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#### Kawasaki Robotics website

https://kawasakirobotics.com/



#### Kawasaki Robotics brand site XYZ

https://robotics.kawasaki.com/ja1/xyz/en/



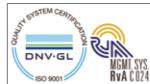
#### Kawasaki Robostage (showroom)

https://robotics.kawasaki.com/ja1/robostage/en.html



#### **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
- 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.



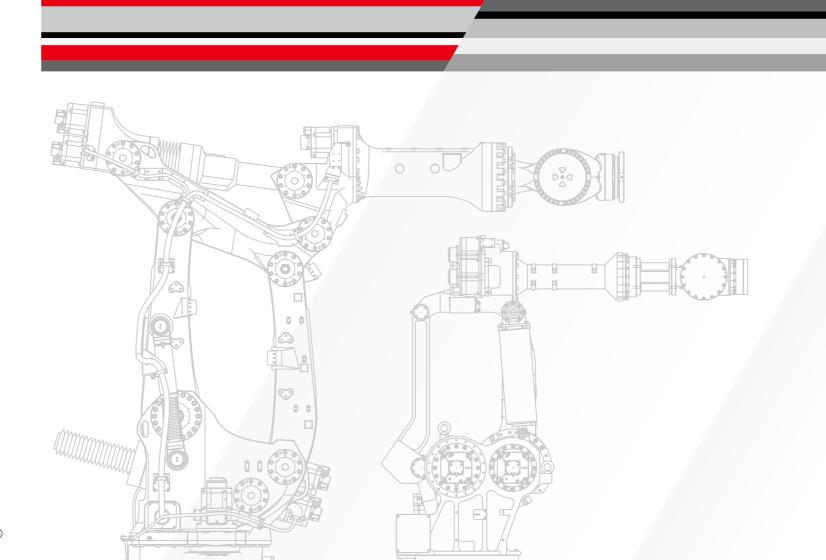


ISO certified in Akashi Works and Nishi-Kobe Works.

## Kawasaki Robot

**Extra Large Robots** up to 1500kg payload

#### Extra large robots up to 1,500kg payload



## Extra large general-purpose robots

M series extra large robots incorporate Kawasaki's experience and state-of-art technologies.

With a maximum payload of 1,500kg, M series robots can gives it the power to lift and manipulate heavy loads such as automobile bodies.

Thanks to Kawasaki's patented link mechanism, the compact robots have payload capacity of up to 1,500 kg with high position repeatability.

# MX/MT series

Kawasaki's original link structure for JT3 (arm up-down) achieves compact, yet high payload capacity up to 700 kg.



MX350L









MX700N MT400N

## MG series

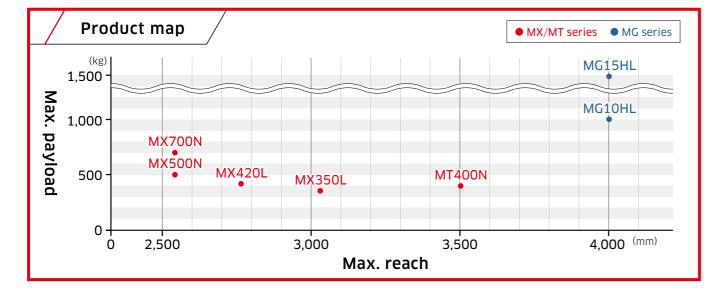
The MG series is equipped with Kawasaki's original hybrid link structure, ball screws and two large motors for JT3 (arm up-down) to achieve a slim body without a counter weigh. It offers a wide motion range and hight position repeatability, suitable for handling heavy workpieces.





