

M-420iA M-421iA

Applications

PLANNING SOLUTIONS



Description

The FANUC M-420iA and M-421iA robots represent the latest generation of industrial robots with high speed and performance.

Based on a highly reliable and very simple mechanical structure, the M-420iA and M-421iA robots provide high performance and sophisticated systems for controlling movement thanks to the new SYSTEM R-J3iB controller, ensuring high productivity.

M-420iA / M-421iA, the solution for:

High-speed packaging
High-speed palletization
Machine tool loading/unloading

Features

M-420iA: 4-axes movement, 40 Kg load at wrist
M-421iA: 2-axes movement, 50 Kg load at wrist
±0.5 mm repeatability at maximum load and speed in the entire work area
Wide work area with a 1,855 mm horizontal range specially designed for packaging applications
Linear speed up to 4,200 mm/sec

Special pneumatic and electrical connections (8 digital inputs + 8 digital outputs) on the wrist for simplifying integration with tools
Programming keyboard with an ergonomic design equipped with a large LCD for easily controlling the process

Sealed bearings and AC brushless motors for greater protection and reliability

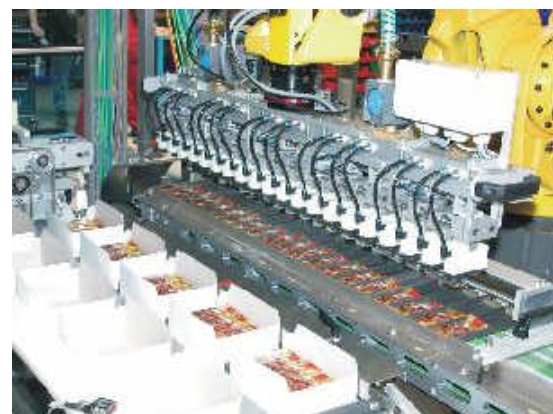
Advantages

Fastest in its class of robots in order to ensure maximum performance and productivity
Highest possible load at wrist in this class of robots allows various parts to be handled simultaneously, maximizing system productivity
Four-axes movement (M-420iA) gives the robot access to several packaging lines

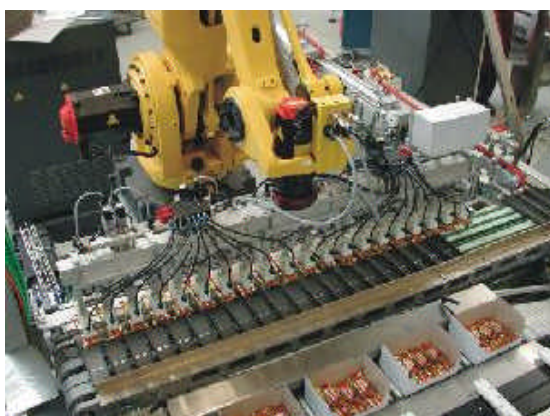
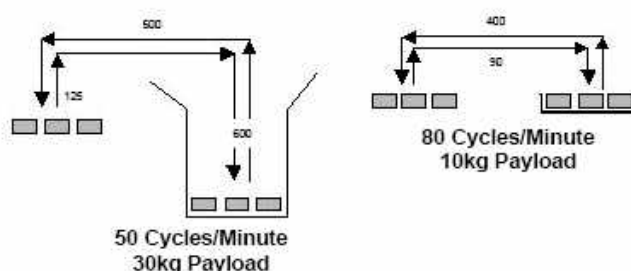
Options

Connection cables of various lengths for greater installation flexibility and optional flexible cables for assembly on tracks

Applications



Fastest cycle times in its class:



M-420iA / M-421iA Specifications

Items	M-420iA	M-421iA
Axis	4	2
Payload - Wrist (kg)	40	50
- JS Arm (kg)	10	10
Reach (mm)	1855	1855
Repeatability (mm)	±0,5	±0,5
Interference radius (mm)	543	-
Motion range (degree)	J1	320
	J2	115
	J3	110
	J4	540
Motion speed (degrees/sec.)	J1	180
	J2	200
	J3	200
	J4	360
Wrist moment (kgf m)	J4	10
Wrist inertia (kgfoms ²)	J4	26
Mechanical brakes	All axes	All axes
Mechanical weight (kg)	620	520
Mounting method	Floor	
Installation environment		
Ambient temperature °C	0 to 45	
Humidity	Normally: 75% or less Short term (within a month): 95% or less No condensation	
Vibration (m/s ²)	4,9 or less	

