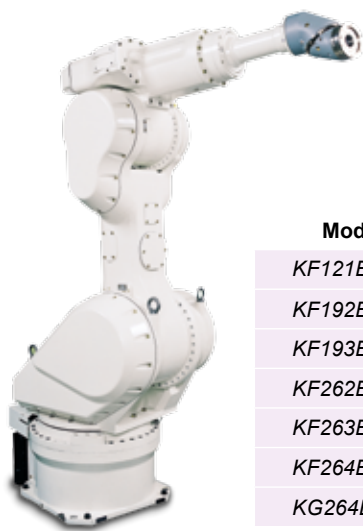




K-Series / Painting



Features

ATEX specified painting robots suitable to realize space-saving cells as well as complete painting lines. The special wrist design allows internal media routing - „Hollow Wrist“.

Model	Maximum Payload	Axes	Maximum Reach	Repeatability	Wristype
KF121E FE47	5 kg	6	1240 mm	±0,20 mm	RBR
KF192E FE45	12 kg	6	1973 mm	±0,50 mm	BBR
KF193E FE45	12 kg	6	1973 mm	±0,50 mm	3R (40 mm)
KF262E FE45	12 kg	6	2665 mm	±0,50 mm	BBR
KF263E FE45	12 kg	6	2665 mm	±0,50 mm	3R (40 mm)
KF264E FE45	12 kg	6	2668 mm	±0,50 mm	3R (70 mm)
KG264E FE45	20 kg	6	2665 mm	±0,50 mm	3R (70 mm)

B-Series / Spot Welding

Model	BX100N	BX200L
Degrees of Freedom	6 Axes	
Maximum Reach*1	2200 mm	2597 mm
Maximum Payload	100 kg	200 kg
Maximum Stroke	Axis 1	±160°
	Axis 2	+120°~-65°
	Axis 3	+90°~-77°
	Axis 4	±210°
	Axis 5	±125°
	Axis 6	±210°
Repeatability*2	± 0,2 mm	± 0,2 mm
Weight	740 kg	930 kg
Maximum Speed*2	5000 mm/s	
Controller	E42	
Installation	Floor mounting	
Protection Class	Wrist Unit: IP67 / Basic Axes: IP65	

Features

The dedicated spotwelder: innovative robot concept with internal media routing in the upper arm – „Hollow Wrist“.

*1 Distance between Centre of Axis 1 and Axis 5.

*2 Measure Point: Middle of Flange Axis 6



YF003N / Pick & Place



Features

Pick & Place robot for fast packaging and sorting processes. Shortest cycle times for up to 175 picks per minute are possible.

Axes	Maximum Reach	Maximum Speed
1	+95° ~ -52,5°	1090,9°/s
2	+95° ~ -52,5°	1090,9°/s
3	+95° ~ -52,5°	1090,9°/s
4	±360°	1714,3°/s
Maximum Payload	3 kg	
Repeatability	± 0,10 mm / ± 0,10°	
Cycle time (sec.)	0,35 (1 kg) / 0,45 (3 kg)	
Weight	145 kg (without options)	
Controller	E40	
Mounting Position	Ceiling	
Option	5th axis	

Simple and friendly

Kawasaki Robot

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: All photos 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.

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Printed in Germany June 2012 Catalogue No. GE121

Materials and specification are subject to change without notice.



