

Kawasaki Heavy Industries, Ltd

Robot Business Division

Tokyo Head Office/Robot Division

1-14-5, Kaigan, Minato-ku, Tokyo 105-8315, Japan
Phone: +81-3-3435-2501 Fax: +81-3-3437-9880

Akashi Works/Robot Division

1-1, Kawasaki-cho, Akashi, Hyogo 673-8666, Japan
Phone: +81-78-921-2946 Fax: +81-78-923-6548

Nishi-Kobe Works/Robot Division

234, Matsumoto, Hasetani-cho, Nishi-ku, Kobe, Hyogo 651-2239, Japan
Phone: +81-78-915-8136 Fax: +81-78-915-8274

Kawasaki Robotics website

<https://kawasakirobotics.com/>



Kawasaki Robostage (showroom)

<https://kawasakirobotics.com/jp-sp/robostage/en/>



Kawasaki Robot LINEUP

Global Network

Kawasaki Robotics (USA), Inc.

28140 Lakeview Drive, Wixom, MI 48393, U.S.A.
Phone: +1-248-446-4100 Fax: +1-248-446-4200

Kawasaki Robotics (UK) Ltd.

Unit 4 Easter Court, Europa Boulevard, Westbrook
Warrington Cheshire, WA5 7ZB, United Kingdom
Phone: +44-1925-71-3000 Fax: +44-1925-71-3001

Kawasaki Robotics GmbH

Im Taubental 32, 41468 Neuss, Germany
Phone: +49-2131-34260 Fax: +49-2131-3426-22

Kawasaki Robotics Korea, Ltd.

43, Namdong-daero 215beon-gil, Namdong-gu, Incheon,
21633, Korea
Phone: +82-32-821-6941 Fax: +82-32-821-6947

Kawasaki Robotics (Tianjin) Co., Ltd.

1-2/F, Building 6, No.19 Xinhuan Road, TEDA, China
Phone: +86-22-5983-1888 Fax: +86-22-5983-1889

Taiwan Kawasaki Robot Center

3F, No.31, Ln.216, Gongyuan Rd., Hsinchu City
30069, Taiwan(R.O.C)
Phone: +886-3-562-0518

Kawasaki Motors Enterprise (Thailand) Co., Ltd. (Rayong Robot Center)

119/10 Moo 4 T.Pluak Daeng, A.Pluak Daeng, Rayong 21140
Thailand
Phone: +66-38-955-040-58 Fax: +66-38-955-145

Singapore Kawasaki Robot Center

100G Pasir Panjang Road #06-10
Singapore 118523
Phone: +65-6513-3145

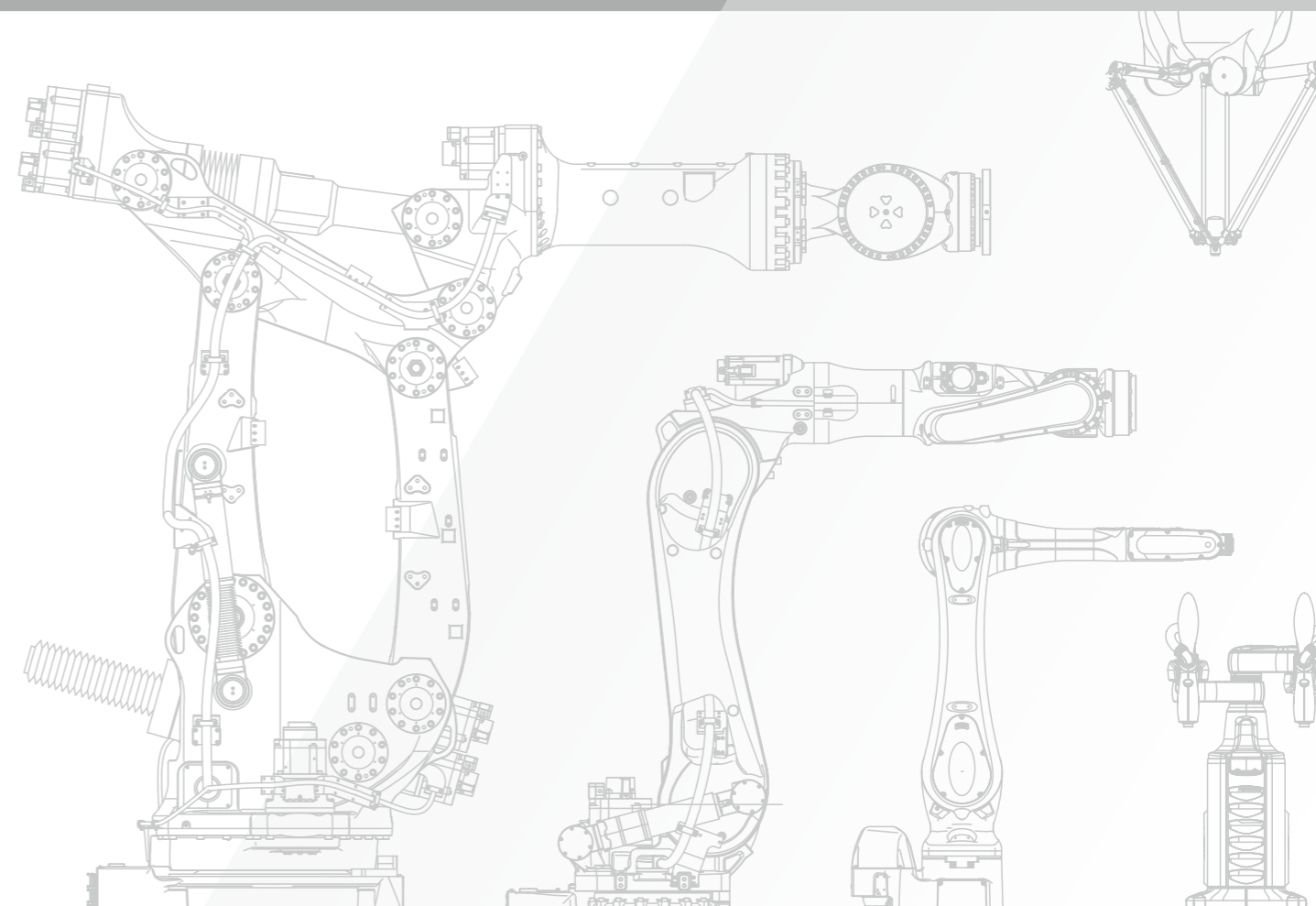
Kawasaki Robotics India Pvt. Ltd.

Plot No. 136, Sector-37, Pace City 1,
Gurgaon, 122101 Haryana, India
Phone: +91-124-437-1845



CAUTIONS TO BE TAKEN TO ENSURE SAFETY

- For those persons involved with the operation / service of your system, including Kawasaki Robot, they must strictly observe all safety regulations at all times. They should carefully read the Manuals and other related safety documents.
- Products described in this catalogue are general industrial robots. Therefore, if a customer wishes to use the Robot for special purposes, which might endanger operators or if the Robot has any problems, please contact us. We will be pleased to help you.
- Be careful as Photographs illustrated in this catalogue are frequently taken after removing safety fences and other safety devices stipulated in the safety regulations from the Robot operation system.





A Kawasaki robot for every application.

User-friendly robots closer to users

As a fully-integrated robot manufacturer with decades of experience in industrial robotics, Kawasaki is an automation partner you can trust. We provide our customers with flexible, high quality robots that stand the test of time in today's ever-changing manufacturing landscape.

