



for a greener tomorrow

 **MITSUBISHI
ELECTRIC**
Changes for the Better



TRULY INDUSTRIAL
TRULY COLLABORATIVE

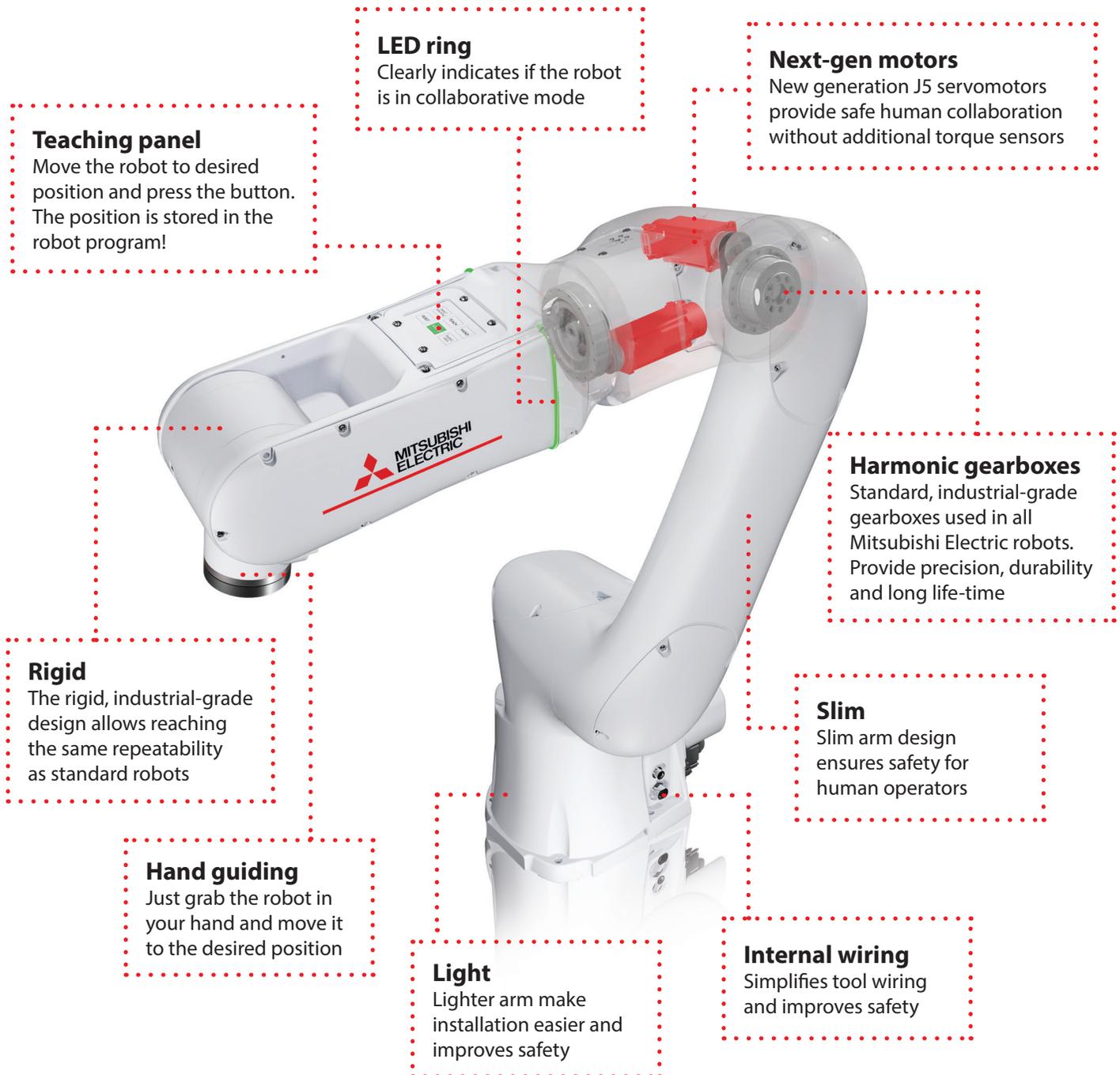
MELFA

assista

ASSISTA

Industrial Performance Built-In

The MELFA ASSISTA is Mitsubishi Electric's newest robot offering, specifically created to work in a cooperative environment. ASSISTA is a collaborative robot that can share a workspace with human interaction for a wide variety of applications. Easy control, programming, and connectivity provide operators with the skills they need to interact with this robot quickly and efficiently.



Teaching panel

Move the robot to desired position and press the button. The position is stored in the robot program!

