

M-900iA SERIES



	Robot model	Controller	Controlled axes	Max. load capacity at wrist [kg]	Repeatability [mm]	Mechanical weight [kg]	Reach [mm]	Motion range [°]						Maximum speed [°/s]						J4 Moment [Nm]/	J5 Moment [Nm]/	J6 Moment [Nm]/	IP Rating
								J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	Inertia [kgm²]			ii Ruting
M-900 <i>i</i> A	200P	R-30 <i>i</i> A	6	200	± 0.3	2670	3507	360	180	180	720	230	720	110	95	95	95	95	165	2200/413.2	2200/413.2	715/392	Wrist & J3 arm IP67, body IP54, Option: movable parts IP66, main body IP56
	260L		6	260	± 0.3	1800	3100	360	150	211	720	250	720	100	105	95	120	120	200	1666/188—313	1666/188—313	715/118—225	
	350		6	350	± 0.3	1720	2650	360	150	223	720	250	720	100	95	95	105	105	170	1960/235—392	1960/235—392	891.8/157—352	
	400L		6	400	± 0.5	3150	3625	360	154	160	720	244	720	80	80	80	100	100	160	2744/510	2744/510	1726/320	
	600		6	600	± 0.3	2800	2832	360	154	160	720	244	720	80	80	80	100	100	160	3381/510	3381/510	1726/320	
	600 (700 kg SW)		6	700	± 0.3	2800	2832	360	154	160	720	244	720	80	80	80	100	100	160	3381/1098	3381/1098	1726/444	



Available in 5 different versions:

- M-900iA/260L: 260 kg, Long arm
 M-900iA/200P: 200 kg, Super long arm, rack mount (press transfer)

- M-900iA/350: 350 kg, Standard model
 M-900iA/400L: 400 kg, Super long arm
 M-900iA/600: 600 up to 700 kg (option)

THE M-900iA 6-AXES ROBOT SERIES HAS ONE OF THE HIGHEST PAYLOADS AVAILABLE IN THE MARKET TODAY, DESIGNED TO HANDLE VERY HEAVY OR MULTIPLE PARTS (200 TO 700 KG PAYLOAD).

> FEATURES AND BENEFITS

M-900iA Series, the solution for:

- Heavy duty spot welding
- Handling of heavy work pieces
- Palletising (complete layers)
- Press transfer



M-900iA/260L M-900iA/350











HIGH ALLOWABLE WRIST MOMENT AND INERTIA

- Ability to handle large gripper and heavy payload at high speed
- Flexibility on gripper design (choice of cheaper material improving the robustness of the gripper)
- Improved carrying capability providing higher throughputs

J4 ROTATION AT WRIST - SLIM J3 ARM WITH EQUIPMENT MOUNTING FLANGES

- With hollow drive shafts for the wrist motor the 13 arm is very slim for easy access into narrow spaces.
- The J4 reducer at the end of J4 keeps the whole J3 arm stationary. Axis 4 rotates at end of arm
- · Reliable long-life design proven in the automotive industry
- · Simple and reliable cable dress out package

ADDITIONAL MOUNTING FACILITY ON J3 ARM

- Capability to mount additional 25 kg on the arm at full payload at wrist
- Equipment mounting close to the wrist on the rigid J3 arm keeps "free" gripper hoses and cables short and avoids wear and tear

COMPACT WRIST: NO MOTORS AND IP67

- No electrical elements at wrist: all motors for wrist motion are mounted on the robot's "shoulder". J3.
- · Reduced risk of damaging the wrist motors because of high heat or harsh environment
- · Compact design to access narrow spaces
- · High loads and high duty cycles possible thanks to good air cooling of the wrist motors
- Wrist unit sealed against dust and water according to

STANDARD AIR AND ELECTRICAL CONNECTIONS PROVIDED TO AXIS J3

Integrated air and electrical services from J1 to J3

- Short connections to tool
- Increased wiring reliability
- Proven reliability (factory built)

FLOOR AND CEILING MOUNTING M-900iA/260L and M-900iA/350 (ANGLE AND WALL ALSO POSSIBLE)

- Easier access to the machine being serviced
- Maximised use of the robot work envelope Note: the M-900iA/600 is floor mounted.