As demand for automation grows and applications diversify, Kawasaki's versatile lineup of top-of-the-line robots are ready to take on the challenge.

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Small-to-medium robots up to 80kg payload

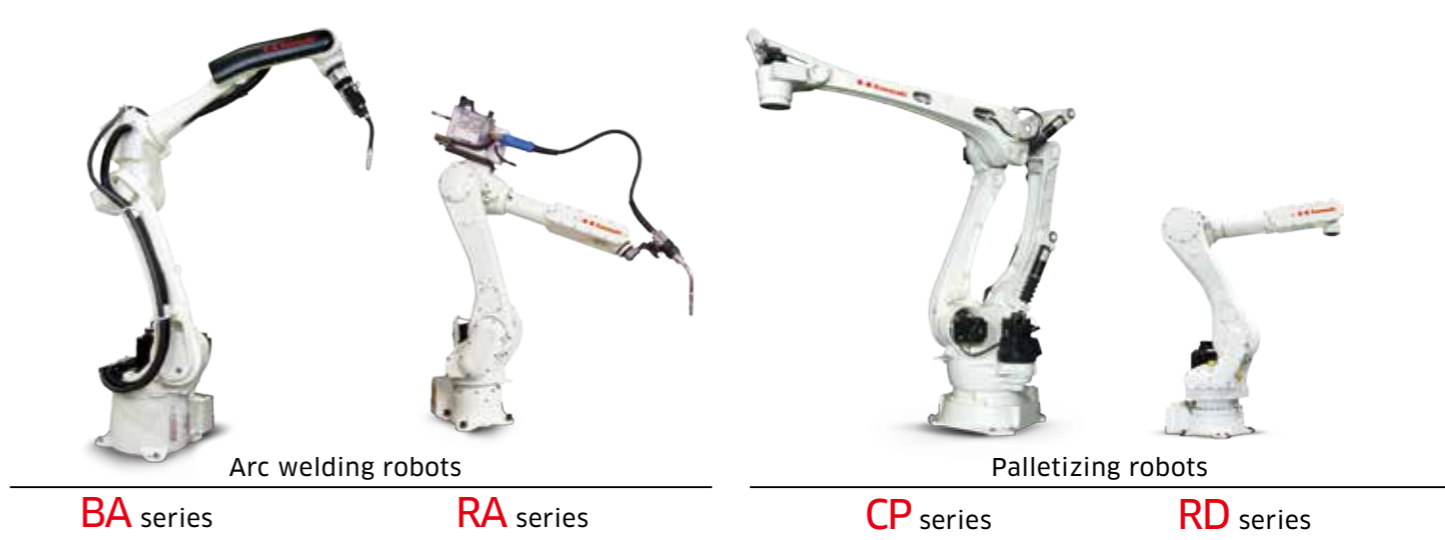
RS series

Large robots up to 300kg payload

BXP/BTP series

BX series

ZX series



Arc welding robots

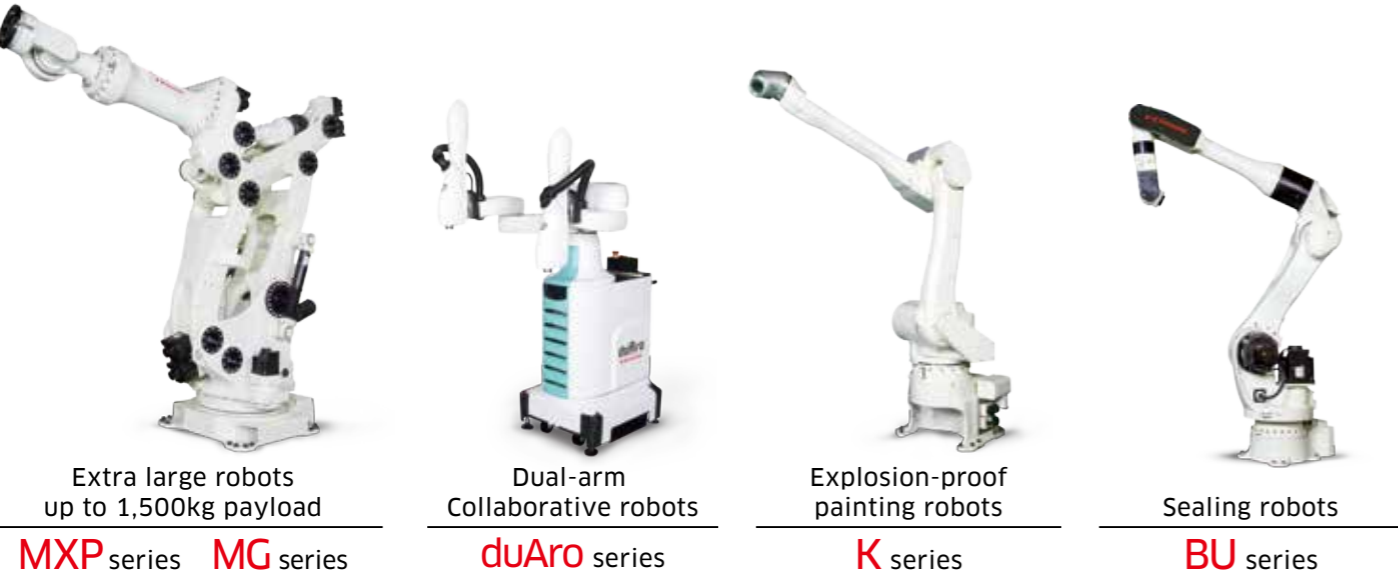
BA series

RA series

Palletizing robots

CP series

RD series



Extra large robots up to 1,500kg payload

MXP series **MG** series

Dual-arm Collaborative robots

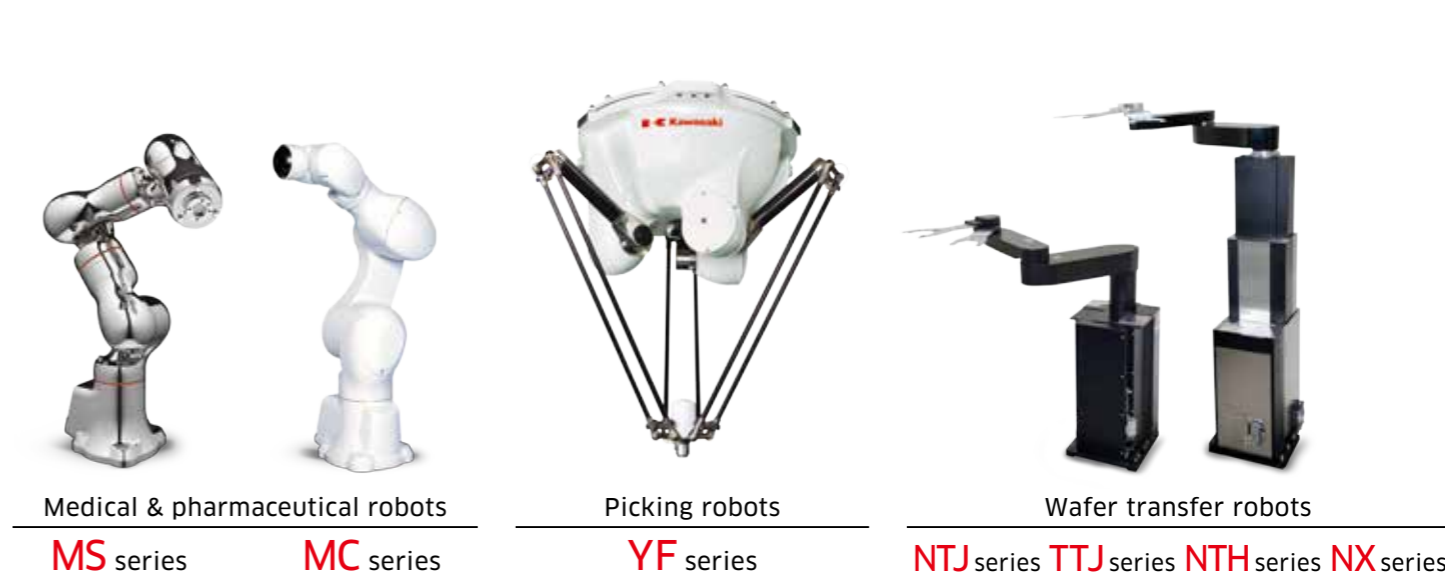
duAro series

Explosion-proof painting robots

K series

Sealing robots

BU series



Medical & pharmaceutical robots

MS series **MC** series

Picking robots

YF series

Wafer transfer robots

NTJ series **TTJ** series **NTH** series **NX** series

RS series

Small-to-medium robots up to 80kg payload

- Wide range of lineup for every application.
- Industry-leading operation speed.
- Compact, yet wide motion range.

[Applications]



Assembling



Sealing



Machine tending



Handling



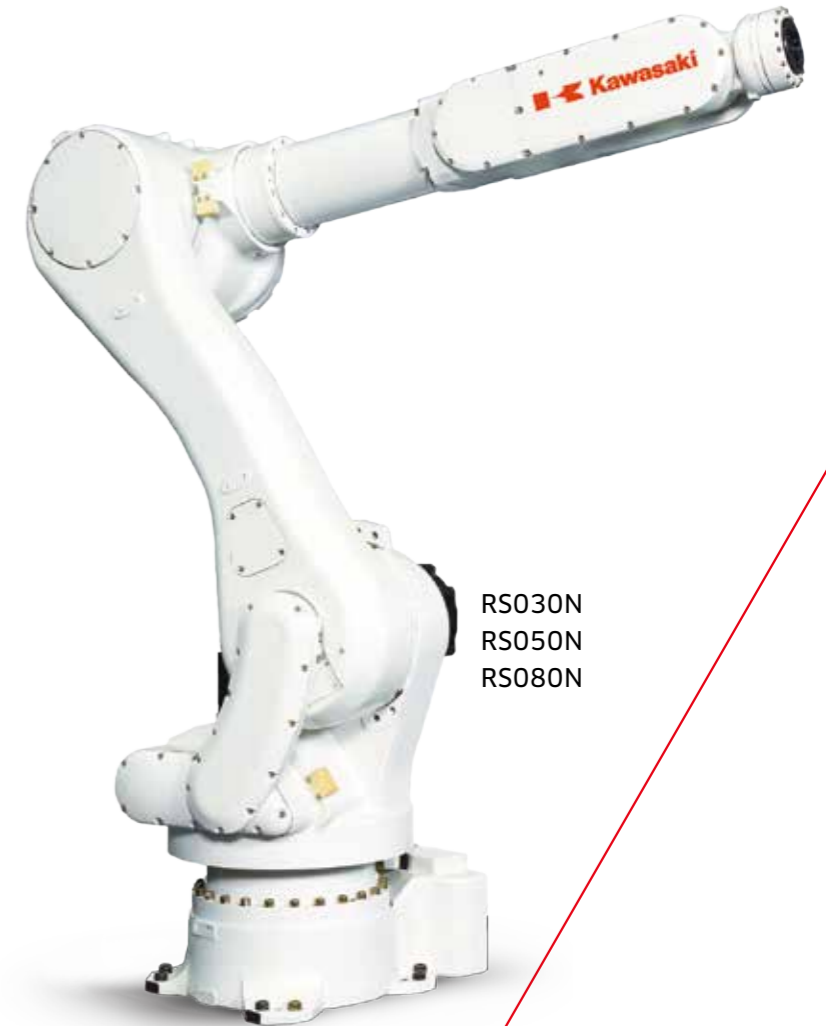
Grinding & deburring



RS007N



RS013N



RS030N
RS050N
RS080N

		RS series						RS series							
		RS003N	RS005N	RS005L	RS006L	RS007N	RS007L	RS010L	RS013N	RS015X	RS025N	RS030N	RS050N	RS080N	
Degree of freedom (axes)		6						6							
Payload (kg)		3	5		6	7		10	13	15	25	30	50	80	
Max. reach (mm)		620	705	903	1,650	730	930	1,925	1,460	3,150	1,885	2,100			
Position repeatability*1 (mm)		±0.02		±0.03			±0.02	±0.03	±0.05	±0.03	±0.06	±0.04	±0.06		
