

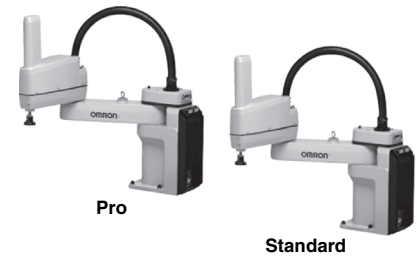
SCARA Robots

eCobra 800

EtherCAT (NJ501-R) version

Large SCARA robot for precision machining, assembly, and material handling

- EtherCAT connectivity to the Omron NJ501-R controller and programming through the familiar IEC 61131-3 programming language or scripting (eV+).
- Reach is extended to 800 mm without compromising repeatability
- High payload for screw-driving tools
- The amplifier and controller built into the robot reduces simplifies integration
- Choose the right robot for you application from two different types
- Reach 800 mm
- Maximum payload 5.5 kg
- Weight 43 kg



Specifications

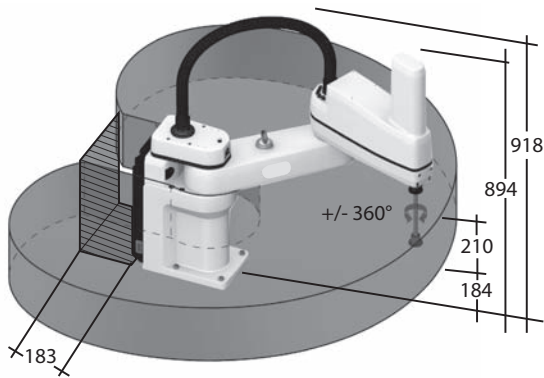
Product name		eCobra					
		800					
		800 Standard			800 Pro		
Type		Standard	Cleanroom	IP65	Standard	Cleanroom	IP65
Cleanroom/IP							
Part Number		RL4-1168000	RL4-1168010	RL4-1168030	RL4-2168000	RL4-2168010	RL4-2168030
Number of axes		4					
Mounting		table/floor					
Reach		800 mm					
Maximum Payload		5.5 kg					
Repeatability	XY	±0.017 mm					
	Z	±0.003 mm					
	Theta	±0.019°					
Joint Range	Joint 1	±105°					
	Joint 2	±157.5°					
	Joint 3	210 mm					
	Joint 4	±360°					
Inertia Moment (Max.)	Joint 4	450 kg-cm ²					
Joint Speeds	Joint 1	386°/s					
	Joint 2	720°/s					
	Joint 3	1100 mm/s					
	Joint 4	1200°/s					
Power Requirements		24 VDC: 6 A 200 to 240 VAC: 10 A, single-phase					
Protection		IP20	IP20	IP65	IP20	IP20	IP65
Clean Class		---	Class 10	---	---	Class 10	---
Environment Requirements	Ambient Temperature	5 to 40°C					
	Humidity Range	5 to 90% (non-condensing)					
Weight		43 kg					
Basic configuration	Controller	ICS-ECAT					
	On-board I/O (Input/Output)	12/8, 4 Solenoid Output					
	Conveyor tracking input	No			2		
	RS-232C serial communications port	1					
	Programming environment	Sysmac Studio 64-bit					
	ACE Sight	Yes					
	ePLC Connect	No					
	ePLC I/O	No			No		
Connectable controller		Omron NJ501-R Series					

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

Dimensions

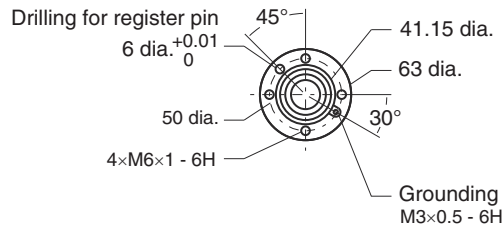
(Unit: mm)

eCobra 800

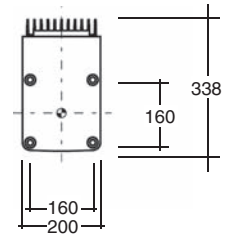


- Work Envelope: Radius 800 mm
Inner Limit: Radius 164 mm
Height: 210 mm
- ▨ Required clearance to open iCS-ECAT Chassis

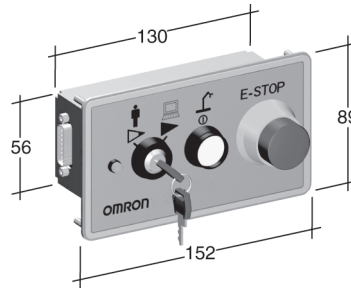
Flange



Footprint



Front panel



Robot Parts Code and Bundled Accessories

Type	eCobra			
	Cleanroom/IP	Standard	Cleanroom	IP65
eCobra 800 Standard	RL4-1168000	RL4-1168010	RL4-1168030	
eCobra 800 Pro	RL4-2168000	RL4-2168010	RL4-2168030	
Overview	Robot + iCS-ECAT			
Purpose	To be used in conjunction with NJ501-R controller, which can connect up to 8 robots via EtherCAT			
Bundled Accessories	<ul style="list-style-type: none"> • XSYSTEM cable with jumpers and Ethernet Management port, 1,8 m/6ft (13323-100) • Front panel kit (90356-10358) 			