

FACTORY AUTOMATION

MITSUBISHI INDUSTRIAL ROBOT RH-3CH/6CH60/6CH70

Features

- Compact arm for space saving Required space for J3 (Z) axis section: 512 mm/560 mm (3CH/6CH robot arm)
- Light weight robot arm 14 kg/17 kg/18 kg (3CH/6CH6020/6CH7020 robot arm)
- High-speed movement and high performance for productivity

Cycle time^{Note1} 0.44 s/0.41 s/0.43 s (3CH/6CH6020/6CH7020) Standard equipment: I/O points: 32 inputs/32 outputs. Configuring a circuit for controlling an additional axis is enabled. Up to eight axes except the robot can be controlled.

- Offering of bellows-installed specifications and heavy loadspecifications (RH-3CH)
- Easy operation Easy teaching operation can be performed by RT ToolBox2 (JOG operation and teaching position).



Applications





Labeling



Pick and place

Tracking



Specifications

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			RH-3CH4018	RH-6CH6020	RH-6CH7020	
Load		kg	Maximum: 3 (rating: 1) Note 3	Maximum: 6 (rating: 2)		
Arm longth	No. 1 arm	mm	225	325	425	
Anniengui	No. 2 arm	mm	175	275		
Maximum arrival point	Reach	mm	400	600 700		
Operating range	J1	deg	264 (±132)	264 (±132)		
	J2	deg	282 (±141)	300 (±150)		
	J3	mm	180	200		
	J4	deg	720 (±360)	720 (±360)		
Pose repeatability	X-Y direction	mm	±0.01	±0.02		
	J3 (Z)	mm	±0.01	±0.01		
	J4 (θ)	deg	±0.01	±0.01		
	J1	deg/sec	720	420	360	
Maximum speed	J2	deg/sec	720	720		
	J3 (Z)	mm/sec	1100	1100		
	J4 (θ)	deg/sec	2600	2500		
	J1+J2	mm/sec	7200	7800		
Cycle time Note 2		sec	0.44	0.41	0.43	
Allowable inertia	Rating	kg∙m²	0.005	0.01		
	Maximum Note 5	kg∙m²	0.05 (0.075)	0.05 (0.075) 0.12 (0.18)		
Mass		kg	14	17 18		
Wiring and piping system for hand input/output			15 points, D-SUB/ø6 × 2, ø4 × 1			
Controller			CR751-D CR751-D			

Note 1. 2: The cycle time is measured based on reciprocating movements over a horizontal distance of 300 mm and vertical distance of 25 mm when the MyTune2 (high-speed movement mode) with the carrying mass of 2 kg is applied. The cycle time may increase with the case where the positioning accuracy of the workpiece etc. is necessary, or by the moving position. Note 3: We also have 5 kg load specifications. However, there are restrictions. For details, refer to the specifications.

Note 4: We also have machine cables with special specifications (various lengths or flexed type) and bellows-installed specifications as options

However, there are restrictions to the operating range, etc. For details, refer to the specifications manual.

Note 5: The values in parentheses are the values of the allowable inertia when the heavy load mode is enabled.

Outside dimensions





45±0.05 (ø6H7, 6H7 p

> 110 ø6ŀ

> > 55±0.05

ø3 counter

132 440 / R235 30

225

Operating range diagram of RH-3CH4018

325.6

180



*1: The space is required for battery replacement. The distance to the minimum bending radius of the machine cable is specified

Operating range diagram of RH-6CH6020/7020



Bellows-installed specifications (For applications such as transportation of packed products)

Mitsubishi Electric Corporation Nagoya Works is a factory certified for ISO14001 (standards for environmental management systems) and ISO9001 (standards for quality assurance management systems)



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 Variable dimensions Α

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178

51.5

559

Туре	A	В	С	D	
RH-6CH6020	325	R600	R162.6	492.5	
RH-6CH7020	425	R700	R232	559.4	

67

1C

Outside dimensions of RH-6CH6020/7020

166.5

nine cable length)

Outside dimensions of RH-3CH4018

• Option: machine cables with the special specifications

Specifications	Length	Model		Specifications	Length	Model
	3 m	1F-03UCBL-04			10 m	1F-10LUCBL-04
Fixed type	10 m	1F-10UCBL-04	Flexed type		15 m	1F-15LUCBL-04
	15 m	1F-15UCBL-04			20 m	1F-20LUCBL-04
	20 m	1F-20UCBL-04				