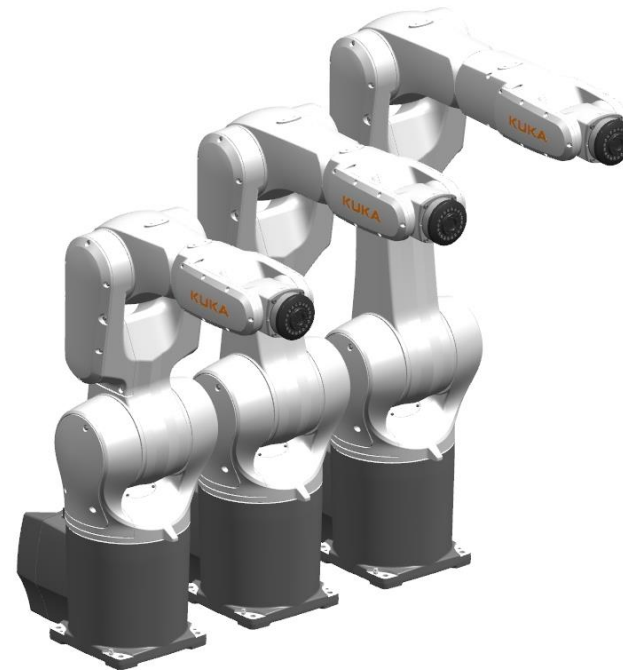


KUKA



KR AGILUS Generation 2 (KR 6 & KR 10)

Internal Sales Information





Overview of Agilus-2

Technical details of Agilus-2

Energy supplies

Timeline

Improvements

The future of Agilus-1

Work envelope

Graphical comparison



AGILUS-2 overview

Reach in mm	Payload	
	6kg	10kg
	KR 6 Rxxx-2	KR 10 Rxxx-2
R 700	X	
R 900	X	X
R 1100		X
Mounting	Floor, Ceiling, Wall – selectable in WoV	
Environment	Standard Industrial Environment (IP67) Comes with KR C4 compact or KR C4 smallsize-2 (KSS 8.3)	





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KR 6 & KR 10: What is new?

Redesign of robot arm:

- New motors
 - New cable routing
 - New bearings
 - IP67 as standard
- Improved quality



Completely new in-line wrist:

- New position of motors and reducers
 - less parts and less quality issues (noise)
 - improved controllability

Same flange for mounting:

- Easy to replace Agilus -1 by -2 generation

KR 6 & KR 10: What is new?



Same flange dimension than 1st Generation

Slightly different dimensions in structural parts might lead to re-teaching in case of robot replacement of Gen 1 by Gen 2.

Same connectors and cables than Generation 1

KR 6 & KR 10 :What is new?





KR 6 & KR 10: Datasheet

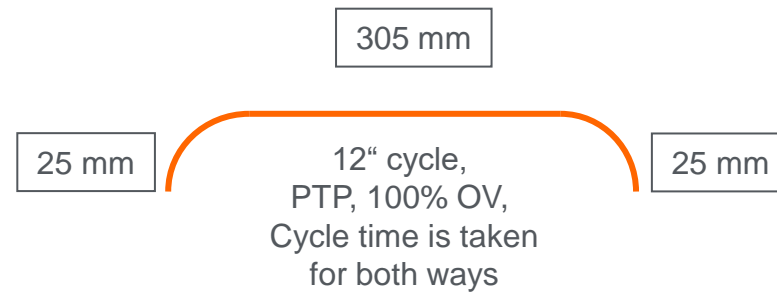


Technical data

Repeatability	+/- 0,01mm
Cleanroom class	ISO 4
IP rating	IP 65 / 67 (with connected purge air)
Weight	53-55kg
ESD	Fulfills DIN EN 61340-5-1



Cycle times



12" - cycles per minute

Roboter	Agilus-2	Agilus-1
KR6R700	138	138
KR6R900	150	150
KR10R900	141	131
KR10R1100	140	143