MG10HL

MG15HL



# MX/MT/MGシリーズ

[Applications]



#### **MX350L**

/ Standard Specifications /			
Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		350	
Max. reach (	mm)	3,018	
Position repeatability*1 (mm)		±0.1	
	Arm rotation (JT1)	±180	
	Arm out-in (JT2)	+9045	
Motion	Arm up-down (JT3)	+20115	
range (°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±110	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	80	
	Arm out-in (JT2)	70	
Max. speed	Arm up-down (JT3)	70	
(°/s)	Wrist swivel (JT4)	80	
	Wrist bend (JT5)	80	
	Wrist twist (JT6)	120	
Allowable	Wrist swivel (JT4)	2,740	
moment (N·m)	Wrist bend (JT5)	2,740	
	Wrist twist (JT6)	1,960	
Allowable moment of inertia (kg·m²)	Wrist swivel (JT4)	400	
	Wrist bend (JT5)	400	
	Wrist twist (JT6)	259	
Mass (kg)		2,800	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		F04/12kVA	

Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		350	
Max. reach (mm)		3,018	
Position repeatability*1 (mm)		±0.1	
	Arm rotation (JT1)	±180	
	Arm out-in (JT2)	+9045	
Motion range	Arm up-down (JT3)	+20115	
(°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±110	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	80	
	Arm out-in (JT2)	70	
Max. speed	Arm up-down (JT3)	70	
(°/s)	Wrist swivel (JT4)	80	
	Wrist bend (JT5)	80	
	Wrist twist (JT6)	120	
Allowable	Wrist swivel (JT4)	2,740	
moment	Wrist bend (JT5)	2,740	
(N·m)	Wrist twist (JT6)	1,960	
Allowable moment of	Wrist swivel (JT4)	400	
	Wrist bend (JT5)	400	
inertia (kg·m²)	Wrist twist (JT6)	259	
Mass (kg)		2,800	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment   Relative humidity		35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		F04/12kVA	

\*1: Conforms to ISO9283

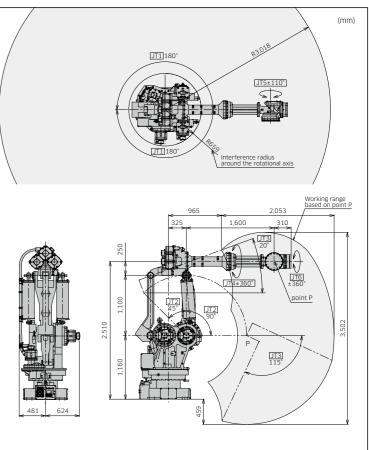
### **MX420L**

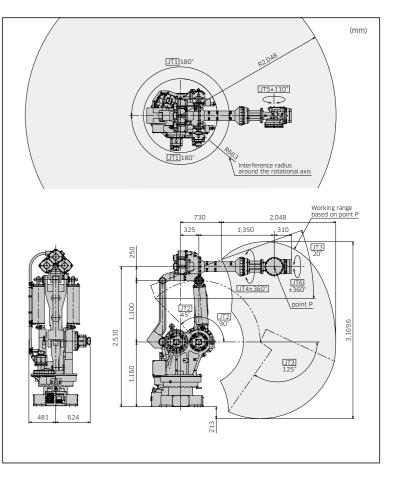
### Standard Specifications

Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		420	
Max. reach (r	mm)	2,778	
Position repe	eatability*1 (mm)	±0.1	
	Arm rotation (JT1)	±180	
	Arm out-in (JT2)	+9045	
Motion range	Arm up-down (JT3)	+20125	
(°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±110	
	Wrist twist (JT6)	±360	
	Arm rotation $(JT1)$	80	
	Arm out-in (JT2)	70	
Max. speed	Arm up-down (JT3)	70	
(°/s)	Wrist swivel (JT4)	80	
	Wrist bend (JT5)	80	
	Wrist twist (JT6)	120	
Allowable	Wrist swivel (JT4)	3,290	
moment	Wrist bend (JT5)	3,290	
(N·m)	Wrist twist (JT6)	1,960	
Allowable	Wrist swivel (JT4)	400	
moment of	Wrist bend (JT5)	400	
inertia (kg·m²)	Wrist twist (JT6)	259	
Mass (kg)		2,800	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		F04/12kVA	

/ Features

- Maximum payload of up to 1,500 kg allows for transfer of heavy workpieces.
- Dynamic and accurate tasks are possible thanks to high position repeatability.
- Slim body without a counter weight achieves wide motion ranges and high rigidity (MG10HL/MG15HL).





