

**KUKA**



**The masterful movers in  
the low payload category**

**KR 6-2,  
KR 16-2**



reddot design award  
winner 2002

»KR 6-2 AND KR 16-2: OUR MOST POPULAR MULTI-TALENTS

Their versatility and flexibility make the KUKA KR 6-2 and KR 16-2 our most popular robots. These masterful movers have a payload of 6 or 16 kg and, thanks to their design, are ideal for all space-saving, cost-effective system concepts. That's why they are used virtually everywhere – both in the automotive components industry and in non-automotive sectors.

With minimized disruptive contours and a streamlined robot wrist design, these high-precision multi-talents offer outstanding accessibility, even in confined spaces. For cleanroom requirements or environments with a high degree of fouling and high temperatures, the KR 16-2 is also available in the special variants Cleanroom (CR) and Foundry (F). **The advantages: high planning reliability and security of investment.**

»EXTREMELY FLEXIBLE – EXTREMELY SPACE-OPTIMIZED

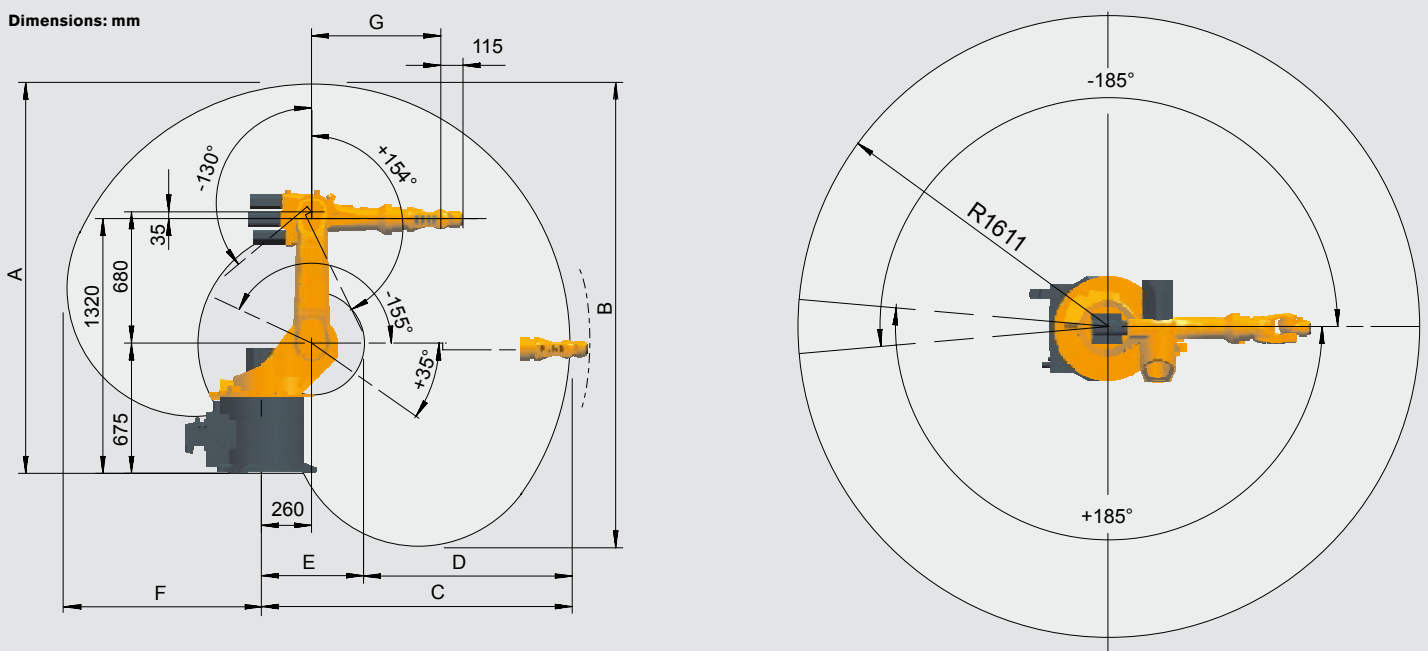
Open up your options: the KR 6-2 and KR 16-2 are available in 13 different variants and can also be installed on the ceiling or wall. In combination with variable mounting positions and an highly streamlined robot wrist, they are suitable for many different applications and can be optimally adapted to existing space conditions. **The advantages: flexible production and reduced space requirements.**

»EXTREMELY DURABLE – EXTREMELY COST-EFFECTIVE

You can depend on it: with our accumulated experience from around 15,000 systems sold, we have continually improved the robots in the low payload category. The results speak for themselves. The low-maintenance KR 6-2 and KR 16-2 offer impressive reliability and long service life, while you in turn benefit from long service cycles – thus making substantial savings on maintenance costs. **The advantages: reduced downtime and rapid commissioning.**

»TECHNICAL DETAILS KR 6-2 AND KR 16-2

Dimensions: mm



Work envelope	Dimensions <sup>1)</sup>							Volume
	A	B	C	D	E	F	G	
KR 6-2	2,026 mm	2,412 mm	1,611 mm	1,081 mm	530 mm	1,027 mm	670 mm	14.5 m³
KR 16-2	2,026 mm	2,412 mm	1,611 mm	1,081 mm	530 mm	1,027 mm	670 mm	14.5 m³

<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 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.**



The streamlined design of the robot wrists gives the KR 6-2 and KR 16-2 robots minimal disruptive contours and maximum freedom of motion.



The Cleanroom (CR) and Foundry (F) variants allow operation even in extreme conditions.

Type	KR 6-2	KR 16-2
Maximum reach	1,611 mm	1,611 mm
Rated payload	6 kg	16 kg
Suppl. load, arm/link arm/rotating col.	10/variable/20 kg	
Suppl. load, arm + link arm, max.	Variable	
Maximum total load	36 kg	46 kg
Number of axes	6	
Mounting position	Floor, wall, ceiling	
Variant		Cleanroom, Foundry, Explosion-Proof
Positioning repeatability*	±0.05 mm	
Path repeatability*		
Controller	KR C2 edition2005	
Weight (excluding controller), approx.	235 kg	235 kg
Temperature during operation	+5 °C to +55 °C	
Protection classification	IP 65	
Robot footprint	500 mm x 500 mm	
Connection	7.3 kVA	
Noise level	< 75 dB	

Axis data	Range (software)	Speed with rated payload	
		6 kg	16 kg
Axis 1 (A1)	±185°	156°/s	156°/s
Axis 2 (A2)	+35°/-155°	156°/s	156°/s
Axis 3 (A3)	+154°/-130°	156°/s	156°/s
Axis 4 (A4)	±350°	343°/s	330°/s
Axis 5 (A5)	±130°	362°/s	330°/s
Axis 6 (A6)	±350°	659°/s	615°/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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