

KUKA



**KUKA QUANTEC:
The reinvention of robotics**

KR QUANTEC extra

»THE NEW KUKA QUANTEC SERIES: TIME FOR A NEW REVOLUTION

More streamlined, stronger, faster and considerably more versatile: that's the new KUKA QUANTEC robot series. Our extensive range of models with optimal payload and reach intervals paves the way for totally new automation solutions. With 15 basic robot types, various special models and versatile mounting options, the four product lines – pro, extra, prime and ultra – are ushering in the standard of the future.

Furthermore, all robots of the KUKA QUANTEC series have the same connection dimensions for tools and the same footprint. **The advantages: maximum flexibility and versatility.**

»EXTREMELY VARIABLE – EXTREMELY STRONG

Answers to all the questions of automation: the new KUKA QUANTEC series offers the perfect solution for each and every requirement. A total of 15 basic robot types makes it possible to handle payloads from 90 to 300 kg with ease. In the payload category up to 300 kg, KUKA offers the most compact machine on the market with the highest power density. **The advantages: custom-tailored solutions and high availability.**

»EXTREMELY LONG-RANGE – EXTREMELY FUTURE-PROOF

Broad product spectrum: reaches of 2,500 to 3,900 mm make the new KUKA QUANTEC robots highly versatile. For you, this means: significantly reduced procurement costs. As a result, you benefit from increased planning and investment security. **The advantages: countless opportunities and profitable systems.**

»EXTREMELY STREAMLINED – EXTREMELY OPTIMIZED

Small but strong: a 25 percent reduction in robot volume results in reduced space requirements and improved reachability – even in tight corners. Moreover, this is combined with denser installations and improved mounting options. Thanks to the intelligent gradation of models, you are guaranteed to get exactly the robot you need. **The advantages: minimum space requirements and maximum productivity.**

»EXTREMELY PERFORMANCE-ORIENTED – EXTREMELY PRECISE

Optimal process results: the stiffer mechanical system, improved motion characteristics, shorter cycle times and increased path accuracy ensure top performance. Even the handling of heavy parts is now no more than child's play. **The advantages: enormous power and simple operation.**



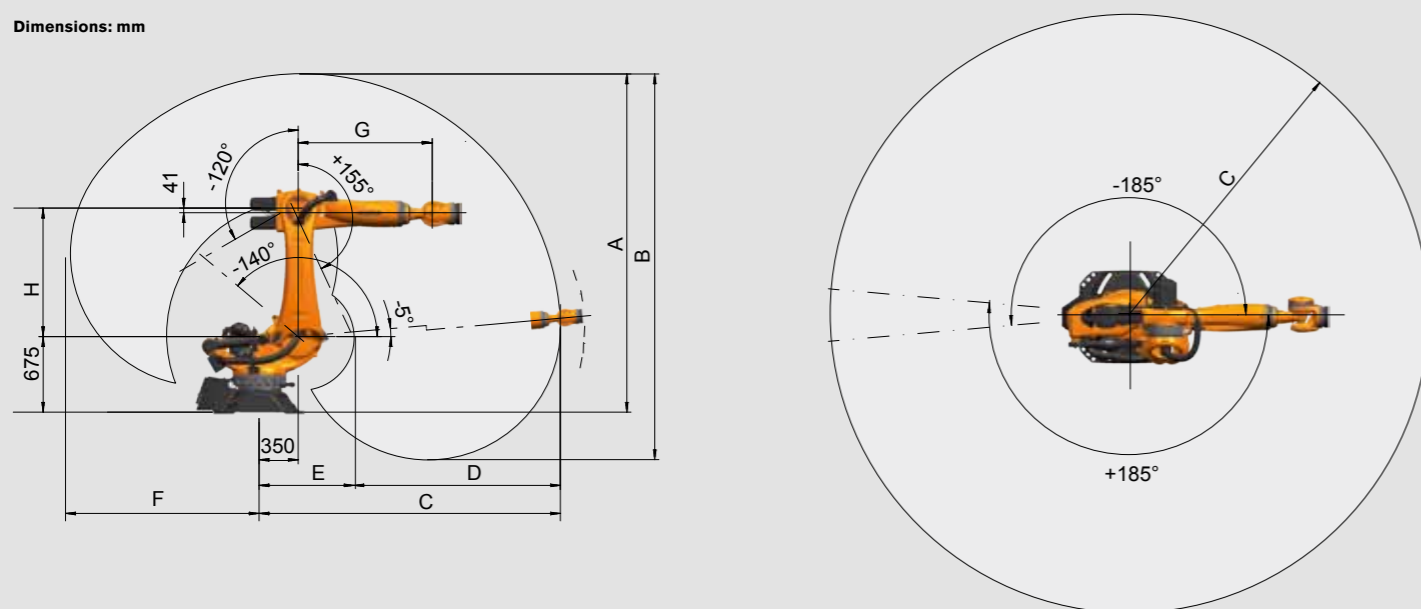
Extremely compact: the robot wrist of the new QUANTEC series.