Single Axes speed

Axes speed (°/s)						
Robot Type	Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Axis 6
KR 6 R700-2	360	300	360	450	450	547,5
KR 6 R700	360	300	360	381	388	615
KR 6 R900-2	360	300	360	450	450	547,5
KR 6 R900	360	300	360	381	388	615
KR 10 R900-2	300	225	330	360	360	438
KR 10 R900	300	225	225	381	311	492
KR 10 R1100-2	300	225	330	360	360	438
KR 10 R1100	300	225	225	381	311	492





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Energy supply – selectable as an option (2nd Gen only)

	Agilus-1	Basic	Fully loaded
I/O	6x I / 2x O Power 24V	8x0,25mm ² I/O's (also usable for power supply 8x0.25A) I/O not controlled	4x I/ 2x O Power 24V
Air	1x6mm direct, 1x to valves	4x4mm Air pipe	1x6mm direct, 1x to valves
Ethernet	100 MBit	---	1 Gbit
Solenoid valves	3x 5/2	---	2x 5/3
Aux Axis	2	---	2



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KR 6 & KR 10 Timeline and ramp up



Market introduction plan:

- All variants in Pricelist and ready for ordering in March 2018
- Robots will be displayed on following shows: PackExpo 2017, CIIF 2017, EMO 2017 and many more
- Production site will be Germany and China



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Overview of robot types

- Following AGILUS-2 robots will be available

Product Group sixx	
Robot Variants Standard	Art.Nr.
KR 6 R700-2	00-290-000
KR 6 R900-2	00-290-001
KR 10 R900-2	00-290-002
KR 10 R1100-2	00-290-003

- New naming excludes sixx in the robot name and adds -2 (e.g. KR 6 R700-2)
- Mounting position is flexible for all new AGILUS-2 robots and can be configured in Work Visual.
- Energy supply can be chosen as an option (2 different styles available)
- Ready Pack robots will be defined and available
- All options (except energy supply and range limitation options) will be the same than for AGILUS KR 6 & KR 10 Gen 1.



Improvements

- **IP67** rating for all AGILUS -2 as standard:
 - High protection rating as standard, WP robots cannot be replaced due to corrosion resistance against liquids (WP have special sealings)
- **EMD mastering** for all axes incl. A6 (with standard micro EMD)
- **Flexible mounting** position: Mounting position can be configured by Work Visual
- **Configurable energy supply** with 1Gbit and 5/3 solenoid valves (max)
- New position of outlets of energy supply in combination with angled plugs **reduce the disturbing contour**
- Massive **reduction of variants** for the entire Agilus empire
- **Cycle time** will be as fast as first generation at least
- **Easy to assemble and maintain**
- **Improved quality**
 - **No more leakage** at reducers
 - High efficient motors → **no thermal issues**
 - New power train concept for in-line wrist → **Lower noise, improved controllability**
- **Standard color white, other colors selectable**
- **Ready Packs will be available (mid 2018)**
- **Connection cables, EMD, break release device, foundations** remains as it is
- Additional, **empty Energy supply** will be available as option



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Overview of Gen 1 AGILUS sixx robots

- Basically all AGILUS-1 sixx robots for special environments (WP, CR, EX, HM) will still be available as first Generation AGILUS robots (with new name).
- All remaining AGILUS-1 robots will get flexible mounting positions (selectable in Work Visual).
 - New flexible mounting position leads to new catalogue elements for Work visual
 - For this we need new names for the robots
 - This is the reason for discontinuing all AGILUS-1 robots and replace them with a new name and article number
- All five robots will be discontinued and not replaced
- New naming:
 - No more sixx and mounting position in robot name
 - Gen 1 is not part of the name
 - E.g. KR 6 R900 WP
- Orders can be placed by End of 2017, old variants are in discontinuation.