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E CONTROLLER

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MODEL	E70		E71	E40	E42	E43	E44
Number of Controlled Axes	6 (optional 8)			6 (optional 16)		5 (optional 15)	6 (optional 16)
Servo Motors	Brushless AC Servomotors						
Position Detectors	Absolute Encoder						
Servo System	Full digital servo system						
Programming	Block or AS-Language						
Coordinate Systems	Joint, Base, Tool (Option: external Tool)						
Motion Control	Joint-, Linear- and Circular interpolated						
Signals	External	Motor power, Signal HOLD, etc.					
	Input	32 (optional 96)			32 (optional 128)		
	Output	32 (optional 96)			32 (optional 128)		
	Analogue Input (optional)	8/16					
	Analogue Output (optional)	4/8/12			4/8/12/16		
Memory	8 MB (ca. 80.000 steps)						
External Memory	2 x USB						
Data Interfaces	PC, Network, etc.	2 x RS-232C, 2 x Ethernet					
	Fieldbus (optional)	DeviceNet®, PROFIBUS®, PROFINET®, INTERBUS-S®, Ethernet/IP®, CC-Link®, CANopen®, Modbus TCP®, Control Net®					
Teach Pendant	6.4" TFT LCD with Touch Panel, Emergency Stop SW, Teach-Lock, Deadman SW, Motor power, Program start, Hold/Run						
Operation Panel	Emergency Stop SW, Control Power, TEACH/REPEAT						
Cable Length (Controller – Arm), (Controller – Teach Pendant)	10m (Arm: optional up to 40m), (TP: optional up to 30m)						
Dimensions (WxDxH mm)	500x420x250			550x550x1200		730x550x1200	
Weight (kg)	30			145	180	195	
Power Requirements	AC 200-240V ± 10%, 50/60Hz, 1 Phase, 1,5kVA (E70) / 3kVA (E71)				AC 380-415V ± 10%, 50/60Hz, 3 Phases, 4,9kVA (E40) / 9,9kVA (E42/43/44)		
Ground	<100Ω, Leakage Current ≤ 30mA				<100Ω, Max. Leakage Current 10mA		
Safety Category	3. Performance Level d (EN ISO13849-1:2008)						
Ambience Temperature / Humidity	0-45°C (horizontal) / 0-40°C (vertically), 35-85% (no Dew, nor Frost allowed)				0-45°C, 35-85% (no Dew, nor Frost allowed)		
Surface	Zinc coated / chromed				Color: Munsell 10GY9/1		

Note: Not all Options can be combined.

The E-Controller: technically matured, easy to operate and powerful

Compact, upgradeable and user-friendly

A maximum of ten external axes may be integrated, up to three of which in the controller housing (E4x). All established bus systems (Interbus, Profibus, ProfiNet...) are supported. The integrated Soft PLC may be edited via Teach Pendant or even more comfortable at the PC. Customized user interfaces may be programmed and used for the simplified control of the robot and also peripheral devices.

System

Ultra-fast execution of programs, loading and storing processes as well as a precise continuous-path control and much more thanks to the up-to-date processor design and powerful components. 8 MB RAM (80,000 steps) and USB interface as standard.

Maintenance

»Simple and friendly« – Due to the optimized modular configuration of the Kawasaki controller, maintenance work is user-friendly. Furthermore, integrated service and diagnostics tools guarantee increased safety in operation. Remote diagnosis via Ethernet is also included in the standard package.



Features

As innovative robot generation, the R-Series meets the increasing demands of its customers.
An extremely compact and light-weight design forms the basis for high speeds and rigidity as well as an enormous reach.
Subordinated to the R-Series are the RA-Series Arc Welding robots.

