KUKA

Industrial robotics_**Linear units and positioners**

EN

Maximum productivity all along the line

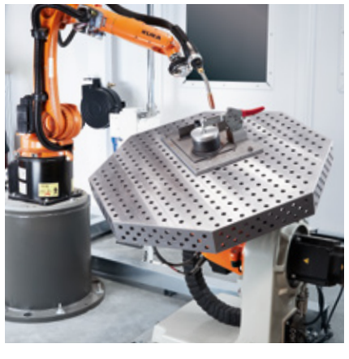
On course for success with
KUKA linear units and positioners

Linear units. Maximize your productivity all the way down the line. KUKA linear units allow you to increase workspaces significantly. Another major advantage: the linear units are implemented as an external axis, which means that no additional controller is required. The KUKA product range covers every payload category, every environment and every requirement. The spectrum ranges from ceiling-mounted units to the high-speed variant and even linear units with a protective cover. You thus hold all the options for decisively expanding your success margin.

Positioners. The objective of every automation solution is to boost productivity and quality. With KUKA positioners, you can achieve this from all angles – they allow you to align workpieces quickly and precisely. Ideal for automating production operations. For this purpose, service-proven standard robotics components are used, which can be combined to form customized solutions. The result is highly dynamic automatic positioners with one to three axes. Choose from a diverse range of sizes and kinematic systems with payload capacities ranging from 250 kg to 12,000 kg to meet the requirements of the production task at hand. With KUKA you are in a strong position to implement your automation ideas.

Covered heavy-duty
KL 3000 with the KR 1000 titan

The KP1-HC500 welding
a frame with its quick and
precise alignment capability



Arc welding with the
KR CYBERTECH nano (KR10 R1420)
and the DKP-400

Find out more about the additional components of KUKA robots for compact, flexible and efficient production concepts. Just scan this QR code with your smartphone.

Four machining centers
interlinked with the KL 4000 and
the KR FORTEC Foundry

Increase your robots' radius of action
KUKA linear units

Product overview

Linear units, designed for robots in the categories	Small robots	KL 100
	Low payloads, 5 kg to 16 kg	KL 250-3
	Medium payloads, 30 kg to 60 kg	KL 1000-2
		KR 30-2 JET
		KR 60-2 JET, KR 60 L45-2 JET, KR 60 L30-2 JET
	High payloads, 90 kg to 300 kg	KL 2000
	Heavy payloads, 360 kg to 1,300 kg	KL 3000, KL 4000
Controller	KR C4, KR C4 smallsize-2, KR C4 compact	
Teach pendant	KUKA smartPAD	

Compact carriage KL 2000


The linear units from KUKA can be extended as desired.

KUKA gantry robots can be installed in an inverted or side-mounted position – meaning they can be deployed flexibly.

_Positionally accurate

_Flexible

_Productive

_Versatile

_Powerful

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Flexible. Long travel extends the work envelope by several times the reach of the robot. The linear units are ideal for linking production lines.

Powerful. Additional version with high torque (e.g. for milling applications) and a high-speed variant for tasks requiring extreme speed and short cycle times.

Versatile. Floor, ceiling and wall-mounted variants are available, as well as a cover to provide protection from dirt during operations in harsh environments.

Productive. Moving workpieces/tools with additional carriages, driven or non-driven (tender carriages) helps to shorten cycle times.

Product overview
Linear units and gantry robots

Linear unit	KL 100
Max. number of carriages	4
Rated payload	100 kg
Installation position	Floor, ceiling, wall
Compatibility	KR AGILUS series

Find out more about the KL 100 on pages 08 – 09

Linear unit	KL 250-3
Max. number of carriages	4
Rated payload	300 kg
Installation position	Floor, ceiling
Compatibility	KR CYBERTECH nano series KR CYBERTECH series

Find out more about the KL 250-3 on pages 10 – 11

Linear unit	KL 1000-2
Max. number of carriages	4
Rated payload	1,000 kg
Installation position	Floor, ceiling
Compatibility	KR 30-3, KR 30 L16-2, KR 30-3 HA, KR 30-4 KS KR 60-3, KR 60 L45-3, KR 60 L30-3 KR 60-3 HA, KR 60 L45-3 HA, KR 60 L30-3 HA KR 60-4 KS, KR 60 L30-4 KS, KR 60 L16-2 KS, KR 60 L45-4 KS

Find out more about the KL 1000-2 on pages 12 – 13

Linear unit	KL 2000
Max. number of carriages	4
Rated payload	2,000 kg
Installation position	Floor
Compatibility	KR QUANTEC pro, KR QUANTEC extra, KR QUANTEC prime, KR QUANTEC ultra

Find out more about the KL 2000 on pages 14 – 15

Linear unit	KL 3000
Max. number of carriages	2
Rated payload	6,500 kg
Installation position	Floor
Compatibility	KR 700 PA, KR 1000 titan, KR 1000 L750 titan

Find out more about the KL 3000 on pages 16 – 17

Linear unit	KL 4000
Max. number of carriages	4
Rated payload	4,000 kg
Installation position	Floor, ceiling
Compatibility	KR QUANTEC Serie, KR FORTEC, KR 300 PA, KR 470 PA

Find out more about the KL 4000 on pages 18 – 19

Gantry robot	KR 30-2 JET
Max. number of carriages	2,002 mm
Rated payload	30 kg
Installation position	Wall, ceiling
Compatibility	–

Find out more about the KR 30-2 JET on pages 20 – 21

Gantry robot	KR 60-2 JET
Max. number of carriages	2,002 mm
Rated payload	60 kg
Installation position	Wall, ceiling
Compatibility	–

Find out more about the KR 60-2 JET on pages 22 – 23

KL 100

Flexible. Long travel extends the work envelope by several times the reach of the robot.

Versatile. Floor, wall and ceiling-mounted variants are available, as well as a cover to provide protection from dirt during operations in harsh environments.

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Productive. Moving workpieces/tools with additional carriages, driven or non-driven (tender carriages) helps to shorten cycle times.

Specially for the KR AGILUS. This linear unit is suitable for robots with a payload from 6 kg to 10 kg.

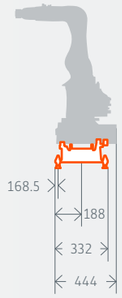
Linear unit	KL 100
Max. number of carriages	4
Rated payload	100 kg
Velocity with rated payload	2.5 m/s
Pose repeatability	<±0.02 mm
Number of axes	1
Variant	–
Installation position	Floor, ceiling, wall
Mass of carriage	43 kg
Mass of beam per meter	35 kg
Min. rated travel	250 mm
Max. rated travel	30,000 mm
Max. gradation of rated travel	500 mm (250 mm to 2 m travel)
Power transmission	Rack

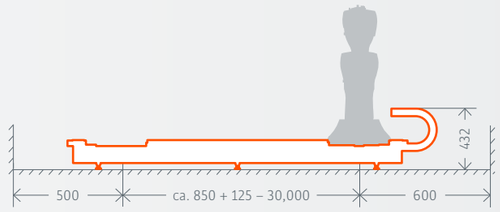
Operating conditions

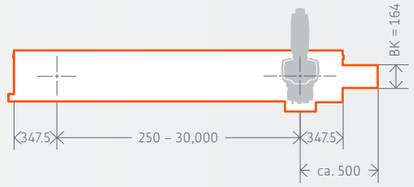
Ambient temperature	+5 °C to +45 °C

Controller	KR C4 compact, KR C4 smallsize-2
Teach pendant	KUKA smartPAD

Compatibility	Robots of the low payload category (6 to 10 kg)
	KR AGILUS series







KL 250-3

Flexible. Long travel extends the work envelope by several times the reach of the robot.

Versatile. Floor, wall and ceiling-mounted variants are available, as well as a cover to provide protection from dirt during operations in harsh environments.

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Productive. Moving workpieces/tools with additional carriages, driven or non-driven (tender carriages) helps to shorten cycle times.

Specially for low payloads. This linear unit is suitable for robots with a payload from 5 kg to 22 kg.

Linear unit	KL 250-3
Max. number of carriages	4
Rated payload	300 kg
Velocity with rated payload	1.47 m/s
Pose repeatability	<±0.02 mm
Number of axes	1
Variant	CV
Installation position	Floor, ceiling
Mass of carriage	95 kg
Mass of beam per meter	175 kg
Min. rated travel	1,100 mm
Max. rated travel	30,100 mm
Max. gradation of rated travel	500 mm
Power transmission	Rack

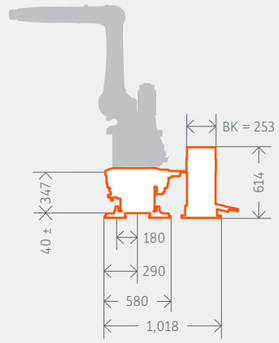
Operating conditions

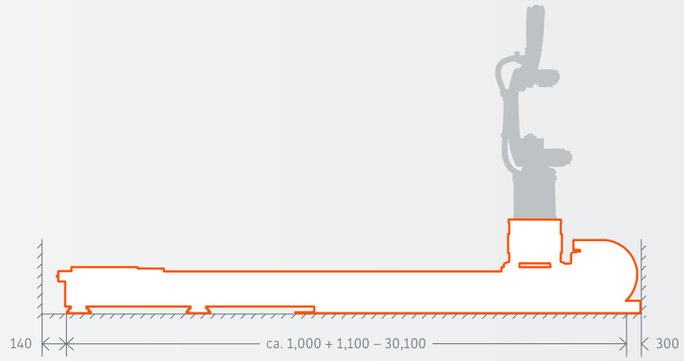
Ambient temperature	+10 °C to +55 °C

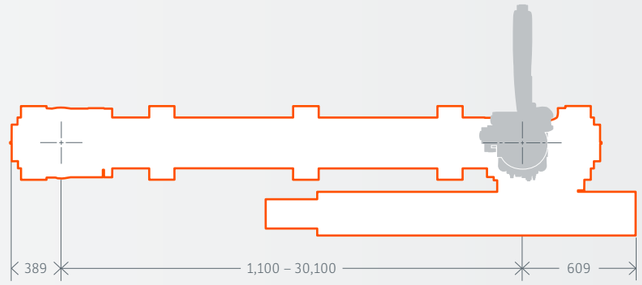
Controller	KR C4
Teach pendant	KUKA smartPAD

Compatibility	Robots of the low payload category (5 to 22 kg)
	KR CYBERTECH nano series
	KR CYBERTECH series

CV Covered







KL 1000-2

Powerful. Additional high-speed variant for tasks requiring extreme speed and short cycle times.

Flexible. Long travel extends the work envelope by several times the reach of the robot. The linear units are implemented as an external axis, which means that no additional controller is required.

Versatile. Floor, wall and ceiling-mounted variants are available, as well as a cover to provide protection from dirt during operations in harsh environments.

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Productive. Moving workpieces/tools with additional carriages, driven or non-driven (tender carriages) helps to shorten cycle times.

Specially for medium payloads. This linear unit is suitable for robots with a payload from 30 kg to 60 kg.

