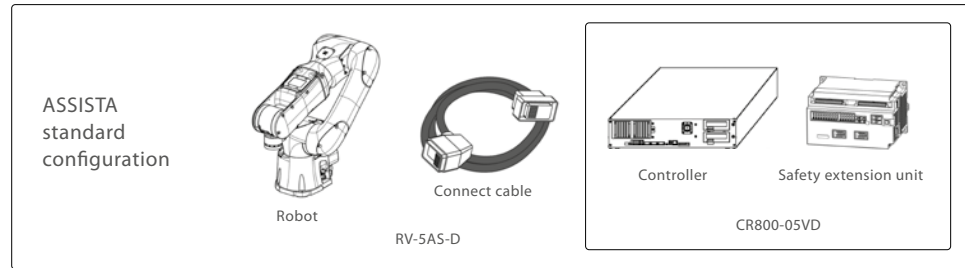


Capable of connecting to various types of robots from each company via a shared mount-type quick changer. Plans are to increase the quantity of products to 40 beginning in 2020.

Inquiry point (Europe)

OnRobot A/S
Teglvaerksvej 47H, 5220 Odense SØ Denmark
Tel.: +45 53 53 57 37
E-Mail: sales@onrobot.com

Robot arm



Standard specifications of RV-5AS-D robot

Item		Unit	Specifications
Environment			IP54 (Optional food-grade H1 grease in all gears and joints)
Degree of freedom			6
Installation posture			Floor mounted / ceiling mounted
Structure			Vertical, multiple-joint type
Operating range	Waist (J1)	Degree	±240
	Shoulder (J2)		±148
	Elbow (J3)		±150
	Wrist twist (J4)		±200
	Wrist pitch (J5)		±120
	Wrist roll (J6)		±200
Speed of motion ^{Note1)}	Waist (J1)	Degree/s	124 (59.6)
	Shoulder (J2)		124 (34.0)
	Elbow (J3)		124 (34.0)
	Wrist twist (J4)		297 (142)
	Wrist pitch (J5)		356 (215)
	Wrist roll (J6)		360
Maximum reach radius		mm	910
Maximum resultant velocity ^{Note2)}	High-speed operation mode	mm/sec	1,000
	Collaborative operation mode (Standard operation)		250
	Collaborative operation mode (Low-speed operation)		50
Load	Rating	kg	5
	Maximum ^{Note3)}		5.5
Pose repeatability		mm	±0.03
Ambient temperature ^{Note4)}		°C	0 to 40
Mass		kg	32
Wiring	Hand I/O	-	Mechanical interface: 2 inputs/4 outputs Forearm: 6 inputs/0 outputs Base: 0 inputs/4 outputs
	Force sensor cable/Spare cable	-	5-conductor (24 V/0.7 A) One of the conductors should be used for the frame ground (FG).
	LAN cable	-	Cat-5e supported
Plumbing	Primary hoses	-	Φ6 × 2
	Secondary hoses	-	Φ4 × 4 From the base of the robot to the elbow.
Supply pressure		MPa	0.54

