

PENDANT LADDER EDITOR



LARGE PART PROCESSING



MOTOSIM EG-VRC (OPTION)

TOP REASONS TO BUY

- Variety of payloads/reaches/mounting options allow MH-series robot models to be used for a variety of applications
- Multiple robot control (up to eight robots/72 axes) simplifies programming
- Highest axis speeds in their class
- Improved wrist ratings provide higher handling capacity in many applications

Long/Extended Reach for Large Parts

- Powerful, high-speed robots with long/extended reaches offer superior performance in coating, dispensing, material cutting and handling applications.
- MH50: 50 kg (110.3 lb) payload; 2,061 mm (81.1") horizontal reach; 3,578 mm (140.9") vertical reach; ± 0.07 mm (± 0.003 ") repeatability.
- MH50-35: 35 kg (77.2 lb) payload; 2,538 mm (100") horizontal reach; 4,448 mm (175.1") vertical reach; ± 0.07 mm (± 0.003 ") repeatability.
- MH50 and MH50-35 models can be floor-, wall- or ceiling-mounted. Brakes on all axes.
- Wide work envelopes with small interference zones, allow robots to be placed close to workpieces/equipment which reduces required floorspace.



MH50 MH50-35

COATING • DISPENSING • MACHINE TENDING
MATERIAL CUTTING • MATERIAL HANDLING • PRESS TENDING

Payloads:

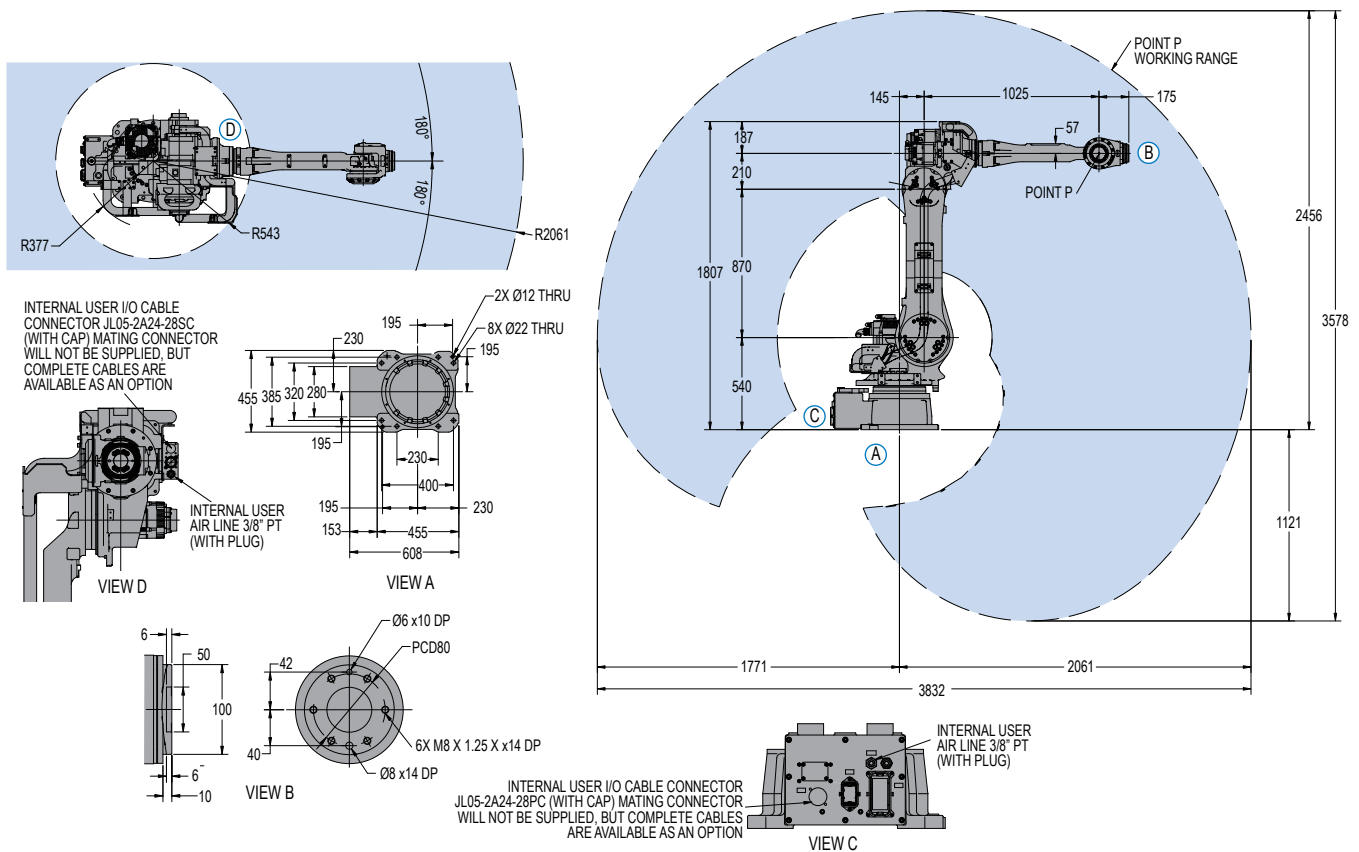
50 kg; Standard (MH50)
35 kg; Long Reach (MH50-35)

