

KUKA



The specialist for high-accuracy continuous-path processes

Serie 2000
KR 100 HA

»KR 100 HA: TOP DYNAMIC PERFORMANCE AND OUTSTANDING ABSOLUTE ACCURACY

Extremely powerful motors, gear units and servo drives – Series 2000 robots give you greater performance. These talented all-rounders come in five rating classes: for payloads from 150 to 270 kg and reaches from 2,700 to 3,000 mm. Thanks to their modular design and the wide range of expansion options, these robots can be quickly upgraded or converted – and thus perfectly adapted to your application.

As if that were not enough, Series 2000 robots are also available as special variants: Cleanroom (CR) for stringent cleanroom requirements; Foundry (F) for environments with a high degree of fouling and high temperatures; and an optional variant with food-compatible H1 oil. **The advantages: a high degree of planning reliability and security of investment.**

»EXTREMELY PRECISE – EXTREMELY OPTIMIZED

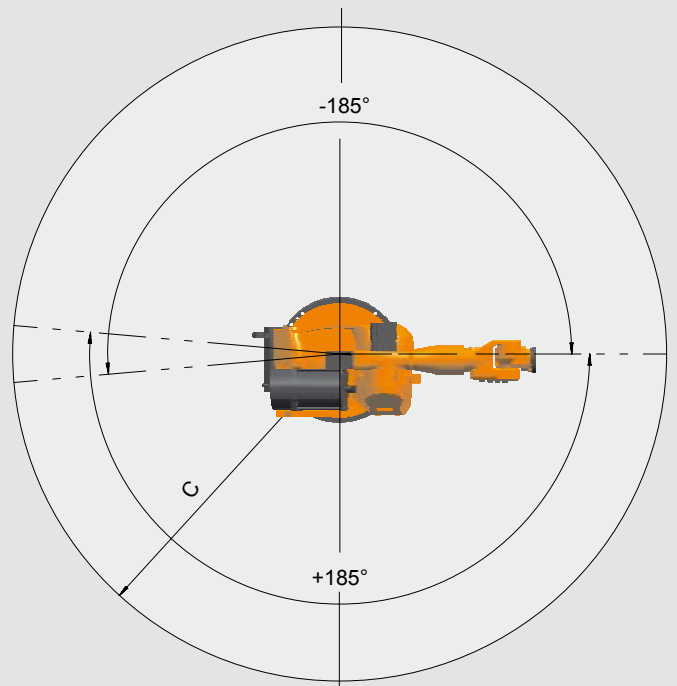
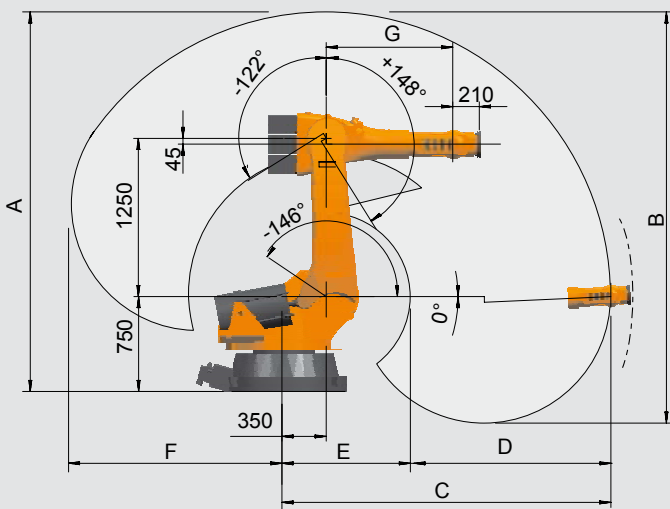
Utmost precision ensures maximum process quality: with special gear units, absolutely accurate calibration and high mechanical stiffness, the KR 100 HA offers impressively high positioning accuracy. The result is a point repeatability of ± 0.05 mm and a linear path repeatability of ± 0.2 mm – combined with very high correction velocities. **The advantages: optimum process results and fewer rejects.**

»EXTREMELY FAST – EXTREMELY RELIABLE

Increase your output: the KR 100 HA belongs to the 2000 Series and therefore has particularly powerful motors, guaranteeing outstanding dynamic performance. In combination with the high orientation velocities of the wrist axes, this results in improved path characteristics and a substantial increase in the output of your system. **The advantages: shorter cycle times and greater productivity.**