Motion range (°)	Arm rotation (JT1)	±160		±180			±180								
	Arm out-in (JT2)	±150 - -60	±135 - -80		+145 - -105		±135		±155 - -105	+138 - -105	+140 - -105	+131 - -100	+140 - -105		
	Arm up-down (JT3)	+120 - -150	+118 - -172		+150 - -163		±155	±157	+150 - -163	+135 - -159	+135 - -155	+145 - -161	+135 - -155		
	Wrist swivel (JT4)	±360			±270		±200		±270	±200	±360	±270	±360		
	Wrist bend (JT5)	±135	±145			±125		±145		±125	±145				
	Wrist twist (JT6)	±360						±360							
Max. speed (°/s)	Arm rotation (JT1)	360		300	250	470	370	190	265	180	215	180			
	Arm out-in (JT2)	250	360	300	250	380	310	205	250	180	215	180			
	Arm up-down (JT3)	225	410	300	215	520	410	210	265	200	270	185	160		
	Wrist swivel (JT4)	540	460		365	550		400	475	410	420	260	185		
	Wrist bend (JT5)	225	460		380	550		360	475	360	420	260	165		
	Wrist twist (JT6)	540	740		700	1,000		610	730	610	780	360	280		
Mass (kg)		20	34	37	150	35	36	230	170	545	270	555			
Mounting		Floor, Ceiling						Floor, Ceiling							
Degrees of protection		IP54 or equivalent	Wrist : IP67 or equivalent Base axes : IP65 or equivalent				Wrist : IP67 or equivalent Base axes : IP65 or equivalent		All axes: IP67	Wrist : IP67 or equivalent Base axes : IP65 or equivalent		All axes: IP67	Wrist : IP67 or equivalent Base axes : IP65 or equivalent		
Controller/Power requirements		F60/2.0kVA			F60/2.0kVA, F01/5.6kVA			F01/5.6kVA	F60/2.0kVA, F01/5.6kVA		F02/7.5kVA				

*1: Conforms to ISO9283

Large robots
up to 300kg payload

BXP/BTP series

Large robots up to 300kg payload

- Built-in cables and hoses.
- Lighter and more compact.
- Higher speed thanks to new F series controller.