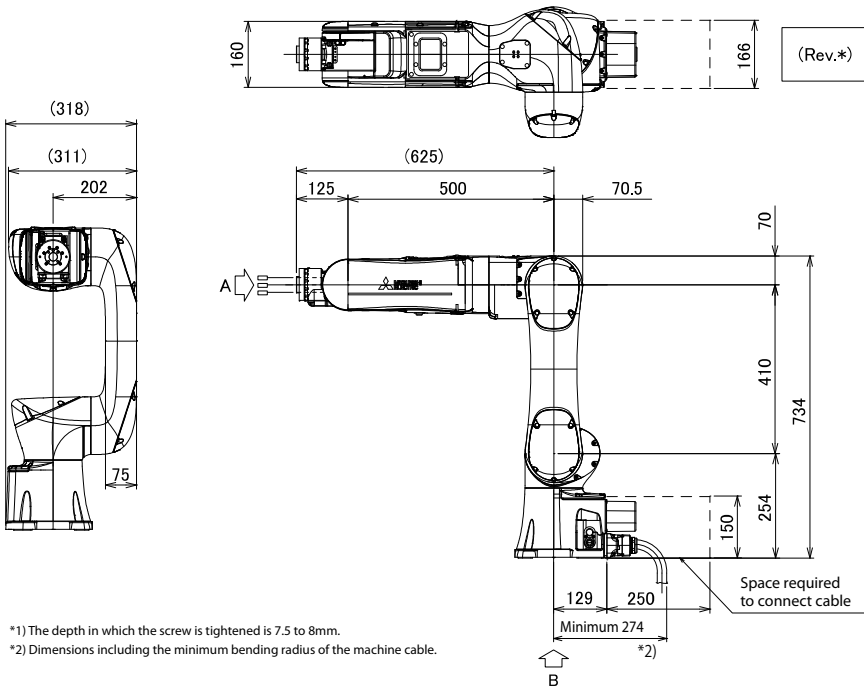
Note1) Values in parentheses indicate the maximum speed when the input voltage is single-phase 100 to 120 VAC.

Note2) These values represent the maximum overall speed of all axes combined. The safety functions limit the robot to the speeds shown in the table. For accurate collision force data when the robot is in Collaborative operation mode, measure collision forces under actual operating conditions.

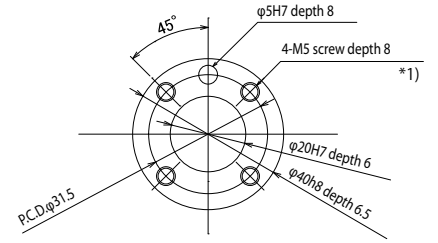
Note3) Allowable load when the mechanical interface faces downward at an inclination within ±10° to the vertical direction.

Note4) Sets the robot's operating environmental temperature as parameter OLTMX. The initial value is 30 (°C). Corresponding to the environment, the continuous control action performance and the overload-protection function are optimized.

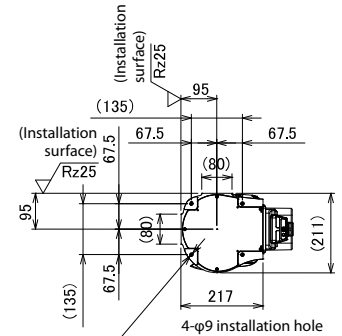
Outside dimension



*1) The depth in which the screw is tightened is 7.5 to 8mm.
*2) Dimensions including the minimum bending radius of the machine cable.