Linear unit	KL 1000-2	KL 1000-2-S
Max. number of carriages	4	4
Rated payload	1,000 kg	1,000 kg
Velocity with rated payload	1.89 m/s	2.35 m/s
Pose repeatability	<±0.02 mm	<±0.02 mm
Number of axes	1	1
Variant	CV	CV
Installation position	Floor, ceiling	Floor, ceiling
Mass of carriage	320 kg	320 kg
Mass of beam per meter	300 kg	300 kg
Min. rated travel	1,200 mm	1,200 mm
Max. rated travel	30,200 mm	30,200 mm
Max. gradation of rated travel	500 mm	500 mm
Power transmission	Rack	Rack

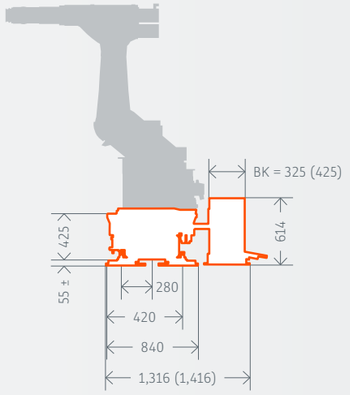
Operating conditions

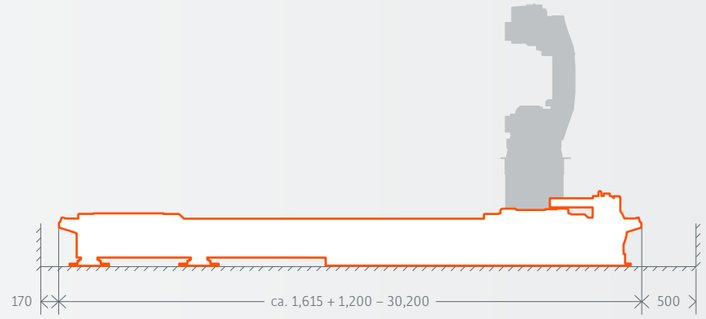
Ambient temperature	+10 °C to +55 °C

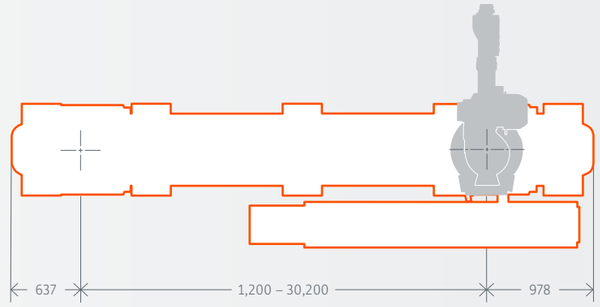
Controller	KR C4
Teach pendant	KUKA smartPAD

Compatibility	Robots of the medium payload category (30 to 60 kg)
	KR 30-3, KR 30 L16-2, KR 30-3 HA, KR 30-4 KS
	KR 60-3, KR 60 L45-3, KR 60 L30-3
	KR 60-3 HA, KR 60 L45-3 HA, KR 60 L30-3 HA
	KR 60-4 KS, KR 60 L30-4 KS, KR 60 L16-2 KS, KR 60 L45-4 KS

CV Covered







KL 2000

Flexible. Long travel of up to 30 m extends the work envelope by several times the reach of the robot. They are ideal for linking production lines.

Powerful. Higher performance and energy efficiency due to the reduced mass of the beam and the carriage.

Modular. Thanks to the modular design of the linear unit, the length can be extended as desired using standard components.

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Linear unit	KL 2000
Max. number of carriages	4
Rated payload	2,000 kg
Velocity with rated payload	1.96 m/s
Pose repeatability	<±0.02 mm
Number of axes	1
Variant	–
Installation position	Floor
Mass of carriage	350 kg
Mass of beam per meter	240 kg
Min. rated travel	400 mm
Max. rated travel	29,900 mm
Max. gradation of rated travel	500 mm
Power transmission	Rack

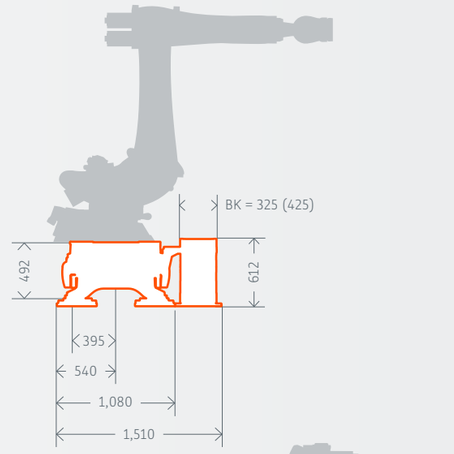
Operating conditions

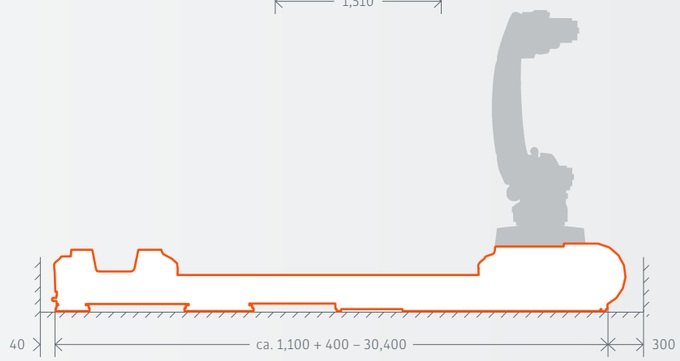
Ambient temperature	+10 °C to +55 °C

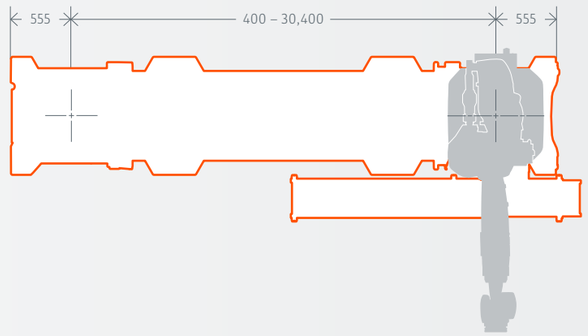
Controller	KR C4
Teach pendant	KUKA smartPAD

Compatibility Robots of the high payload category (90 to 300 kg)

KR QUANTEC pro, KR QUANTEC extra, KR QUANTEC prime, KR QUANTEC ultra







KL 3000

Flexible. Long travel extends the work envelope by several times the reach of the robot.

Powerful. Works quickly and precisely, with maximum payload and robustness.

Versatile. A cover to provide protection from dirt during operations in harsh environments is available.

Positionally accurate. Up to two robots can be operated on a linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Specially for heavy payloads. This linear unit is suitable for robots with a payload from 700 kg to 1,300 kg.

Linear unit	KL 3000
Max. number of carriages	2
Rated payload	6,500 kg
Velocity with rated payload	1.45 m/s
Pose repeatability	<±0.02 mm
Number of axes	1
Variant	CV
Installation position	Floor
Mass of carriage	2,500 kg
Mass of beam per meter	720 kg
Min. rated travel	800 mm
Max. rated travel	29,800 mm
Max. gradation of rated travel	500 mm
Power transmission	Rack

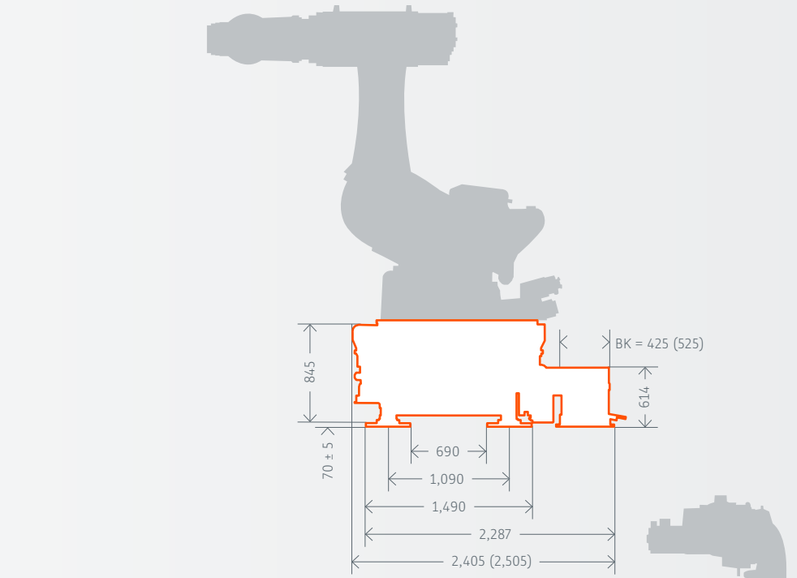
Operating conditions

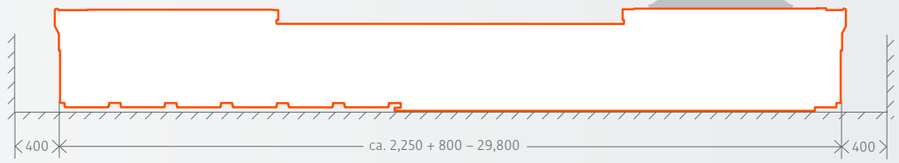
Ambient temperature	+10 °C to +55 °C

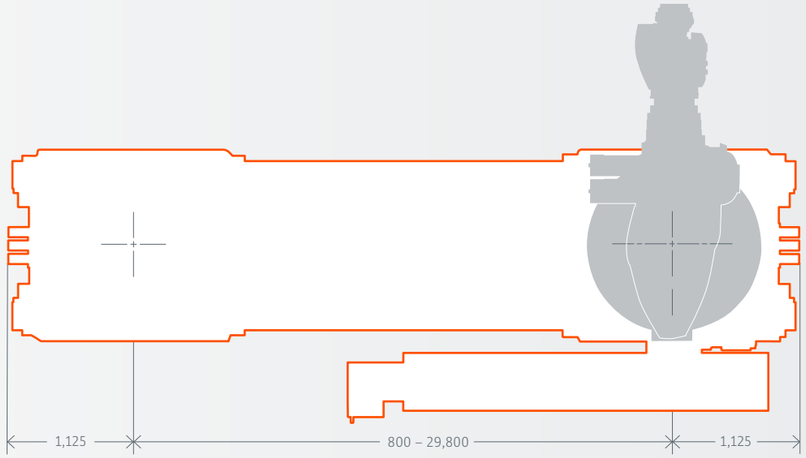
Controller	KR C4
Teach pendant	KUKA smartPAD

Compatibility	Robots of the heavy payload category (700 to 1,300 kg)
	KR 700 PA, KR 1000 titan, KR 1000 L750 titan

CV Covered







KL 4000

Flexible. Long travel of up to 30 m extends the work envelope by several times the reach of the robot. They are ideal for linking production lines.

Powerful. Higher performance and energy efficiency due to the reduced mass of the beam and the carriage.

Modular. Thanks to the modular design of the linear unit, the length can be extended as desired using standard components.

Positionally accurate. Up to four robots can be operated on one linear axis. Multiple robot positions on the linear axis allow optimal adaptation to existing requirements and workspaces.

Greatly simplified installation. Since no welding work is required during installation of the linear unit, installation is significantly faster. There is no need for a welding certificate for the hall or for specialist welding personnel.

Linear unit	KL 4000	KL 4000 S
Max. number of carriages	4	4
Rated payload	4,000 kg	4,000 kg
Velocity with rated payload	1.89 m/s	2.35 m/s
Pose repeatability	<±0.02 mm	<±0.02 mm
Number of axes	1	1
Variant	S	S
Installation position	Floor, ceiling	Floor, ceiling
Mass of carriage	508 kg	508 kg
Mass of beam per meter	235 kg	235 kg
Min. rated travel	0.4 m	0.4 m
Max. rated travel	30.4 m	30.4 m
Max. gradation of rated travel	0.5 m	0.5 m
Power transmission	Rack	Rack

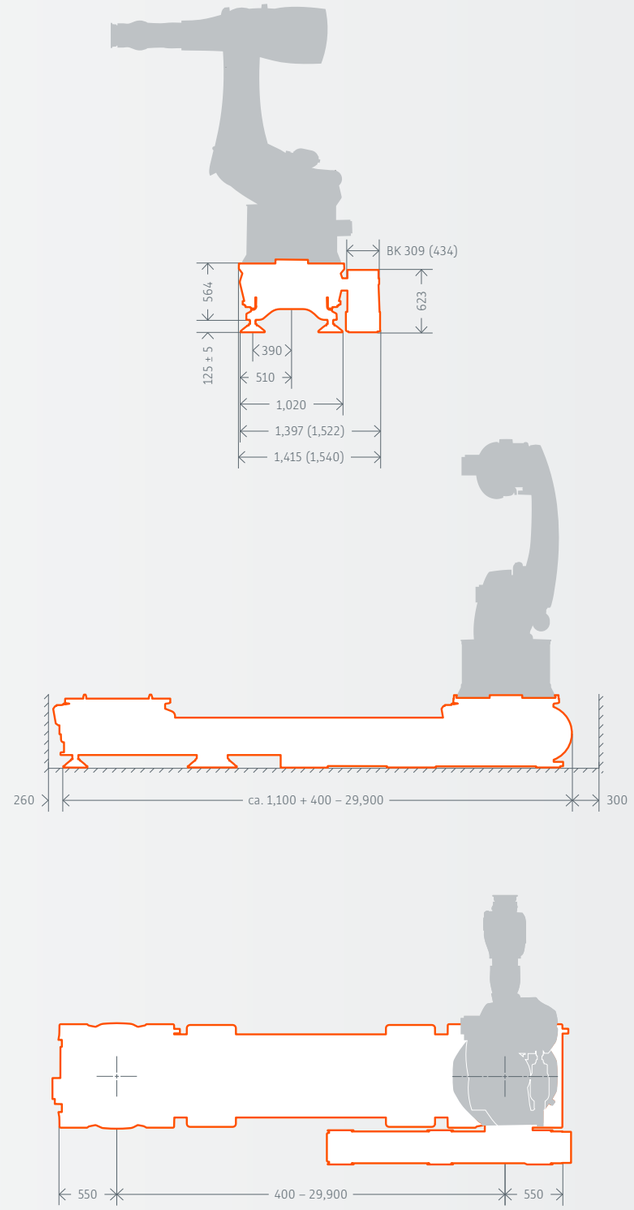
Operating conditions

Ambient temperature	+10 °C to +55 °C

Controller	KR C4
Teach pendant	KUKA smartPAD

Compatibility	Robots of the heavy payload category (90 to 600 kg)
	KR 300 PA, KR 470 PA, KR QUANTEC Serie, KR FORTEC

S Speed



KR 30-2 JET

Positionally accurate. Up to two robots can be operated on a JET axis, allowing multiple production processes to be carried out simultaneously. The JET robots can be installed in both the inverted and side-mounted positions.

