

Kawasaki Robot

MS005N Medical and pharmaceutical robot

Features:

All stainless steel

Vapor hydrogen peroxide (VHP) resistant.

Meets to FDA standards

FDA (Food and Drug Administration, USA) approved gaskets and seals.

Meets ISO Class 5

(Class 100 of US FED STD 209E) cleanroom standard.

Hollow wrist

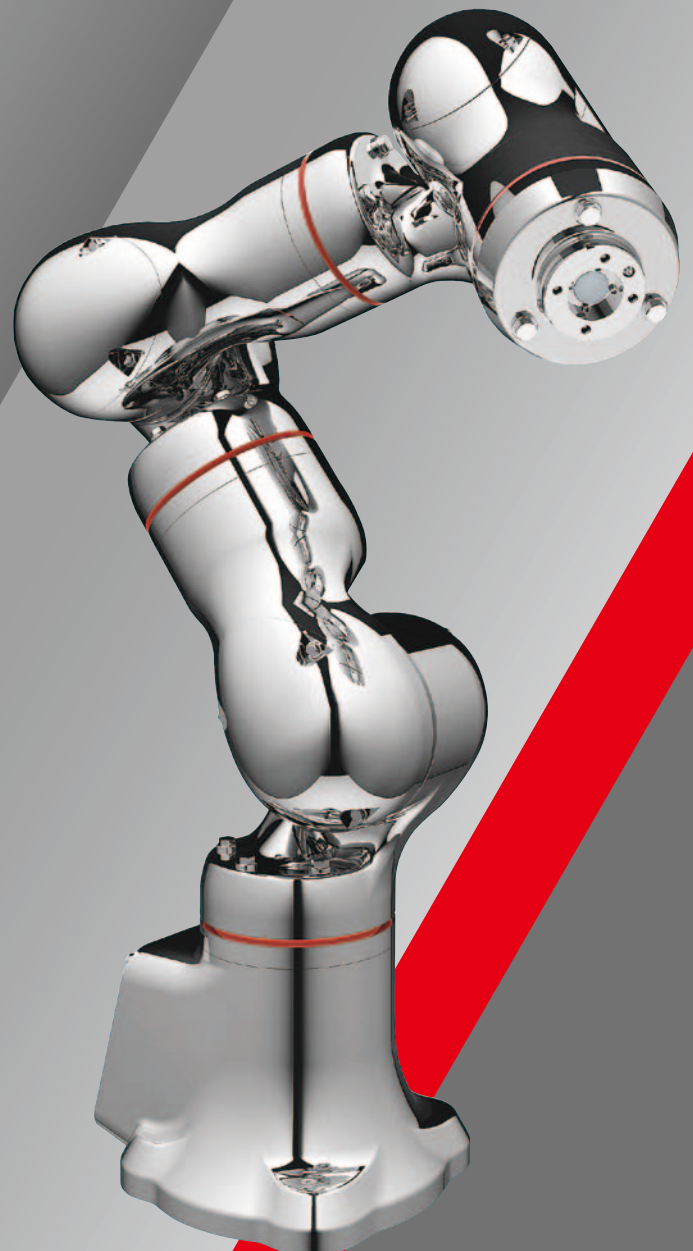
Through-arm cable feature eliminates cable interference.

Sanitary features

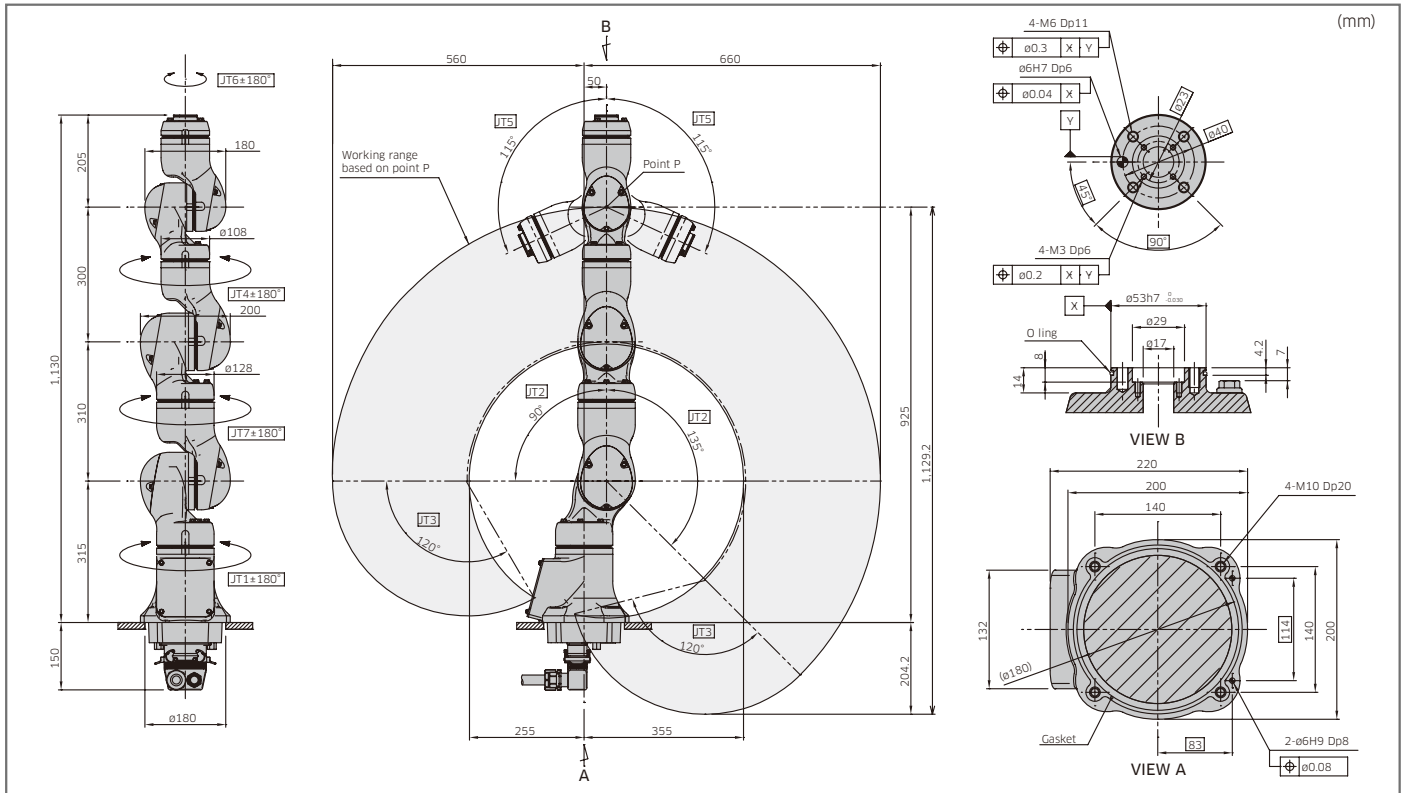
Streamlined design features high performance seals and chemical resistant stainless steel to facilitate decontamination process