LED ring

Clearly indicates if the robot is in collaborative mode

Next-gen motors

New generation J5 servomotors provide safe human collaboration without additional torque sensors

Harmonic gearboxes

Standard, industrial-grade gearboxes used in all Mitsubishi Electric robots. Provide precision, durability and long life-time

Rigid

The rigid, industrial-grade design allows reaching the same repeatability as standard robots

Slim

Slim arm design ensures safety for human operators

Hand guiding

Just grab the robot in your hand and move it to the desired position

Light

Lighter arm make installation easier and improves safety

Internal wiring

Simplifies tool wiring and improves safety

ASSISTA Collaborative Robot Product Overview



KEY BENEFITS:

EASY CONTROL



Move easily with operation buttons

- **Programming without a teach pendant** – The operation buttons on the arm of the robot give you an easy way to control the robot. A teach pendant is not required for programming. The LED on the robot arm changes color depending on the status of the robot, giving the operator a quick visual cue about what the robot is doing.



EASY PROGRAMMING



No robot expertise is needed

- **RT VisualBox engineering software** – You can create programs visually using the intuitive operations of the RT VisualBox software. The software allows operators to program the robot with a “train by demonstration” programming interface. This allows for the movement of the robot arm position to set waypoints easily.

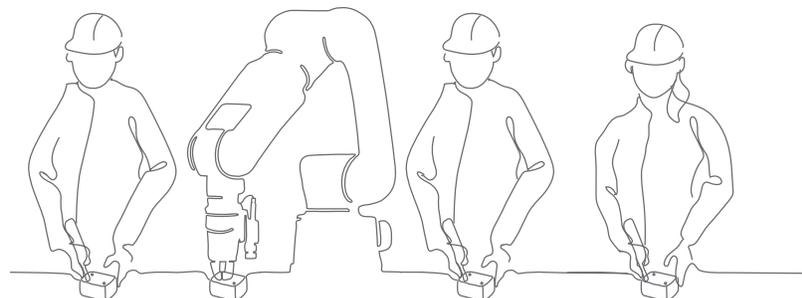


EASY CONNECTIVITY



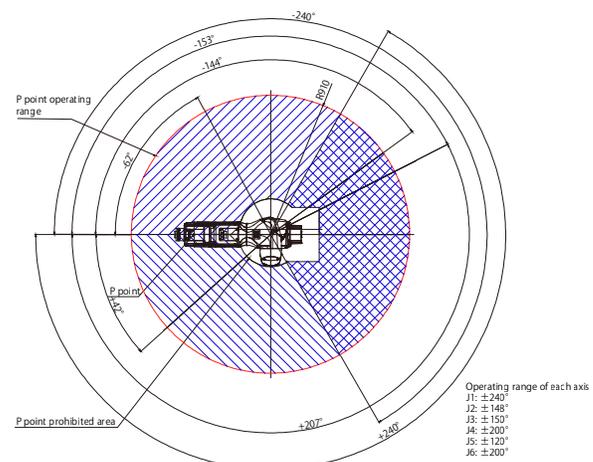
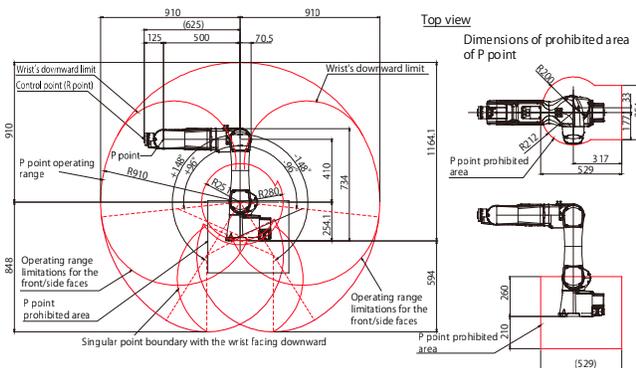
A wide variety of components and applications

- **ASSISTA offers a wide variety of components** – Grippers, fingers, vision and other peripherals have been developed by a group of organizations known as the MELFA Robot Partners. These tools can be easily setup and configured for your application. ASSISTA can also be configured to move freely as part of an AGV/AMR system or as a mobile robot.



ASSISTA Collaborative Robot Product Overview

TYPE	UNIT	SPECIFICATIONS
MACHINE CLASS		Standard/Oil mist *1
PROTECTION DEGREE	—	IP40(Standard)/IP45(oil mist) * 1
INSTALLATION	—	Floor type, ceiling type, (wall-mounted type *2)
DEGREES OF FREEDOM	—	6
DRIVE SYSTEM		AC servo motor
POSITION DETECTION METHOD		Absolute encoder
MAXIMUM LOAD CAPACITY	kg	5
ARM LENGTH	mm	500+410
MAXIMUM REACH RADIUS	mm	910
OPERATING RANGE	J1	480 (±240)
	J2	296 (±148)
	J3	300 (±150)
	J4	400 (±200)
	J5	240 (±120)
	J6	400 (±200)
MAX. SPEED	J1	125
	J2	125
	J3	125
	J4	300
	J5	360
	J6	720
MAXIMUM COMPOSITE SPEED	mm/s	1,000
POSITION REPEATABILITY	mm	±0.03
AMBIENT TEMPERATURE	°C	0 to 40
MASS	kg	20



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