List of Gen 1 AGILUS sixx robots

Cleanroom

Discontinued products	Article no.
KR 6 R700 sixx CR	00-236-780
KR 6 R900 sixx CR	00-234-681
KR 10 R900 sixx CR	00-236-915
KR 10 R1100 sixx CR	00-235-300
KR 6 R700 sixx C-CR	00-237-726
KR 6 R900 sixx C-CR	00-237-701
KR 10 R900 sixx C-CR	00-237-703
KR 10 R1100 sixx C-CR	00-237-728
KR 6 R700 sixx W-CR	00-237-725
KR 6 R900 sixx W-CR	00-237-700
KR 10 R900 sixx W-CR	00-237-702
KR 10 R1100 sixx W-CR	00-237-727

Will be replaced by	Article no.
KR 6 R700 CR*	00-295-590
KR 6 R900 CR*	00-293-591
KR 10 R900 CR*	00-293-592
KR 10 R1100 CR*	00-293-594

*Successor will have configurable mounting position and can be mounted on floor, ceiling and wall.



List of Gen 1 AGILUS sixx robots

Waterproof

Discontinued products	Article no.
KR 6 R700 sixx WP	00-235-183
KR 6 R900 sixx WP	00-227-057
KR 10 R900 sixx WP	00-217-650
KR 10 R1100 sixx WP	00-235-180
KR 6 R700 sixx C-WP	00-235-184
KR 6 R900 sixx C-WP	00-234-225
KR 10 R900 sixx C-WP	00-217-651
KR 10 R1100 sixx C-WP	00-235-181
KR 6 R700 sixx W-WP	00-235-186
KR 6 R900 sixx W-WP	00-234-226
KR 10 R900 sixx W-WP	00-217-652
KR 10 R1100 sixx W-WP	00-235-182

Will be replaced by	Article no.
KR 6 R700 WP*	00-295-585
KR 6 R900 WP*	00-293-587
KR 10 R900 WP	00-293-588
KR 10 R1100 WP*	00-293-589

*Successor will have configurable mounting position and can be mounted on floor, ceiling and wall.



List of Gen 1 AGILUS sixx robots

Hygienic Machine (HM-SC)

Discontinued products	Article no.
KR 6 R700 sixx HM-SC	00-255-268
KR 6 R900 sixx HM-SC	00-228-379
KR 10 R900 sixx HM-SC	00-251-650
KR 10 R1100 sixx HM-SC	00-253-053
KR 6 R700 sixx C-HM-SC	00-255-269
KR 6 R900 sixx C-HM-SC	00-252-186
KR 10 R900 sixx C-HM-SC	00-252-188
KR 10 R1100 sixx C-HM-SC	00-253-055
KR 6 R700 sixx W-HM-SC	00-255-270
KR 6 R900 sixx W-HM-SC	00-252-187
KR 10 R900 sixx W-HM-SC	00-252-189
KR 10 R1100 sixx W-HM-SC	00-253-056

Will be replaced by	Article no.
KR 6 R700 HM-SC*	00-293-595
KR 6 R900 HM-SC*	00-293-596
KR 10 R900 HM-SC*	00-293-597
KR 10 R1100 HM-SC*	00-293-598

*Successor will have configurable mounting position and can be mounted on floor, ceiling and wall.



