

Automation Solutions_KUKA laser cutting gantry KR70 LP



The second generation of the KUKA laser cutting gantry is an extremely dynamic combination of lightweight design and robot-based drive and control technology. The development and optimization of the new laser cutting gantry benefited greatly from our experience gained from many laser cutting applications and our expertise as one of the leading suppliers of intelligent automation solutions.

We are setting new standards by using the KR C controller to pave the way for present and future automation. While the costs for integration, preventive maintenance and servicing decrease, long-term gains are made in efficiency and flexibility. The worldwide KUKA service network and KUKA RemoteService enable us to provide online assistance and ensure system availability and flexibility in ongoing operations.

How you benefit

- The modular design allows workspaces from 0.5 m³ up to 90 m³ to be implemented, which makes the KUKA laser gantry a safe investment and a reliable tool for challenging machining tasks.
- Designed for fiber-guided lasers, the gantry enables customized automation featuring state-of-the-art laser technology.
- Compact, highly integrated cutting optics – designed for the toughest production environments – ensure the highest cutting quality and minimized interference contours.
- Through the use of proven drive components from robotics series production, outstanding performance and reliability are achieved in addition to excellent dynamics and precision.

Scope of supply consists of

- KR70LP with basic travel and a basic height of 3,175 mm with a column height of 2,000 mm.
- (A1 = 1,000 mm, A2 = 1,000 mm, A3 = 500 mm)
- Wrist axis module with laser cutting optics
- KR C robot controller
- Bellows cover for A3

Options

- Lasers with outputs up to 4,000 W
- Stepwise travel extension for A1 – A3
- Bellows cover for A1 & A2
- Offline programming system KUKA.Sim

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Technical data

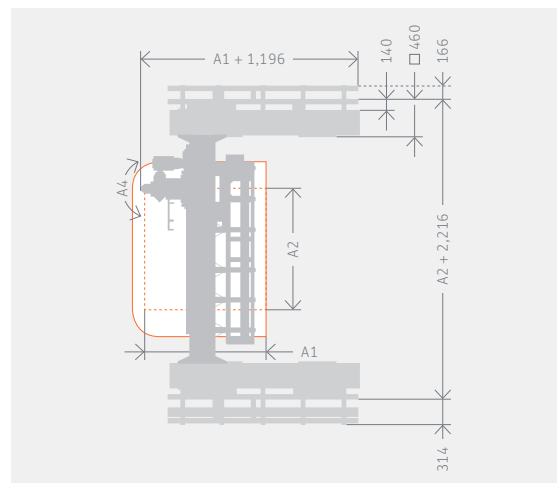
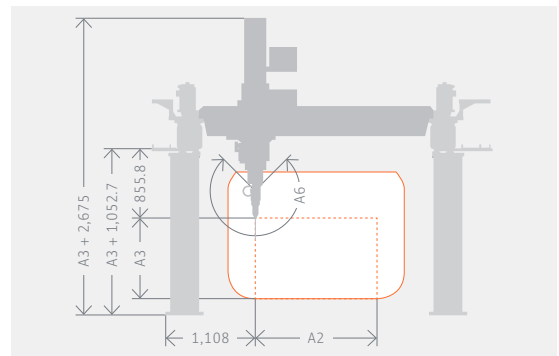
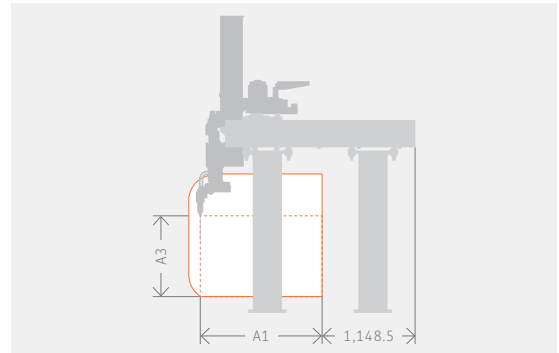
Max. payload (without wrist axis)	70 kg
Max. supplementary load (with wrist axis)	5 – 10 kg
Number of axes	3 + 2
Repeatability (within basic travel)	0.02 mm
Height (with column height of 2,000 mm)	min. 3,175 mm / max. 3,675 mm
Weight (within basic travel)	2,550 kg
Additional weight per extension step	
A1 (by 500 mm)	140 kg
A2 (by 500 mm)	35 kg
A3 (by 250 mm)	13 kg

Axis data

Velocities	
Axis A1	120 m/min
Axis A2	120 m/min
Axis A3	120 m/min
Axis A4	700 °/s
Axis A6	540 °/s
Accelerations	
Axis A1	8 m/s ²
Axis A2	8 m/s ²
Axis A3	8 m/s ²
Axis A4	3,500 °/s ²
Axis A6	3,500 °/s ²

Travel lengths

	A1	A2	A3
Basic travel	1,000 mm	1,000 mm	500 mm
Maximum travel	30,000 mm	3,000 mm	1,000 mm
Extension steps	500 mm	500 mm	250 mm
Motion range A4	± 185°		
Motion range A6	± 135°		



For further information please contact us at
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