MODEL	RS003N	RS005N	RS005L	RS006L	RS010N	RS010L	RS015X	RS020N	RS030N	RS050N	RS080N
Degrees of Freedom	6 Axes						6 Axes				
Maximum Reach*1	620 mm	705 mm	903 mm	1650 mm	1450 mm	1925 mm	3150 mm	1725 mm	2100 mm	2100 mm	2100 mm
Maximum Payload	3 kg	5 kg	5 kg	6 kg	10 kg	10 kg	15 kg	20 kg	30 kg	50 kg	80 kg
Maximum Stroke	Axis 1	±160 °	±180 °	±180 °	±180 °	±180 °	±180 °	±180 °	±180 °	±180 °	±180 °
	Axis 2	+150 ° ~ -60 °	+135 °~-80 °	+135 °~-80 °	+145 °~-105 °	+145 °~-105 °	+155 °~-105 °	+140 ° ~ -105 °	+155 °~-105 °	+140 °~-105 °	+140 °~-105 °
	Axis 3	+120 °~-150 °	+118 °~-172 °	+118 °~-172 °	+150 °~-163 °	+150 °~-163 °	+150 °~-163 °	+135 °~ -155 °	+150 °~-163 °	+135 °~-155 °	+135 °~-155 °
	Axis 4	±360 °	±360 °	±360 °	±270 °	±270 °	±270 °	±360 °	±360 °	±360 °	±360 °
	Axis 5	±135 °	±145 °	±145 °	±145 °	±145 °	±145 °	±145 °	±145 °	±145 °	±145 °
	Axis 6	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °
Repeatability (Measure Point: Middle of Flange Axis 6)	± 0,05 mm	± 0,02 mm	± 0,03 mm	± 0,05 mm	± 0,04 mm	± 0,06 mm	± 0,15 mm	± 0,05 mm	± 0,07 mm	± 0,07 mm	± 0,07 mm
Weight	20 kg	34 kg	35 kg	150 kg	150 kg	230 kg	545 kg	230 kg	555 kg	555 kg	555 kg
Max. linear Speed (Measure Point: Middle of Flange Axis 6)	6,000 mm/s	9,100 mm/s	9,300 mm/s	13,700 mm/s	11,850 mm/s	13,100 mm/s	19,900 mm/s	11,500 mm/s	13,400 mm/s	13,400 mm/s	12,700 mm/s
Controller	E70	E71	E71	E40/E71	E40/E71	E40	E42	E40	E42	E42	E42
Installation	Floor or Ceiling (optional wall mount)						Floor or Ceiling (optional wall mount)				
Protection Class	Wrist Unit: IP67 / Basic Axes: IP65						Wrist Unit: IP67 / Basic Axes: IP65				

*1 Distance between centre of axis 1 and axis 5.

RD/ZD/MD series

Palletizer 80 to 500 kg payload

MODEL	RD080N	ZD130S	ZD250S	MD400N	MD500N
Degrees of Freedom	4 Axes				
Maximum Reach*1	2100 mm	3255 mm	3255 mm	3142 mm	3142 mm
Maximum Payload	80 kg	130 kg	250 kg	400 kg	500 kg
Maximum Stroke	Axis 1	±180 °	±180 °	±180 °	±180 °
	Axis 2	+140 ° ~ -105 °	+90 °~-50 °	+90 °~-50 °	+90 ° ~ -45 °
	Axis 3	+40 ° ~ -205 °	+15 °~-120 °	+15 °~-120 °	+14 ° ~ -125 °
	Axis 4	±360 °	±360 °	±360 °	±360 °
	Axis 5**	±10 °	-	-	±10 °
	Axis 6	-	-	-	-
Repeatability (Measure Point: Middle of Flange Axis 6)	± 0,07 mm	± 0,50 mm	± 0,50 mm	± 0,50 mm	± 0,5 mm
Weight	540 kg	1350 kg	1350 kg	2650 kg	2680 kg
Performance Data FD: vertical 75 mm/horizontal 2000 mm RD/ZD/MD: vertical 400 mm/horizontal 2000 mm	900 cycles/h (80 kg)	1800 cycles/h (80 kg), 1500 cycles/h (130 kg)	850 cycles/h (250 kg)	740 cycles/h (400 kg)	600 cycles/h (500 kg)
Controller	E42	E43	E43	E44	E44
Installation	Floor				
Protection Class	Wrist Unit: IP67 / Basic Axes: IP65				

*1 Distance between centre of axis 1 and axis 5.
** Limited supporting axis.

Palletizer



Features

The Kawasaki Palletizer, based on the Standard Series, specialists for challenging requirements. Palletizing on limited space with the RD080N up to heavy duty applications with the MD500N.

R-series



Features

The Z-Series with a payload from 100 to 300 kg. The key features of these robots are the slim arm design and the small footprint in combination with maximum reach. Integrated air- and electrical attachments in the robot arm, lead to an easy adaption and installation.
The protection, class IP65 of the arm and IP67 of the wrist (axis 5 and 6) allows the usage in harsh environments.