[Applications]



Assembling



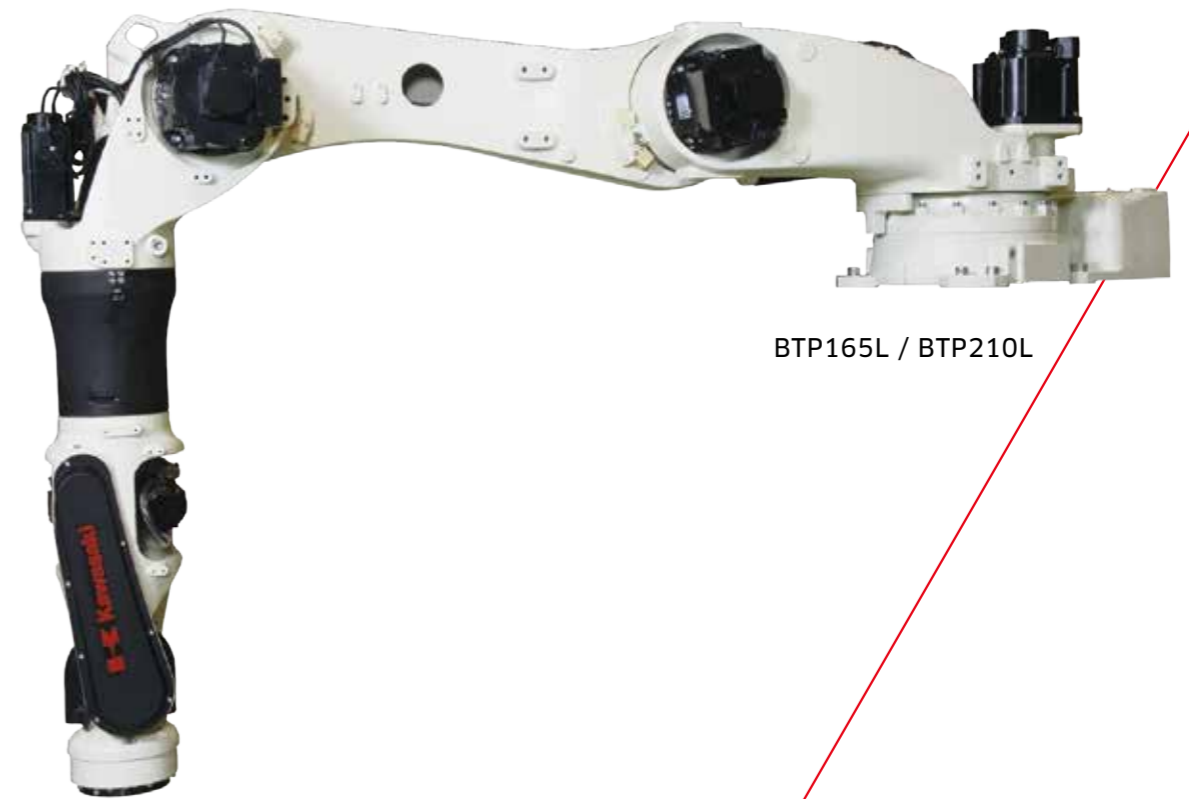
Handling



Spot welding



BXP210L



BTP165L / BTP210L

	BXP series				BXP series		BTP series		
	BXP110S	BXP110L	BXP135X	BXP165N	BXP165L	BXP210L	BTP165L	BTP210L	
Degree of freedom (axes)	6				6		6		
Payload (kg)	110		135	165	165	210	165	210	
Max. reach (mm)	1,634	2,597	2,991	2,325	2,597		3,151		
Position repeatability*1 (mm)	±0.06				±0.06		±0.08		
Motion range (°)	Arm rotation (JT1)		±160		±160		±160		
	Arm out-in (JT2)		+120 - -65		+76 - -60		+80 - -130		
	Arm up-down (JT3)		+90 - -81		+90 - -75		+90 - -75		
	Wrist swivel (JT4)		±210		±210		±210		
	Wrist bend (JT5)		±125		±125		±125		
	Wrist twist (JT6)		±210		±210		±210		
Max. speed (°/s)	Arm rotation (JT1)		140		140		125	115	
	Arm out-in (JT2)		130	105	130	115	105	115	90
	Arm up-down (JT3)		170	135	140	130	115	130	115
	Wrist swivel (JT4)		220		220	190	140	190	140
	Wrist bend (JT5)		185	200	200	180	135	180	135
	Wrist twist (JT6)		300		300	290	240	290	240
Mass (kg)	700	870	880	855	870		1,030		
Mounting	Floor				Floor		Shelf		
Degrees of protection	Wrist : IP67 or equivalent Base axes : IP54 or equivalent				Wrist : IP67 or equivalent Base axes : IP54 or equivalent				
Controller/Power requirements	F02/7.5kVA				F02/7.5kVA				

*1: Conforms to ISO9283

Large robots
up to 300kg payload

BX series

Large robots up to 300kg payload

- Built-in cables and hoses.
- Slim design and small footprint for high-density installation.

[Applications]



Assembling



Handling



Spot welding



BX100N

ZX series

Large robots up to 300kg payload

- Wide range of applications for every industry.
- Suitable for harsh environment thanks to wrist motors located at the shoulder.
- Wide motion range of 360°

[Applications]