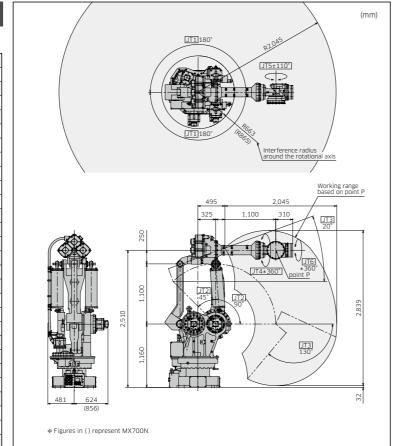
\*1: Conforms to ISO9283

### MX500N/MX700N

#### / Standard Specifications /

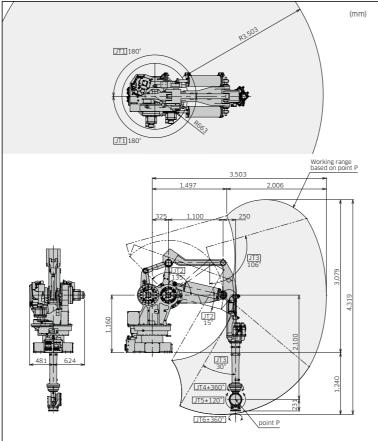
Standard Specifications			
Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		500/700	
Max. reach (r	mm)	2,540	
Position repeatability*1 (mm)		±0.1	
	Arm rotation (JT1)	±180	
	Arm out-in (JT2)	+9045	
Motion range	Arm up-down (JT3)	+20130	
(°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±110	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	80/65	
	Arm out-in (JT2)	70/50	
Max. speed	Arm up-down (JT3)	70/45	
(°/s)	Wrist swivel (JT4)	80/50	
	Wrist bend (JT5)	80/50	
	Wrist twist (JT6)	120/95	
Allowable	Wrist swivel (JT4)	3,920/5,488	
moment	Wrist bend (JT5)	3,920/5,488	
(N·m)	Wrist twist (JT6)	1,960/2,744	
Allowable	Wrist swivel (JT4)	400/600	
moment of	Wrist bend (JT5)	400/600	
inertia (kg·m²)	Wrist twist (JT6)	259/388	
Mass (kg)		2,750/2,860	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		F04/12kVA	





## MT400N

Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		400	
Max. reach (r	mm)	3,503	
Position repe	eatability*1 (mm)	±0.5	
	Arm rotation (JT1)	±180	
	Arm out-in (JT2)	+15135	
Motion range	Arm up-down (JT3)	+10630	
(°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±120	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	80	
	Arm out-in (JT2)	70	
Max. speed	Arm up-down (JT3)	70	
(°/s)	Wrist swivel (JT4)	70	
	Wrist bend (JT5)	70	
	Wrist twist (JT6)	130	
Allowable	Wrist swivel (JT4)	2,150	
moment	Wrist bend (JT5)	2,150	
(N·m)	Wrist twist (JT6)	980	
Allowable	Wrist swivel (JT4)	200	
moment of inertia (kg·m²)	Wrist bend (JT5)	200	
	Wrist twist (JT6)	147	
Mass (kg) 2,600		2,600	
Mounting		Shelf	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		F02/7.5kVA	

