

KUKA



Arc welding and more

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KR 5 arc

»KR 5 arc: THE VERSATILE ROBOT WITH THE LONGEST SERVICE LIFE

Arc welding is one of your major applications? But processes such as brazing, gluing or handling also play a significant role in your operations? Then the KR 5 arc is your perfect choice: with its payload of 5 kg, this robot is not only ideally suited to arc welding, but can also be used for many other applications thanks to its standard wrist and overload-tolerant wrist axes.

What's more, the KR 5 arc boasts the longest service life in its class: with 40,000 hours of guaranteed production and maintenance intervals of over 20,000 hours, this robot sets the very highest standards. And the use of low-viscosity lubricants – oil instead of grease – makes servicing simpler than ever before.

The advantages: a high degree of planning reliability and security of investment.

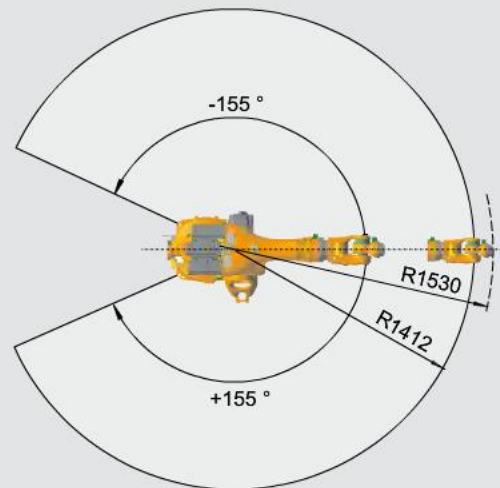
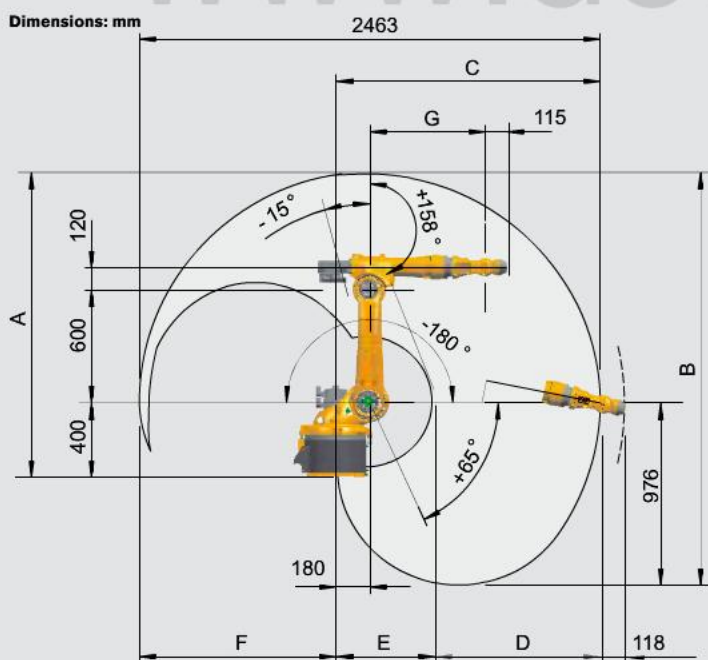
»EXTREMELY FAST – EXTREMELY POWERFUL

Increase your output: the combination of powerful motors, optimized gear ratios and a weight of only 127 kg gives the KR 5 arc a very high dynamic performance and thus significantly greater production capacity. Added to this: automated mastering with an electronic measuring tool ensures rapid start-up availability and highly accurate referencing. **The advantages: greater productivity and greater availability.**

»EXTREMELY ROBUST – EXTREMELY PRECISE

Utmost precision ensures maximum process quality: the KR 5 arc excels with its high-stiffness structure, which enables it to follow exactly the programmed path. A further plus point is its machine data, which are optimized for continuous-path applications. In combination with a robust mechanical design and high-precision gear units, this results in a repeatability of less than ± 0.04 mm. **The advantages: optimum process results and fewer rejects.**

»TECHNICAL DETAILS KR 5 arc



Work envelope	Dimensions ¹⁾							Volume
KR 5 arc	A	B	C	D	E	F	G	8.4 m ³
	1,632 mm	2,207 mm	1,412 mm	881 mm	531 mm	1,052 mm	620 mm	

¹⁾ Relative to intersection of axes 4/5

»EXTREMELY COMPACT – EXTREMELY VARIABLE

Ideal for space-saving system concepts: thanks to its compact dimensions and reduced interference contours, the KR 5 arc is able to operate in the most confined spaces. This robot type is also highly flexible due to a wide range of mounting options – on the floor, on the ceiling or on a linear unit. And the KUKA Posiflex positioner system ensures fast, precise positioning of the workpieces to be processed. **The advantages: reduced space requirements and increased flexibility.**

»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 5 arc
Maximum reach	1,411 mm
Rated payload	5 kg
Suppl. load, arm/link arm/rotating col.	12/-/20 kg
Suppl. load, arm + link arm, max.	–
Maximum total load	37 kg
Number of axes	6
Mounting position	Floor, ceiling
Variant	–
Positioning repeatability*	±0.04 mm
Path repeatability*	
Controller	KR C2 edition2005
Weight (excluding controller), approx.	127 kg
Temperature during operation	+10 °C to +55 °C
Protection classification	IP 54, IP 65 (In-line wrist)
Robot footprint	324 mm x 324 mm
Connection	7.3 kVA
Noise level	< 75 dB

This robot type is also available as a special model with a hollow-wrist design, under the model name KR 5 arc HW.

Drive system, electromechanical with brushless AC servomotors

*to ISO 9283

Axis data	Range (software)	Speed with rated payload
		5 kg
Axis 1 (A1)	±155°	154°/s
Axis 2 (A2)	+65°/~180°	154°/s
Axis 3 (A3)	+158°/~15°	228°/s
Axis 4 (A4)	±350°	343°/s
Axis 5 (A5)	±130°	384°/s
Axis 6 (A6)	±350°	721°/s

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»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.

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KUKA YOUR IDEAS

KUKA ROBOTER GMBH

Global Sales Center
Hery-Park 3000
86368 Gersthofen
Germany
Tel. +49 821 4533-0
Fax +49 821 4533-1616
info@kuka-roboter.de

Additional contact addresses:
www.kuka-robotics.com