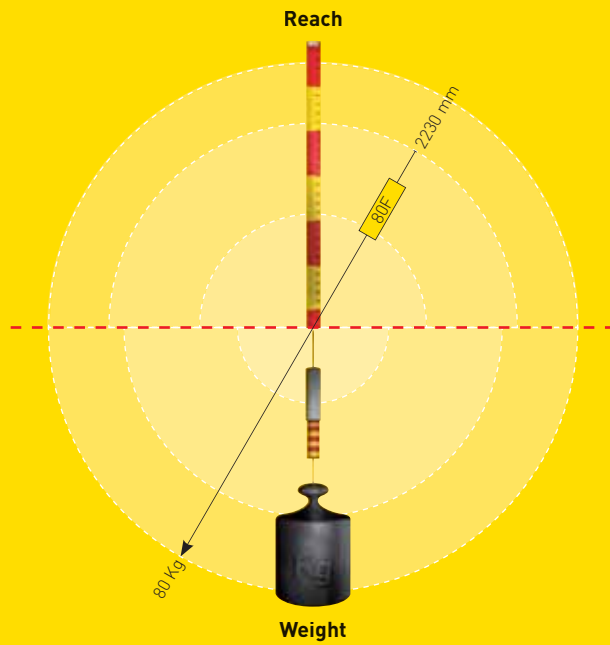


# R-1000iA

24

	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]/ Inertia [kgm <sup>2</sup> ]	J5 Moment [Nm]/ Inertia [kgm <sup>2</sup> ]	J6 Moment [Nm]/ Inertia [kgm <sup>2</sup> ]	IP Rating
								J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6				
<b>R-1000iA</b>	80F	R-30iA	6	80	± 0.2	620	2230	360	245	360	720	250	720	170	140	160	230	230	350	380/30	380/30	200/20	Body IP54 std. (IP67 optional) wrist & J3 arm IP67



THE FANUC ROBOT R-1000iA/80F IS A NEW TOP PERFORMANCE ROBOT WITH 80KG PAYLOAD AND 2.23M REACH. THE INNOVATIVE ROBOT IS DESIGNED TO MAXIMIZE THE PRODUCTIVITY OF SPOT WELDING IN THE AUTOMOTIVE AND AUTOMOTIVE COMPONENTS INDUSTRIES.

## FEATURES AND BENEFITS

R-1000iA/80F the ideal robot for compact work cells and dense production lines. Quick and robust robot for applications such as:

- Spot welding
- Material handling

### FAST AND SLIM ROBOT ARM INCREASES PRODUCTION OUTPUT

- The small footprint, slim body and slim wrist of R-1000iA/80F are ideal for innovative high density spot welding cells. 3 R-1000iA/80F robots easily fit into the space required by 2 conventional spot welding robots for 50% more production output.
- The fast axes speed of R-1000iA/80F achieve more than 10% faster cycle times in typical spot welding motion than conventional robots.

### MAJOR SAVINGS IN FLOORSPACE, ENERGY CONSUMPTION AND COST

- With ca. 50% less weight than conventional robots R-1000iA/80F dramatically reduces energy consumption
- With its footprint and floor space requirement ca. 50% smaller than for conventional robots R-1000iA/80F greatly reduces building costs.
- R-1000iB/80F can be ceiling mounted freeing even more space.

### FASTEST AND STRONGEST ROBOT IN ITS CLASS

- In its robot class R-1000iA/80F leads the competition with the longest reach and competitive high payload capacity and top axes speeds.
- Best cycle times for short pitch spot welding achieve top productivity
- Heavy payload capacity and long reach are ideal for material handling operations.

### PROVEN TOP RELIABILITY DESIGN

- Fully sealed water and dust tight (IP67) wrist and J3 arm ensure top performance and top reliability in wet and dusty environments
- Top reliability design common for R-1000iA, R-2000iB, M-900iA and M-2000iA is proven by 85000 robots installed worldwide in automotive body shops, foundries and other harsh applications
- Low maintenance costs thanks to minimized downtime and minimum maintenance requirements.

### J4 ROTATION AT WRIST – SLIM J3 ARM FOR EQUIPMENT MOUNTING

- With hollow drive shafts for the wrist motor the J3 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
  - reduced wear on gripper service
  - reliable long-life design
  - simple and reliable cable dress out package
- Equipment weighing up to 15 kg can be mounted at J3 arm

### STANDARD AIR AND ELECTRIC CONNECTIONS PROVIDED TO AXIS J3

- Integrated air and electrical services from J1 to J3
- Short Connections to Equipment mounted at J3 axis
- Increased wiring reliability
- Proven Reliability (factory built)

### FLIP OVER CAPABILITY

- Reduced cycle time
- Enables more flexible cell designs
- Allows several robots to work together in close proximity.
- Full working envelope when robot is mounted in inverted position.

### OPTION: SPOT WELDING SOLUTION ARM

The optional Solution Arm dressout packages include welding hoses, cooling water hoses and signal cables to support the spot welding process.

- Speeds up robot installation
- Maximizes uptime
- Eliminates misconnections due to human error

### OPTION: ADJUSTABLE HARDSTOPS FOR MAIN AXES

Adjustable hardstops for the restriction of the axes range of J1, J2, J3 can be installed.

- Safety distances to human operator in compact robot cells can be maintained
- Robot cells size can be reduced and building cost reduced.