Extremely streamlined: thanks to a quarter less robot volume.

»TECHNICAL DETAILS KR 210 R2700 extra, KR 180 R2500 extra, KR 150 R2700 extra, KR 120 R2900 extra, KR 90 R3100 extra

Dimensions: mm



Work envelope	Dimensions ¹⁾								Volume
	A	B	C	D	E	F	G	H	
KR 210 R2700 extra	3,026 mm	3,451 mm	2,700 mm	1,874 mm	822 mm	1,732 mm	1,200 mm	1,150 mm	55.0 m ³
KR 180 R2500 extra	2,826 mm	3,051 mm	2,500 mm	1,699 mm	797 mm	1,532 mm	1,000 mm	1,150 mm	41.0 m ³
KR 150 R2700 extra	3,026 mm	3,451 mm	2,700 mm	1,874 mm	822 mm	1,732 mm	1,200 mm	1,150 mm	55.0 m ³
KR 120 R2900 extra	3,226 mm	3,634 mm	2,900 mm	2,016 mm	880 mm	1,885 mm	1,200 mm	1,350 mm	66.0 m ³
KR 90 R3100 extra	3,426 mm	4,034 mm	3,100 mm	2,187 mm	908 mm	2,085 mm	1,400 mm	1,350 mm	84.0 m ³

¹⁾ Relative to intersection of axes 4/5

Type	KR 210 R2700 extra	KR 180 R2500 extra	KR 150 R2700 extra	KR 120 R2900 extra	KR 90 R3100 extra
Maximum reach	2,700 mm	2,500 mm	2,700 mm	2,900 mm	3,100 mm
Rated payload	210 kg	180 kg	150 kg	120 kg	90 kg
Supplementary load, arm	50 kg				
In-line wrist type	IW 210	IW 180	IW 150	IW 120	IW 90
Maximum total load	260 kg	230 kg	200 kg	170 kg	140 kg
Number of axes	6				
Mounting position	Floor	Floor, ceiling			
Variant		Foundry			
Positioning repeatability	±0.06 mm				
Path repeatability					
Controller	KR C4				
Weight (excluding controller), approx.	1,078 kg	1,066 kg	1,078 kg	1,145 kg	1,098 kg
Temperature during operation	+10 °C to +55 °C				
Protection classification	IP 65 (Foundry-variant wrist IP 67)				
Robot footprint	830 mm x 830 mm				
Connection	7.3 kVA				
Noise level	< 75 dB				

Axis data	Motion range	Speed with rated payload				
		210 kg	180 kg	150 kg	120 kg	90 kg
Axis 1 (A1)	±370°	123°/s	123°/s	123°/s	123°/s	123°/s
Axis 2 (A2)	±135°	115°/s	115°/s	115°/s	115°/s	115°/s
Axis 3 (A3)	±275°	112°/s	120°/s	120°/s	120°/s	120°/s
Axis 4 (A4)	±700°	179°/s	179°/s	179°/s	179°/s	292°/s
Axis 5 (A5)	±250°	172°/s	172°/s	172°/s	172°/s	258°/s
Axis 6 (A6)	±700°	230°/s	219°/s	219°/s	219°/s	284°/s

The KUKA QUANTEC series comprises:
 KR 120 R2500 pro
 KR 90 R2700 pro
 KR 210 R2700 extra
 KR 180 R2500 extra
 KR 150 R2700 extra
 KR 120 R2900 extra
 KR 90 R3100 extra
 KR 240 R2500 prime
 KR 210 R2700 prime
 KR 180 R2900 prime
 KR 150 R3100 prime
 KR 300 R2500 ultra
 KR 270 R2700 ultra
 KR 240 R2900 ultra
 KR 210 R3100 ultra

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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