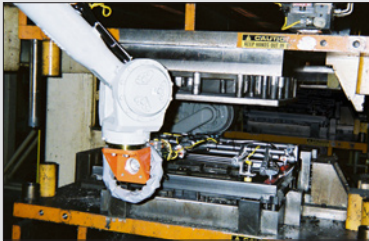


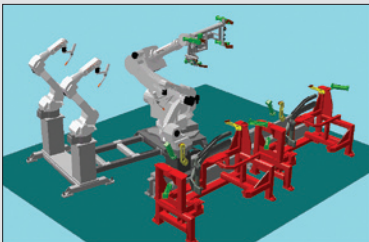
MOTOMAN
a YASKAWA company



PRESS TENDING



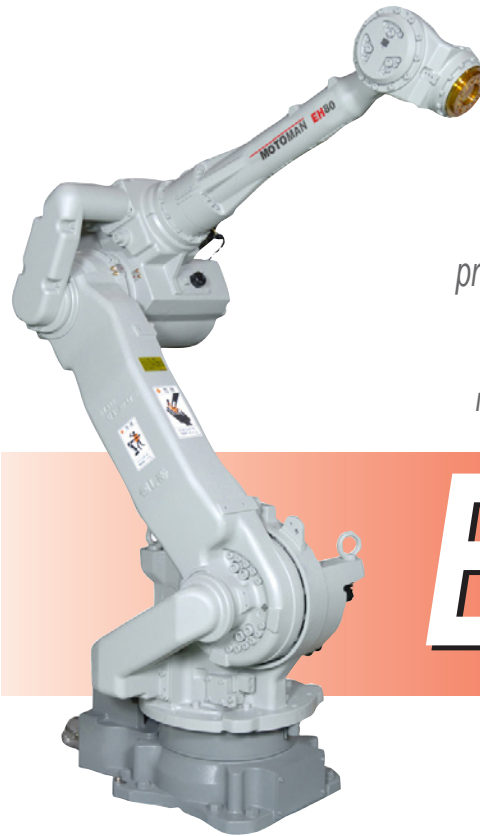
MATERIAL REMOVAL



MOTOSIM EG (optional)

FEATURES & OPTIONS

- Multiple robot control (up to four robots) simplifies programming
- Floor-, wall-, and ceiling-mounting options
- Widest working envelope in its class: 2,051 mm (80.7") reach
- Highest repeatability in its class: ± 0.07 mm (± 0.003 ")
- MotoSim® EG simulation software (optional)
- Highest speed in its class
- IP67 rated wrist
- IP54 rated body (standard)
- IP65 rated body (optional)



Motoman's EH80 robot provides a flexible solution to meet your automation needs

MATERIAL HANDLING • MACHINE TENDING
PRESS TENDING • MATERIAL REMOVAL

EH80

Payload: 80 kg

Designed for Material Handling

The heavy-duty EH80 "Expert Handling" robot is designed specifically for high duty cycle material handling applications. The EH-series robots provide a longer operating life than standard-duty robots. The EH80 offers superior performance in machine tending, dispensing, handling and material removal applications.

The versatile EH80 has an 80 kg (176.4 lb) payload, 3,557 mm (140") vertical reach, 2,051 mm (80.7") horizontal reach, and an industry-leading repeatability of ± 0.07 mm (± 0.003 ").

The EH80 is a sleek, high-speed robot that requires minimal installation space. Featuring a streamlined body, the EH80 can be placed close to machines for loading and unloading of parts.

The standard EH80 robot can be floor-, wall-, and ceiling-mounted. It can be used in a dual-robot configuration with any NX100-controlled robot to provide maximum flexibility for a variety of processes.

Advanced NX100 Controller

The NX100 high-performance controller features a Windows® CE

programming pendant, fast processing, easy-to-use INFORM III programming language, and robust PC architecture.

