

i4-350L/450L/550L

New i4L robot for precision machining, assembly, and material handling

- High payload, inertia, and repeatability in a compact size for use in digital assembly applications.
- Compact, easy to install design. Mountable on table or wall without additional HW. Available with bottom or rear interface panel orientations.
- Easy to service with high visibility, multi-colored LED light dome provides convenient indication of the robot status.
- Reach Options: 350 mm, 450 mm, 550 mm
- Maximum payload: 5 kg
- Weight 350: 15.1 kg; 450: 15.9 kg; 550 (180 mm): 16.4 kg; 550 (350 mm): 16.5 kg



Specifications

Product		i4-350L		i4-450L		i4-550L			
Type		Standard		Standard		Standard		Long-Quill	
Interface Panel Orientation		Rear Panel	Bottom Panel	Rear Panel	Bottom Panel	Rear Panel	Bottom Panel	Rear Panel	Bottom Panel
Part Number		RS4-2053002	RS4-2053102	RS4-2054002	RS4-2054102	RS4-2055002	RS4-2055102	RS4-2055004	RS4-2055104
Number of axes		4							
Reach (mm)		350		450		550			
Maximum Payload (kg)		5							
Quill Length (mm)		180				350			
Repeatability	XY (mm)	±0.01							
	Z (mm)	±0.01							
	Theta (deg)	±0.01							
Joint Range	Joint 1 (deg)	±135							
	Joint 2 (deg)	±135		±148					
	Joint 3 (mm)	180				350			
	Joint 4 (deg)	±360							
Inertia Moment (Max.)	Joint 4 (kg m ²)		0.05						
Maximum push force - vertical	Joint 3 (N)		150						
Joint Speeds	Joint 1 (deg/s)	456							
	Joint 2 (deg/s)	456							
	Joint 3 (mm/s)	800							
	Joint 4 (deg/s)	6000							
Cycle times*1	Burst (s)	0.54		0.48					
	Sustained (s)	0.57		0.57		0.54			
	Blended Burst (s) *2	0.45		0.42		0.38			
Power Requirements		24 VDC: 5 A 48 VDC:20 A							
Protection		IP20 / NEMA Type 1							
Environment Requirements	Ambient Temperature	5 to 40°C							
	Humidity Range	5 to 90% non-condensing							
Weight (kg)		15.1		15.9		16.4		16.5	
Basic Configuration	Controller	iCS-ENET							
	On-board I/O	8 outputs / 12 inputs (Primary Interface Panel) 4 outputs / 5 inputs (Secondary Interface Panel)							
	Pneumatic pass-through connections	3							
	Conveyor tracking input	2							
	RS-232C serial comm port	1							
	Programming Environment	ACE							
	Vision Manager	Yes							
Pack Manager	Yes								
Connectable Controller		IPC Application Controller							

*1. Adept cycle, in mm 25/305/25 (seconds, at 20°C ambient) with 2.0 kg payload

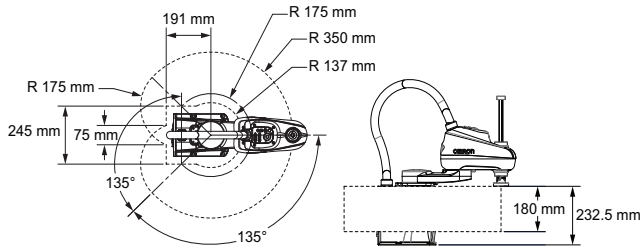
*2. Fast cycle, in mm (25/305/25) (seconds, at 20°C ambient) with 2.0 kg payload but with arc motion

Dimensions

(Unit: mm)