List of Gen 1 AGILUS sixx robots

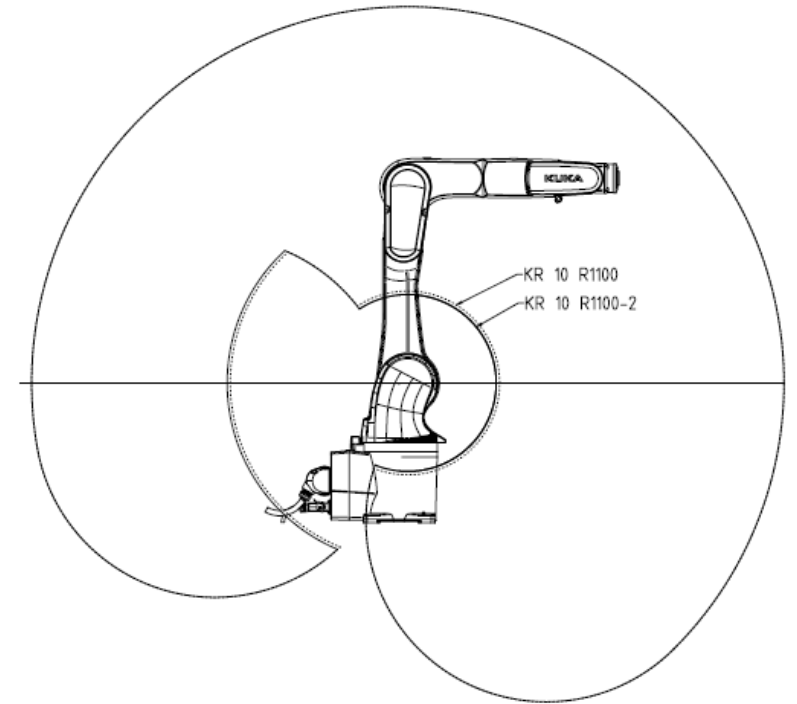
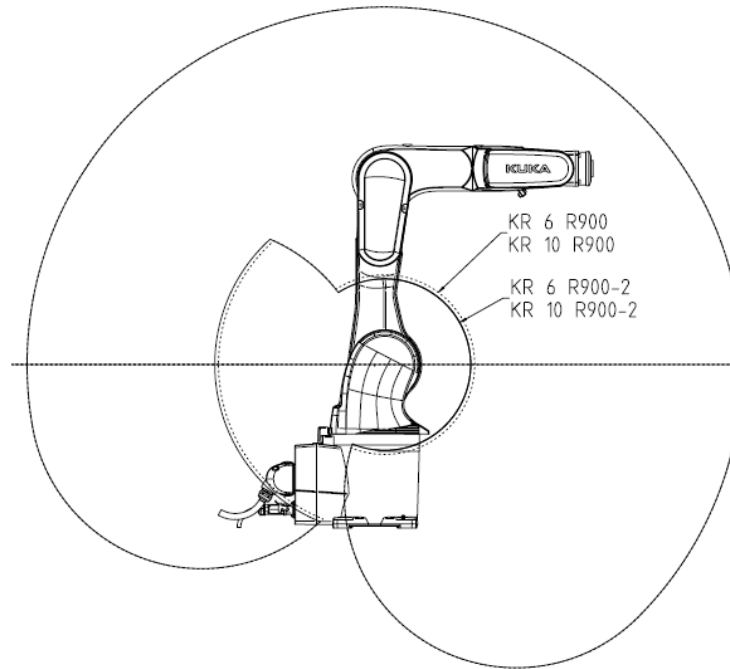
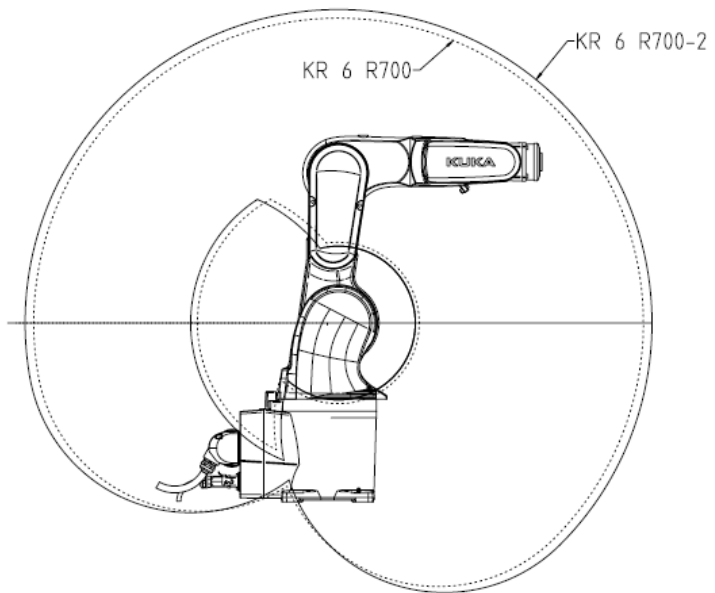
Atex protection (EX)

