

# Melfa Assista Cobot

RV-5AS-D

PRODUCT FLYER



Mitsubishi Electric MELFA ASSISTA Cobot with advanced safety technology can share a workplace with humans without the need of guard or safety fences. The setup of the robot is easy even without specialised knowledge of robots. Typical applications include assembly tasks, packing operations, precise holding or repetitive pick and place. Simpler, easier and more flexible, this robot will change your perception of what a “robot” is.



## Easy Control

Movements can be taught via the dedicated operating buttons on the robot arm and the teaching pendant for programming. Users can move the arm to the desired position by hand and then the position is added to the motion sequence without opening programming tools. The six-colour LED indicator on the arm displays the status of the robot.



## Easy Programming

No robot programming expertise required. The Cobot features Windows-based programming software called RT VisualBox 'Visual Programming'. The software allows non-expert users to drag-and-drop icons to define the movements of the arm and simulate operations in 3D before the robot actually performs them.



## Easy Connectivity

ASSISTA offers a wide variety of components such as grippers, fingers, vision and other peripherals developed by a group of organisations known as MELFA Robot Partners. These tools can easily be setup for your application. ASSISTA Cobot can also be configured to move freely as part of an AGV/AMR or as a mobile robot.

## Features

- » RT VisualBox software
- » 5kg load capacity
- » Six-axis movement
- » International safety and robotic standards
- » LED light status
- » Move easy with operating buttons
- » Automatic calibration
- » Visual programming on tablet
- » Compact and powerful

# SPECIFICATIONS

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)	±240	
	Shoulder (J2)	±148	
	Elbow (J3)	±150	
	Wrist Twist (J4)	±200	
	Wrist Pitch (J5)	±120	
	Wrist Roll (J6)	±200	
Speed of Motion*1	Waist (J1)	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*2	High-Speed Operation Mode	1000	
	Collaborative Operation Mode (Standard Operation)	250	
	Collaborative Operation Mode (Low-Speed Operation)	50	
Load	Rating	5	
	Maximum*3	5.5	
Pose Repeatability	mm	±0.03	
Ambient Temperature*4	°C	0 - 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	-	ø6 x 2
	Secondary Hoses	-	ø4 x 4 from the base of the robot to the elbow
Supply Pressure	MPa	0.54	

## Notes:

\*1 Values in parentheses indicate the maximum speed when the input voltage is single-phase 100 to 120 VAC.

\*2 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.

\*3 Allowable load when the mechanical interface faces downward at an inclination within ±10° to the vertical direction.

\*4 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 optimised.

## Catalogue

<http://bit.ly/cobot-ME>

## e-Learning

<https://www.mitsubishielectric.com/fa/assist/e-learning/eng.html>

For further information contact



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