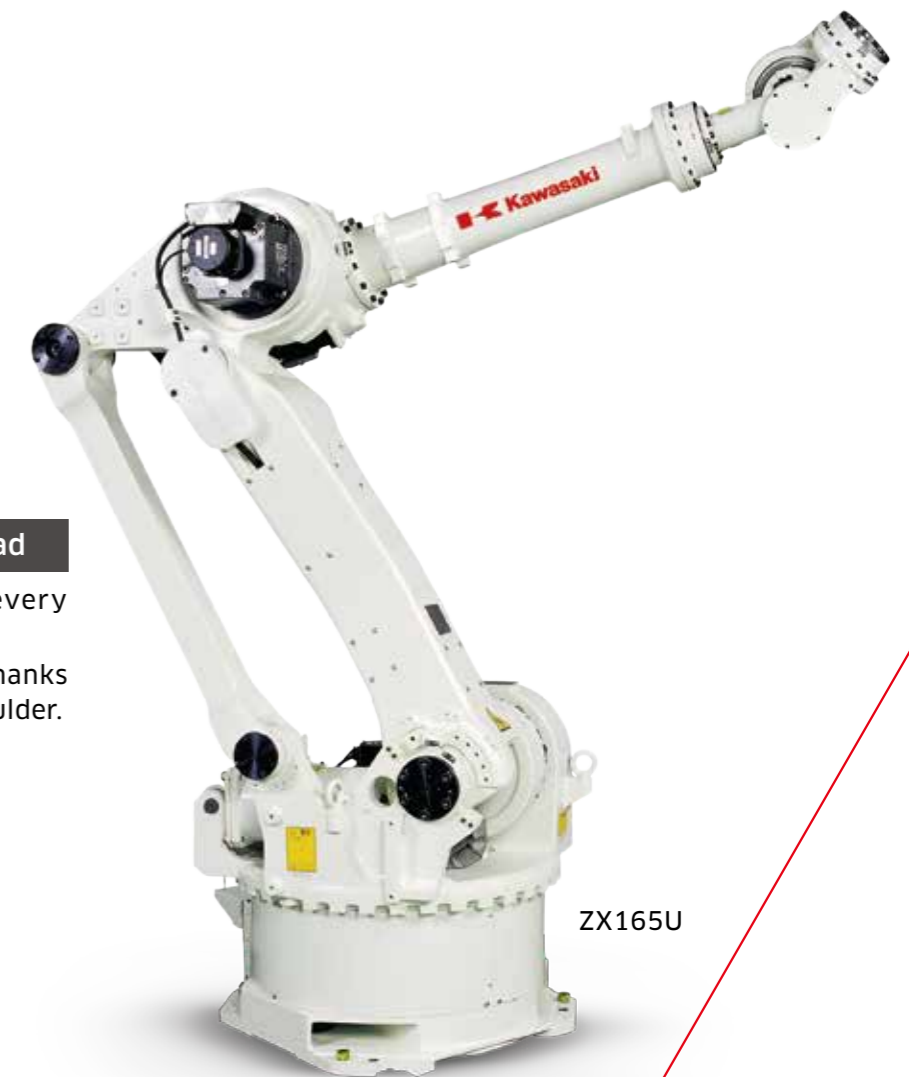
Assembling



Handling



Spot welding



ZX165U

		BX series			
		BX100N	BX200X	BX250L	BX300L
Degree of freedom (axes)		6			
Payload (kg)		100	200	250	300
Max. reach (mm)		2,200	3,412	2,812	
Position repeatability*1 (mm)		±0.06		±0.07	
Motion range (°)	Arm rotation (JT1)	±160		±180	
	Arm out-in (JT2)	+120 - -65		+76 - -60	
	Arm up-down (JT3)	+90 - -77	+90 - -110		+90 - -120
	Wrist swivel (JT4)		±210		
	Wrist bend (JT5)		±125		
	Wrist twist (JT6)		±210		
Max. speed (°/s)	Arm rotation (JT1)	135		125	
	Arm out-in (JT2)	110	102	120	102
	Arm up-down (JT3)	140	85	100	85
	Wrist swivel (JT4)	200	105	140	105
	Wrist bend (JT5)	200	120	140	110
	Wrist twist (JT6)	300	200		180
Mass (kg)	740	1,450	1,460		
Mounting	Floor				
Degrees of protection	Wrist : IP67 or equivalent Base axes : IP54 or equivalent				
Controller/Power requirements	F02/7.5kVA				

*1: Conforms to ISO9283

		ZX series				
		ZX130S	ZX130L	ZX165U	ZX200S	ZX300S
Degree of freedom (axes)		6				
Payload (kg)		130		165	200	300
Max. reach (mm)		2,651	2,951	2,651		2,501
Position repeatability*1 (mm)		±0.3				
Motion range (°)	Arm rotation (JT1)	±180				
	Arm out-in (JT2)	+75 - -60				
	Arm up-down (JT3)	+250 - -120				
	Wrist swivel (JT4)	±360				
	Wrist bend (JT5)	±130				
	Wrist twist (JT6)	±360				
Max. speed (°/s)	Arm rotation (JT1)	130	110		105	100
	Arm out-in (JT2)	130	110			85
	Arm up-down (JT3)	130	110	115	105	85
	Wrist swivel (JT4)	180	140		120	90
	Wrist bend (JT5)	180	135	155	120	90
	Wrist twist (JT6)	280	230	260	200	150
Mass (kg)	1,350	1,400	1,350	1,400		
Mounting	Floor					
Controller/Power requirements	E02/7.5kVA					

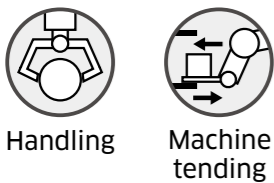
*1: Conforms to ISO9283

MXP series MG series

Extra large robots
up to 1,500kg payload

- Max. payload of 1,500kg suitable for heavy workpieces, e.g. cast iron.
- Dynamic, yet accurate operations due to high positioning repeatability.
- The MG series has a slim body without a counter weight, allowing for a wide motion range and high rigidity.

[Applications]



MXP360L

MG15HL

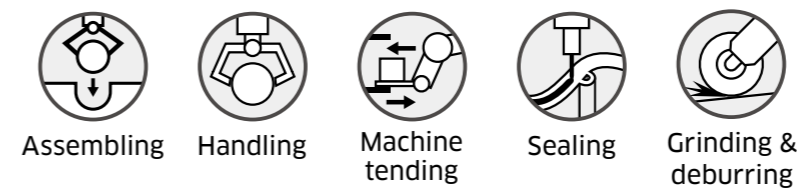
duAro series

Dual-arm
Collaborative robots

- Space-saving without safety fences.*
- With its two arms, duAro can perform as efficient tasks as human workers.
- Easy programming using a tablet and the direct teaching function.

* : Users are required to carry out a safety risk assessment before use.

[Applications]



duAro1

duAro2

	MXP series			MG series
	MXP360L	MXP410X	MXP710L	MG15HL
Degree of freedom (axes)	6			6
Payload (kg)	360	410	710	1,500
Max. reach (mm)	3,234	3,763	2,930	4,005
Position repeatability*1 (mm)	±0.08	±0.12	±0.08	±0.1
Motion range (°)	Arm rotation (JT1)	±160 (±185)		±150
	Arm out-in (JT2)	+90 - -75		+90 - -64
	Arm up-down (JT3)	+50 - -120		+30 - -110*2
	Wrist swivel (JT4)	±360		±360
	Wrist bend (JT5)	±125		±122
	Wrist twist (JT6)	±360		±360
Max. speed (°/s)	Arm rotation (JT1)	100		82
	Arm out-in (JT2)	86		70
	Arm up-down (JT3)	86		70
	Wrist swivel (JT4)	105	110	90
	Wrist bend (JT5)	105	110	90
	Wrist twist (JT6)	165	160	
Mass (kg)	1,550	2,800	2,750	6,550
Mounting	Floor			Floor
Controller/Power requirements	F02/7.5kVA	F04/12kVA		E58/15kVA

*1: Conforms to ISO9283
*2: Max. working range varies depending on the load mass and load torque
*3: The values in the table are maximum values and vary depending on conditions such as load and motion range.

	duAro series				
	duAro1		duAro2		
Degree of freedom (axes)	4 × 2 arms				
Payload (kg)	2 × 2 arms		3 × 2 arms		
Max. reach (mm)	760		785		
Position repeatability (mm)	±0.05				
Motion range	Arm rotation (°)	Arm 1 (lower arm)	Arm 2 (upper arm)	Arm 1 (lower arm)	Arm 2 (upper arm)
		±170(JT1)	-140 - +500(JT1)	±170(JT1)	-140 - +500(JT1)
	±140(JT2)		-130 - +140(JT2)		-140 - +130(JT2)
	Arm up-down*1 (mm)	0 - +150(JT3)		0 - +550(JT3)	
Wrist swivel*1 (°)	±360(JT4)				
Mass (kg)	about 210		about 220		
Mounting	Floor				
Controller/Power requirements	F61/2.0kVA				

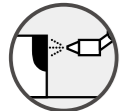
*1: Specification varies in case of other options or conversion

K series

Explosion-proof painting robots

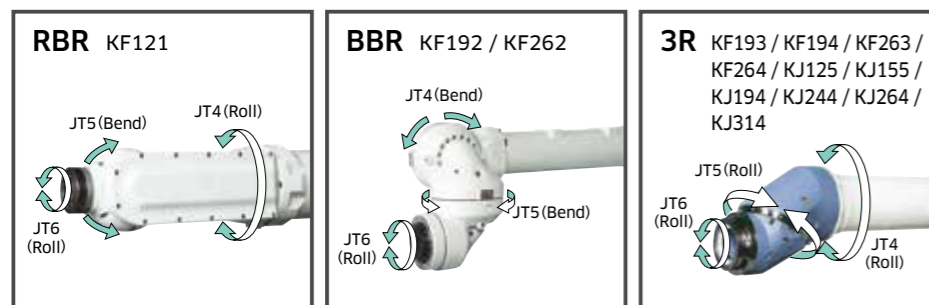
- Extensive product range for painting small parts to large automobile bodies.
- Hollow wrist to prevent painting defects due to paint mist.
- Packaged painting systems for an easy and quick installation and start up.