Fast. By eliminating axis 1, the dead weight is reduced and JET robots can achieve optimum acceleration values and maximum working speeds.

Space-saving. The gantry design frees up valuable shop space and enables multiple machines to be tended from above. Its high degree of adaptability also simplifies the integration process.

Productive. The ideal combination of linear unit and jointed-arm robot guarantees shorter cycle times and greater productivity.

Versatile. From system software and simulation programs for system design right through to special application software such as KUKA.PlastTech: the comprehensive range of software makes for maximum ease of operation and major time savings.

Gantry robot	KR 30-2 JET
Max. reach	2,002 mm
Rated payload	30 kg
Rated supplementary load, arm/link arm/rotating column	35 kg/–/–
Maximum total load	65 kg
Pose repeatability	±0.10 mm
Number of axes	6
Installation position	Wall, ceiling
Robot footprint	–
Weight	435 kg

Axis data / Range of motion		Velocity with 30 kg rated payload
Axis 1 (A1)	1.5 m to 30 m	3.1 m/s
Axis 2 (A2)	+0°/–180°	126°/s
Axis 3 (A3)	+158°/–120°	166°/s
Axis 4 (A4)	+/–350°	260°/s
Axis 5 (A5)	+/–119°	245°/s
Axis 6 (A6)	+/–350°	322°/s

Operating conditions

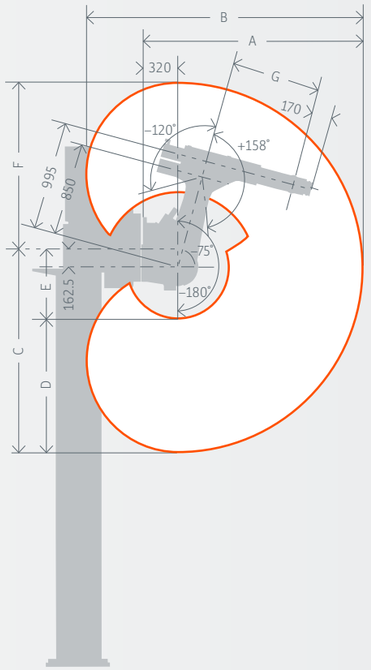
Ambient temperature	+10 °C to +55 °C

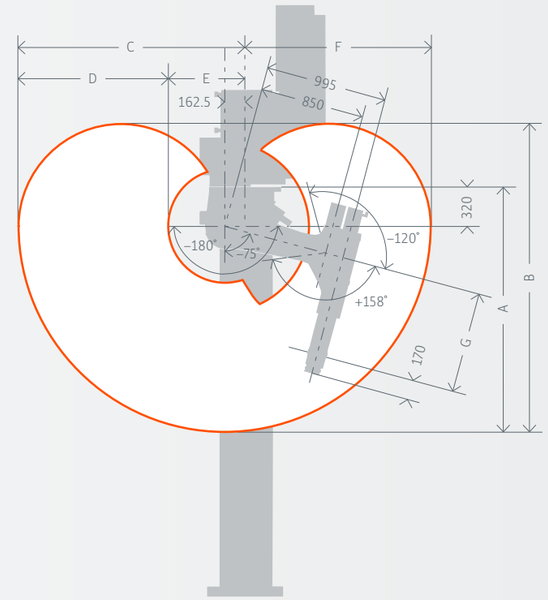
Controller	KR C4
Teach pendant	KUKA smartPAD

Protection rating

Protection rating of robot	IP 64
Protection rating of in-line wrist	IP 65

Working envelope [1, 2]	Dimensions A	Dimensions B	Dimensions C	Dimensions D	Dimensions E	Dimensions F	Dimensions G	Volume
KR 30-2 JET	2,002 mm	2,516 mm	1,845 mm	1,218 mm	627 mm	1,520 mm	820 mm	5.7 m³





[1] Relative to intersection of axes 4/5
[2] Gantry: similar to illustration

KR 60-2 JET

Positionally accurate. Up to two robots can be operated on a JET axis, allowing multiple production processes to be carried out simultaneously. The JET robots can be installed in both the inverted and side-mounted positions.

Fast. By eliminating axis 1, the dead weight is reduced and JET robots can achieve optimum acceleration values and maximum working speeds.

Space-saving. The gantry design frees up valuable shop space and enables multiple machines to be tended from above. Its high degree of adaptability also simplifies the integration process.

Productive. The ideal combination of linear unit and jointed-arm robot guarantees shorter cycle times and greater productivity.

Versatile. From system software and simulation programs for system design right through to special application software such as KUKA.PlastTech: the comprehensive range of software makes for maximum ease of operation and major time savings.

Gantry robot	KR 60-2 JET	KR 60 L45-2 JET	KR 60 L30-2 JET
Max. reach	2,002 mm	2,202 mm	2,402 mm
Rated payload	60 kg	45 kg	30 kg
Rated supplementary load, arm/link arm/rotating column	35 kg/–/–	35 kg/–/–	35 kg/–/–
Maximum total load	95 kg	80 kg	65 kg
Pose repeatability	±0.15 mm	±0.15 mm	±0.15 mm
Number of axes	6	6	6
Installation position	Wall, ceiling	Wall, ceiling	Wall, ceiling
Robot footprint	–	–	–
Weight	435 kg	471 kg	479 kg

Axis data / Range of motion		Velocity with 60 kg rated payload	Velocity with 45 kg rated payload	Velocity with 30 kg rated payload
Axis 1 (A1)	1.5 to 30 m	3.1 m/s	3.1 m/s	3.1 m/s
Axis 2 (A2)	+0°/–180°	120°/s	120°/s	120°/s
Axis 3 (A3)	+158°/–120°	166°/s	166°/s	166°/s
Axis 4 (A4)	+/–350°	260°/s	260°/s	260°/s
Axis 5 (A5)	+/–119°	245°/s	245°/s	245°/s
Axis 6 (A6)	+/–350°	322°/s	322°/s	322°/s

Operating conditions

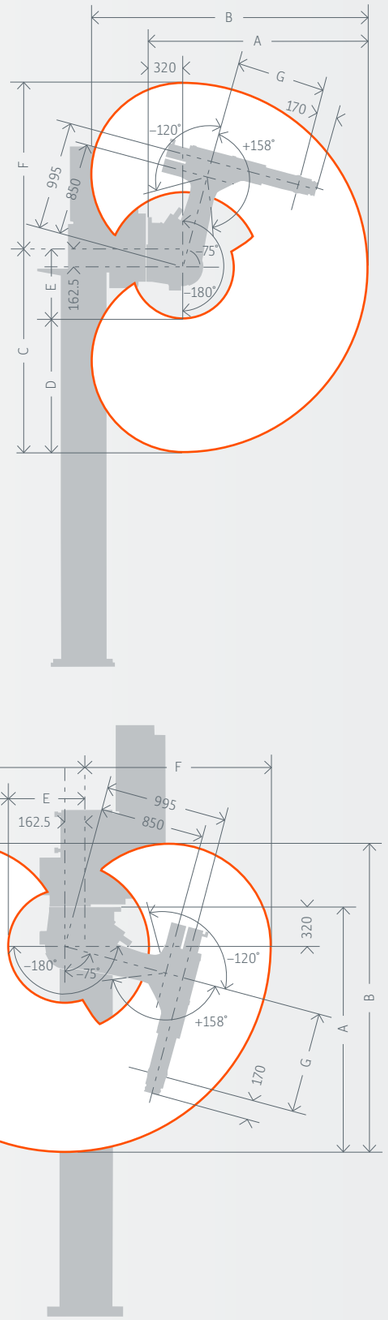
Ambient temperature	+10 °C to +55 °C

Controller	KR C4
Teach pendant	KUKA smartPAD

Protection rating

Protection rating of robot	IP 64
Protection rating of in-line wrist	IP 65

Working envelope [1,2]	Dimensions A	Dimensions B	Dimensions C	Dimensions D	Dimensions E	Dimensions F	Dimensions G	Volume
KR 60-2 JET	2,002 mm	2,516 mm	1,845 mm	1,218 mm	627 mm	1,520 mm	820 mm	5.7 m³
KR 60 L45-2 JET	2,202 mm	2,916 mm	2,045 mm	1,363 mm	682 mm	1,720 mm	1,020 mm	7.2 m³
KR 60 L30-2 JET	2,402 mm	3,316 mm	2,245 mm	1,446 mm	799 mm	1,920 mm	1,220 mm	9.0 m³



[1] Relative to intersection of axes 4/5
[2] Gantry: similar to illustration

In position for Industrie 4.0 – easier, more effective, more precise
KUKA positioners

Product overview

Positioners	1-axis positioners	KP1-MB 2000, KP1-MB 4000, KP1-MB 6000
		KP1-V 500, KP1-V 1000
		KP1-H 250, KP1-H 500, KP1-H 750, KP1-H 1000
		KP1-H 5000 HW, KP1-H 6300 HW, KP1-H 12000 HW
		KP1-HC 250, KP1-HC 500, KP1-HC 750, KP1-HC 1000, KP1-HC 2000, KP1-HC 4000
		KP1-MD 250, KP1-MD 500, KP1-MD 750, KP1-MD 1000, KP1-MD 2000
		KP1-MD 250 HW, KP1-MD 500 HW, KP1-MD 750 HW
		KP1-MDC 250, KP1-MDC 500, KP1-MDC 750, KP1-MDC 1000, KP1-MDC 2000, KP1-MDC 4000
		KP1-MDC 250 HW, KP1-MDC 500 HW, KP1-MDC 750 HW, KP1-MDC 1000 HW
	2-axis positioners	DKP-400
		KP2-HV 1100 HW, KP2-HV 2600 HW
	3-axis positioners	KP3-V2H 250, KP3-V2H 500, KP3-V2H 750, KP3-V2H 1000, KP3-V2H S
		KP3-H2H 500, KP3-H2H 750, KP3-H2H 1000
		KP3-V2MD 2000
Controller	KR C4, KR C4 smallsize-2, KR C4 compact	
Teach pendant	KUKA smartPAD	

KUKA support bars for simplified, precise and quick mounting of fixtures (optional)

User-friendly, integrated connector panels

Integrated, protected energy supply systems (optional)

_Maximum process reliability

_User- and integration-friendly solutions

_Solutions from a single source

_Outstanding added value and efficiency

_Maximum system availability and long product service life

Solutions from a single source. KUKA positioners stand out for their high bending stiffness and minimal interference circles and contours. The extensive portfolio offers maximum flexibility for choosing the right positioner for every application. KUKA supplies robots, positioners, linear units, MGUs, etc. all from a single source – it's as simple as that.

Outstanding added value and efficiency. The optimally coordinated robot-positioner systems allow the highest level of performance. Highly dynamic drives allow for extremely short cycle times.

Maximum system availability and long product service life. The use of tried-and-proven standard robot components, gear units and motors ensures utmost reliability and availability. Insulated face plates in all positioners serve to protect the bearings and gear units against leakage currents during arc welding operations.

Maximum process reliability. From welding to material processing and material handling – KUKA positioners ensure high accuracy and extreme precision with minimized cycle times. Another highlight: the standardized products (interfaces, energy supplies, design, etc.) eliminate risk for system integrators and also speed up the integration process.

User- and integration-friendly solutions. Minimal customer risk, quick integration and short start-up thanks to user-friendly complete systems such as Easy to Use, Easy to Program or simple, tried-and-tested mastering by means of the KUKA EMD.

