

KUKA



**The experts in the
heavyweight class**

**KR 360-3
KR 500-3**

»KR 360-3 AND KR 500-3: THE DYNAMIC WEIGHTLIFTERS

As successors to the acclaimed KR 500-2 series, the flexible heavy-duty robots have the benefit of a well-thought-out redesign: thanks to their powerful motors and an optimized gear unit, they make light work of handling even the heaviest parts. Payloads of up to 360 kg or 500 kg are handled with ease. Optimization of the stiffness and reduction of the interference contour results in even greater precision and flexibility. With the same flexibility, they can also be adapted to their environment: for the greater demands of environments with a high degree of fouling and high temperatures, the robots are also available in the special Foundry (F) variant. Two arm length variants extend the work envelope in each case, rounding out the wide product range. **The advantages: high planning reliability and security of investment**

»EXTREMELY ROBUST – EXTREMELY PRECISE

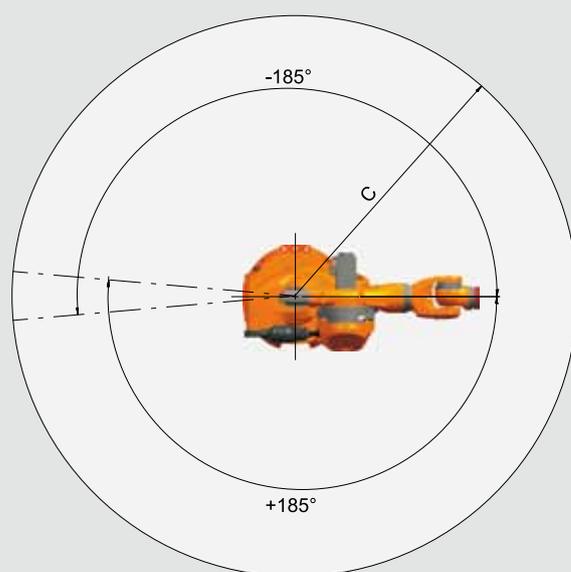
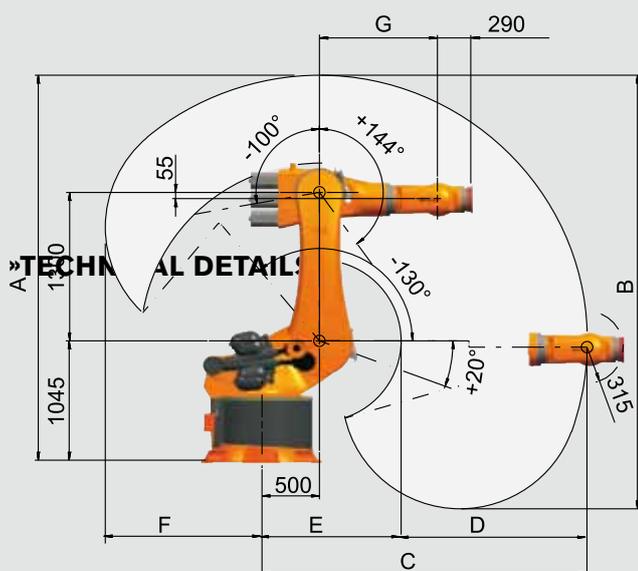
How do you make something good even better? In the case of the KR 360-3 and KR 500-3 robots, the answer to this question was by using new materials and technologies. With the result that the flexible heavy-duty robots are now even more stable and accurate due to their increased stiffness. What's more, optimized gear units give even greater stiffness and a further improvement in performance. **The advantages: high-precision production and greater availability.**

»EXTREMELY ADAPTABLE – EXTREMELY SPACE-SAVING

With its streamlined design, the KR500-3 series requires little space and can be easily integrated into existing cell layouts. Thanks to pioneering robotics and control technology, you can rely around the clock on maximum precision – as well as on ease of operation and availability rates of almost 100%. **The advantages: high planning reliability and security of investment.**