[Applications]

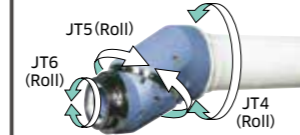


Painting

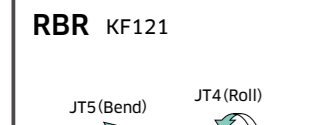
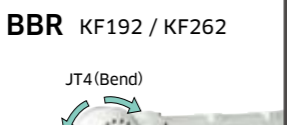
[Variation of Wrists]



3R KF193 / KF194 / KF263 / KF264 / KJ125 / KJ155 / KJ194 / KJ244 / KJ264 / KJ314



BBR KF192 / KF262



KJ264

BU series

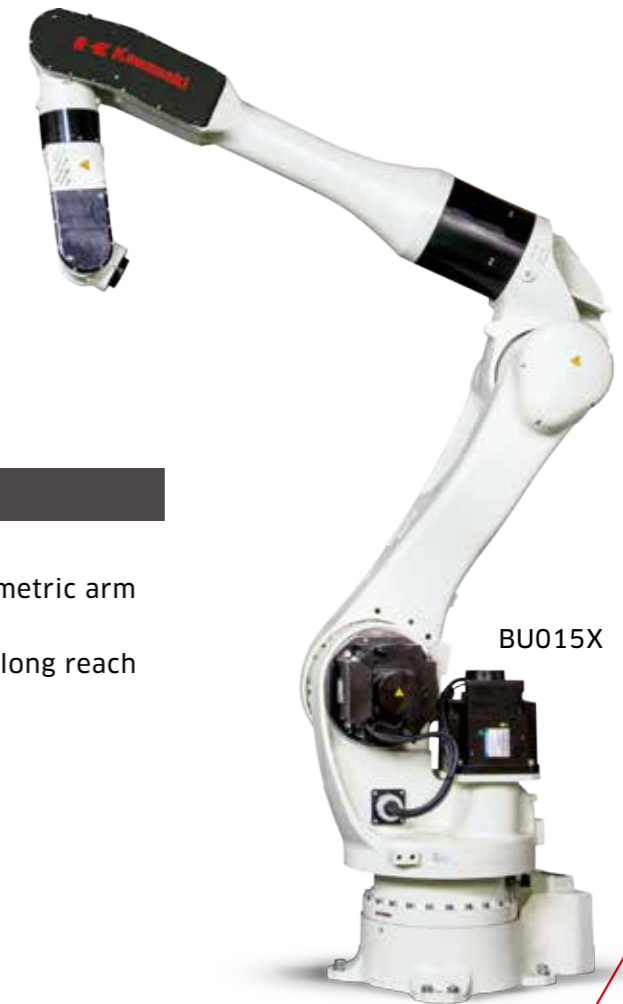
Sealing robots

- Built-in hoses
- Reduced interferences thanks to the symmetric arm design.
- Suitable for complex tasks because of its long reach and the 7-axis construction (UB015X).

[Applications]



Sealing



BU015X

	K series								K series						
	KF121	KF192	KF193	KF194	KF262	KF263	KF264	KJ125	KJ155	KJ194 (Floor/Shelf/Wall)	KJ244 (Floor/Shelf/Wall)	KJ264 (Floor/Shelf/Wall)	KJ314		
Degree of freedom (axes)	6								6				7		
Payload (kg)	5	Wrist : 12 Arm : 20				Wrist : 8 Arm : 5				Wrist : 15 Arm : 25					
Max. reach (mm)	1,240	1,973	1,978	2,665	2,668	1,299	1,545	1,940	2,490	2,640	3,100				
Position repeatability*1 (mm)	±0.2	±0.5				±0.15				±0.5					
Motion range (°)	Arm rotation (JT1)	±160/±60(Shelf)		±150		±150 (Floor)/±60 (wall)		±160		±120/±120/+30 - -120				±120	
	Arm out-in (JT2)	±90		+110 - -60				+130 - -80		+130 - -80					
	Arm up-down (JT3)	±150		+90 - -80				+90 - -75		+90 - -65					
	Wrist swivel (JT4)	±270	±360	±720	±360	±720		±720		±720					
	Wrist bend (JT5)	±145	±360	±720	±360	±720		±720		±720					
	Wrist twist (JT6)	±360	±360	±410	±360	±410		±410		±410					
	Arm swing (JT7)	-								-				±90	
Painting speed (m/s)	-	1.2				1.5				1.5					
Mass (kg)	140	690	720	750	720	740	770	190	195	530/520/520	540/530/530		720		
Mounting	Floor, Ceiling, Shelf*2		Floor, Shelf								Floor, Shelf, Wall				Wall
Power requirements*3 (kVA)	1.5	5				3				5					
Controller	North America	E37	-				E35				E35				
	Europe	E47	E45				E45				E45				
	Japan & Asia	E27	E25				E25				E25				

*1: Conforms to ISO9283
 *2: Floor and wall mount for North America.
 *3: Depends on the payload and motion patterns

	BU series	
	BU015N	BU015X
Degree of freedom (axes)	6	7
Payload (kg)	15	
Max. reach (mm)	1,550	2,887.5
Position repeatability*1 (mm)	±0.04	±0.06
Motion range (°)	Arm rotation (JT1)	±180
	Arm out-in (JT2)	+140 - -105
	Arm up-down (JT3)	+155 - -120 +30 - -170
	Wrist swivel (JT4)	±210
	Wrist bend 1 (JT7)	- +110 - -130
	Wrist bend 2 (JT5)	±120
	Wrist twist (JT6)	±360
Max. speed (°/s)	Arm rotation (JT1)	250
	Arm out-in (JT2)	250
	Arm up-down (JT3)	215
	Wrist swivel (JT4)	280
	Wrist bend 1 (JT7)	- 170
	Wrist bend 2 (JT5)	280
Wrist twist (JT6)	360	
Mass (kg)	160	590
Mounting	Floor	
Controller/Power requirements	E51/5.6kVA	E52/10kVA

*1: Conforms to ISO9283

BA series

Arc welding robots

- Built-in welding cables
- Easy one-cable connection between the robot and welding equipment.

[Applications]



Arc welding



BA013L



RA010N

RA series

Arc welding robots

- Full lineup for a wide range of workpieces with various sizes.
- Easy one-cable connection between the robot and welding equipment.