Product range
Positioners

Positioner	KP1-MB 2000	KP1-MB 4000	KP1-MB 6000
Rated payload	2,000 kg	4,000 kg	6,000 kg
Tool radius	–	–	–
Distance between face plates	–	–	–
Max. loading height	–	–	–

Find out more about the KP1-MB on pages 28 – 29

Positioner	KP1-V 500	KP1-V 1000
Rated payload	500 kg	1,000 kg
Tool radius	–	–
Distance between face plates	–	–
Max. loading height	705 mm	705 mm

Find out more about the KP1-V on pages 30 – 31

Positioner	KP1-H 250	KP1-H 500	KP1-H 750	KP1-H 1000
Rated payload	250 kg	500 kg	750 kg	1,000 kg
Tool radius (in increments of 100 mm)	950 to 1,250 mm	950 to 1,250 mm	950 to 1,250 mm	950 to 1,250 mm
Distance between face plates	–	–	–	–
Max. loading height (in increments of 100 mm)	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm

Find out more about the KP1-H on pages 32 – 33

Positioner	KP1-H 5000 HW	KP1-H 6300 HW	KP1-H 12000 HW
Rated payload	5,000 kg	6,300 kg	12,000 kg
Tool radius	1,100 mm	1,100 mm	1,100 mm
Distance between face plates	–	–	–
Max. loading height	1,200 mm	1,200 mm	1,200 mm

Find out more about the KP1-H HW on pages 34 – 35

Positioner	KP1-HC 250	KP1-HC 500	KP1-HC 750	KP1-HC 1000	KP1-HC 2000	KP1-HC 4000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg	4,000 kg
Tool radius	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	970 mm 1,220 mm 1,470 mm	970 mm 1,220 mm 1,470 mm
Distance between face plates	–	–	–	–	–	–
Max. loading height (in increments of 100 mm)	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	1,000 mm 1,250 mm 1,500 mm	1,000 mm 1,250 mm 1,500 mm

Find out more about the KP1-HC on pages 36 – 37

Positioner	KP1-MD 250	KP1-MD 500	KP1-MD 750	KP1-MD 1000	KP1-MD 2000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg
Tool radius	–	–	–	–	–
Distance between face plates	–	–	–	–	–
Max. loading height	–	–	–	–	–

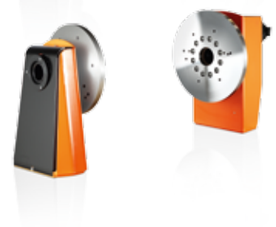
Find out more about the KP1-MD on pages 38 – 39

Positioner	KP1-MD 250 HW	KP1-MD 500 HW	KP1-MD 750 HW
Rated payload	250 kg	500 kg	750 kg
Tool radius	–	–	–
Distance between face plates	–	–	–
Max. loading height	–	–	–

Find out more about the KP1-MD HW on pages 40 – 41

Positioner	KP1-MDC 250	KP1-MDC 500	KP1-MDC 750	KP1-MDC 1000	KP1-MDC 2000	KP1-MDC 4000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg	4,000 kg
Tool radius	–	–	–	–	–	–
Distance between face plates	–	–	–	–	–	–
Max. loading height	–	–	–	–	–	–

Find out more about the KP1-MDC on pages 42 – 43



Positioner	KP1-MDC 250 HW	KP1-MDC 500 HW	KP1-MDC 750 HW	KP1-MDC 1000 HW
Rated payload	250 kg	500 kg	750 kg	1,000 kg
Tool radius	–	–	–	–
Distance between face plates	–	–	–	–
Max. loading height	–	–	–	–

Find out more about the KP1-MDC HW on pages 44 – 45

Positioner	KP2-HV 1100 HW	KP2-HV 2600 HW
Rated payload	1,100 kg	2,600 kg
Tool radius	–	–
Distance between face plates	–	–
Max. loading height	1,085 mm	1,145 mm

Find out more about the KP2-HV HW on pages 46 – 47

Positioner	DKP-400
Rated payload	400 kg
Tool radius	–
Distance between face plates	–
Max. loading height	857 mm

Find out more about the DKP on pages 48 – 49

Positioner	KP3-V2H 250	KP3-V2H 500	KP3-V2H 750	KP3-V2H 1000	KP3-V2H S
Rated payload	250 kg	500 kg	750 kg	1,000 kg	500 kg 750 kg
Tool radius (in increments of 100 mm)	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm
Distance between face plates (in increments of 200 mm)	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm
Max. loading height	950 mm	950 mm	950 mm	950 mm	950 mm

Find out more about the KP3-V2H on pages 50 – 51

Positioner	KP3-H2H 500	KP3-H2H 750	KP3-H2H 1000
Rated payload	500 kg	750 kg	1,000 kg
Tool radius (in increments of 100 mm)	400 to 600 mm	600 to 800 mm	600 to 800 mm
Distance between face plates (in increments of 400 mm)	1,600 to 4,400 mm	2,000 to 4,400 mm	2,000 to 4,400 mm
Max. loading height	1,019 mm	1,019 mm	1,019 mm

Find out more about the KP3-H2H on pages 52 – 53

Positioner	KP3-V2MD 2000
Rated payload	2,000 kg
Tool radius	–
Distance between face plates	–
Max. loading height	880 mm

Find out more about the KP3-V2MD on pages 54 – 55

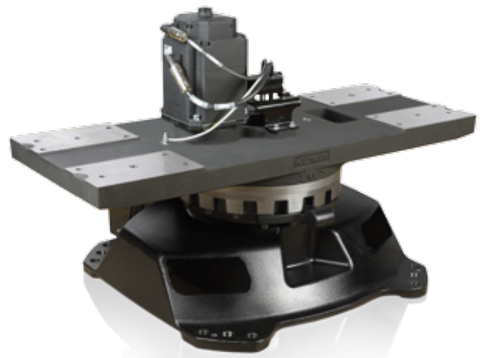
1-axis positioner
KP1-MB

Big performer in a small space. The modular base unit has a particularly compact design. This provides you with greater spatial flexibility for designing your specific installation.

Economical use of space. The central hollow shaft in the center of the mounting platform allows you to route energy and fluid supply lines in a space-efficient manner. This gives you extra flexibility for your specific application.

Particularly simple integration. Standardized products for interfaces and constructions allow for quick and simple integration into your systems or cells.

Simple transportation. Integrated fork slots ensure simple transportation and straightforward integration into your installation.

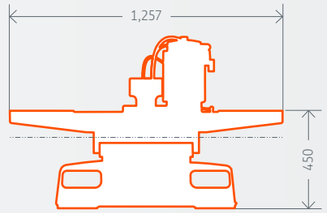


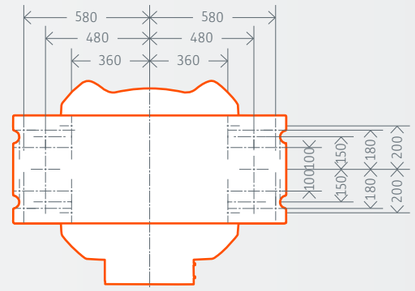
Positioner	KP1-MB 2000	KP1-MB 4000	KP1-MB 6000
Rated payload	2,000 kg	4,000 kg	6,000 kg
Number of axes	1	1	1
Pose repeatability	±0.04 mm r = 1,000 mm	±0.04 mm r = 1,000 mm	<±0.08 mm
Max. tilting torque	25,000 Nm	30,000 Nm	44,000 Nm
Turning range with energy supply system	+/–185°	+/–185°	+/–185°
Permissible mass moment of inertia	4,867 kg m²	7,857 kg m²	17,000 kg m²
Turning time (180° / 360°)	3.9 s / 6.9 s	3.9 s / 6.9 s	4.2 s / 8.6 s
Installation position	Floor	Floor	Floor
Diameter of hollow shaft	140 mm	140 mm	–
Protection rating	IP 67	IP 67	IP 67
Weight	530 kg	530 kg	870 kg

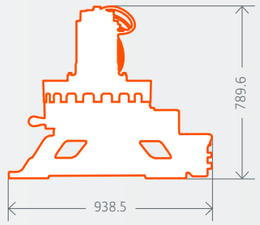
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







* Exemplary drawing for KP1-MB 2000 to KP1-MB 4000

1-axis positioner
KP1-V

Compact design. Thanks to its small outer dimensions, the KP1-V helps you to implement particularly space-efficient automation solutions.

Central supply of energy and fluids. The hollow shaft in the center of the face plate allows for a direct supply of energy and fluids – greater economy of space in every installation.

Infinite rotation. Thanks to its infinitely rotating design, the KP1-V is optimally positioned and can be used without limitation in any axis orientation.

Ergonomic loading height. With its loading height of 705 mm, the KP1-V simplifies the workpiece loading process and thus improves the productivity and efficiency of your application.

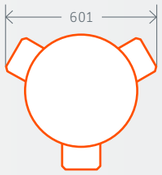
Identical hole pattern. All KP1-V positioners have the same hole pattern, allowing you to plan reliably and integrate the positioner quickly and seamlessly into your installation.

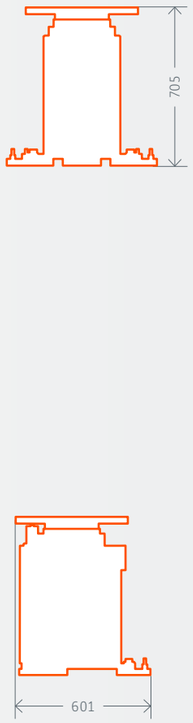
Positioner	KP1-V 500	KP1-V 1000
Rated payload	500 kg	1,000 kg
Number of axes	1	1
Pose repeatability	<±0.08 mm	<±0.08 mm
Max. tilting torque	3,550 Nm	3,550 Nm
Standard turning range	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°
Max. load torque	3,100 Nm	3,100 Nm
Permissible mass moment of inertia	829 kg m²	962 kg m²
Turning time (180° / 360°)	2.1 s / 3.2 s	2.5 s / 4 s
Installation position	Floor	Floor
Max. loading height	705 mm	705 mm
Diameter of hollow shaft	60 mm	60 mm
Protection rating	IP 67	IP 67
Weight	380 kg	380 kg
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A	500 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A	590 A

Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD





1-axis positioner
KP1-H

Broad portfolio. Thanks to the wide range of tool radii, loading heights and payload capacities that are available, you can enjoy the greatest possible flexibility when designing your system.

High precision. The single-axis positioner KP1-H with horizontal rotational axis guarantees that workpieces are positioned with the utmost precision.

Infinite rotation. Thanks to its infinitely rotating design, the single-axis positioner KP1-H is optimally positioned and can be used without limitation in any axis orientation.

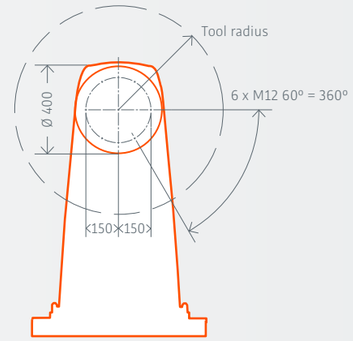
Streamlined silhouette. Top performance can be delivered even in the tightest of spaces. For this purpose, the single-axis positioner KP1-H has a particularly space-saving design.

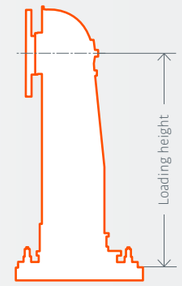
Positioner	KP1-H 250	KP1-H 500	KP1-H 750	KP1-H 1000
Rated payload	250 kg	500 kg	750 kg	1.000 kg
Number of axes	1	1	1	1
Tool radius (in increments of 100 mm)	950 to 1,250 mm	950 to 1,250 mm	950 to 1,250 mm	950 to 1,250 mm
Pose repeatability	<±0.08 mm	<±0.08 mm	<±0.08 mm	<±0.08 mm
Max. tilting torque	1,790 mm	3,581 mm	5,371 mm	7,161 mm
Standard turning range	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	368 Nm	736 Nm	736 Nm	1.472 Nm
Permissible mass moment of inertia	180 kg m²	359 kg m²	530 kg m²	719 kg m²
Turning time (180° / 360°)	2.3 s / 3.7 s	2.5 s / 4.2 s	3.4 s / 5.9 s	2.5 s / 2.4 s
Installation position	Floor	Floor	Floor	Floor
Max. loading height (in increments of 100 mm)	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm
Protection rating	IP 67	IP 67	IP 67	IP 67
Weight	259 / 267 / 275 / 283 kg	293 / 302 / 310 / 318 kg	293 / 302 / 310 / 318 kg	399 / 410 / 421 / 432 kg
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A	500 A	500 A	500 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A	590 A	590 A	590 A

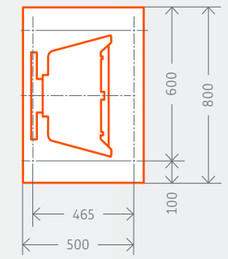
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







* Exemplary drawing for KP1-H 250 to KP1-H 750

1-axis positioner
KP1-H HW

High precision. The single-axis positioner KP1-H HW with horizontal rotational axis is used to position large and heavy workpieces with high precision.