»TECHNICAL DETAILS KR 100 HA

Dimensions: mm



Work envelope	Dimensions ¹⁾							Volume
	A	B	C	D	E	F	G	
KR 100 HA	3,000 mm	3,250 mm	2,600 mm	1,585 mm	1,015 mm	1,686 mm	1,000 mm	45.9 m ³
KR 100 L90 HA	3,200 mm	3,650 mm	2,800 mm	1,773 mm	1,027 mm	1,886 mm	1,200 mm	60.9 m ³
KR 100 L80 HA	3,400 mm	4,050 mm	3,000 mm	1,905 mm	1,095 mm	2,086 mm	1,400 mm	77.9 m ³

¹⁾ Relative to intersection of axes 4/5

»EXTREMELY LONG-RANGE – EXTREMELY FLEXIBLE

Extend your radius of action: with optional arm extensions of 200 or 400 mm, the KR 100 HA can achieve reaches of up to 3,000 mm and can be installed either on a pedestal or directly on the floor. This allows the robot's reach to be perfectly tailored to the specific application and flexibly adapted to new tasks. **The advantages: utmost flexibility and maximum scope**

»EXTREMELY VERSATILE – EXTREMELY SAFE

KUKA offers you a comprehensive range of software: from ready-made application software for the most common applications to simulation programs for planning robot cells and Safe Robot Technology for monitoring safety zones. And for precisely coordinated teamwork with several robots, we offer the RoboTeam application package. **The advantages: maximum scope and maximum safety.**

Type	KR 100 HA	KR 100 L90 HA	KR 100 L80 HA
Maximum reach	2,033 mm	2,033 mm	3,230 mm
Rated payload	100 kg	90 kg	80 kg
Suppl. load, arm/link arm/rotating col.	50/100/100 kg		
Suppl. load, arm + link arm, max.	150 kg		
Maximum total load	350 kg	340 kg	330 kg
Number of axes	6		
Mounting position	Floor, ceiling		
Variant			
Positioning repeatability*	±0.05 mm		
Path repeatability*	±0.20 mm		
Controller	KR C2 edition2005		
Weight (excluding controller), approx.	1,200 kg	1,207 kg	1,210 kg
Temperature during operation	+10 °C to +55 °C		
Protection classification	IP 65		
Robot footprint	850 mm x 950 mm		
Connection	7.3 kVA		
Noise level	< 75 dB		

Axis data	Range (software)	Speed with rated payload		
		100 kg	90 kg	80 kg
Axis 1 (A1)	±185°	101°/s	97°/s	97°/s
Axis 2 (A2)	0°–146°	83°/s	79°/s	79°/s
Axis 3 (A3)	+148°/–122°	112°/s	105°/s	105°/s
Axis 4 (A4)	±350°	209°/s	209°/s	209°/s
Axis 5 (A5)	±120°	227°/s	225°/s	225°/s
Axis 6 (A6)	±350°	308°/s	305°/s	305°/s

Drive system, electromechanical with brushless AC servomotors

*to ISO 9283

Details provided about the properties and usability of the products are purely for information purposes and do not constitute a guarantee of these characteristics. The extent of goods delivered and services performed is determined by the subject matter of the specific contract. No liability accepted for errors or omissions.



»THE KUKA ROBOT GROUP: YOUR STRONG PARTNER

Quality made in Germany, creativity and the utmost commitment to customers and business partners: these form the basis on which KUKA develops the best possible technologies and thus the optimal automation concepts. The result is that you receive custom-tailored solutions and benefit from decisive process optimization.

Genuine passion for the fascination of robotics is reflected in our slogan “KUKA YOUR IDEAS”, which is also our promise to you: Whatever you want to do, and however unusual your idea may be, with us you can implement anything – irrespective of the specific branch of industry and irrespective of whether or not a similar application has existed before.

Whatever task you give us, KUKA has the required specialists. In close cooperation with experienced system partners with competence in their respective industries, we do everything in our power to implement your ideas. Let us work on them together.

»KUKA SERVICES: ALWAYS THERE FOR YOU

You can rely on us to stand by you in every phase of a project: from planning and commissioning to maintenance and conversion. 24 hours a day. 365 days a year. The high-density KUKA service network ensures that we are always in your vicinity and can start your production in record time.

KUKA YOUR IDEAS

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