

**KUKA**



**The compact robot  
for low payloads**

**KR 5 sixx**

»THE KUKA KR 5 SIXX: SMALL BUT SPEEDY

Maximum speed in minimum space: the KUKA Small Robots are ideal for nearly all applications that call for utmost precision and rapidity, such as for handling delicate components. Special tools can be easily adapted, as all the energy and fluid supply lines are integrated into the robots so that there is no restriction on the axis motion ranges.

All of the Small Robots are also optionally available as a dust- and splash-proof variant, allowing protection ratings of up to IP 65 to be achieved. A further strength is their user-friendly and service-proven KUKA controller. This assures system compatibility with other KUKA models, provides a uniform control concept across the entire range, and enables fast commissioning and simple maintenance. **The advantages: high planning reliability and security of investment.**

»EXTREMELY FAST – EXTREMELY FLEXIBLE

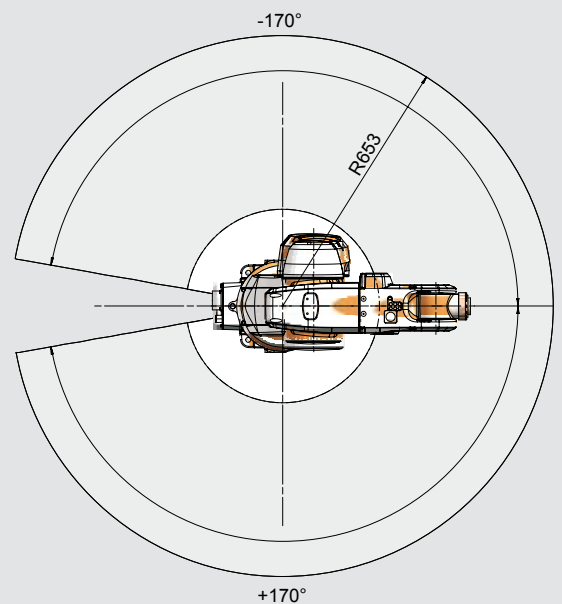
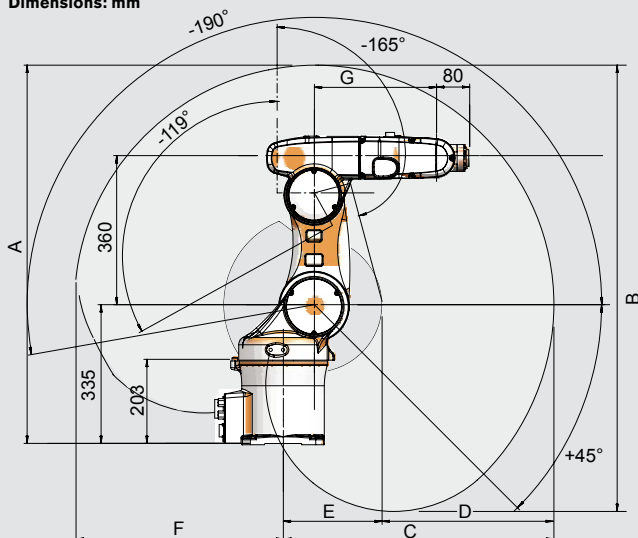
Whether mounted on the floor or ceiling, as the standard model or in the special variants Cleanroom (CR) or Waterproof (WP) – the KR 5 sixx gives you high precision: with repeatability rates of up to ±0.02 mm. Thanks to its low weight and fist-shaped work envelope, it performs its work quickly and flexibly even in confined spaces – with a reach of up to 850 mm and a payload of up to 5 kg. **The advantages: increased output and flexible production.**

»EXTREMELY DURABLE – EXTREMELY PRODUCTIVE

These robots offer you more: integrated routing of the energy supply system for air and I/O signals significantly reduces the wear – thereby extending the maintenance intervals. At the same time, special brakes prevent the axes from sagging under gravity when the robot is switched off. This means that the robot is always ready for operation, and you save time and money. **The advantages: lower maintenance and major time savings.**

»TECHNICAL DETAILS KR 5 sixx

Dimensions: mm



Work envelope	Dimensions <sup>1)</sup>							Volume
	A	B	C	D	E	F	G	
KR 5 sixx R650	913 mm	1,078 mm	653 mm	419 mm	234 mm	500 mm	295 mm	1.0 m <sup>3</sup>
KR 5 sixx R850	1,115 mm	1,453 mm	855 mm	614 mm	242 mm	705 mm	405 mm	2.3 m <sup>3</sup>

<sup>1)</sup> Relative to intersection of axes 4/5.

**»EXTREMELY COST-EFFECTIVE – EXTREMELY PRECISE**

Automatically better: with a KUKA robot you not only have all process steps under control, but also benefit from top performance and flexibility. Thanks to pioneering robotics and control technology, you can rely around the clock on maximum precision – as well as on ease of operation, simple space-saving integration into production sequences, and availability rates of almost 100%. **The advantages: production with greater precision and lower costs.**

**»EXTREMELY SIMPLE – EXTREMELY VERSATILE**

The simpler your robot is to program, the quicker you can get going. KUKA supports you with a wide range of products and services: from expandable system software and ready-made application software to simulation programs for designing systems. Programming is made easy with the familiar Windows look, intuitive user interface and clear visualization. **The advantages: maximum ease of operation and rapid commissioning.**

Type	KR 5 sixx R650	KR 5 sixx R850
Maximum reach	653 mm	855 mm
Rated payload	5 kg	
Suppl. load, arm/link arm/rotating col.		
Suppl. load, arm + link arm, max.		
Maximum total load	5 kg	
Number of axes	6	
Mounting position	Floor, ceiling	
Variant	Cleanroom, Waterproof	
Positioning repeatability*	±0.02 mm	±0.03 mm
Path repeatability*		
Controller	KR C2 sr	
Weight (excluding controller), approx.	28 kg	29 kg
Temperature during operation	0 °C to +40 °C	
Protection classification	IP 40	
Robot footprint	200 mm x 200 mm	
Connection	2.35 kVA	
Noise level	< 75 dB	

Axis data	Range (software)	Speed	
		R650	R850
Axis 1 (A1)	±170°	375°/s	250°/s
Axis 2 (A2)	+45°/-190°	300°/s	250°/s
Axis 3 (A3)	+165°/-119°	375°/s	250°/s
Axis 4 (A4)	±190°	410°/s	410°/s
Axis 5 (A5)	±120°	410°/s	410°/s
Axis 6 (A6)	±358°	660°/s	660°/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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