Extremely flexible. The KP1-H HW 1100 HW can move payloads of 5,000 kg, 6,300 kg and 12,000 kg.

Robust design. Its robust design provides outstanding stability and the positioner is optimally protected even for operation in harsh production environments.

Simple integration. The positioner can be combined with any KUKA robot and is straightforward to integrate thanks to the simple and quick KUKA EMD mastering system.

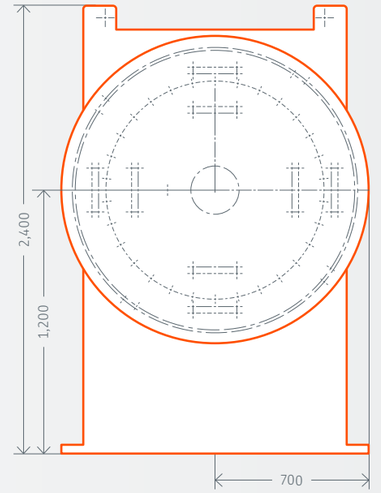
Integrated hollow shaft. The single-axis positioner KP1-H HW has an integrated hollow shaft which allows energy and fluids to be supplied in a particularly space-efficient manner.

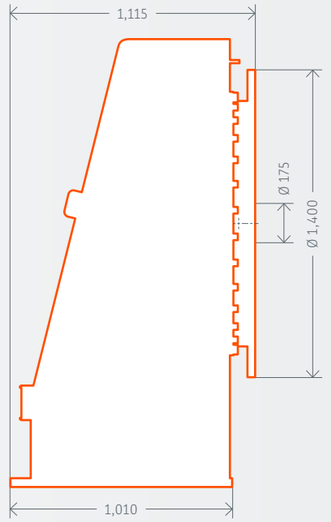
Positioner	KP1-H 5000 HW	KP1-H 6300 HW	KP1-H 12000 HW
Rated payload	5,000 kg	6,300 kg	12,000 kg
Tool radius	1,100 mm	1,100 mm	1,100 mm
Face plate diameter	Ø 1,400 mm	Ø 1,400 mm	Ø 1,600 mm
Pose repeatability	±0.3 mm r = 700 mm	±0.3 mm r = 700 mm	±0.35 mm r = 800 mm
Max. tilting torque	25,000 Nm	50,400 Nm	190,000 Nm
Max. rotational torque	10,000 Nm	14,800 Nm	24,000 Nm
Standard turning range	370°	370°	370°
Permissible mass moment of inertia	1,700 kg m²	3,000 kg m²	6,000 kg m²
Velocity	17 °/s	15 °/s	8 °/s
Max. loading height	1,200 mm	1,200 mm	1,200 mm
Width	1,100 mm	1,400 mm	1,500 mm
Height	700 mm	1,010 mm	1,500 mm
Diameter of hollow shaft	Ø 80 mm	Ø 175 mm	Ø 175 mm
Protection rating	IP 65	IP 65	IP 65
Weight	2,300 kg	3,060 kg	3,800 kg
Optional: rated welding current (100 % duty cycle)	360 A / 720 A	360 A / 720 A	360 A / 720 A
Optional: rated welding current (60 % duty cycle)	400 A / 800 A	400 A / 800 A	400 A / 800 A

Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD





* Exemplary drawing for KP1-H 6300 HW

1-axis positioner
KP1-HC

Broad portfolio. Thanks to the wide range of tool radii, loading heights and payload capacities that are available, you can enjoy the greatest possible flexibility when designing your system.

Integrated hollow shaft. The hollow shaft integrated into the counterbearing can be used to route the energy and fluid supply lines in a highly space-efficient and convenient manner.

Infinite rotation. Thanks to its infinitely rotating design, the KP1-HC is optimally positioned and can be used without limitation in any axis orientation.

Low space requirements. Thanks to its compact design, the single-axis positioner KP1-HC can be easily integrated anywhere. Enjoy greater creative freedom in the planning process.

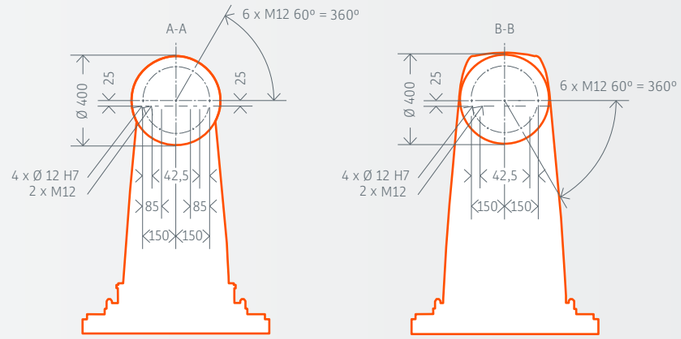
Simple integration. The optional connecting tube for the KP1-HC allows you to align the drive and counterbearing simple and accurately.

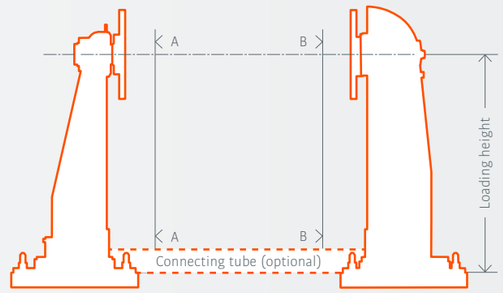
Positioner	KP1-HC 250	KP1-HC 500	KP1-HC 750	KP1-HC 1000	KP1-HC 2000	KP1-HC 4000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg	4,000 kg
Number of axes	1	1	1	1	1	1
Tool radius	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	950 mm 1,050 mm 1,150 mm 1,250 mm	970 mm 1,220 mm 1,470 mm	970 mm 1,220 mm 1,470 mm
Pose repeatability	<±0.08 mm	<±0.08 mm	<±0.08 mm	<±0.08 mm	<±0.08 mm	<±0.08 mm
Standard turning range	Infinite	Infinite	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	368 Nm	736 Nm	736 Nm	1,472 Nm	3,900 Nm	5,890 Nm
Permissible mass moment of inertia	180 kg m²	359 kg m²	530 kg m²	719 kg m²	2,100 kg m²	4,300 kg m²
Turning time (180° / 360°)	2.3 s / 3.7 s	2.7 s / 4.6 s	3.4 s / 5.9 s	2.3 s / 4.0 s	3.3 s / 5.8 s	3.8 s / 6.8 s
Installation position	Floor	Floor	Floor	Floor	Floor	Floor
Max. loading height (in increments of 100 mm)	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm	980 to 1,280 mm
Diameter of counterbearing hollow shaft	69 mm	69 mm	69 mm	69 mm	69 mm	69 mm
Protection rating	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
Weight	466 / 479 / 492 / 506 mm	538 / 551 / 563 / 577 mm	538 / 551 / 563 / 577 mm	648 / 663 / 680 / 695 mm	1,085 / 1,174 / 1,263 mm	1,246 / 1,343 / 1,440 mm
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A

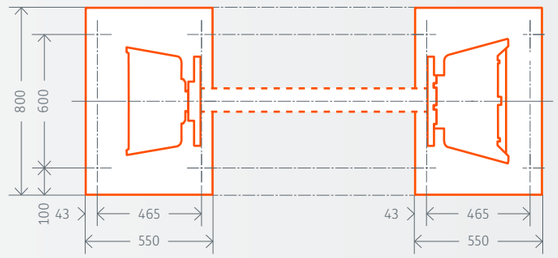
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







* Exemplary drawing for KP1-HC 250 to KP1-HC 750

1-axis positioner
KP1-MD

Simple planning. The KP1-MD makes planning even easier – with its identical loading height and hole pattern for all KP1-MDs up to 1,000 kg.

Modular design. The modular structure of the positioners provides maximum flexibility for implementing individual customer solutions.

Compact construction. The space-saving modular units of the single-axis positioner KP1-MD can even fit into confined installations.

Infinite rotation. Thanks to its infinitely rotating design, the KP1-MD is optimally positioned and can be used without limitation in any axis orientation.

Any installation position. Deploy the KP1-MD in floor, wall, angle or ceiling-mounted positions without any restriction on the function or precision.

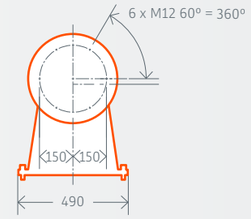
Positioner	KP1-MD 250	KP1-MD 500	KP1-MD 750	KP1-MD 1000	KP1-MD 2000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg
Number of axes	1	1	1	1	1
Pose repeatability	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm
Max. tilting torque	736 Nm	1,472 Nm	2,207 Nm	2,943 Nm	7,652 Nm
Standard turning range	Infinite	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	368 Nm	736 Nm	736 Nm	1,472 Nm	3,900 Nm
Permissible mass moment of inertia	180 kg m²	359 kg m²	530 kg m²	719 kg m²	2,100 kg m²
Turning time (180° / 360°) (KR C4 compact: 2.5 s / 4.2 s)	2.2 s / 3.5 s	2.7 s / 4.6 s	2.9 s / 4.9 s	2.3 s / 4.0 s	3.3 s / 5.8 s
Installation position	Variable	Variable	Variable	Variable	Variable
Protection rating	IP 67	IP 67	IP 67	IP 67	IP 67
Optional: rated welding current (100% duty cycle), infinitely rotating	500 A	500 A	500 A	500 A	500 A
Optional: rated welding current (60% duty cycle), infinitely rotating	590 A	590 A	590 A	590 A	590 A

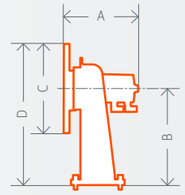
Operating conditions

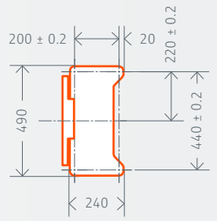
Ambient temperature	+5 °C to +40 °C

Controller	KR C4 compact (KP1-MD 250) KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD

Working envelope[1]	Dimensions A	Dimensions B	Dimensions C	Dimensions D
KP1-MD 250	332 mm	432 mm	400 mm	632 mm
KP1-MD 500	403 mm	432 mm	400 mm	632 mm
KP1-MD 750	403 mm	432 mm	400 mm	632 mm
KP1-MD 1000	426.5 mm	432 mm	500 mm	682 mm
KP1-MD 2000	579 mm	494 mm	660 mm	824 mm







[1] Exemplary drawing for KP1-MD 250 to KP1-MD 1000

1-axis positioner
KP1-MD HW

Simple planning. The KP1-MD HW makes planning even easier – with its identical loading height and hole pattern for all payload categories.

Modular design. The modular structure of the positioners provides maximum flexibility for implementing individual customer solutions.

Compact design. Thanks to its small outer dimensions, the KP1-MD HW helps you to implement particularly space-efficient automation solutions.

Integrated hollow shaft. The modular drive unit KP1-MD HW has an integrated hollow shaft. This allows energy and fluids to be supplied in a particularly space-efficient manner.

Infinite rotation. Thanks to its infinitely rotating design, the KP1-MD HW is optimally positioned and can be used without limitation in any axis orientation.

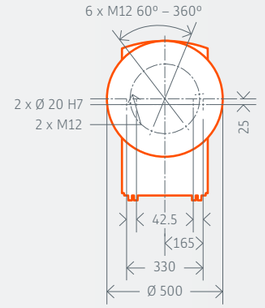
Any installation position. Deploy the KP1-MD HW in floor, wall, angle or ceiling-mounted positions without any restriction on the function or precision.

