Datasheet

LARA

Lightweight Agile Robotic Assistant

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Ready to be used for your application right away. Combining lightweight design and industrial performance with an intuitive user interface.

LARA, the Lightweight Agile Robotic Assistant, is a six-degree-of-freedom collaborative robot that combines the agility of lightweight design with industrial performance. With unmatched speed, precision and protection, LARA bridges the gap between the world of collaborative and industrial robots.

This way, LARA allows you to automate any production process in a cost-efficient way. Its intuitive user interface enables anyone to create programs for LARA, easily automating simple and repetitive tasks in any production environment.

Specifications	LARA 3	LARA 5	LARA 8	LARA 10	LARA 15	LARA 20	LARA 25	LARA 30	LARA 30L
Payload (kg)	3	5	8	10	15	20	25	30	30
Reach (mm)	590	800	1300	1000	1600	1800	1800	1300	1800
Weight (kg)	18	26	48	45	67	98	101	98	126
Degree of Freedom	6 rotary joints								
Repeatability (mm)	± 0.02				±0.05				
IP Rating	IP66				IP54				
Footprint base (mm)	Ø 144	Ø 156	Ø 200	Ø 200	Ø 262	Ø 299	Ø 299	Ø 299	Ø 357
Bolt circle (mm)	Ø 126	Ø 140	Ø 180	Ø 180	Ø 232	Ø 264	Ø 264	Ø 264	Ø 318
Operating Temperature	0 °C – 40 °C								
Power Cables	complete inner harness								
Tool Connector Type	M12 12-pole								
Status Indicator	RGB LED on flange								
Tgt. Perf. Level	PLd Cat.3 / SIL2								
Mounting	any orientation								

Axis	Working Angle (Degrees)		Maximum Speed (°/s)			
	LARA 3/5/8/10	LARA 15/20/25/30/30L	LARA 3	LARA 5	LARA 8/10	LARA 15/20/25/30/30L
A1	± 180°	± 180°	180	170	130	120
A2	± 180°	± 120°	180	170	130	120
A3	± 150°	± 150° (±120° for 30L)	180	180	150	120
A4	± 180°	± 180°	180	180	150	120
A5	± 180°	± 180°	200	200	180	180
A6	± 360°	± 360° (opt.)	200	200	180	180

TCP Connector and Flange

Hole pattern	DIN ISO 9409-1-50-4-M6
GPIO	3x digital in, 3x digital out, 2x analog in
I/O port	M12 12-pin-A-M / IEC 61076-2-101
I/O power supply	24V, max. 1000mA
Electrical interfaces	GPIO, Modbus RTU, 24V PSU
Control functions	2 programmable buttons on flange

Reach 590 / 800 / 1000 / 1300 / 1600 / 1800 mm

Software & Controller

Motion controller	Real-Time NR-Motion Master
Software interfaces	NeuraPy API
Safety architectures	Safe Master
Safety features	Safe position, speed, torque, limits, I/Os

Programming Features

Smart GUI	Neura easy programming interface
Fast programming	2 programmable buttons on flange, ZeroG, path recording
Human-robot interaction	GUI, force-feedback, LED indicator on flange

Control Box (NRLCC)

Dimensions	493 mm x 470 mm x 243 mm
Weight	20 kg
Power supply	100-240 VAC, 50/60 Hz, max.1200W
Interfaces	8x GPIO, Modbus TCP, Ethernet IP, USB 3.0, Safe I/Os

Teach Pendant

Dimensions (var.)	300 mm x 245 mm x 133 mm
Resolution	2560 x 1600 px
Weight	1.5 kg (without cable) 2.5 kg (incl. 5 m cable)
Cable length	5 m

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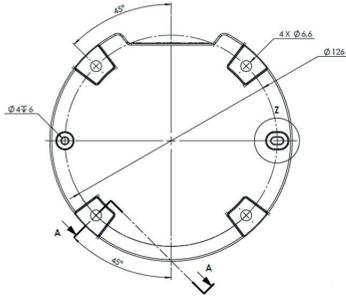
Robot Base Hole Pattern for **LARA 3**	Robot Base Hole Pattern for **LARA 5**	Robot Base Hole Pattern for **LARA 8/10**	Robot Base Hole Pattern for LARA 15
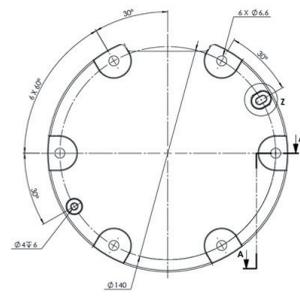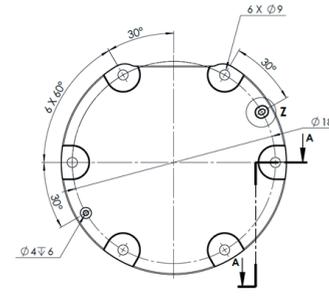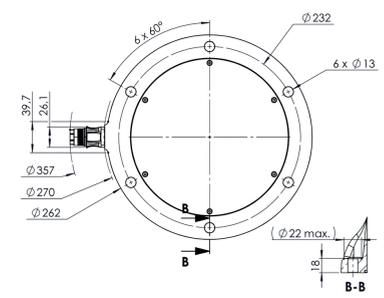
Robot Base Hole Pattern for **LARA 20/25/30/**	TCP Flange Hole Pattern for **LARA 3/5/8/10**	TCP Flange Hole Pattern for **LARA 20**	TCP Flange Hole Pattern for **LARA 25/30/30L**
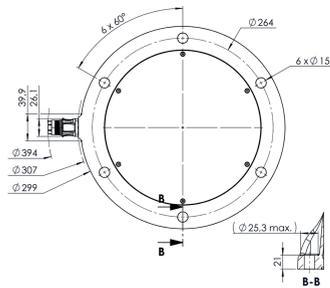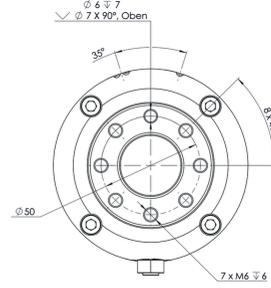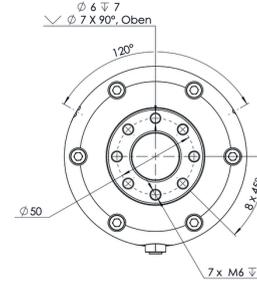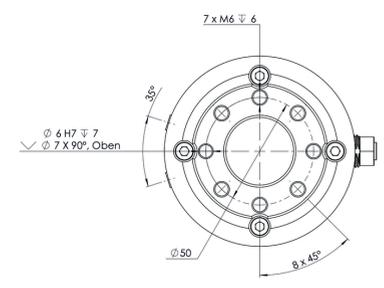
NEURA Robotics GmbH

Gutenbergstr. 44
72555 Metzingen | Germany
Phone: +49 (0) 7123 87970 0
E-Mail: info@neura-robotics.com
www.neura-robotics.com

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