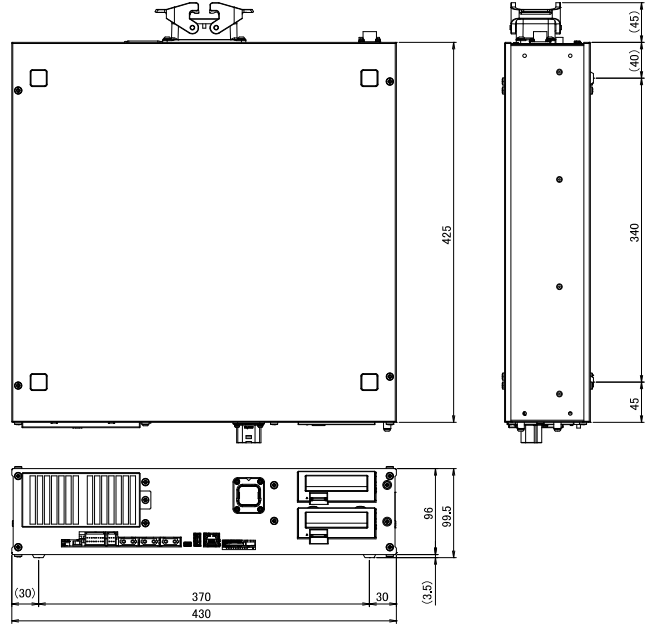
View A: Detail of mechanical interface



View B: Detailed installation dimensions

CR800-05VD controller specifications of controller

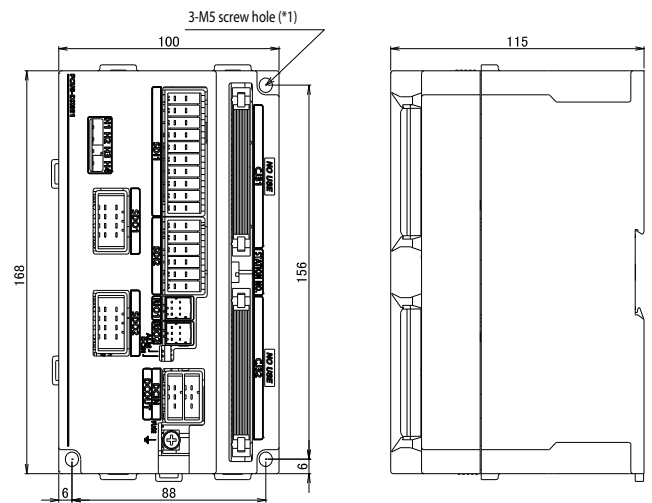
Item	Unit	Specification	Remarks	
Number of control axis	-	Simultaneously 6	-	
Memory capacity	Programmed positions	point	39,000	
	No. of steps	step	78,000	
	Number of program	-	512	
Robot language	-	MELFA-BASIC VI	-	
Teaching method	-	Pose teaching method, MDI method	-	
External input and output	Input/output	point	0/0	Max. 64/64 by option
	Dedicated input/output	-	Assigned with general-purpose input/output	The signal number of "STOP" input signals is fixing.
	Emergency stop input ^{Note2)}	point	1 (duplicated)	
	Emergency stop output	point	1 (duplicated)	
	Mode selector switch input ^{Note3)}	point	1 (duplicated)	
	Mode output	point	1 (duplicated)	
	Robot error output	point	1 (duplicated)	
	Door switch input	point	1 (duplicated)	
Safety I/O	Encoder input	Channel	2	-
	Safety I/O	point	8 (duplicated) / 4 (duplicated)	Safety extension unit
Interface	Force sensor interface	Channel	1	-
	Remote input/output	Channel	1	For connection to the Safety extension unit.
	USB	port	1	Ver. 2.0 HighSpeed device functions only. USB mini-B
	Ethernet	port	1	For customer: 1000BASE-T/100BASE-TX/10BASE-T
			1	Dedicated T/B port: 100BASE-TX/10BASE-T
	Option slot	slot	2	For option interface
	SD memory card slot	slot	1	For extended memory
RS-422	port	1	Dedicated T/B port	
Power source	Input voltage rang	V	Single phase AC 100 to 120 Single phase AC 200 to 230	The rate of power-supply voltage fluctuation is within 10%.
	Power capacity	kVA	1.0	Does not include rush current. ^{Note4)}
	Power supply frequency	Hz	50/60	-
Outline dimensions	mm	430(W) x 425(D) x 99.5(H)	Excluding protrusions	
Mass	kg	Approx. 12.5	-	
IP Rate	-	IP20	-	
Ambient temperature	°C	0 to 40	Without freeze	
Ambient humidity	%RH	45 to 85	Without dew drops	
Grounding	Ω	100 or less	Class D Grounding ^{Note5)}	



- Note1) The maximum number of usable programs differs depending on the number of types of workpieces that are registered.
- Note2) Only the STO function can meet the requirements of Category 4, Performance Level e. At factory settings, the STO function meets the requirements of Category 3, Performance Level d. To make the STO function meet the requirements of Category 4, Performance Level e, change the parameter setting.
- Note3) Provide a mode selector switch to change the mode (MANUAL/AUTOMATIC) of the controller.
- Note4) The power capacity is the recommended value. The power capacity does not include the rush current when the power is turned ON. The power capacity is a guideline and the actual operation is affected by the input power voltage.
- Note5) The robot must be grounded by the customer.

