

**KUKA**

**The shelf-mounted robot  
for extreme distances**



**KR 60 L16-3 KS**

»THE KUKA SHELF-MOUNTED ROBOTS: MASTERS OF PRECISION AND DEXTERITY

Greater flexibility and downward reach: KUKA shelf-mounted robots combine powerful motors and high-performance gear units with a very low base and an axis 2 that is located further forward. Options for installation on either the floor or a machine make these robots versatile, space-saving and particularly well suited to difficult removal processes.

And as if that were not enough, the robust design with low-wear components increases the service life and extends the maintenance intervals – thereby reducing your costs. For cleanrooms or environments with a high degree of fouling and high temperatures, the special variants Cleanroom (CR) and Foundry (F) are available for some of these models. **The advantages: high planning reliability and security of investment.**

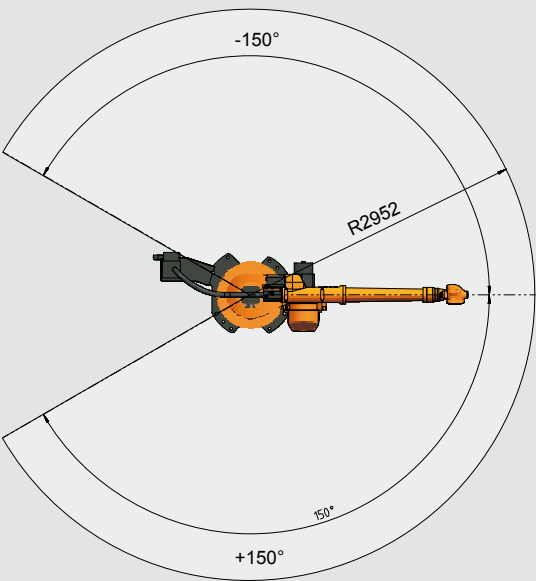
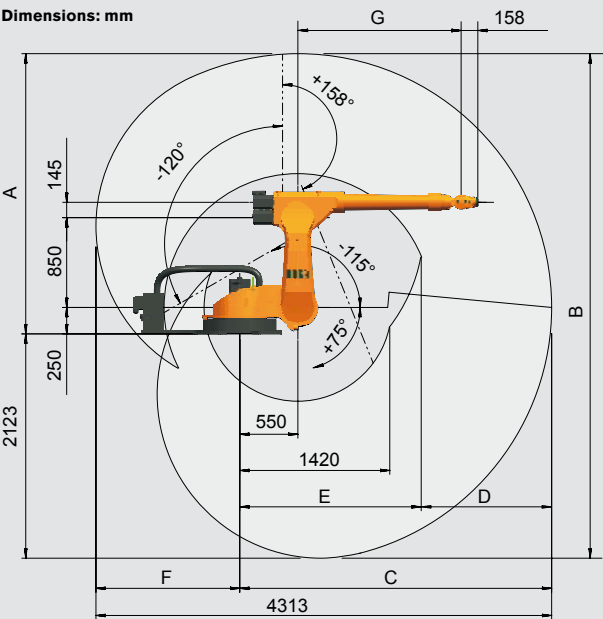
»EXTREMELY LONG-RANGE – EXTREMELY FLEXIBLE

A robot for extreme distances: the KR 60 L16-3 KS is equipped with an exceptionally long arm extension which expands the work envelope to an impressive diameter of 6 mm and increases the downward reach to 2.5 m. Installation directly on the machine, an extremely slender robot wrist and minimal disruptive contours make this robot ideal for applications in which large distances need to be bridged. **The advantages: greater flexibility and reduced space requirements.**

»EXTREMELY POWERFUL – EXTREMELY PRECISE

More speed and maximum output: the high installed motor capacity and high-torque gear units in all axes make the shelf-mounted robots highly dynamic and powerful. Added to this is the precision control, which gives the robots a repeatability of up to ±0.06 mm. The result: better manufacturing quality, fewer rejects, and thus greater efficiency for your production. **The advantages: shorter cycle times and higher quality.**

»TECHNICAL DETAILS KR 60 L16-3 KS



Work envelope	Dimensions <sup>1)</sup>							Volume
	A	B	C	D	E	F	G	
KR 60 L16-3 KS	2,652 mm	4,775 mm	2,952 mm	1,235 mm	1,717 mm	1,361 mm	1,545 mm	77.0 m³

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

## »EXTREMELY WELL-DESIGNED – EXTREMELY ERGONOMIC

With the shelf-mounted robots, the name says it all: “KS” stands for “low base” and refers to the extremely low base frame. Together with axis 2 being located further forward, this shortens the lifting distances and gives the robots a longer downward reach. This makes them ideal for the efficient removal of castings or plastic parts. Mounted directly on the machine, they can reach faster and deeper into its workspace. **The advantages: improved process optimization and faster production.**

## »EXTREMELY VERSATILE – EXTREMELY SAFE

KUKA offers you a comprehensive range of software. In addition to expandable system software and simulation programs for system design, we also provide you with specific application software, such as KUKA.PlastTech: the software coordinates and optimizes the work process of robots and injection molding machines – thereby reducing the cycle time for production of the parts. **The advantages: maximum ease of operation and major time savings.**

Type	KR 60 L16-3 KS
Maximum reach	2,952 mm
Rated payload	16 kg
Suppl. load, arm/link arm/rotating col.	35/0/0 kg
Suppl. load, arm + link arm, max.	35 kg
Maximum total load	51 kg
Number of axes	6
Mounting position	Shelf-mounted, floor
Variant	
Positioning repeatability*	±0.06 mm
Path repeatability*	
Controller	KR C2 edition2005
Weight (excluding controller), approx.	650 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
		16 kg
Axis 1 (A1)	±150°	103°/s
Axis 2 (A2)	+75°/-115°	88°/s
Axis 3 (A3)	+158°/-120°	81°/s
Axis 4 (A4)	±350°	230°/s
Axis 5 (A5)	±130°	165°/s
Axis 6 (A6)	±350°	149°/s

Drive system, electromechanical with brushless AC servomotors

\*to ISO 9283

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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.

# KUKA YOUR IDEAS

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