

THE Y-SERIES

1. Speed

Fast Acceleration and speed are the decisive factors to reach a cycle time of 0,27 sec. at 1 kg payload and a cycle time of 0,43 sec. at 3 kg payload (Movement: vertically 25 mm, horizontally 305 mm and vertically 25 mm).

2. Stiffness

High stiffness and precision of the YF003N ensure a position repeatability of 0,1mm as well as 0,1°.

3. Protection

The Kawasaki YF003N is available with protection class IP65 or IP67.

4. Flexibility

An optionally 5th Axis, 2 Ethernet ports and USB port ensure the capability to adapt intelligent grippers, vision systems or other peripherals as well.

5. Application Area

The Kawasaki YF003N is produced by using lubricants with food specification. Through this, many application areas as well in food industry are possible.



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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Power Requirements

Ambience Temperature / Humidity

Note: Not all Options can be combined

Safety Category

Ground



»Simple and friendly« INTO THE FUTURE

Fast Pick & Place operations are the domain of this robot.

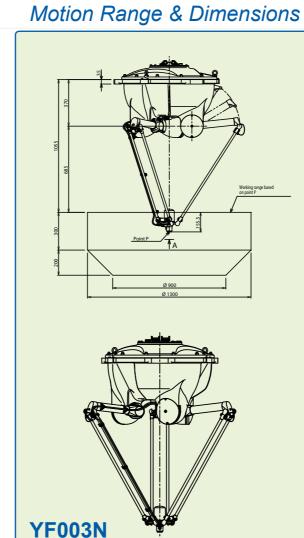
»40 years of experience and state-of-the-art robot technology«

Maximum speed and precision combined with incredible stiffness are the key factors of success of this robot.

»Your goal is our task«

It was Kawasaki's intelligence and flexibility which made them build the most powerful robots in their class. Combined with a high-end control system, they reliably meet the demands of the most varied application fields - now and in the near & far future.

MODEL		YF003N
Degrees of Freedom		4 Axis
Maximal Reach		1300 mm
Maximum Payload		3 kg
Maximum Stroke	Axis 1	±95 ° ~ -54 °
	Axis 2	±95 ° ~ -54 °
	Axis 3	±95 ° ~ -54 °
	Axis 4	±360 °
Maximum Speed	Axis 1	1090,9 %s
	Axis 2	1090,9 %s
	Axis 3	1090,9 %s
	Axis 4	1714,3 °/s
Repeatability (Measure Point: Middle of Flange)		± 0,1 mm/ ± 0,1 °
Weight		145 kg
Max. Cycle time at 1 kg payload (25 mm vertikally / 305 mm horizontally)		0,27 sec per pic
Controller		E40
Color		Munsell 10GY9/1
Installation		pendant
Ambient Conditions	Temperature	0 ~ 45 °C
	Humidity	35 ~ 85 % (no Dew or Frost allowed)
	Vibration	< 0.5 G
	Others	Installation Ambience must be free of: Inflammable or corrosive Liquid or Gas Electric Noise Interferences



4 (optional 16) Number of Controlled Axes Servo Motors Brushless AC Servomotors Position Detectors Absolute Encoder Servo System Full Digital Servo System Block or AS-Language Programming Coordinate Systems Joint, Base, Tool, external Tool Motion Control Joint-, Linear- and Circular interpolated Motor Power, Signal Hold, etc. Input 32 (optional 128) 32 (optional 128) 8/16 Analogue Input (optional) 4/8/12/16 Analogue Output (optional) 8 MB (ca. 80.000 steps) Memory External Memory 2 x USB 2 x RS-232C, 2 x Ethernet PC, Network, etc. Datenübertragung DeviceNet®, PROFIBUS®, PROFINET®, INTERBUS-S®, Ethernet/IP®, CC-Link®, CANopen®, schnittstelle Fieldbus (optional) Modbus TCP®. Control Net® 6.4" LCD with Touch Panel, Emergency Stop SW, Teach-Lock, Deadman SW, Teach Pendant Motor Power, Program Start, Hold/Run Emergency Stop SW, Control Power, Teach/Repeat Operation Panel Cable Length (Controller - Arm), 10 m (Arm: optional up to 40 m), (TP: optional up to 30 m) (Controller - Teach Pendant) 550x550x1200 Dimensions (WxDxH mm) Weight (kg)

AC 380-415V ± 10%, 50/60Hz, 3 Phases,

max. 9,9kVA (E44) <100Ω, Max. Leakage Current 10mA

3, Performance Level d (EN ISO13849-1:2008)

0-45°C, 35-85% (no Dew or Frost allowed) Munsell 10GY9/1



The E-Controller – technically mature, easy to operate and powerful

IP 65 (optional IP67)

Compact, upgradeable and user-friendly

Protection Class

A maximum of 12 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 comfortably at the PC (option). Custom-tailored user interfaces may be programmed and used for the simplified control of the robot and also peripheral devices. Motor voltage ON and program start may be activated directly via the manual control unit. The parallel display of two information screens (e.g. position and signal data) facilitates the process control.

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 control, maintenance work is exceptionally user-friendly. Furthermore integrated service and diagnosis tools guarantee increased safety in operation. Remote diagnosis via Ethernet is also included in the standard package.