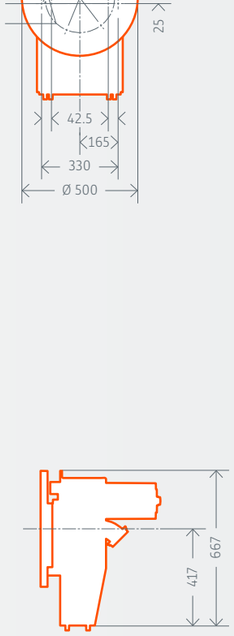
Positioner	KP1-MD 250 HW	KP1-MD 500 HW	KP1-MD 750 HW
Rated payload	250 kg	500 kg	750 kg
Number of axes	1	1	1
Pose repeatability	<±0.06 mm	<±0.06 mm	<±0.06 mm
Max. tilting torque	956 Nm	1,913 Nm	2,869 Nm
Standard turning range	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°
Permissible mass moment of inertia	370 Nm	736 Nm	1,100 Nm
Turning time (180° / 360°)	1.9 s / 3.4 s	2 s / 3.5 s	2.1 s / 3.6 s
Installation position	Variable	Variable	Variable
Diameter of hollow shaft	60 mm	60 mm	60 mm
Protection rating	IP 67	IP 67	IP 67
Weight	266 kg	266 kg	266 kg
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A	500 A	500 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A	590 A	590 A

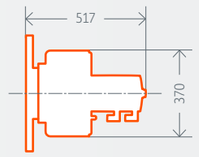
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







1-axis positioner
KP1-MDC

Simple planning. The KP1-MDC makes planning even easier – with its identical loading height and the same hole pattern up to 1,000 kg.

Modular design. The modular structure of the positioners provides maximum flexibility for implementing individual customer solutions.

Space-saving construction. The single-axis positioners KP1-MDC are modular, highly compact units and are even suitable for confined installations.

Infinite rotation. Thanks to its infinitely rotating design, the single-axis positioner KP1-MDC is optimally positioned and can be used without limitation in any axis orientation.

Any installation position. Deploy the KP1-MDC in floor, wall, angle or ceiling-mounted positions without any restriction on the function or precision.

Integrated hollow shaft. Thanks to the hollow shaft integrated into the counterbearings, energy and fluids can be supplied in a particularly space-efficient and convenient manner.

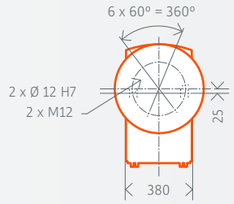
Positioner	KP1-MDC 250	KP1-MDC 500	KP1-MDC 750	KP1-MDC 1000	KP1-MDC 2000	KP1-MDC 4000
Rated payload	250 kg	500 kg	750 kg	1,000 kg	2,000 kg	4,000 kg
Number of axes	1	1	1	1	1	1
Pose repeatability	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm
Standard turning range	Infinite	Infinite	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	368 Nm	736 Nm	736 Nm	1,472 Nm	3,900 Nm	5,890 Nm
Permissible mass moment of inertia	180 kg m²	359 kg m²	530 kg m²	719 kg m²	2,100 kg m²	4,300 kg m²
Turning time (180° / 360°)	2.2 s / 3.5 s (2.5 s / 4.2 s KR C4 compact)	2.7 s / 4.6 s	2.9 s / 4.9 s	2.3 s / 4.0 s	3.3 s / 5.8 s	3.8 s / 6.8 s
Installation position	Variable	Variable	Variable	Variable	Variable	Variable
Diameter hollow shaft in counterbearing	69 mm	69 mm	69 mm	69 mm	69 mm	69 mm
Protection rating	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
Weight	147 kg	175 kg	175 kg	241 kg	677 kg	850 kg
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A

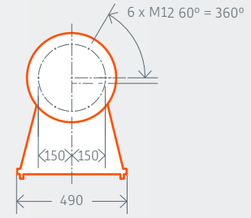
Operating conditions

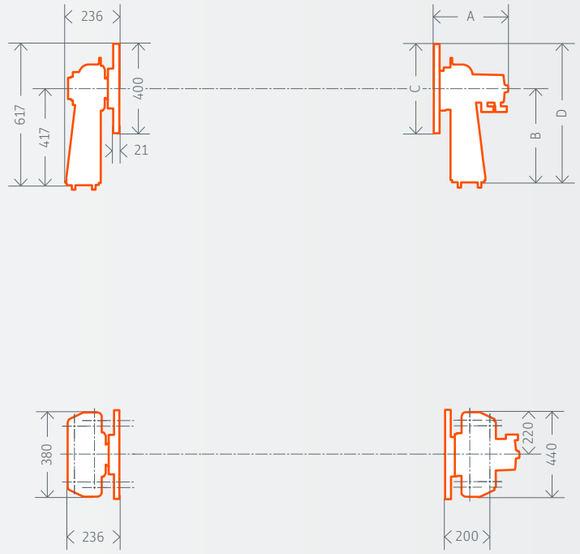
Ambient temperature	+5 °C to +40 °C

Controller	KR C4 compact (KP1-MDC 250), KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD

Working envelope[1]	Dimensions A	Dimensions B	Dimensions C	Dimensions D
KP1-MDC 250	332 mm	417 mm	400 mm	617 mm
KP1-MDC 500	403 mm	417 mm	400 mm	617 mm
KP1-MDC 750	403 mm	417 mm	400 mm	617 mm
KP1-MDC 1000	426.5 mm	417 mm	500 mm	667 mm
KP1-MDC 2000	579 mm	494 mm	660 mm	824 mm
KP1-MDC 4000	665.5 mm	495 mm	660 mm	825 mm







[1] Exemplary drawing for KP1-MDC 250 to KP1-MDC 1000

1-axis positioner
KP1-MDC HW

Reliable planning. The single-axis positioner KP1-MDC HW is available in all payload categories from 250 kg up to 1,000 kg with identical loading height and hole pattern. For simpler planning.

Modular design. The modular structure of the positioners provides maximum flexibility for implementing individual customer solutions.

Space-saving construction. The single-axis positioners KP1-MDC HW are modular, highly compact units and are even suitable for confined installations.

Infinite rotation. Thanks to its infinitely rotating design, the KP1-MDC HW is optimally positioned and can be used without limitation in any axis orientation.

Any installation position. Deploy the KP1-MDC HW in floor, wall, angle or ceiling-mounted positions without any restriction on the function or precision.

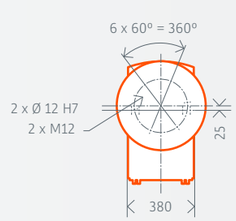
Integrated hollow shaft. The drive and counterbearing have a hollow shaft through which energy and fluids can be supplied in a particularly space-efficient and convenient manner. For greater flexibility.

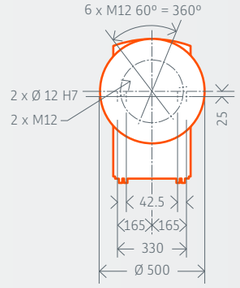
Positioner	KP1-MDC 250 HW	KP1-MDC 500 HW	KP1-MDC 750 HW	KP1-MDC 1000 HW
Rated payload	250 kg	500 kg	750 kg	1,000 kg
Number of axes	1	1	1	1
Pose repeatability	<±0.06 mm	<±0.06 mm	<±0.06 mm	<±0.06 mm
Standard turning range	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	370 Nm	736 Nm	1,100 Nm	1,962 Nm
Permissible mass moment of inertia	180 kg m²	360 kg m²	539 kg m²	736 kg m²
Turning time (180° / 360°)	1.9 s / 3.4 s	2 s / 3.5 s	2.1 s / 3.6 s	2.3 s / 3.8 s
Installation position	Variable	Variable	Variable	Variable
Diameter of hollow shaft	60 mm	60 mm	60 mm	60 mm
Diameter of counterbearing hollow shaft	69 mm	69 mm	69 mm	69 mm
Protection rating	IP 67	IP 67	IP 67	IP 67
Weight	334 kg	334 kg	334 kg	334 kg
Optional: rated welding current (100 % duty cycle), infinitely rotating	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A
Optional: rated welding current (60 % duty cycle), infinitely rotating	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A

Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD





2-axis positioner
KP2-HV HW

High precision. The rotational axis and tilting axis enable large and heavy components to be positioned.

Extremely flexible. The KP2-HV 1100 HW can move payloads of up to 1,100 kg, while the KP2-HV 2600 HW can be used for payloads of up to 2,600 kg.

Robust design. The housing provides outstanding stability – even in harsh production environments.

Simple integration. The positioner can be combined with any KUKA robot quickly and easily by means of KUKA EMD mastering.

Integrated hollow shaft. The two-axis positioner KP2-HV HW has an integrated hollow shaft which allows energy and fluids to be supplied in a particularly space-efficient manner.

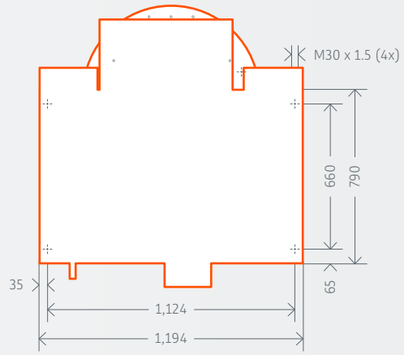
Simple transportation. Straightforward transportation and simple integration thanks to built-in fork slots.

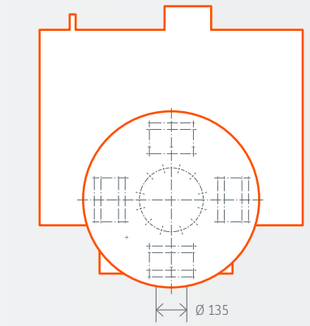
Positioner	KP2-HV 1100 HW	KP2-HV 2600 HW
Rated payload	1,100 kg	2,600 kg
Face plate diameter	Ø 800 mm	Ø 1,200 mm
Pose repeatability	±0.20 mm r = 400 mm	±0.35 mm r = 400 mm
Max. tilting torque	5,100 Nm	9,250 Nm
Max. rotational torque	2,200 Nm	3,900 Nm
Standard tilting range	115°	120°
Standard turning range	370°	370°
Tilting axis velocity	60 °/s	25 °/s
Rotational axis velocity	90 °/s	50 °/s
Permissible mass moment of inertia	250 kg m²	500 kg m²
Loading height	1,085 mm	1,145 mm
Width	1,200 mm	1,630 mm
Tilting axis height	865 mm	995 mm
Depth	790 mm	1,120 mm
Diameter of counterbearing hollow shaft	Ø 135 mm	Ø 135 mm
Protection rating	IP 65	IP 65
Weight	1,500 kg	2,000 kg
Optional: rated welding current (100 % duty cycle)	360 A / 720 A	360 A / 720 A
Optional: rated welding current (60 % duty cycle)	400 A / 800 A	400 A / 800 A

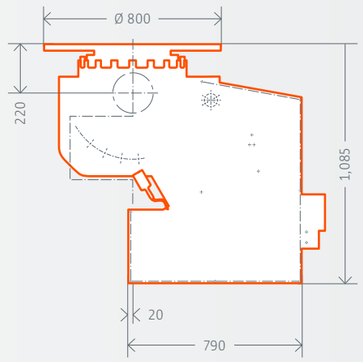
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







* Exemplary drawing for KP2-HV 1100 HW

2-axis positioner
DKP

Enhanced ergonomics. Work processes can be made easier and more efficient thanks to the ergonomic loading height of the 2-axis positioner DKP.

Quick positioning. No matter which axis it is using, the tilt-turn positioner finds the required position swiftly and with the utmost precision.

Central supply of energy and fluids. The DKP allows for the highly process-friendly supply of energy and fluids through the center of the face plate.

Compact design. The 2-axis positioner DKP has been designed with minimized outer measurements and space-saving dimensions.

Flexibility. The 2-axis positioner DKP ensures absolutely flexible machining of the workpieces at all times.

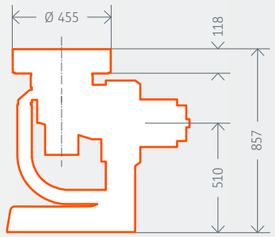
Positioner	DKP-400
Rated payload	400 kg
Number of axes	2
Pose repeatability	<±0.06 mm
Max. tilting torque	1,100 Nm
Installation position	Floor
Max. loading height	857 mm
Protection rating	IP 67
Weight	300 kg
Rated welding current (100% duty cycle)	430 A
Rated welding current (60% duty cycle)	500 A

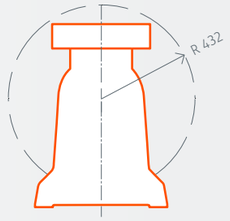
Axis data / Tilting axis A1	DKP-400
Standard turning range	+/–90°
Turning range with energy supply system	+/–90°
Max. load torque	1,900 Nm
Permissible mass moment of inertia	170 kgm²
Turning time (180° / 360°)	94.5° / s

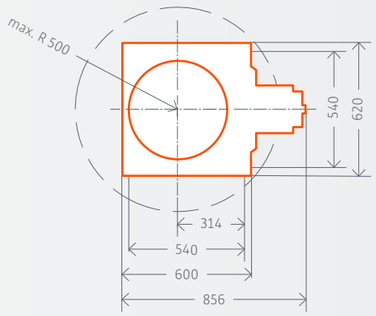
Axis data / Rotational axis A2	DKP-400
Standard turning range	Infinite
Turning range with energy supply system	+/–185°
Max. load torque	750 Nm
Permissible mass moment of inertia	64 kgm²
Turning time (180° / 360°)	126° / s

Operating conditions	
Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







3-axis positioner
KP3-V2H

Maximum flexibility. Tailor the dimensions precisely to your specific installation. Various tool radii and distances between face plates are available.