[Applications]



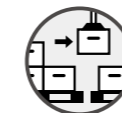
Arc welding

CP series RD series

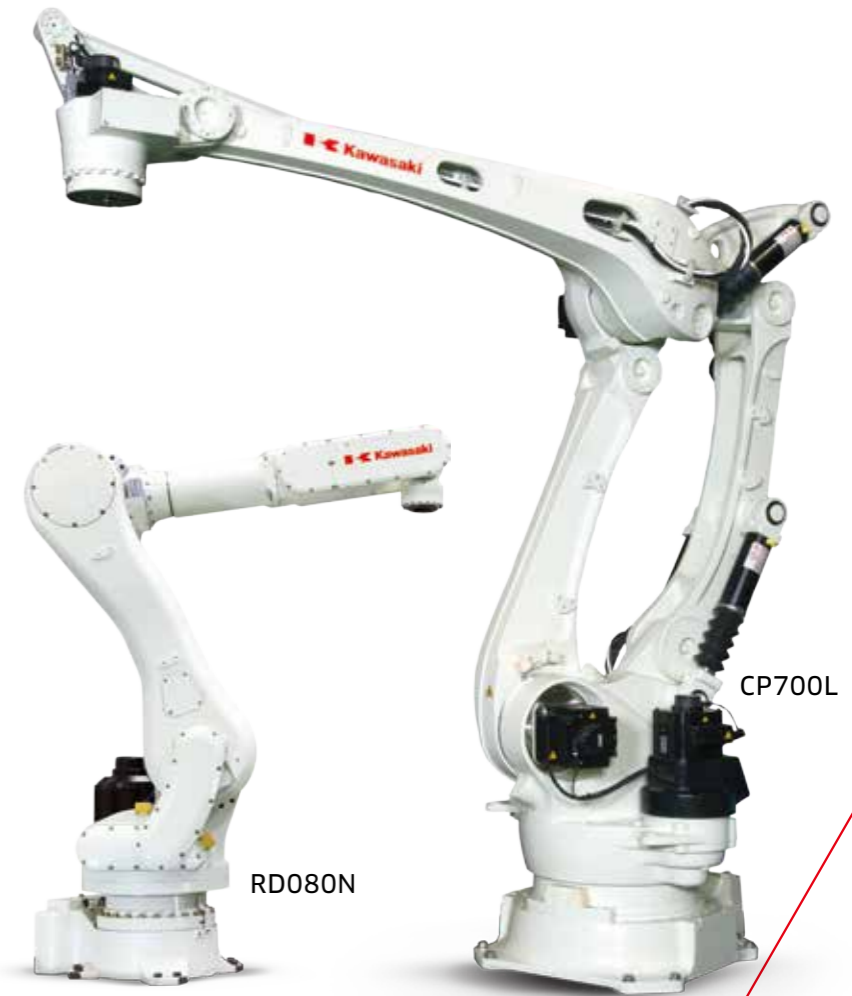
Palletizing robots

- Products suitable for a wide range of applications and payloads.
- High throughput and efficient palletizing thanks to speed.
- Monitoring function for safe operations and space-saving operations (optional).

[Applications]



Palletizing



RD080N

CP700L

	BA series				RA series					
	BA006N	BA006L	BA013N	BA013L	RA005L	RA006L	RA010N	RA010L	RA020N	
Degree of freedom (axes)	6				6					
Payload (kg)	6		13		5	6	10		20	
Max. reach (mm)	1,445	2,036	1,492	2,093	903	1,650	1,450	1,925	1,725	
Position repeatability*1 (mm)	±0.06	±0.08	±0.04	±0.06	±0.03			±0.05	±0.04	
Motion range (°)	Arm rotation (JT1)	±165			±180					
	Arm out-in (JT2)	+150 - -90		+150 - -95	+135 - -80	+145 - -105		+155 - -105		
	Arm up-down (JT3)	+90 - -175		+90 - -185	+118 - -172	+150 - -163				
	Wrist swivel (JT4)	±180		±200		±360		±270		
	Wrist bend (JT5)	±135				±145				
	Wrist twist (JT6)	±360				±360				
Max. speed (°/s)	Arm rotation (JT1)	240	210	265	215	300	250		190	
	Arm out-in (JT2)	240	210	250	215	300	250		205	
	Arm up-down (JT3)	220		265	270	300	215		210	
	Wrist swivel (JT4)	430		470	440	460	365		400	
	Wrist bend (JT5)	430		475	475	460	380		360	
	Wrist twist (JT6)	650		730	730	740	700		610	
Mass (kg)	150	160	265	280	37	150		230		
Mounting	Floor, Ceiling				Floor, Ceiling					
Controller/Power requirements	F60/2.0kVA, F01/5.6kVA		F01/5.6kVA	F02/7.5kVA	F60/2.0kVA	F60/2.0kVA, F01/5.6kVA		F01/5.6kVA		

*1: Conforms to ISO9283

	CP series				RD series	
	CP180L	CP300L	CP500L	CP700L		RD080N
Degree of freedom (axes)	4				5	
Payload (kg)	180	300	500	700	80	
Max. reach (mm)	3,255				2,100	
Position repeatability*1 (mm)	±0.5				±0.07	
Motion range (°)	Arm rotation (JT1)	±160			±180	
	Arm out-in (JT2)	+95 - -46			+140 - -105	
	Arm up-down (JT3)	+15 - -110			+40 - -205	
	Wrist swivel (JT4)	±360			±360	
	Wrist compensation (JT5)	-			±10*2	
Max. speed (°/s)	Arm rotation (JT1)	130	100	85	75	180
	Arm out-in (JT2)	125	90	80	65	180
	Arm up-down (JT3)	125	90	80	65	175
	Wrist swivel (JT4)	330	220	180	170	360
Mass (kg)	1,600		1,650		540	
Mounting	Floor				Floor	
Controller/Power requirements	F03/12kVA				F03/12kVA	

*1: Conforms to ISO9283

*2: Operating angle of the JT5 is ±10 degrees perpendicular to the ground.



MS005N

MS series

Medical & pharmaceutical robots

- All stainless-made to support VHP sterilization.
- FDA-approved parts.
- Meets ISO class 5 (Fed-class 100) without vacuum piping.
- Operations in confined space thanks to the seven-axis construction.

[Applications]



Medical & pharmaceutical



MC004N

MC series

Medical & pharmaceutical robots

- Built-in cables and hoses.
- Meets ISO class 5 (Fed-class 100) without vacuum piping.
- Special sealing material enables VHP sterilization (MC004V).

[Applications]



Medical & pharmaceutical



YF003N

YF series

Picking robots

- Compact YF002N and wide motion range YF003N to cover wide range of applications and industries.
- Wide range of applications thanks to wash-down with acid or alkaline cleanser (for YF003N). Grease and oil for food processing machinery (both models).

[Applications]



Assembling Handling



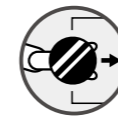
NTJ20

NTJ series

Wafer transfer robots

- Original drive mechanism provides highly accurate and smooth operations.

[Applications]



Wafer transfer



TTJ20

TTJ series

Wafer transfer robots

- High-speed transfer in high and low pass-lines, thanks to a unique high-rigidity telescopic mechanism.

[Applications]



Wafer transfer



NTH20

NTH series

Wafer transfer robots

- The long arm that is offset from the center of the base can access 4FOUP without a track.

[Applications]



Wafer transfer



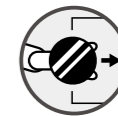
NX20

NX series

Wafer transfer robots

- Installation in a small space is possible, thanks to its compact arm construction.