Safety extension unit

Item		Description	Remarks	
Safety function	STO function	The function electrically shuts off the driving energy to the motor of the robot arm.	IEC 60204-1 Corresponds to stop category 0	
	SS1 function	The function to control and decelerate the motor speeds of the robot. After stopping, the robot transitions to the STO state.	IEC 60204-1 Corresponds to stop category 1	
	SS2 function	The function to control and decelerate the motor speeds of the robot. After stopping, the robot transitions to the SOS state.	IEC 60204-1 Corresponds to stop category 2	
	SOS function	Without shutting off the driving energy to the motors, this function monitors the robot so that it stays at rest.	When SOS, SLS, SLP, and STR detect error, activate SS1. EN 61800-5-2 compliant	
	SLS function	This is a function to monitor each part of the robot arm so that their speeds do not exceed monitoring speeds.		
	SLP function	The function monitors specified monitoring positions so that they do not go across position monitoring planes.		
	STR function	This function ensures that the torque limits of each motor in the robot are not exceeded.		
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, PLd/Category 3 (at factory settings) SIL3, PLe/Category 4 (with changes to parameters)	-
		SS1,SS2,SS2, SLS,SLP, STR	SIL 2, PLd/Category 3	-
	Dangerous failure rate	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]	-		
Safety extension unit	Power supply specifications			
	Voltage	24 V DC±5% Ripple 0.2 V (P-P)	Supplied by customer	
	Maximum consumption current	300 mA	-	
	IP Rate	IP20	-	
	Weight	0.8kg	-	
	Environment	Operating temperature range	0 to 40°C	It must be kept away from heat appliances and other heat sources.
		Relative humidity	45 to 75%	Without dew drop
Input signal	8 routes (duplicated signal)			
Output signal	4 routes (duplicated signal)			



The list of robot option equipment

Item	Type	Description
Machine cable (replacement)	1F-□□UCBL-41	*□□* in type shows the length of the cables as follows. 02=2 m, 10=10 m (Changed from the original length of 5 m)
Solenoid valve set	1F-VD0□□-01(Sink)	Sets with one or two valves are available. Ø4 diameter output hoses The number that replaces "□□" indicates the number of valves the solenoid has (1 or 2).
	1F-VD0□□E-01(Source)	
2-piece force sensor conversion cable set	1F-ASSISTA-ADCBL	2-piece force sensor conversion cable set (hand cable/base cable) required to connect the force sensor to the robot.
Vision sensor mounting bracket	1F-ASSISTA-2DVSFLG	Bracket required to connect a vision sensor to the hand.

The list of the controller option equipment and special specification

Item	Type	Description
Easy-setup kit	4F-ASSISTASETUP-EU	A kit which aids setup that consists of switches, a connector cable, and a 24 V power supply.
RT VisualBox	3G-30C-WINE	Windows 10 Supporting English.
RT ToolBox3	3F-14C-WINE	Windows 7, Windows 8, Windows 8.1, Windows 10 Supporting English. (With the simulation function) Ver.1.70Y or later
Simple teaching pendant	R32TB/R32TB-15	Cable length 7m, Cable length 15m
Highly efficient teaching pendant	R56TB/R56TB-15	Cable length 7m, Cable length 15m
Parallel I/O Interface	2D-TZ368(Sink type)	DO: 32 point
	2D-TZ378(Source type)	DI: 32 point
External I/O cable (For Parallel I/O Interface)	2D-CBL05	CBL05:5m, CBL15: 15m Use to connect the external peripheral device to the parallel input/output interface.
CC-Link interface	*1 2D-TZ576	Only intelligent device station, Local station.
Network base card (EtherNet/IP interface)	*1 2D-TZ535-EIP-SET	Communication interface EtherNet/IP including Anybus CompactCom module manufactured by HMS
Network base card (PROFINET interface)	*1 2D-TZ535-PN-SET	Communication interface PROFINET including Anybus CompactCom module manufactured by HMS.
Network base card (CC-Link IE Field interface)	*1 2F-DQ535-CCIEF-SET	Communication interface CC-Link IE Field including Anybus CompactCom module manufactured by HMS
Network base card (EtherCAT interface)	*1 2F-DQ535-ECT-SET	Communication interface EtherCAT including Anybus CompactCom module manufactured by HMS.
SD memory card	*1 2F-2GBSD	Memory card capacity 2GB.