Discontinued products	Article no.	Will be replaced by	Article no.
KR 6 R900 sixx EX	00-264-048	KR 6 R900 EX	00-293-617

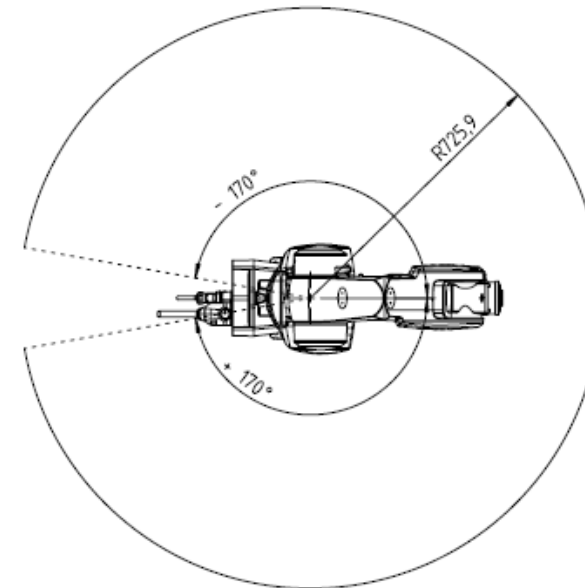
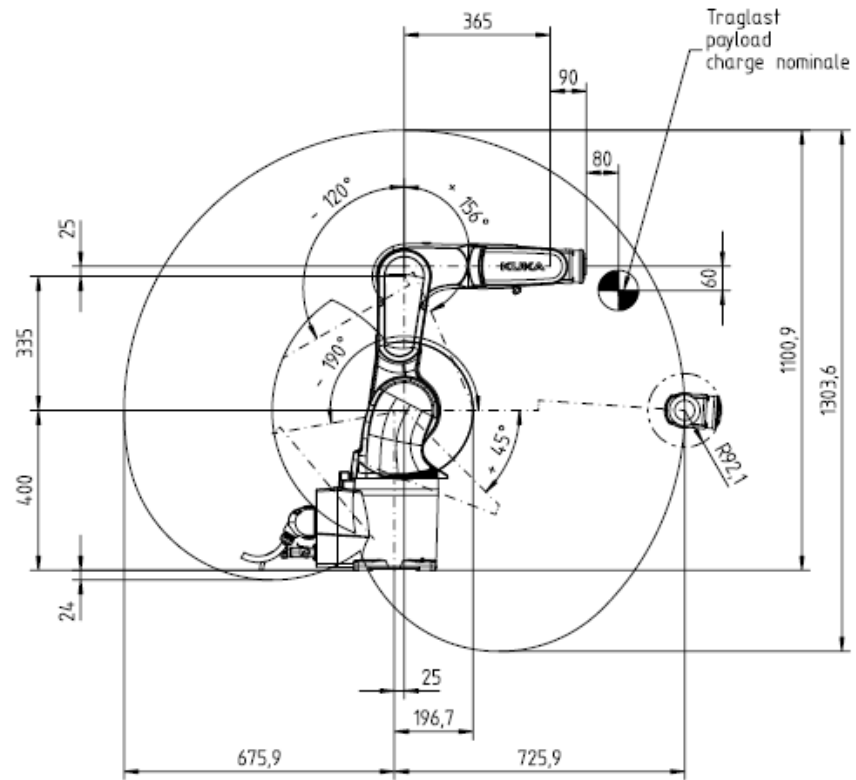