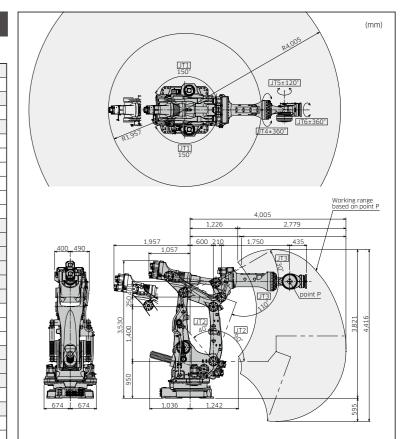


#### \*1: Conforms to ISO9283

### MG10HL

## Standard Specifications

Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		1,000	
Max. reach (mm)		4,005	
Position repe	eatability*1 (mm)	±0.1	
	Arm rotation (JT1)	±150	
	Arm out-in (JT2)	+9040	
Motion range	Arm up-down (JT3)	+30110*2	
(°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±120	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	65	
	Arm out-in (JT2)	33.5	
Max. speed*3	Arm up-down (JT3)	37.5	
(°/s)	Wrist swivel (JT4)	65	
	Wrist bend (JT5)	65	
	Wrist twist (JT6)	80	
Allowable	Wrist swivel (JT4)	8,800	
moment	Wrist bend (JT5)	8,800	
(N·m)	Wrist twist (JT6)	4,410	
Allowable	Wrist swivel (JT4)	1,800	
moment of	Wrist bend (JT5)	1,800	
inertia (kg·m²)	Wrist twist (JT6)	1,200	
Mass (kg)		6,500	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		E58/15kVA	



- \*1: Conforms to ISO9283

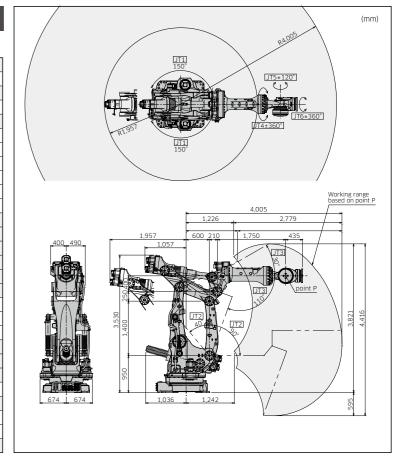
  \*2: Max. working range varies depending on the load mass and load torque

  \*3: The values in the table are maximum values and vary depending on conditions such as load and motion range.

### MG15HL

#### Standard Specifications /

Туре		Articulated robot	
Degree of freedom (axes)		6	
Payload (kg)		1,500	
Max. reach (r	mm)	4,005	
Position repeatability*1 (mm)		±0.1	
	Arm rotation $(JT1)$	±150	
	Arm out-in (JT2)	+9040	
Motion	Arm up-down (JT3)	+30110*2	
range (°)	Wrist swivel (JT4)	±360	
	Wrist bend (JT5)	±120	
	Wrist twist (JT6)	±360	
	Arm rotation (JT1)	65	
	Arm out-in (JT2)	33.5	
Max. speed*3	Arm up-down (JT3)	37.5	
(°/s)	Wrist swivel (JT4)	36	
	Wrist bend (JT5)	36	
	Wrist twist (JT6)	80	
Allowable	Wrist swivel (JT4)	15,000	
moment	Wrist bend (JT5)	15,000	
(N·m)	Wrist twist (JT6)	4,410	
Allowable	Wrist swivel (JT4)	2,250	
moment of inertia (kg·m²)	Wrist bend (JT5)	2,250	
	Wrist twist (JT6)	1,200	
Mass (kg)		6,550	
Mounting		Floor	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Controller/Power requirements		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.

# F02/F04

#### Features

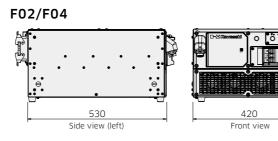
- Dimensions and weight have been reduced from its previous E-controller.
- This universal controller has common specifications that can be used globally. (An optional transformer unit is necessary in the region where the power supply and safety standard differ.)