MODEL	ZX130L	ZX130U	ZX165L	ZX165U	ZX200U	ZX300S	ZB150S	ZH100U	ZT130L	ZT130U	ZT165U	ZT200U
Degrees of Freedom	6 Axes						6 Axes					
Maximum Reach*1	2951 mm	2651 mm	2810 mm	2651 mm	2651 mm	2501 mm	1365 mm	1634 mm	3530 mm	3230 mm	3230 mm	3230 mm
Maximum Payload	130 kg	130 kg	165 kg	165 kg	200 kg	300 kg	150 kg	100 kg	130 kg	130 kg	165 kg	200 kg
Maximum Stroke	Axis 1	±180 °	±180 °	±180 °	±180 °	±180 °	±160 °	±160 °	±180 °	±180 °	±180 °	±180 °
	Axis 2	+75 °~-60 °	+75 °~-60 °	+75 °~-60 °	+75 °~-60 °	+75 °~-60 °	+75 °~-60 °	+75 °~-60 °	+60 °~-75 °	+60 °~-75 °	+60 °~-75 °	+60 °~-75 °
	Axis 3	+250 °~-120 °	+250 °~-120 °	+250 °~-120 °	+250 °~-120 °	+250 °~-120 °	+250 °~-120 °	+250 °~-120 °	+165 °~-95 °	+165 °~-95 °	+165 °~-95 °	+165 °~-95 °
	Axis 4	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °
	Axis 5	±130 °	±130 °	±130 °	±130 °	±130 °	±120 °	±130 °	±130 °	±130 °	±130 °	±130 °
	Axis 6	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °	±360 °
Repeatability (Measure Point: Middle of Flange Axis 6)	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm	± 0,30 mm
Weight	1400 kg	1350 kg	1355 kg	1350 kg	1350 kg	1400 kg	900 kg	750 kg	1565 kg	1550 kg	1550 kg	1550 kg
Max. linear Speed (Measure Point: Middle of Flange Axis 6)	2.500 mm/s	2.500 mm/s	2.500 mm/s	2.500 mm/s	2.500 mm/s	2.500 mm/s	1.500 mm/s	2.000 mm/s	2.500 mm/s	2.500 mm/s	2.500 mm/s	2.500 mm/s
Controller	E42	E42	E42	E42	E42	E42	E42	E42	E42	E42	E42	E42
Installation	Floor						Floor					
Protection Class	Wrist Unit: IP67 / Basic Axes: IP65						Wrist Unit: IP67 / Basic Axes: IP65					

*1 Distance between Centre of Axis 1 and Axis 5.

M-Series 350 to 700 kg payload

MODEL	MX350L	MX420L	MX500N	MX700N
Degrees of Freedom	6	6	6	6
Maximum Reach*1	3018 mm	2778 mm	2540 mm	2540 mm
Maximum Payload	350 kg	420 kg	500 kg	700 kg
Maximum Stroke	Axis 1	±180 °	±180 °	±180 °
	Axis 2	+90 °~-45 °	+90 °~-45 °	+90 °~-45 °
	Axis 3	+20~-115 °	+20 °~-125 °	+20 °~-130 °
	Axis 4	±360 °	±360 °	±360 °
	Axis 5	±110 °	±110 °	±110 °
	Axis 6	±360 °	±360 °	±360 °
Repeatability (Measure Point: Middle of Flange Axis 6)	± 0,50 mm	± 0,50 mm	± 0,50 mm	± 0,50 mm
Weight	2800 kg	2800 kg	2750 kg	2860 kg
Max. linear Speed (Measure Point: Middle of Flange Axis 6)	2000 mm/s			
Controller	E44			
Installation	Floor			
Protection Class	Wrist Unit: IP67 / Basic Axes: IP65			

*1 Distance between Centre of Axis 1 and Axis 5..

M-Series



Features

The M-Series includes robots with a payload from 350 to 700 kg. Heavy duty robots with enormous payload and a compact design.

Z-Series