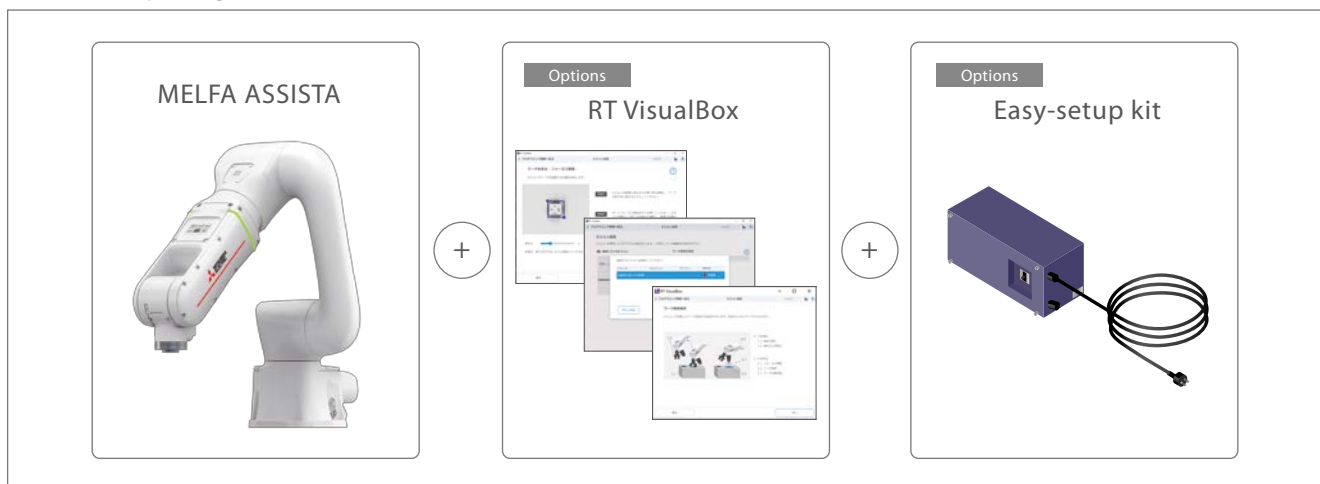
*1 Not supported by RT VisualBox.

The list of function extension device

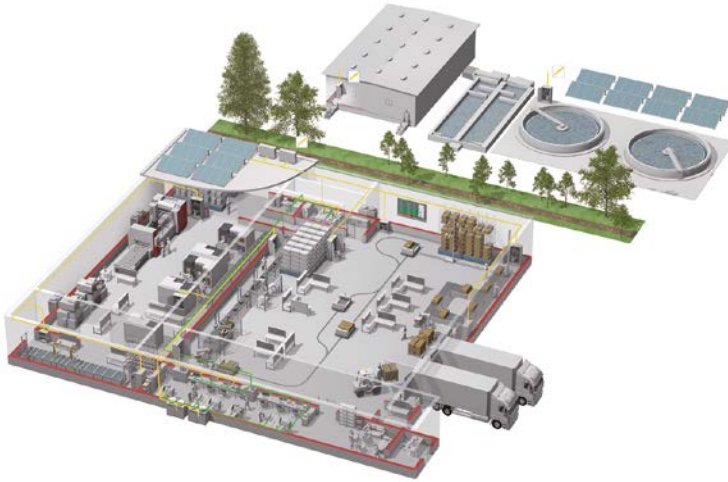
Item	Type name	Specifications
Force sensor set	*1 4F-FS002H-W200	A set of devices necessary for force sense control function, such as a force sensor, an interface unit, and support software.

