## **SPECIFICATION OF ROBOT**



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KAWASAKI HEAVY INDUSTRIES LTD.

ROBOT DIV.

Doc, No:90101-1818DEA

## 1. Specification of Robot

[1] Robot Arm					
1. Model	KF264J-C001, KF264C-C001				
2. Type	Articulated robot				
3. Degree of freedom	6 axes				
4. Axis specification	Operating axis Max. operating range				
-	Arm rotation (JT1)	$\pm 150^{\circ}$ (Floor mounting) / $\pm 60^{\circ}$ (Wall mounting)			
	Arm out-in (JT2)	$+110\degree\sim-60\degree$			
	Arm up-down (JT3) $+ 90^{\circ} \sim -80^{\circ}$		$-90\degree\sim-80\degree$		
	Wrist roll (JT4) $\pm 720^{\circ}$		$\pm720~^\circ$		
	Wrist roll (JT5) $\pm 720^{\circ}$		$\pm720~^{\circ}$		
	Wrist roll (JT6)		$\pm410~^\circ$		
5. Repeatability	$\pm 0.5$ mm (at the tool mounting surface)				
6. Playback Accuracy	$\pm 1.0$ mm (at the tool mounting surface)				
7. Max. payload	Wrist : 12 kg (at the tool mounting surface)				
	Upper arm : 20 kg (on the Upper Arm)				
8. Max. painting speed	1200 mm/s (at the center of tool mounting surface)				
9. Max. linear interpolation speed	2000 mm/s				
10. Load capacity of					
wrist	Ν	lax. torque	Moment of inertia <sup>*</sup>		
	JT4	35.3 N•m	$1.44 \text{ kg} \cdot \text{m}^2$		
	JT5	27.7 N•m	$0.89 \text{ kg} \cdot \text{m}^2$		
	JT6	7.9 N∙m	$0.10 \text{ kg} \cdot \text{m}^2$		
	Note <sup>*</sup> Each value in this table shows allowable payload moment of inertia of JT4/JT5/JT6 when max. allowed torque is applied to each axis. If more detailed data is required for your application, please contact Kawasaki.				
11. Driving motor	Brushless AC Servomotor				
12. Working range	See attached drawing				
13. Mass	770 kg (without options)				
14. Color	Munsell 10GY9/1 equivalent				
15. Installation	Floor and Wall mounting				
16. Environment cond.	(Temperature) $0 \sim 40$ °C, (Humidity) $35 \sim 85$ %, no dew, nor frost allowed				
17. Explosion proof	Pressurized and intrinsically safe				
18. Air supply	Clean & dry air : 0.5 $\text{Nm}^3/\text{min}$ , 0.4 $\sim$ 0.7 MPa				
to the manipulator	Dew point : $-17$ °C or less at atmospheric pressure.				
	Solid material : 0.01 µm or less				
	Oil content : Mist separation 99.9999% or more				
19. Options	Manipulator cover				
	Adjustable Mechanical Stopper : JT1/JT2/JT3				
	Jig set for Zeroing				
20.01	Consult Kousseli about maintenance norte en la surre parte				
20. Others	Consult Kawasaki about maintenance parts and spare parts.				

[2] (	Controller				
	Model	E25/E27			
2.		Self-supported type			
-	Dimensions	See attached drawing	,		
	Number of controlled	6 axes			
	axes	7/8/9 axes(built-in addition, option)			
5.	Servo control and	Full Digital Servo System			
0.	drive system				
6.	Type of control	Teach mode Joint, Base, Tool, Fixed Tool (option) operation mode		option) operation mode	
	51	Repeat mode			
		1	Joint, Linear, Circular (option)	interpolation	
7.	Teaching method	Teaching or AS lang	eaching or AS language programming		
	Memory capacity	8 MB			
	External operation	External Motor Power Off, External Hold, etc.			
	signals	,,, _,, _			
10.	General purpose	Input signals	32 channels (Includes dedicated	d signals)	
	signals	Output signals	32 channels (Includes dedicated signals)		
11.	Operation panel	Basic Operation Switches			
		-	Emergency Stop SW, Control por	wer lamp)	
12.	Cable length	Power/Signal cable in	n non hazardous area	3 m	
		Power/Signal cable in	n hazardous area	3 m	
		Teach Pendant cable 10 n		10 m	
13.	Mass	See attached drawing	5		
14.	Power requirement	AC200 V - AC220 V±10%, 50/60 Hz, 3 phases,			
		Max 5.6 kVA(E27), Max 10 kVA(E25)			
15.	Ground	Less than $10\Omega$ (for Explosion proof) ,Less than $100\Omega$ (robot dedicated ground)			
		Leakage current: max. 100 mA			
	Ambient temperature	0 - 45 °C			
	Relative humidity	35 - 85 % (non-condensation)			
	Color	Munsell: 10GY9/1 equivalent			
19.	Teach Pendant		struction, Color display (7.2 incl	n LCD) with touch panel	
		Emergency Stop, Teach Lock and Deadman Switches			
20.	Options				
	General purpose       Input signals       64/96/128 channels (Includes dedicated signals         Output signals       64/96/128 channels (Includes dedicated signals			-	
			ledicated signals)		
	I/O connector	· · · ·	D-SUB 37pin(male,female) with cover		
	Operation panel		Motor Power ON, Cycle start, RUN/HOLD, Error reset, Error lamp		
	Power/Signal cable in non hazardous area 5,7,10,15,20,25,30m			<b>Τ</b> -(-11(1), (4)	
	T	in hazardous area 1,5,7,10,15m J Total length: max. 40 n			
	Teach Pendant cable	5m, 15m, 20m, 25m			
	Teach pendant	in non hazardous area 3,5,7,10,15,20,25,30m			
	Connector Box	in hazardous area 1,3,5,7,10,15,20,25,30m J Total length: max. 50 m			
	Auxiliary storage Brake release	USB memory Proto release switch			
	AC Outlet	Brake release switch			
	PC cable	AC100V Outlet			
		1.5 m, 3 m Cable back, connector for TD loss			
	Teach Pendant option Others	Cable hook, connector for TP less			
	Oulers	Cooler, LED Light, Field BUS, Software PLC, Analog input/output, Conveyor Synchronization, Paint Equipment Control and so on			
21	Others				
41.	Unicis		out maintenance parts and spare	puro.	