Identical hole pattern. All 3-axis KP3-V2H positioners have the same hole pattern, allowing you to plan reliably and integrate the positioner seamlessly into your installation.

Simple transportation. Integrated fork slots ensure simple transportation and straightforward integration into your installation.

Compact design. The 3-axis positioner KP3-V2H has been designed with minimized outer measurements and space-saving dimensions.

Positioner	KP3-V2H 250	KP3-V2H 500	KP3-V2H 750	KP3-V2H 1000	KP3-V2H S
Rated payload	250 kg	500 kg	750 kg	1,000 kg	500 to 750 kg
Number of axes	3	3	3	3	3
Distance between face plates (in increments of 200 mm)	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm	1,600 to 3,000 mm
Tool radius (in increments of 100 mm)	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm	500 to 1,000 mm
Pose repeatability	±0.04 mm r = 1,000 mm	±0.04 mm r = 1,000 mm	±0.04 mm r = 1,000 mm	±0.04 mm r = 1,000 mm	±0.04 mm r = 1,000 mm
Max. tilting torque	3,311 Nm	6,622 Nm	9,933 Nm	13,244 Nm	13,244 Nm
Installation position	Floor	Floor	Floor	Floor	Floor
Max. loading height	950 mm	950 mm	950 mm	950 mm	950 mm
Protection rating	IP 67	IP 67	IP 67	IP 67	IP 67
Weight	1,331 kg	1,389 kg	1,491 kg	1,619 kg	1,619 kg
Optional: rated welding current (100% duty cycle), infinitely rotating	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A
Optional: rated welding current (60% duty cycle), infinitely rotating	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A
Load ratio	100 : 80	100 : 80	100 : 80	100 : 80	100 : 80

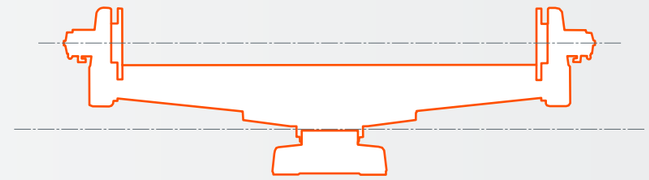
Axis data / Main rotational axis A1	KP3-V2H 250	KP3-V2H 500	KP3-V2H 750	KP3-V2H 1000	KP3-V2H S
Standard turning range	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	3,790 Nm	6,420 Nm	7,420 Nm	8,600 Nm	8,600 Nm
Permissible mass moment of inertia	3,517 kg m²	4,896 kg m²	6,212 kg m²	7,887 kg m²	7,887 kg m²
Turning time (180°)	3.7 s	3.8 s	3.3 s	3.7 s	≤2 s

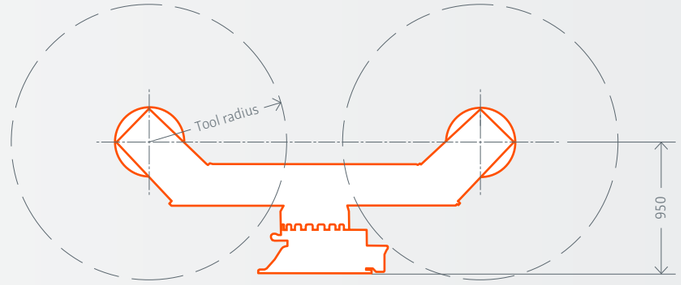
Axis data / Planetary axes A2, A3	KP3-V2H 250	KP3-V2H 500	KP3-V2H 750	KP3-V2H 1000	KP3-V2H S
Standard turning range	Infinite	Infinite	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°	+/–185°	+/–185°
Max. load torque	368 Nm	736 Nm	736 Nm	1,472 Nm	1,472 Nm
Permissible mass moment of inertia	180 kg m²	359 kg m²	530 kg m²	719 kg m²	719 kg m²
Diameter of counterbearing hollow shaft	69 mm	69 mm	69 mm	69 mm	69 mm
Turning time (180° / 360°)	2.2 s / 3.5 s	2.7 s / 4.6 s	2.9 s / 4.9 s	2.3 s / 4.0 s	2.3 s / 4.0 s

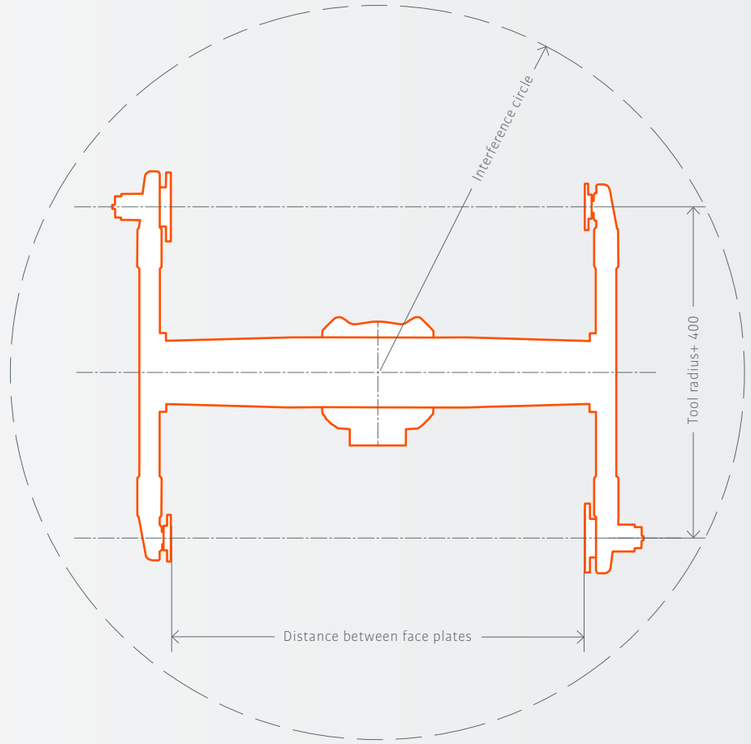
Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD







3-axis positioner
KP3-H2H

Maximum flexibility. A broad selection of tool radii and distances between face plates is available for the KP3-H2H to suit your specific requirements.

Compact design. The 3-axis positioner KP3-H2H has been designed with minimized outer measurements and space-saving dimensions.

Large distances between face plates. The 3-axis positioner KP3-H2H is available with a distance of up to 4,400 mm between the face plates. This means that long components can be machined in a highly space-efficient manner.

Infinite rotation. Thanks to its infinitely rotating face plates, the KP3-H2H allows for optimum positioning and machining of the workpiece in any axis orientation.

Positioner	KP3-H2H 500	KP3-H2H 750	KP3-H2H 1000
Rated payload	500 kg	750 kg	1,000 kg
Number of axes	3	3	3
Distance between face plates (in increments of 400 mm)	1,600 to 4,400 mm	2,000 to 4,400 mm	2,000 to 4,400 mm
Tool radius	600 mm	600, 700, 800 mm	600, 700, 800 mm
Pose repeatability	<±0.08 mm	<±0.08 mm	<±0.08 mm
Installation position	Floor	Floor	Floor
Max. loading height	1,019 mm	1,019 mm	1,019 mm
Protection rating	IP 67	IP 67	IP 67
Weight	2,310 kg	2,500 kg	2,600 kg
Optional: rated welding current (100% duty cycle), infinitely rotating	500 A / 1,000 A	500 A / 1,000 A	500 A / 1,000 A
Optional: rated welding current (60% duty cycle), infinitely rotating	590 A / 1,180 A	590 A / 1,180 A	590 A / 1,180 A
Load ratio	100 : 80	100 : 80	100 : 80

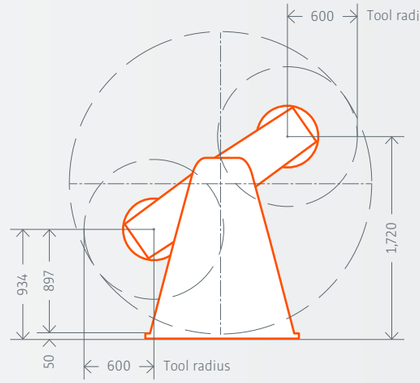
Axis data / Main rotational axis A1	KP3-H2H 500	KP3-H2H 750	KP3-H2H 1000
Turning range	–185° / 5°	–185° / 5°	–185° / 5°
Max. load torque	3,360 Nm	6,520 Nm	8,690 Nm
Permissible mass moment of inertia	3,090 kg m²	6,022 kg m²	8,032 kg m²
Turning time (180°)	3.8 s	3.8 s	3.8 s

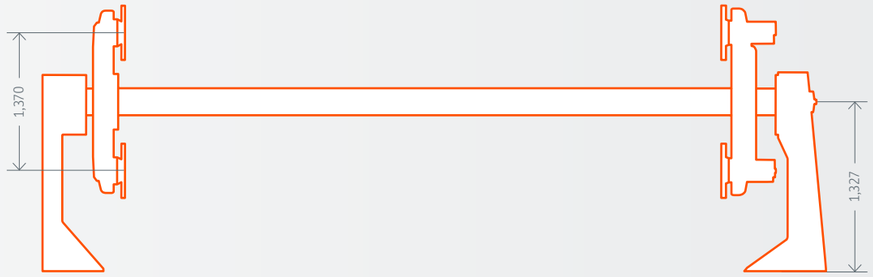
Axis data / Planetary axes A2, A3	KP3-H2H 500	KP3-H2H 750	KP3-H2H 1000
Standard turning range	Infinite	Infinite	Infinite
Turning range with energy supply system	+/–185°	+/–185°	+/–185°
Permissible load torque	736 Nm	736 Nm	1,472 Nm
Permissible mass moment of inertia	359 kg m²	530 kg m²	719 kg m²
Diameter of counterbearing hollow shaft	69 mm	69 mm	69 mm
Turning time (180° / 360°)	2.7 s / 4.6 s	2.9 s / 4.9 s	2.3 s / 4.0 s

Operating conditions

Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD





* Exemplary drawing for KP3-H2H 500 (tool radius 600 mm)

3-axis positioner
KP3-V2MD

Modular unit. The integrated modular unit makes it possible to create an individual 2-station positioner.

Simple transportation. Integrated fork slots ensure simple transportation and straightforward integration into your installation.

Stiff design. The KP3-V2MD has been designed with particularly high stiffness so that it can move even heavy tool holders and components into position with the utmost precision.

Hollow shafts in both face plates. Thanks to the hollow shafts integrated into the two face plates, energy and fluids can be supplied in a simple and flexible manner.

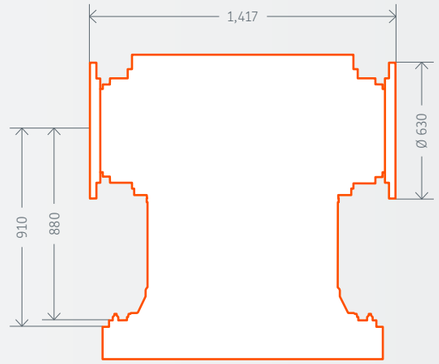
Positioner	KP3-V2MD 2000
Rated payload	2,000 kg
Number of axes	3
Pose repeatability	<±0.03 mm
Max. tilting torque	25,163 Nm
Installation position	Floor
Max. loading height	880 mm
Protection rating	IP 67
Weight	1,600 kg

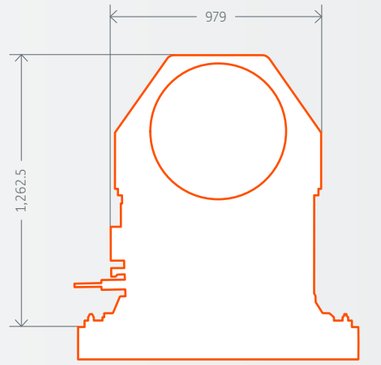
Axis data / Main rotational axis A1	KP3-V2MD 2000
Standard turning range	+/–185°
Turning range with energy supply system	+/–185°
Max. load torque	8,820 Nm
Permissible mass moment of inertia	11,600 kgm²
Turning time (180° / 360°)	3.7 s / 6.7 s

Axis data / Planetary axes A2, A3	KP3-V2MD 2000
Standard turning range	Infinite
Turning range with energy supply system	+/–185°
Max. load torque	5,000 Nm
Permissible mass moment of inertia	2,750 kgm²
Diameter of hollow shaft	139 mm
Turning time (180° / 360°)	3.3 s / 5.8 s

Operating conditions	
Ambient temperature	+5 °C to +40 °C

Controller	KR C4, KR C4 smallsize-2
Teach pendant	KUKA smartPAD





Faster as a team

No matter which robot you choose – KUKA has the matching system components for you. KUKA robots embody the essential characteristics of future-oriented robotic technology. Mastering high loads, extremely long reaches and high precision. Simpler, more reliable and more flexible than ever before. Thanks to an outstanding availability of almost 100 %, KUKA robots make your automation processes easier to calculate than ever before – each and every day, starting with the initial investment.