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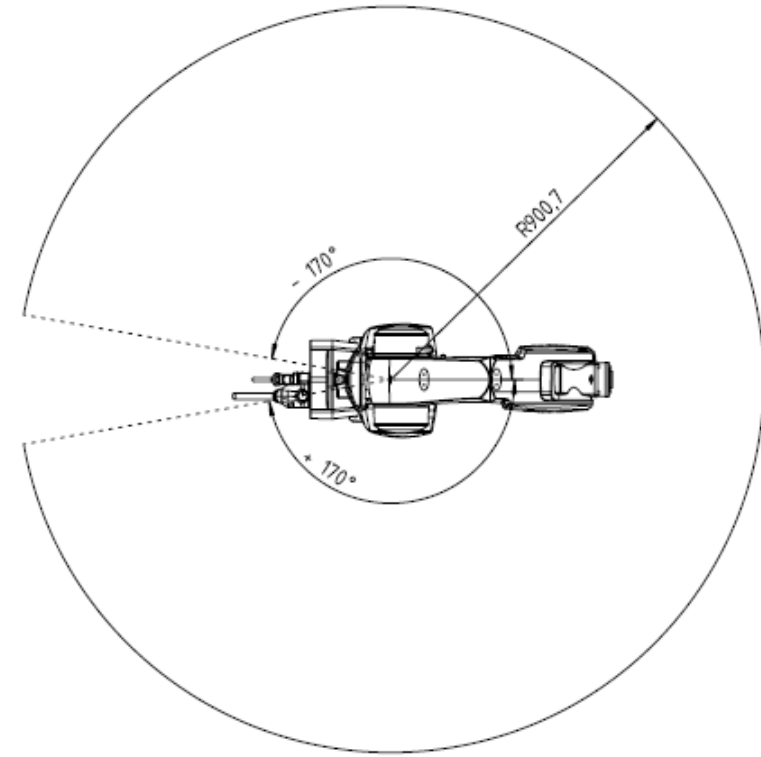
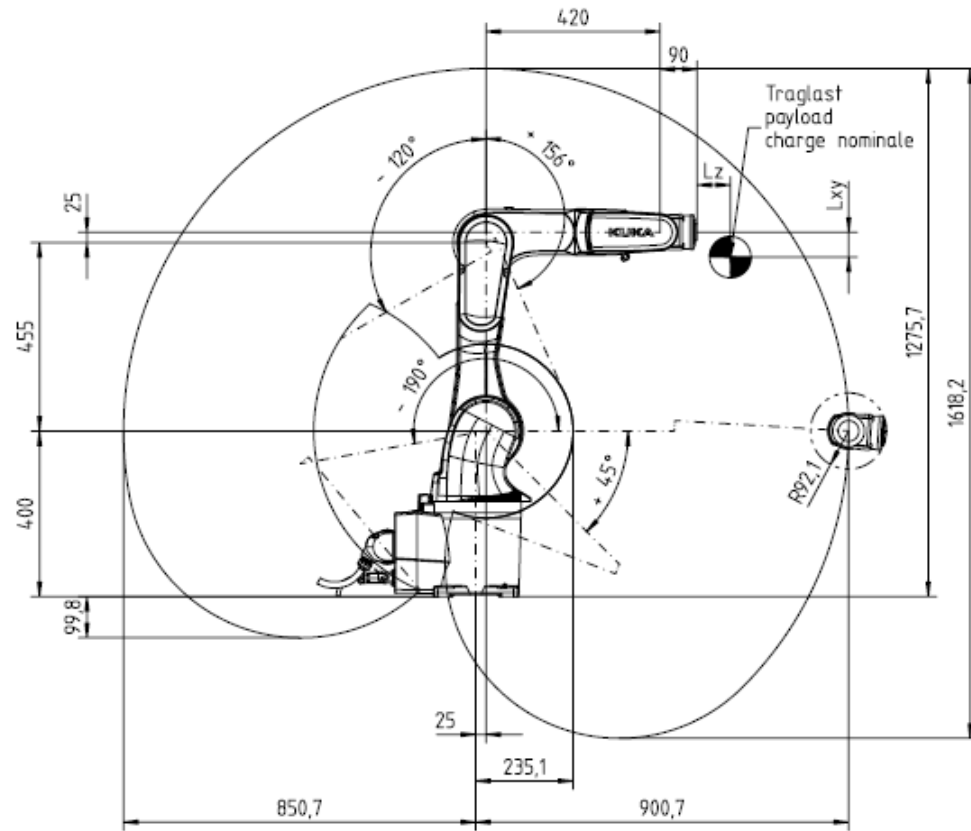
Work envelope comparison