Space-saving: the new streamlined arm structure



Work envelope	Dimensions ¹⁾							Volume
	A	B	C	D	E	F	G	
KR 360-3	3,371 mm	3,798 mm	2,825 mm	1,615 mm	1,210 mm	1,362 mm	1,025 mm	68 m ³
KR 360-3 L280-3	3,621 mm	4,297 mm	3,076 mm	1,833 mm	1,243 mm	1,612 mm	1,275 mm	88 m ³
KR 360-3 L240-3	3,871 mm	4,797 mm	3,326 mm	1,973 mm	1,353 mm	1,862 mm	1,525 mm	114,5 m ³
KR 500-3	3,371 mm	3,798 mm	2,825 mm	1,615 mm	1,210 mm	1,362 mm	1,025 mm	68 m ³
KR 500-3 L420-3	3,621 mm	4,297 mm	3,076 mm	1,833 mm	1,243 mm	1,612 mm	1,275 mm	88 m ³
KR 500-3 L340-3	3,871 mm	4,797 mm	3,326 mm	1,973 mm	1,353 mm	1,862 mm	1,525 mm	114,5 m ³

¹⁾ Relative to inter-section of axes 4/5.

» **EXTREMELY FLEXIBLE – EXTREMELY RELIABLE**

These high-performers are ready for any job: the KR 360-3 and KR 500-3 can be installed on the floor or ceiling, thus allowing optimal use tailored to your specific cell concept. Arm length variants of up to 500 mm make them even more flexible. Added to this is the precision control, which gives the robots a repeatability of ± 0.08 mm – thus guaranteeing reliable production quality. **The advantages: shorter cycle times and higher quality.**

» **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.**



Streamlined: the rotating column with hydropneumatic counterbalancing system

High-performance: the new in-line wrist

Type	KR 360-3	KR 360 L280-3	KR 360 L240-3	KR 500-3	KR 500 L420-3	KR 500 L340-3
Maximum reach						
Rated payload	360 kg	280 kg	240 kg	500 kg	420 kg	340 kg
Suppl. load, arm/link arm/rotating col.	50 / 100* / 400** kg					
Suppl. load, arm + link arm, max.	100 kg*; 50 kg**					
Maximum total load	860 kg	780 kg	740 kg	1000 kg	920 kg	840 kg
Number of axes	6	6	6	6	6	6
Mounting position	Floor, ceiling					
Variant	Foundry					
Pose repeatability	± 0.08 mm	± 0.08 mm	± 0.08 mm	± 0.08 mm	± 0.08 mm	± 0.08 mm
Path repeatability						
Controller	KR C4					
Weight (excluding controller)	2,375 kg	2,405 kg	2,411 kg	2,375 kg	2,405 kg	2,411 kg
Temperature during operation	+ 10°C bis +55°C					
Protection classification	IP (Foundry-variant wrist IP 65)					
Footprint	1,100 mm x 1,100 mm					
Connection	13.5 kVA					
Noise level	< 75 dB					

Drive system, electromechanical with brushless AC servomotors

* floor-mounted robots only
** ceiling-mounted robots only

Axis data	Motion range	Speed with rated payload					
		KR 360-3	KR 360 L280-3	KR 360 L240-3	KR 500-3	KR 500 L420-3	KR 500 L340-3
Axis 1	+/-185°	98 °/s	98 °/s	98 °/s	84 °/s	84 °/s	84 °/s
Axis 2	+20° bis -130°	91 °/s	91 °/s	91 °/s	79 °/s	79 °/s	79 °/s
Axis 3	+144° bis -100°	89 °/s	89 °/s	89 °/s	73 °/s	73 °/s	73 °/s
Axis 4	+/-350°	110 °/s	110 °/s	110 °/s	76 °/s	76 °/s	76 °/s
Axis 5	+/-120°	111 °/s	111 °/s	111 °/s	74 °/s	74 °/s	74 °/s
Axis 6	+/-350°	153 °/s	153 °/s	153 °/s	123 °/s	123 °/s	123 °/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, we have 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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