LARA

Lightweight Agile Robotic Assistant

Data sheet

LARA defines a new level of lightweight design and industrial performance at low cost.

With a high industrial performance in terms of speed, precision, and protection, coming as a cost-effective solution, LARA is the perfect solution for SMEs to get a first experience in the world of collaborative industrial robots. Our own developed control systems and intuitive user interface allow a seamless integration of LARA into any production site. The robust design and high performance enable LARA to be used for applications which are not feasible for other collaborative robots, while still having the advantage of being a robot which can be easily used by everyone – beginners and experts.
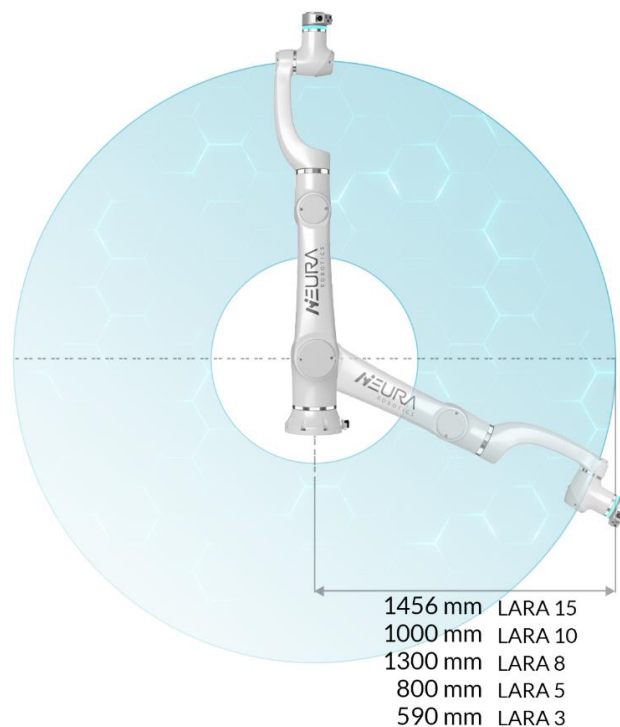
General Specs	LARA 3	LARA 5	LARA 8	LARA 10	LARA 15
Payload	3 kg	5 kg	8 kg	10 kg	15 kg
Reach	590 mm	800 mm	1300 mm	1000 mm	1300 mm
Degrees of Freedom	6 rotary joints	6 rotary joints	6 rotary joints	6 rotary joints	6 rotary joints
Weight	17 kg	23 kg	47 kg	40 kg	55 kg
Robot Mounting	Any Orientation	Any Orientation	Any Orientation	Any Orientation	Any Orientation
IP classification	IP66	IP66	IP66	IP66	IP54
Ambient Working Temperature	0 °C - 50 °C	0 °C - 50 °C	0 °C - 50 °C	0 °C - 50 °C	0 °C - 50 °C
Data & Power Cables	Complete inner harness	Complete inner harness	Complete inner harness	Complete inner harness	Complete inner harness
Footprint Base	Ø 156 mm	Ø 156 mm	Ø 200 mm	Ø 200 mm	Ø 200 mm
Tool Connector Type	M6	M6	M6	M6	M6
Status Illumination	RGB LED on TCP	RGB LED on TCP	RGB LED on TCP	RGB LED on TCP	RGB LED on TCP
Tgt. Performance Level	Pld Cat.3 / SIL3	Pld Cat.3 / SIL3	Pld Cat.3 / SIL3	Pld Cat.3 / SIL3	Pld Cat.3 / SIL3
Tgt. Repeatability	± 0.02 mm	± 0.02 mm	± 0.02 mm	± 0.02 mm	± 0.02 mm

Movement

	Working Range		Maximum speed	
	LARA 3/5/8/10/15	LARA 3/ 5	LARA 8/ 10	LARA 15
A1	±360°	180°/s	120°/s	100°/s
A2	±360°	180°/s	120°/s	100°/s
A3	±360°	180°/s	135°/s	120°/s
A4	±360°	180°/s	135°/s	120°/s
A5	±360°	200°/s	180°/s	150°/s
A1	±360°	200°/s	180°/s	150°/s

TCP Connector Flange

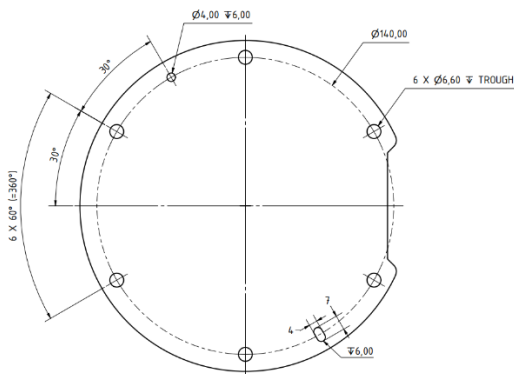|	
Hole pattern	DIN ISO 9409-1-50-5-M6
GPIO	M8 8-pin-A-M	IEC 61076-2-104
I/O Ports	3x Digital In, 3x Digital Out, 2x Analog In
I/O power supply	24V 600mA
Electrical Interfaces	EtherCAT, CAN Bus, IO Link, Modbus
Control Functions	5 Programmable Buttons on Axis 5, 1 Programmable Buttons on TCP

1456 mm	LARA 15
1000 mm	LARA 10
1300 mm	LARA 8
800 mm	LARA 5
590 mm	LARA 3

Software & Controller

Motion Controller	Real-Time NR-Motion Mastert
Software Interfaces	Robot SDKs
Safety Architecture	Safe Master & FSoE Communication
Safety Features	Safe- Position, Speed, Torque, Zones, Limits

Programming Features

Smart GUI	NR Easy Programming Interface
Fast Programming	Shortcut Buttons, Dynamic Path and Force Recording
Human-Robot-Interaction	GUI and Force-Feedback

Control Box

Dimensions	450 mm x 380 mm x 210 mm 17.7 in x 15 in x 8.3 in
Weight	25 kg / 55.1 lbs
Power Supply	100-240 VAC, 50/60 Hz, 3,2 kW
Interfaces	EtherCAT/FSoE, TCP/IP, USB 3.0, GPIO, CAN Bus, Modbus

Teach Pendant

Dimensionst	285 mm x 228 mm x 95 mm 11.2 in x 9 in x 3.7 in
Resolution	1280 x 800
Display	10.1" touchscreen
Cable Length	5 m / 197 in

Connection LARA 3/5

LARA 8/10/15

Note:

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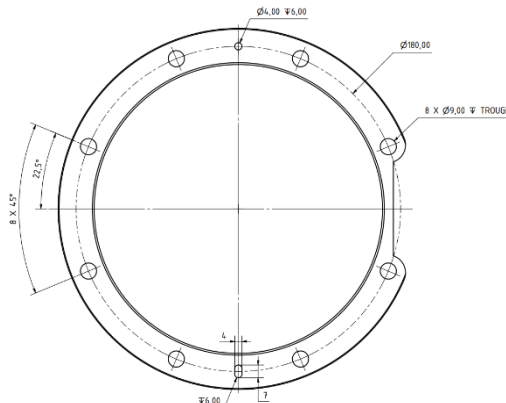www.neura-robotics.com

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