

Customer challenges

Current robotics solutions are complex to integrate and not designed as part of a holistic machine control system. Machine and automation line builders are forced to work in two separate engineering environments, and this makes design more difficult and time consuming than it need to be.

How Schneider Electric Lexium SCARA can help?

- It transforms robotics from a separate offer to one that can be seamlessly integrated into a machine or automation line
- Lexium SCARA complements our Lexium Delta robots, Lexium Cobots and the Lexium MC12 multi carrier.
- Adding integrated robotics and advanced mechatronics allows OEMs to respond to the demands of their market by increasing machine throughput, simplifying machine design and including advanced automation into their machine concepts.



Lexium RS-P SCARA

High precision completely Integrated SCARA Robot Solution



High Speed Handling for Precision Assembly

Lexium RS-P SCARA with integrated controller eliminates the need for a separate control cabinet, offering a more compact design for high precision assembly application.

- 0.41s Cycle Time
- High Precision / 4 Axis Manipulation
- All in one design without separate control cabinet
- Increasing demands for advanced automation solutions are driving OEMs to re-think machine design. Current robotics solutions are complex and time-consuming to implement and machine builders must use two different controllers to operate the robot and machine.

- The Lexium SCARA is a simple, robotic solution in a single package. It is easily integrated into machine design with an integrated controller, promoting flexibility and modular design.
- As part of an integrated robotics solution, Lexium SCARA increases machine throughput, productivity and accuracy.
- The all-in-one design of the Lexium RS means there's no additional control cabinet. Controller and servo drives inside the SCARA housing. There's no need for any additional controllers. But it's possible to integrate it easily into a EcoStruxure machine solution, see more on SE.com
- This makes it easier to integrate robots into machines and production lines. The all-in-one design promotes modular robotics and machine control solutions.

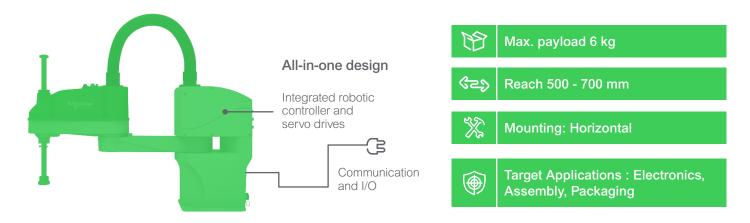
Lexium SCARA

A unified robotic solution for easy machine integration

- Fast, easy integration. The Lexium SCARA can be completely integrated into the machine making it easy to design advanced automation solutions.
- Improved accuracy. It allows OEMs to simplify
 machine mechanics or enhance automation by
 replacing standard kinematics with faster and more
 accurate SCARA movements.
- High performance. The Lexium SCARA is an allin-one unit. Robotics and automation can be incorporated into a single controller, saving the time and effort required to manage and program two separate control systems.

Lexium RS-P SCARA

with integrated Controller and Servo Drives



Lexium RS-P SCARA: Specification

Range		Lexium RS-P6 50		Lexium RS-P6 60		Lexium RS-P6 70		
		LXMRSP650200	LXMRSP650300	LXMRSP660200	LXMRSP660300	LXMRSP670200	LXMRSP670300	
Axis		4	4	4	4	4	4	
Max. Payload		6 Kg	6 Kg	6 Kg	6 Kg	6 Kg	6 Kg	
Arm Length	J1+J2	500 mm	500 mm	600 mm	600 mm	700 mm	700 mm	
	J1	225 mm	225 mm	325 mm	325 mm	425 mm	425 mm	
	J2	275 mm	275 mm	275 mm	275 mm	275 mm	275 mm	
Working Range		+/- 130 Deg	+/- 130 Deg	+/- 130 Deg	+/- 130 Deg	+/- 130 Deg	+/- 130 Deg	
	J2	+/- 129 Deg	+/- 129 Deg	+/- 148 Deg	+/- 148 Deg	+/- 149 Deg	+/- 149 Deg	
	J3	200 mm	300 mm	200 mm	300 mm	200 mm	300 mm	
	J4	+/- 360 Deg	+/- 360 Deg	+/- 360 Deg	+/- 360 Deg	+/- 360 Deg	+/- 360 Deg	
Standard Cycle Time ¹		0.41 s	0.41 s	0.42 s	0.42 s	0.43 s	0.43 s	
Max. Speed	J1+J2	7050 mm/s	7050 mm/s	7750 mm/s	7750 mm/s	8450 mm/s	8450 mm/s	
		1100 mm/s	1100 mm/s	1100 mm/s	1100 mm/s	1100 mm/s	1100 mm/s	
	J4	2150 Deg/s	2150 Deg/s	2150 Deg/s	2150 Deg/s	2150 Deg/s	2150 Deg/s	
Repeatability	J1+J2	+/- 0.02 mm	+/- 0.02 mm	+/- 0.02 mm	+/- 0.02 mm	+/- 0.02 mm	+/- 0.02 mm	
	J3	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	
	J4	+/- 0.01 Deg.	+/- 0.01 Deg.	+/- 0.01 Deg.	+/- 0.01 Deg.	+/- 0.01 Deg.	+/- 0.01 Deg.	
Allowable Moment of Inertia	Rated	(J4) 0.01 Kg/M ³	(J4) 0.01 Kg/M³	(J4) 0.01 Kg/M³	(J4) 0.01 Kg/M ³	(J4) 0.01 Kg/M³	(J4) 0.01 Kg/M³	
	Max.	(J4) 0.12 Kg/M ³	(J4) 0.12 Kg/M ³	(J4) 0.12 Kg/M ³	(J4) 0.12 Kg/M ³	(J4) 0.12 Kg/M ³	(J4) 0.12 Kg/M ³	
Mounting		Floor						
Weight		27 Kg						
Integrated I/O		28 Inputs, 18 Outputs						
Communication		EtherNET TCP/IP, RS232, Modbus, Sercos 3						
Interface for Air		φ 4mm x 1, φ 6mm x2						
Input Voltage		230VAC						
Rated Power		0.9 KW						
Environmental		Ambient Temperature 0-40 Deg C, Humidity 10-90% (non - condensing)						

Lexium RS-H SCARA

Ultra High Speed 2 Axis completely Integrated SCARA Solution



Ultra High-Speed Handling for fast picking

Lexium RS-H, 2 Axis Integrated SCARA, designed for ultra high-speed picking applications in Packaging and Electronics with, Adapter flange for mounting Vision, Gripper or Manipulator

- 0.17s Cycle Times
- IP 65 for harsh environment
- · All in one design without separate control cabinet

Range							
Model		LXMRSH380000	LXMRSH850000				
Axis		2	2				
Payload MAX		3 kg 8 kg					
	J1+J2	800 mm	500mm				
Arm Length	J1	425 mm	250 mm				
	J2	375 mm	250 mm				
	J1	±132°	±135°				
Working Range	J2	±135°	±140°				
Cycle Time(1kg / 305 r	nm)	0.17 s	0.19 s				
Max. Speed	J1+J2	11 M/s	7 M/s				
Repeatability	J3	±0.04 mm	±0.03 mm				
We	ight	36 kg	35 kg				
Mou	nting	Floor					
I/O Int	erface	28 Inputs, 18 Outputs					
Communicat	tion Interface	Ethernet, RS-232, RS-485 Sercos 3					
Rated '	Voltage	230 V a.c. 50/60 Hz					
I	P	IP65					
Rated	Power	1 kW					
Working E	nvironment	Ambient Temperature: 0 ~ 40°C Relative Humidity: 10%~90% (non-condensing)					

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