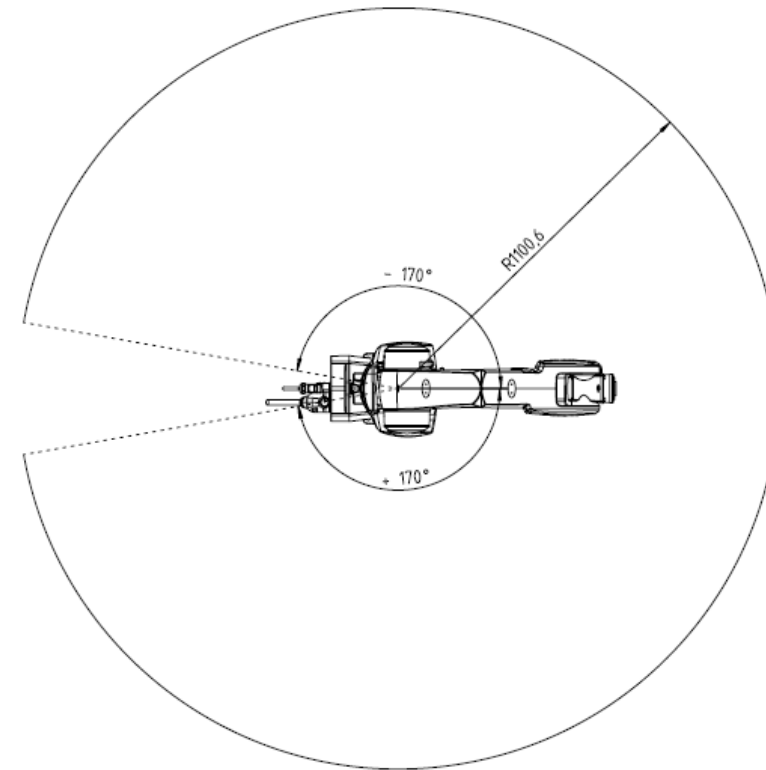
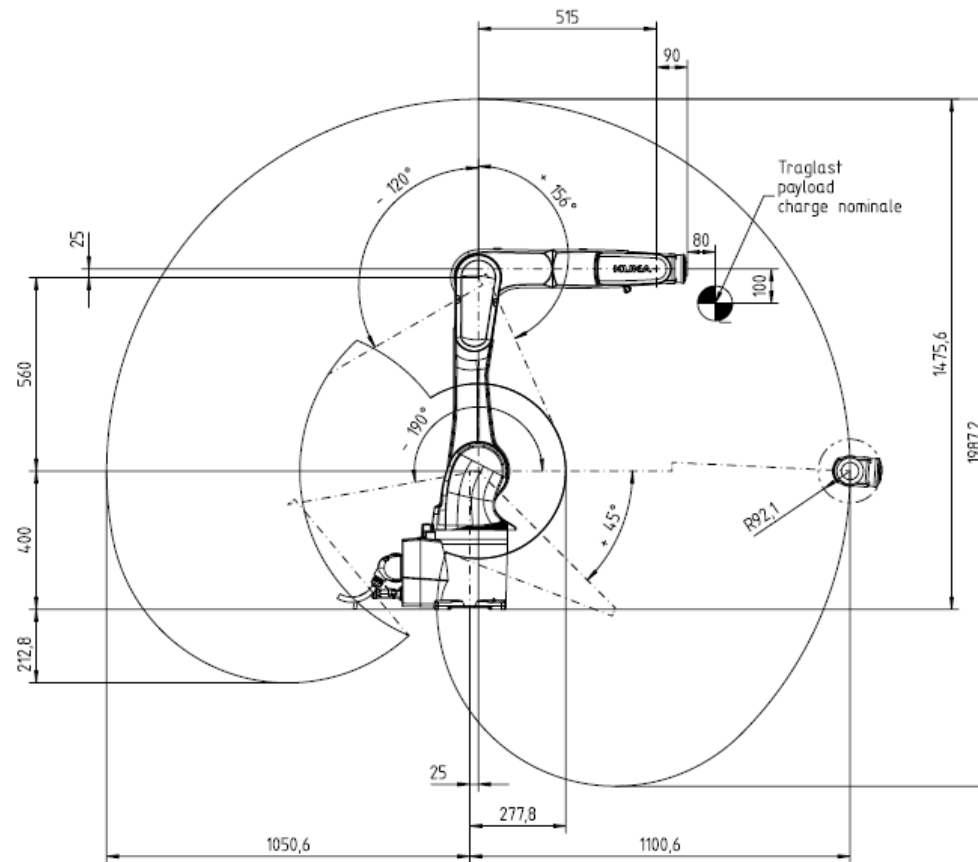
Work envelope R700