Flexible motion

7-axis configuration makes it easy to avoid potential interference with other equipment and provides high dexterity for flexible or complex motion.



Motion range & dimensions



Specifications

		MS005N
Degree of freedom (axes)		7
Max. payload (kg)		5
Max. reach (mm)		660
Positional repeatability (mm) *1		±0.1
Motion range (°)	Arm rotation (JT1)	±180
	Arm out-in (JT2)	+135 - -90
	Arm up-down (JT3)	±120
	Wrist swivel (JT4)	±180
	Wrist bend (JT5)	±115
	Wrist twist (JT6)	±180
	Wrist twist (JT7)	±180
Max. speed (°/s)	Arm rotation (JT1)	130
	Arm out-in (JT2)	130
	Arm up-down (JT3)	215
	Wrist swivel (JT4)	300
	Wrist bend (JT5)	300
	Wrist twist (JT6)	480
Wrist twist (JT7)	215	
Mass (kg)		50
Installation		Floor, Ceiling
Controller	America	E76
	Europe	E70
	Japan & Asia	E73

*1: conforms to ISO9283

Controller

		Standard	Option
America		E76	
Europe		E70	
Japan & Asia		E73	
Dimensions (mm)		W500×D420×H259	
Structure		Enclosed structure / Indirect cooling system	
Number of controlled axes		8	
Drive system		Full digital servo system	
Coordinate systems		Joint, Base, Tool	Fixed tool point
Types of motion control		Joint/Linear/Circular Interpolated motion	
Programming		Point to point teaching or language based programming	
Memory capacity (MB)		8	
General purpose signals	External operation	Motor power off, Hold	
	Input (Channels)	32	Max. 96
	Output (Channels)	32	Max. 96
Operation panel		E-Stop switch, teach/repeat switch, control power light (Cycle start, motor-on, hold/run, and error reset are activated from the teach pendant.)	Cycle start switch, motor-on switch, hold/run switch, error light, error reset switch (E7X), rapid-feed check mode switch
Cable length	Teach pendant (m)	5	10, 15
	Robot-controller (m)	5	10, 15
Mass (kg)		30	
Power requirements		AC200-240V ±10% 50/60Hz 1ø Class-D earth connection (Earth connection dedicated to robots), leakage current: Maximum 100mA	
Environmental condition	Ambient temperature (°C)	0 - 45 (0 - 40 in vertical use)	
	Relative humidity (%)	35 - 85 (no dew, nor frost allowed)	
Teach pendant		TFT color LCD display with touch-panel, E-Stop switch, teach lock switch, Enable switch	
Auxiliary storage unit		-	
Interface		USB, Ethernet (100BASE-TX), RS-232C	

Kawasaki Heavy Industries, Ltd.

ROBOT DIVISION

<https://robotics.kawasaki.com/>

Tokyo Head Office/Robot Division

1-14-5, Kaigan, Minato-ku, Tokyo 105-8315, Japan
Phone: +81-3-3435-6852 Fax: +81-3-3437-9880

Akashi Works/Robot Division

1-1, Kawasaki-cho, Akashi, Hyogo 673-8666, Japan
Phone: +81-78-921-2946 Fax: +81-78-923-6548

Global Network

Kawasaki Robotics (USA), Inc.
Phone: +1-248-446-4100

Kawasaki Robotics (UK) Ltd.
Phone: +44-1925-71-3000

Kawasaki Robotics GmbH
Phone: +49-2131-34260

Kawasaki Robotics Korea, Ltd.
Phone: +82-32-821-6941

Kawasaki Robotics (Tianjin) Co., Ltd.
Phone: +86-22-5983-1888

Kawasaki Motors Enterprise (Thailand) Co., Ltd.
(Rayong Robot Center)
Phone: +66-38-955-040-58