DX100 Controller

- Patented multiple robot control supports up to 8 robots/72 axes.
- Windows® CE programming pendant with color touch screen and USB interface.
- Faster processing speeds for smoother interpolation. Quicker I/O response. Accelerated Ethernet communication.
- Extensive I/O suite includes integral PLC and touch screen HMI, 2,048 I/O and graphical ladder editor.
- Supports all major fieldbus networks, including EtherNet/IP, DeviceNet, Profibus-DP and many others.
- Compliant to ANSI/RIA R15.06-1999 and other relevant ISO and CSA safety standards. Optional Category 3 functional safety unit.

MH50/MH50-35 ROBOTS

MH50 robot shown.
All dimensions are metric (mm) and for reference only. Please request detail drawings for all design/engineering requirements.



ROBOT SPECIFICATIONS			
	MH50	MH50-35	
Structure	Articulated	Articulated	
Controlled Axes	6	6	
Payload	50 kg (110.3 lbs)	35 kg (77.2 lbs)	
Vertical Reach	3,578 mm (140.9")	4,448 mm (175.1")	
Horizontal Reach	2,061 mm (81.1")	2,538 mm (100")	
Repeatability	±0.07 mm (±0.003")	±0.07 mm (±0.003")	
Maximum Motion Range	S-Axis (Turning)	±180°	±180°
	L-Axis (Lower Arm)	+135°/-90°	+135°/-90°
	U-Axis (Upper Arm)	+251°/-170°	+296°/-160°
	R-Axis (Upper Arm Twist)	±360°	±360°
	B-Axis (Pitch/Yaw)	±125°	±125°
	T-Axis (Twist)	±360°	±360°
Maximum Speed	S-Axis	180°/s	180°/s
	L-Axis	178°/s	140°/s
	U-Axis	178°/s	178°/s
	R-Axis	250°/s	250°/s
	B-Axis	250°/s	250°/s
	T-Axis	360°/s	360°/s
Approximate Mass	550 kg (1,212.8 lbs)	570 kg (1,256.9 lbs)	
Power Consumption	4 kVA	4 kVA	
Allowable Moment	R-Axis	216 N • m	147 N • m
	B-Axis	216 N • m	147 N • m
	T-Axis	147 N • m	78 N • m
Allowable Moment of Inertia	R-Axis	28 kg • m ²	10 kg • m ²
	B-Axis	28 kg • m ²	10 kg • m ²
	T-Axis	11 kg • m ²	4 kg • m ²
Internal User I/O Cable	23 conductors + ground	23 conductors + ground	
Internal User Air Line	3/8" pipe tap connection	3/8" pipe tap connection	

DX100 CONTROLLER SPECIFICATIONS**	
Dimensions (mm)	800 (w) x 1,000 (h) x 650 (d) (31.5" x 39.4" x 25.6")
Approximate Mass	250 kg max. (551.3 lbs)
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° to 45° C (32° to 113° F) During transit and storage: -10° to 60° C (14° to 140° F)
Relative Humidity	90% max. non-condensing
Primary Power Requirements	3-phase, 240/480/575 VAC at 50/60 Hz
Digital I/O	Standard I/O: 40 inputs/40 outputs consisting of 16 system inputs/16 system outputs, 24 user inputs/24 user outputs 32 Transistor Outputs; 8 Relay Outputs Max. I/O (optional): 2,048 inputs and 2,048 outputs
Position Feedback	By absolute encoder
Program Memory	JOB: 200,000 steps, 10,000 instructions CIO Ladder Standard: 15,000 steps Expanded: 20,000 steps
Pendant Dim. (mm)	169 (w) x 314.5 (h) x 50 (d) (6.7" x 12.4" x 2")
Pendant Weight	.998 kg (2.2 lbs)
Interface	One Compact Flash slot; One USB port (1.1)
Pendant Playback Buttons	Teach/Play/Remote Keyswitch selector Servo On, Start, Hold, and Emergency Stop Buttons
Programming Language	INFORM III, menu-driven programming
Maintenance Functions	Displays troubleshooting for alarms, predicts reducer wear
Number of Robots/Axes	Up to 8 robots, 72 axes
Multi Tasking	Up to 16 concurrent jobs, 4 system jobs
Fieldbus	DeviceNet Master/Slave, AB RIO, Profibus, Interbus-S, M-Net, CC Link, EtherNet IP/Slave
Ethernet	10 Base T/100 Base TX
Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release Meets ANSI/RIA R15.06-1999, ANSI/RIA/ISO 10218-1-2007 and CSA Z434-03

**See DX100 Controller data sheet (DS-399) for complete specifications

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