More powerful as a team

Motors and motor-gear units with team spirit. KUKA motor-gear units and motors facilitate the development and integration of customized solutions. The power range of the motor-gear units extends from 420 Nm to 8,800 Nm. The power range of the motors extends from 300 watts to 8,600 watts.

Safer as a team

KR C4 – the control system of the future. Safer, more powerful and more flexible. That's because this all-rounder is able to control not only KUKA robots. With its open architecture, it can manage all mechanical equipment and even entire systems. In this way, the KR C4 provides a firm foundation for the automation of tomorrow. This significantly reduces your costs in automation for integration, maintenance and servicing. At the same time, the long-term efficiency and flexibility of the systems are increased. The KR C4 gives you the necessary openness to meet the challenges posed by tomorrow's markets.

Simpler as a team

The simplest way of operating robots. Touch screen. Graphical support. Flexible interaction. With its large touch screen, the KUKA smartPAD allows operation of both the robots and entire systems, which can be represented on the screen. The display adapts to show the user only those operator control elements that are needed at any given moment. Attention is always focused on what is important, so that users can work more intuitively and thus more easily, quickly and efficiently.

More versatile as a team

An optimally prepared, efficient software solution for every task. KUKA function and technology packages breathe life into KUKA robots. They enable them to carry out particular industry-specific functions within an automation solution. Welding, moving, machining, measuring, handling or collaborating with other robots or humans in a synchronized manner: KUKA function and technology packages make automation easy.

99.995 % availability

Robust and low on maintenance, this unbeatable team works non-stop on your success.

Universal KUKA controllers
The management systems of the future

More powerful, safer, more flexible and more intelligent. KUKA controllers are the perfect tool for the automation systems of today and tomorrow. Their decisive advantage: thanks to their open architecture, they are masters of simple integration. They can handle a wide range of programming languages and are ideally matched partners for KUKA robots. Moreover, they can take on a huge range of tasks, be used for robots of all payload categories and can control entire systems. All the integrated control modules SafetyControl, RobotControl, MotionControl and LogicControl share a common database and infrastructure which they use intelligently. For maximum performance, scalability and flexibility. Both now and in the future.

_±0.002 sec I/O response time

_Universal application

_For all payloads

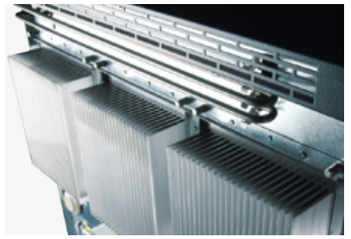
_Allrounder

_Energy-efficient

_Communication talent

_Robustness

Improved system availability due to the systematic reduction of hardware, cables and connectors used in the KR C4



The passive heat exchange system, with separate air circulation in the inner and outer zones of the controller, allows low-maintenance operation even in dusty environments. Entirely without filter mats.

All-rounder. Safety, Robot, Logic and MotionControl – all combined in one controller.

Universally applicable. The open architecture makes it possible to control both KUKA robots and external axes – for maximum flexibility, scalability, performance and openness, in minimum space.

For all payloads. The KR C4 variants are the uniform control system for all KUKA robots, ranging from the low to high payload range categories.

Highly communicative. In addition to its own robot language KRL, KUKA controllers also understand the language of the CNC machining world (G-code) and the language of PLCs, enabling them to communicate directly with your Siemens® or Rockwell® controller, for example.

Robust. The consistent choice of durable components and the well-designed cabinet ensure long-term, reliable operation, even under extreme conditions.

±0.002 sec I/O response time. Secure data exchange in a matter of milliseconds forms the basis for new safety concepts in human-machine collaboration.

Energy-efficient. Thanks to the new energy management system, the energy consumption of the controller can be reduced by up to 95% [1] in standby mode. The improved cooling concept in combination with a temperature-controlled fan further reduces the power dissipation of the controller while allowing for quiet operation.

KR C4 compact

Dimensions (H x W x D)	271 x 483 x 460 mm
Processor	Multi-core technology
Hard drive	SSD
Interface	USB3.0, GbE, DVI-D, Display Port
Max. number of axes	6 + 2 (with additional axis box)
Mains frequency	50 / 60 Hz ± 1 Hz
Rated supply voltage	AC 200 V to 230 V
Without transformer	–
Protection rating	IP20
Weight	33 kg
Ambient temperature	+5 °C to +45 °C

KR C4 smallsize-2

Dimensions (H x W x D)	615 x 580 x 540 mm
Processor	Multi-core technology
Hard drive	SSD
Interface	USB3.0, GbE, DVI-D, Display Port
Max. number of axes	6 + 6 (with additional axis box)
Mains frequency	50 / 60 Hz ± 1 Hz
Rated supply voltage	AC 3 x 208 V to 3 x 575 V
Without transformer	AC 3 x 380 / 400 / 440 / 480 V
Protection rating	IP 54
Weight	60 kg
Ambient temperature	+5 °C to +45 °C

KR C4

Dimensions (H x W x D)	960 x 792 x 558 mm
Processor	Multi-core technology
Hard drive	SSD
Interface	USB3.0, GbE, DVI-D, Display Port
Max. number of axes	9
Mains frequency	49 to 61 Hz
Rated supply voltage	AC 3 x 208 V to 3 x 575 V
Without transformer	AC 3 x 380 / 400 / 440 / 480 V
Protection rating	IP 54
Weight	150 kg
Ambient temperature	+5 °C to +45 °C
Ambient temperature with cooling unit	optional to +50 °C

[1] In standby modes and Eco mode.

KUKA smartPAD
Making robot operation really easy.

Touch screen. Graphics support. Flexible interaction. The more diverse the robots' abilities become, the greater the importance of intuitive user interfaces for their operation. The KUKA smartPAD brilliantly demonstrates on a large antireflection touch screen just how simple it can be. Intelligent, interactive dialogs provide the user with those operator control elements that are currently required. This makes work easier, faster, more efficient, and simply smarter all-round.

Simple, intuitive operator control via touch screen

Ergonomic 6D mouse

_Integrated USB connection

_Antireflection touch display

_Universal application

_Hot-pluggable

_Ergonomically optimized

_Haptic jog keys

Universal application. Operate all KUKA robots and KR C4 controllers with the KUKA smartPAD.

Antireflection touch display. Simple operation via the well-lit 8.4" screen with an intuitive user interface.

Ergonomically optimized. Designed to be user-friendly. Built for mobility and its lightweight, just 1,100 g.

Hot-pluggable. If the KUKA smartPAD is not being used it can be simply unplugged during ongoing operation and used with any other KR C4 controller.

Integrated USB connection. Direct saving and loading of configurations now possible via USB port on the KUKA smartPAD.

Haptic jog keys. The combination of haptic jog keys and a haptically controlled mouse enables intuitive maneuvering with constant visual contact with the robot.

Teach pendant: KUKA smartPAD

Display	scratch-resistant industrial touch display
Display size	8.4"
Dimensions (H x W x D)	240 mm x 290 mm x 50 mm
Weight	1,100 g

KUKA function and technology packages
for the KR C4

KUKA function and technology packages help you to solve specific automation tasks efficiently with minimum programming. KUKA's portfolio of software solutions cover nearly all common areas of application. Using these packages our KUKA system partners implement tailored solutions to meet every customer requirement.

KUKA function and technology packages	
KUKA.WorkVisual	Engineering environment for all KUKA robots for system configuration, programming, data backup, diagnosis, and more.
KUKA.Load	Supports the evaluation of the load on a KUKA robot or the selection of a suitable robot for a given load.
KUKA.UserTech	Fast programming of motion and program sequences using freely definable buttons, input masks and parameter lists.
KUKA.ExpertTech	Faster, simpler programming even for non-experts in KRL code via menu-guided command selection.
KUKA.HMI Zenon	Creation of customized, application-specific user interfaces for visualization and operator control without programming knowledge. Display and operation using the touch panel and keys of the KUKA smartPAD.
KUKA.RemoteView	Allows remote access to the robot via a secure Internet connection, thereby offering the possibility of remote diagnosis or start-up support.
KUKA.VirtualRemotePendant	Allows the use of EtherNet communication to run the user interface of the KUKA smartPAD on an external PC and to operate the robot.
KUKA.RobotSensorInterface	Supports simple and flexible interfacing with sensors in the KR C4. It is also possible to integrate a number of channels with hard real-time requirements.
KUKA.VisionTech	"onBoard" vision system including image processing, camera and sensors. Extensive configuration options enable the flexible use of the robot in an unstructured environment.
KUKA.ConveyorTech	Organizes the cooperation of robots and conveyors. Allows efficient, dynamic handling of parts, even for complex applications.
KUKA.ForceTorqueControl	Takes account of process forces and torques exerted on the workpiece during machining, and controls and adjusts these as specified in the program sequence. In applications such as grinding, polishing, bending or even assembly, this technology package is an indispensable help.
KUKA.SafeOperation	Flexible programming of safe cooperation between humans and machines. Definition of safe workspaces, velocities, envelopes around robot tools, and cooperation with the operator.
KUKA.SafeRangeMonitoring	Beginners' tool for limiting and monitoring the safety and work areas of the robot. The monitoring and limitation of statically defined axis ranges creates an adequate degree of work safety for many applications.

KUKA function and technology packages	
KUKA.Gripper & SpotTech	Programming of grippers and weld guns via easy-to-use inline forms for many industrial applications.
KUKA.ArcTech	For rapid start-up and simple programming of arc welding applications. The complete portfolio of option packages, in combination with sensors and sequence control, enables arc welding at the highest level.
KUKA.LaserTech	A modular, time-saving and easy-to-operate programming support package for laser cutting and laser welding. Both applications can be executed using the same robot – giving maximum flexibility as the workpiece needs to be clamped only once.
KUKA.ServoGun	Enables the operation of electric motor-driven spot weld guns with the KUKA robot controller. Various additional software options allow e.g. the elimination of mechanical gun compensation and other functions.
KUKA.GlueTech	Enables user-friendly programming of dispensing applications such as bonding, seam sealing or application of support seams using inline forms on the KUKA robot controller.
KUKA.RoboTeam	Coordinates and enables the high-precision interaction of a team of robots for handling a shared load or for working together on a moving workpiece.
KUKA.EtherNet KRL	Makes it possible to exchange data with external computers via the EtherNet interface. The robot can function here both as a client and as a server.
KUKA.OPC-Server	Basic technology for standardized data exchange between robots and external controllers for non-real-time information streams. Ideal for interfacing with external visualization and MES systems.
KUKA.PLC Multiprog	Programming environment for an extremely fast Soft PLC conforming to the IEC61131 standard. Expands the functionality of the KR C4 and offers virtually unlimited openness in the programming of automation cells and applications.
KUKA.PLC ProConOS	Runtime system of the KUKA.PLC Multiprog Soft PLC. PLC programs created with KUKA.Multiprog are run directly on the KR C4, with full access to the entire I/O system of the robot. Reading and processing of variables such as axis positions and velocity via function blocks.
KUKA.PLC mxA	Allows direct commanding and positioning of the robot by external controllers (Siemens®, Rockwell®, etc.). The user thus requires no knowledge of robot programming in the KUKA-specific robot language KRL.
KUKA.CNC	Complete software-based CNC implementation for execution of machine tool code (G-code) directly on the robot controller. This turns the robot, with its accuracy and stiffness, into a machining center for path-supported processes.
KUKA.Sim	The simulation programs of KUKA.Sim allow robotic cells to be planned with true-to-life accuracy.

www.kuka.com/contacts

www.facebook.com/KUKA.Robotics

www.youtube.com/kukarobotgroup

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PB0007/EN/2/0917

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