Work envelope R900



Work envelope R1100

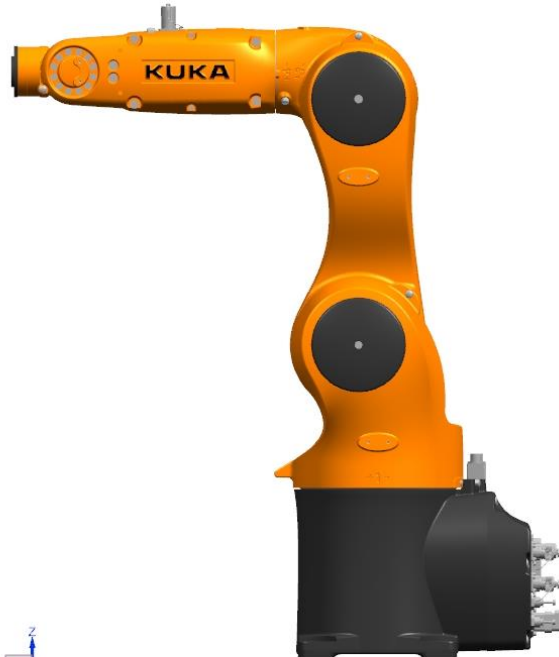




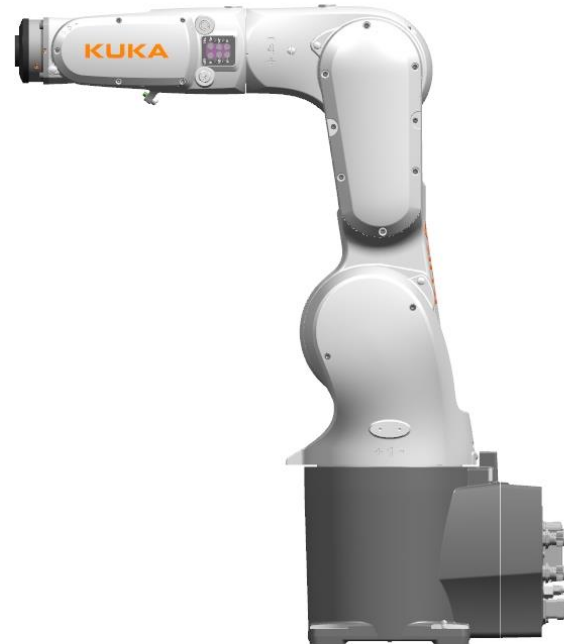
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Comparison AGILUS-1 vs. AGILUS-2 (R700)



Oben ARBEIT Kamera Oben



Oben ARBEIT Kamera Oben