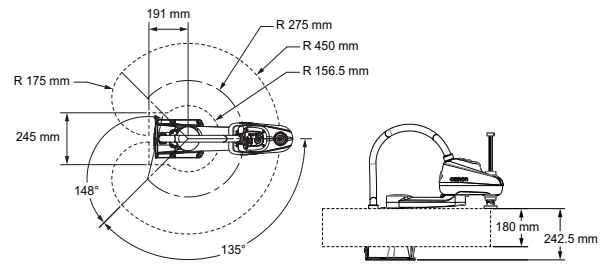
i4-350L Dimensions

i4 350L Work Envelope



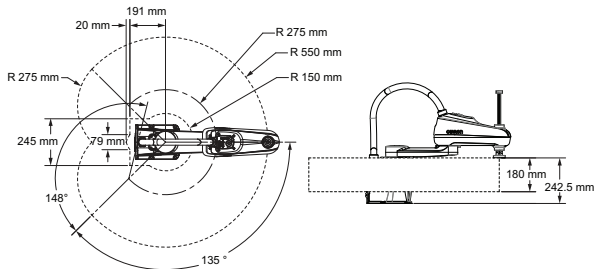
i4 450L Dimensions

i4 450L Work Envelope



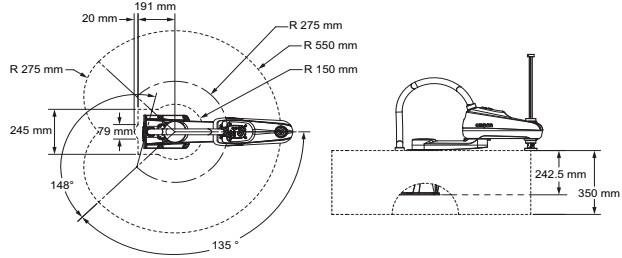
i4-550L Dimensions

i4 550L Work Envelope



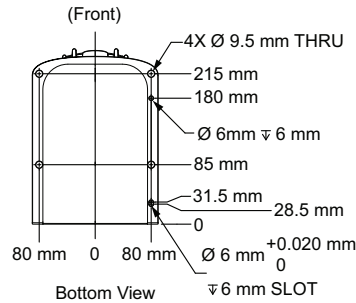
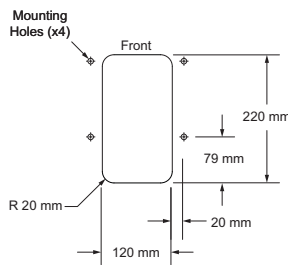
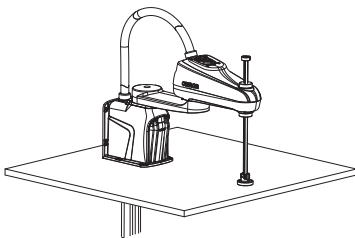
i4-550L Long Quill Dimensions

i4 550L Long Quill Work Envelope

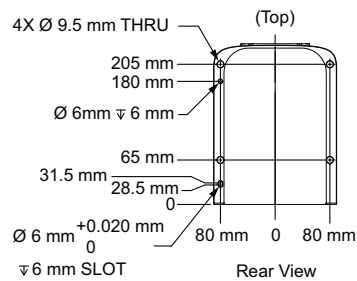
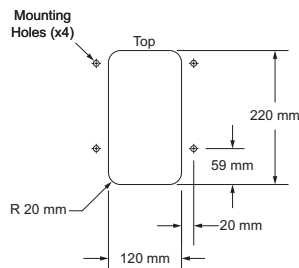
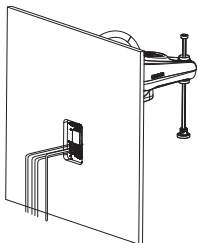


Mounting Options

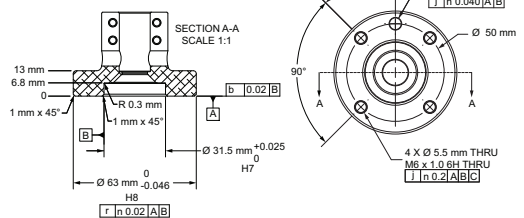
Table Cable Exit Cut-Out Dimensions



Wall Cable Exit Cut-Out Dimensions



Flange



Front Panel



Robot Parts Code and Bundled Accessories

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	Standard		Standard		Standard		Long-Quill	
Interface Panel Orientation	Rear Panel	Bottom Panel	Rear Panel	Bottom Panel	Rear Panel	Bottom Panel	Rear Panel	Bottom Panel
Part Number	RS4-2053002	RS4-2053102	RS4-2054002	RS4-2054102	RS4-2055002	RS4-2055102	RS4-2055004	RS4-2055104
Overview	SCARA Robot Arm + Integrated iCS ENET Controller							
Bundled Accessories	XSYSTEM cable with jumpers, and Ethernet Management port, 1.8 m/6 ft (13323-100) Front Panel Kit (92546-10358)							