*1 Not supported by RT VisualBox.

ASSISTA Startup Configuration



YOUR SOLUTION PARTNER



Mitsubishi Electric offers a wide range of automation equipment from PLCs and HMIs to CNC and EDM machines.

A NAME TO TRUST

Since its beginnings in 1870, some 45 companies use the Mitsubishi name, covering a spectrum of finance, commerce and industry.

The Mitsubishi brand name is recognized around the world as a symbol of premium quality.

Mitsubishi Electric Corporation is active in space development, transportation, semi-conductors, energy systems, communications and information processing, audio visual equipment and home electronics, building and energy management and automation systems, and has 237 factories and laboratories worldwide in over 121 countries.

This is why you can rely on Mitsubishi Electric automation solution - because we know first hand about the need for reliable, efficient, easy-to-use automation and control in our own factories.

As one of the world's leading companies with a global turnover of over 4 trillion Yen (over \$40 billion), employing over 100,000 people, Mitsubishi Electric has the resource and the commitment to deliver the ultimate in service and support as well as the best products.



Low voltage: MCCB, MCB, ACB



Medium voltage: VCB, VCC



Power monitoring, energy management



Compact and Modular Controllers



Inverters, Servos and Motors



Visualisation: HMIs



Numerical Control (NC)



Robots: SCARA, Articulated arm



Processing machines: EDM, Lasers, IDS



Transformers, Air conditioning, Photovoltaic systems

* Not all products are available in all countries.

Global Partner. Local Friend.

European Offices

Germany Mitsubishi Electric Europe B.V. Mitsubishi-Electric-Platz 1 D-40882 Ratingen Phone: +49 (0)2102 / 486-2048	Czech Rep. Mitsubishi Electric Europe B.V. Pekárská 62/77 CZ-155 00 Praha 5 Phone: +420 734 402 587	France Mitsubishi Electric Europe B.V. 23, Boulevard des Bouvets F-92741 Nanterre Cedex Phone: +33 (0)1 / 55 68 56 95	Ireland Mitsubishi Electric Europe B.V. Westgate Business Park, Ballymount IRL-Dublin 24 Phone: +353 (0)1 4198800	Italy Mitsubishi Electric Europe B.V. Valle Colleoni 7 Palazzo Sirio I-20864 Agrate Brianza (MB) Phone: +39 039 / 60 53 1	Netherlands Mitsubishi Electric Europe B.V. Nijverheidsweg 23C NL-3641RP Mijdrecht Phone: +31 (0) 297 250 350	Poland Mitsubishi Electric Europe B.V. ul. Trakowska 48 PL-32-083 Balice Phone: +48 (0) 12 347 65 00
Russia Mitsubishi Electric (Russia) LLC 2 bld. 1, Letnikovskaya st. RU-115114 Moscow Phone: +7 495 / 721 2070	Spain Mitsubishi Electric Europe B.V. Carretera de Rubí 76-80 Apdo. 420 E-08190 Sant Cugat del Vallés (Barcelona) Phone: +34 (0) 93 / 5653131	Sweden Mitsubishi Electric Europe B.V. (Scandinavia) Hedvig Möllers gata 6 SE-223 55 Lund Phone: +46 (0) 8 625 10 00	Turkey Mitsubishi Electric Turkey Elektrik Ürünleri A.Ş. Şenfallı Mahallesi Kale Sokak No:41 TR-34775 Ümraniye-İSTANBUL Phone: +90 (216) 969 25 00	UK Mitsubishi Electric Europe B.V. Travellers Lane UK-Hatfield, Herts. AL10 8XB Phone: +44 (0)1707 / 28 87 80		