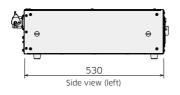
#### Standard Specifications

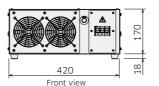
		F02	F04
Dimensions (mm)		W420×D530×H278	
Туре		Enclosed type, indirect cooling system	
Controlled (a	axes)	7	6
Memory cap	acity (MB)	16	
	External operation	Motor power off, Hold	
I/O signals	Input (Channels)	32	
	Output (Channels)	32	
Cable	Teach pendant (m)	5	
length	Robot-controller (m)	5	
Mass (kg)		25	
Power requirements			±10%, 50/60Hz, 3Ф ±10%, 50/60Hz, 1Ф
		Max. 7.5kVA	Max. 12kVA
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Teach pendant		Color LCD display with touch-panel, E-Stop switch, Teach lock switch, Enable switch	
Operation panel		E-stop switch, teach/repeat switch	

### External view and dimensions



#### Transformer unit \*Option





#### System configuration Option boards O DIO board IO board inside arm Option devices Conveyor tracking I/F board Rapid-feed check Cubic-S mode switch Standard (Space/Speed monitoring) Option Brake release switch Fieldbus Teach pendant () Transformer unit \*1 CC-Link slave (Power supply spec) Terminal software O CC-Link IE slave DeviceNet master/slave External axis motor Terminal software Ethernet/IP master/slave O USB memory Vision controller EtherCAT master/slave PROFIBUS-DP Bluetooth O master/slave PROFINET \*1: Power supply spec for transformer master/slave AC380-415V $\pm 10\%$ AC440-480V $\pm 10\%$ Switchable 50/60Hz, $3\phi$

## E58

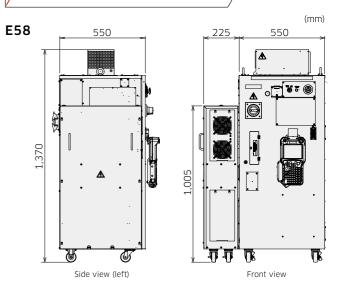
#### **Features**

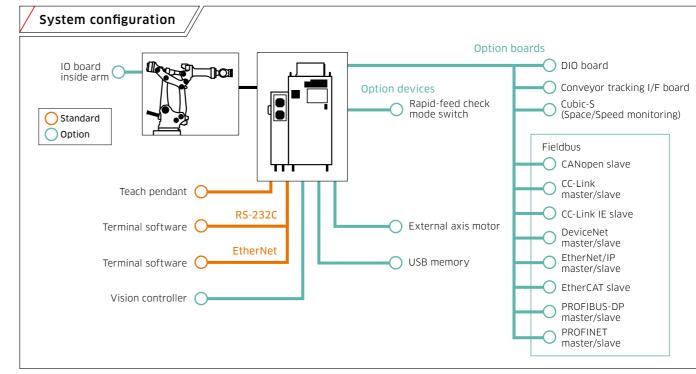
- The E58 controller is used for M series extra large robots.
- The universal controller has common specifications to be used globally and support diverse primary power voltages.

#### Standard Specifications

Dimensions (mm)		W775×D550×H1,370	
Туре		Enclosed structure, Indirect cooling system	
Controlled (a	axes)	9	
Memory cap	pacity (MB)	8	
	External operation	Motor power off, Hold	
I/O signals	Input (Channels)	32	
	Output (Channels)	32	
Cable	Teach pendant (m)	5	
length	Robot-controller (m)	5	
Mass (kg)		165	
	Japan	AC200 - AC220V ± 10%, 50/60Hz, 3Ф	
Power	Europe & Asia	AC380 - AC415V ± 10%, 50/60Hz, 3Ф	
requirements	North America	AC440 - AC480V ± 10%, 60Hz, 3Ф	
		Max. 15kVA	
Installation	Ambient temperature (°C)	0 - 45	
environment	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)	
Teach pendant		Color LCD display with touch-panel, E-Stop switch, Teach lock switch, Enable switch	
Operation panel		Teach/repeat SW, Emergency stop SW,	

### External view and dimensions





05