OPTION: SEVERE DUST LIQUID PROTECTION (SDLP)

- Main body protected from dust and water jets IP56
- Wrist part dustproof and can be immersed in water -
- Drivetrain (motors, reducers, gear, drive shaft) IP66
- Anti-corrosive bolts

HIGH MECHANICAL RIGIDITY

Suitable for constant force applications such as routing, cutting, polishing, deburring, etc...

MOTORS DIRECTLY COUPLED TO THE REDUCER

- Simplified mechanical unit
- Reduced breakdown risk
- Compact and reliable solution
- High accuracy and minimum backlash

HOLLOW JOINT CONSTRUCTION

Reduced wear of cable routing as most reducers have hollow construction





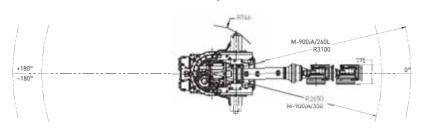


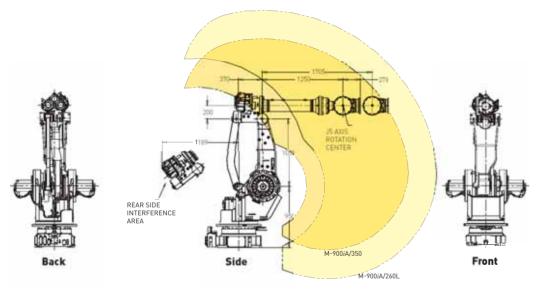


Dimensions



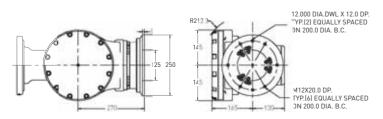
M-900iA/350, M-900iA/260L

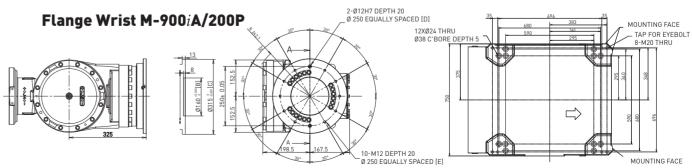




M-900iA/200P Top view +180° -180° Side J5 AXIS ROTATION **Front**

Flange Wrist M-900*i*A/350/260L



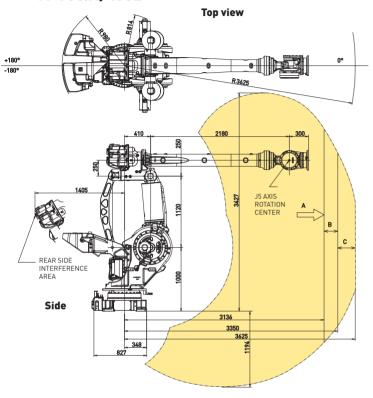


Footprint M-900iA/200P

Dimensions



M-900iA/400L

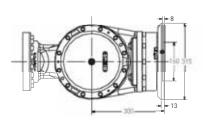


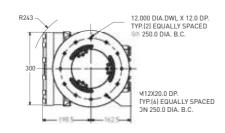
AREA A: ROBOT CAN MOVE WITHOUT RESTRICTION

AREA B: WRIST MOTION IS RESTRICTED SO THAT THE VECTOR FROM
THE CENTER OF THE WRIST TO THE COFG OF THE PAYLOADIS
DOWNWARD AND LESS THAN 30 DEGREES FROM THE VERTICAL

AREA C: WRIST MOTION IS RESTRICTED SO THAT THE VECTOR FROM THE CENTER IS DOWNWARD AND VERTICAL R OF THE WRIST TO THE CORE OF THE PAYLOAD.

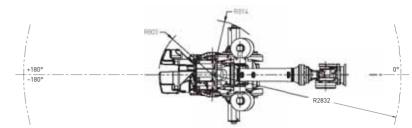
Flange Wrist M-900*i*A/400L/600

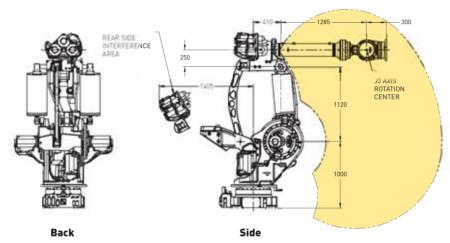


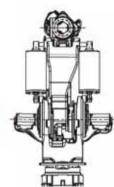


M-900iA/600

Top view







Front

Footprint M-900*i*A/350/260L/400L/600