Representatives

Austria GEVA Wiener Straße 89 A-2500 Baden Phone: +43 (0)2252 / 85 55 20	Belarus OOO TECHNIKON Prospekt Nezavisimosti 177-9 BY-220125 Minsk Phone: +375 (0)17 / 393 1177	Bosnia and Herzegovina INEA RBT d.o.o. Stegne 11 SI-1000 Ljubljana Phone: +386 (0)1 / 513 81 16	Bulgaria AKHNATON 4, Andrei Ljapchev Blvd., PO Box 21 BG-1756 Sofia Phone: +359 (0)2 / 817 6000	Croatia INEA CR Losinjska 4 a HR-10000 Zagreb Phone: +385 (0)1 / 36 940 -01/-02/-03	Czech Republic AutoCont C.S. S.R.O. Kalkova 1853/3 CZ-702 00 Ostrava 2 Phone: +420 595 691 150	Denmark HANS FØLSGAARD A/S Theilgaardss Torv 1 DK-4600 Køge Phone: +45 4320 8600
Estonia Electrobitt OÜ Pärnu mnt. 160b EST-11317, Tallinn Phone: +372 6518 140	Finland UTU Automation Oy Peltotie 37 FIN-28400 Uusika Phone: +358 (0)207 / 463 500	Greece UTEKO A.B.E.E. S. Mavrogenous Str. GR-18542 Piraeus Phone: +30 (0)211 / 1206-900	Hungary AXiCom Automatika Kft. (Robot Center) Rákóczi utca 1-13 HU-1131 Budapest Phone: +36 (0)1 / 412-0882	Latvia OAK Integrator Products SIA Rītausmas iela 23 LV-1058 Riga Phone: +371 67842280	Malta ALFATRADE Ltd. 99, Paola Hill Malta-Paola PLA 1702 Phone: +356 (0)21 / 697 816	Portugal Fonseca S.A. R. João Francisco do Casal 87/89 PT-3801-997 Aveiro, Esqueira Phone: +351 (0)234 / 303 900
Romania Sirius Trading & Services Aleea Lacul Morii Nr. 3 RO-060841 Bucuresti, Sector 6 Phone: +40 (0)21 / 430 40 06	Serbia INEA SR d.o.o. Ul. Karadžorjeva 12/217 SR-11300 Smederevo Phone: +381 69 172 27 25	Slovakia SIMAP SK Dolné Pažite 603/97 SK-911 06 Trenčín Phone: +421 (0)32 743 04 72	Slovenia INEA RBT d.o.o. Stegne 11 SI-1000 Ljubljana Phone: +386 (0)1 / 513 8116	Ukraine CSC - AUTOMATION Ltd. 4 B, Yevhena Sverstyuka Str. UA-02002 Kiev Phone: +380 (0)44 / 494 33 44		
Egypt EIM Energy 3 Roxy Square ET-11341 Heliopolis, Cairo Phone: +202 24552359	Israel ILAN & GAVISH Ltd. 24 Shenkar St., Kiryat Arie IL-49001 Petah-Tikva Phone: +972 (0)3 / 922 18 24	South Africa ADROIT TECHNOLOGIES 20 Waterford Office Park 189 Witkoppen Road ZA-Fourways Phone: +27 (0)11 / 658 8100				

Version check



Mitsubishi Electric Europe B.V.

FA - European Business Group
 Mitsubishi-Electric-Platz 1
 D-40882 Ratingen Germany
 Tel.: +49(0)2102-2048 Fax: +49(0)2102-4861120
 info@mitsubishi-automation.com
<https://eu3a.mitsubishielectric.com>