Product		i4-350L	i4-450L	i4-550L	
Quill Length		180 mm	180 mm	180 mm	350 mm
Number of axes		4			
Reach		350mm	450 mm	550 mm	
Maximum Payload*1		5 kg			
Repeatability at 100% speed	XY	±0.01 mm			
	Joint 3	±0.01 mm			
	Joint 4	±0.01°			
Joint Range	Joint 1	±136°			
	Joint 2	±136°	±148°		
	Joint 3	180 mm*2			350 mm*3
	Joint 4	±360°			
Inertia Moment (Max.)	Joint 4	0.05 kg-m²			
Maximum push force - downward, no load*4	Joint 3	150 N			
Joint Speeds	Joint 1	456 deg/s			
	Joint 2	456 deg/s			
	Joint 3	800 mm/s			
	Joint 4	6000 deg/s			
Cycle times*5	Burst*6	0.54 s	0.48 s		
	Sustained	0.57 s		0.54 s	
	Blended Burst	0.45 s	0.42 s	0.38 s	
Power Requirements	Control Power	24 VDC: 5 A / 120 W max.			
	High Power	48 VDC: 20 A / 960 W max.			
Protection		IP20 / NEMA Type 1			
Mounting		Table, Wall			
Environmental Requirements	Ambient Temperature	5° to 40°C			
	Humidity Range	5% to 90% non-condensing			
Weight		15.1 kg	15.9 kg	16.4 kg	16.5 kg
On-board I/O		8 outputs / 12 inputs (Primary Interface Panel) 4 outputs / 5 inputs (Secondary Interface Panel)			
Electrical pass-through ports		15 pin, D-sub, male			
Pneumatic pass-through ports		4 (6 mm) and 2 (4mm) push-type fittings, max. pressure 0.55 MPa			
Belt Encoder		2 line driver inputs (A, B, and Z)			
RS-232C serial communication ports		1 (troubleshooting information only)			
Programming Software		Sysmac Studio / ACE Version 4*7			
IPC Application Manager		Robot Vision Manager, PackManager			
Controller		NJ501-R Series (Integrated Control robots only)			

*1 Payload includes any object(s) attached to a robot link or tool flange, including end-effectors, tooling, valves, grippers, and objects being handled by the robot.
*2 Bellows reduce the z-axis travel by 27 mm in the retracted position and 27 mm in the extended position.
*3 Bellows reduce the z-axis travel by 53 mm in the retracted position and 53 mm in the extended position.
*4 At a duty cycle of 1 seconds pushing and then 3 seconds not pushing.
*5 Cycle time is defined as a continuous path with straight-line motion in which the robot tool moves up 25 mm, laterally 305 mm, down 25 mm, and then back along the same path (not achievable over all paths in the robot working envelope). Values listed are with no joint 4 rotation, at 20°C ambient with a 2.0 kg payload. Blended Burst cycle uses

the same criteria with arc motion.
*6 Burst cycle times may increase by up to 20% when bellows are present.
*7 Use Sysmac Studio for Integrated Control robots. Use ACE Version 4.4.3.200 and above for Standard Control robots.