[Applications]



Wafer transfer

	MS series		MC series	
	MS005N		MC004N/MC004V	
Degree of freedom (axes)	7		6	
Payload (kg)	5		4	
Max. reach (mm)	660		505.8	
Position repeatability*1 (mm)	±0.1		±0.028	
Motion range (°)	Arm rotation (JT1)	±180	±180	
	Arm out-in (JT2)	+135 - -90	+135 - -95	
	Arm up-down (JT3)	±120	+60 - -155	
	Wrist swivel (JT4)	±180	±270	
	Wrist bend (JT5)	±115	±120	
	Wrist twist (JT6)	±180	±270	
	Wrist twist (JT7)	±180	-	
Max. speed (°/s)	Arm rotation (JT1)	130	200	
	Arm out-in (JT2)	130	180	
	Arm up-down (JT3)	215	225	
	Wrist swivel (JT4)	300	700	
	Wrist bend (JT5)	300	500	
	Wrist twist (JT6)	480	350	
Wrist twist (JT7)	215	-		
Mass (kg)	50		25	
Mounting	Floor, Ceiling		Floor, Ceiling	
Degrees of protection	IP69 or equivalent		Wrist: IP67 or equivalent Base axes: IP65 or equivalent*2	
Controller/Power requirements	F60/2.0kVA		F60/2.0kVA	

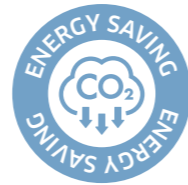
	YF series	
	YF002N	YF003N
Degree of freedom (axes)	4	
Payload (kg)	2	3
Position repeatability*1 (mm)	±0.04	±0.1
Motion range (mm)	φ600 × H200	φ1,300 × H500
Cycle Time*2 (Payload)	0.3s(0.5kg) 0.36s(2kg)	0.27s(1kg) 0.45s(3kg)
Mass (kg)	60	140
Mounting	Ceiling	
Degrees of protection	IP65 or equivalent	
Controller/Power requirements	F01/5.6kVA	

*1: Conforms to ISO9283
*2: Motion Pattern(25mm up,305mm horizontal,25mm down in a to-and-fro motion)

	NTJ series		TTJ series		NTH series	NX series
	NTJ10	NTJ20	TTJ10	TTJ20	NTH20	NX420
Degree of freedom (axes)	4	5	5		5	5
Max. reach (mm)	1,067.2 (for 350mm hand length)		1,067.2 (for 350mm hand length)		1,226.6 (for 350mm hand length)	736 (for 320mm hand length)
Position repeatability*1 (mm)	±0.1 (Wafer Center)		±0.1 (Wafer Center)		±0.1 (Wafer Center)	±0.1 (Wafer Center)
Motion range	θ1axis (rotation JT2) (°)		±170		±170	+313 - -323
	Zaxis (up-down JT3) (mm)		470		470	330
	θ2axis (rotation JT4) (°)		±170		±170	+180 - -150
	H1axis (rotation JT6) (°)		±190		±190	±190
	H2axis (rotation JT7) (°)		-	±190	±190	±190
Mounting	Floor		Floor		Floor	Floor
Controller/Power requirements	F60/0.5kVA		F60/0.5kVA		F60/0.5kVA	F60/0.5kVA

*1: Conforms to ISO9283

Kawasaki's controllers have achieved 25% energy-savings compared to 2015.



F controllers

- Universal controller has common specifications to be used worldwide.
- Drastic downsizing has achieved very compact dimensions and light weight (8.3kg). It is easy for a person to carry the controller.

	Dimensions (mm)	Mass (kg)	Degrees of protection
F60	W300×D320×H130	8.3	IP20 or equivalent



F60

- Dimensions and weight have been reduced from its previous E-controller.
- This universal controller has common specifications that can be used globally. (An optional transformer unit is necessary in the region where the power supply and safety standard differ.)

	Dimensions (mm)	Mass (kg)	Degrees of protection
F01	W420×D530×H278	20	IP54 or equivalent
F02	W420×D530×H278	25	IP54 or equivalent
F03	W420×D530×H278	30	IP54 or equivalent
F04	W420×D530×H278	25	IP54 or equivalent



F01/02/03/04



E01/02/03/04

E controllers

- The E0x controllers are extremely compact.
- They are designed for the universal use of different power supply voltages with optional transformer units.

	Dimensions (mm)	Mass (kg)	Degrees of protection
E01	W550×D580×H278	40	IP54 or equivalent
E02	W550×D580×H278	40	IP54 or equivalent
E03	W550×D580×H278	45	IP54 or equivalent
E04	W550×D580×H278	40	IP54 or equivalent



E25

Explosion-proof E controllers

- Explosion-proof type controllers are used with painting robots.
- The explosion-proof teach pendant can also be used inside the painting booth.

	Dimensions (mm)	Mass (kg)
E25 (Japan & Asia)	W500×D550×H1,400	120
E35 (America, Canada)	W500×D550×H1,400	170
E45 (Europe)	W500×D550×H1,400	170

standard

AS language

Robot programming language

Kawasaki's original AS language is a versatile, multi-functional robot programming language that supports monitor instructions, programming commands and functions. It enables programming with high-level operation and sequence controls. The AS language is equipped standard with all the Kawasaki robots

Option



Off-line programming tool

By making use of 3D models of the facilities and workpieces, robot programming and simulations can easily be performed on the PC. Off-line verification in advance reduces the risk of problems at the time of start up of robot systems.



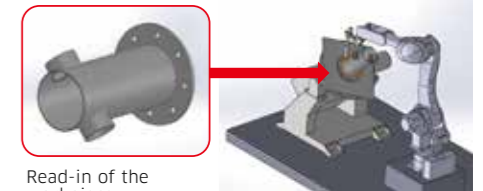
Simultaneous simulation of multiple robots is possible.

Option



Automated robot programming software

Programming cost can be reduced by creating robot programs from 3D CAD data of the workpiece. Small-volume in great-variety production is possible without programming and operation skills



Read-in of the workpiece

Automated creation and verification of the robot operation program.

Option

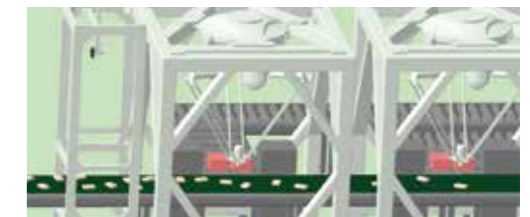


2D Vision system

It is possible to recognize both regular objects (e.g. PCB holes) and irregular objects (e.g. food materials). Without using a complicated indexing device, object's precise position can accurately be identified.



Compensation of the gripping position by fixed or hand cameras.



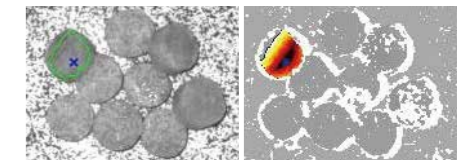
Detection of the present object position in synchronizing with a conveyor.

Option



3D vision system

It can recognize randomly stacked irregular objects. In a palletizing and de-palletizing process, objects can be identified automatically without prior registration of objects' data.



It can discern randomly stacked objects.

Option



Supervise Safety Smart



Robot monitoring function for safety

Putting a limit on the robot motion range and monitoring the speed, force and collision assures operators' safety. Limits on the motion range provides the robot system with safer operation and space-saving. Compliant with ISO 10218-1, 13849-1 (PLd/Category 3) and IEC61508 (SIL2).



Limiting the motion range according to operator's working area.

Option



Full-service service package with state-of-art technology

Overall support of the robot system over the life cycle time is provided for safety on the production. All-time monitoring and collection of operation data enables preventive maintenance. K-COMMIT for life cycle support is targeted to achieve no down-time.