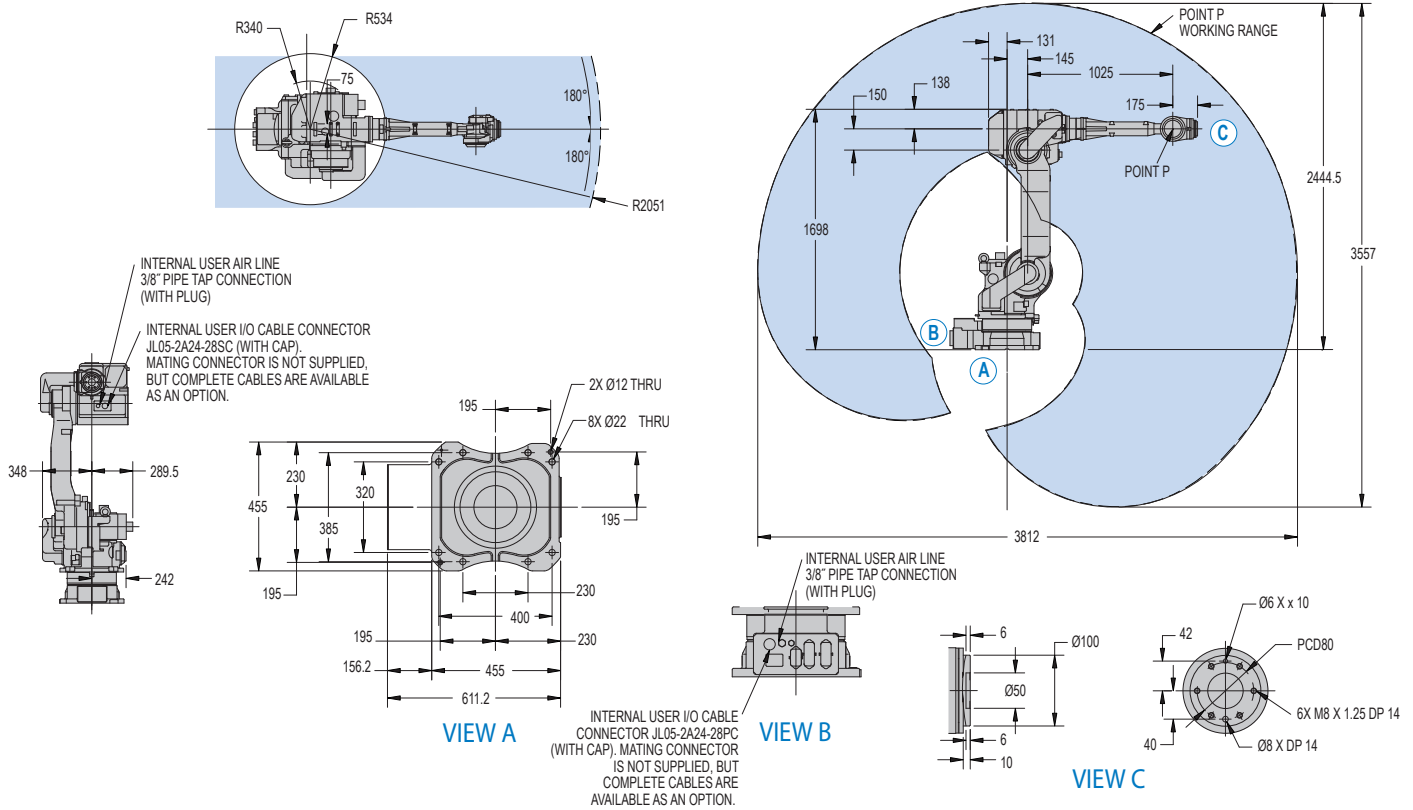
The NX100 offers unmatched multiple robot control capability (up to four robots) to minimize cost of integration and eliminate risk of robot collisions.

The NX100 includes four security levels of password protection (user, editor, maintenance and supervisor) for up to 100 individual users. Password use restricts access to the production programs and the controller logs any changes.

The programming pendant features a color touch-screen display that can be configured as a custom HMI with buttons and status indicators.

Dual-channel safety features include enhanced E-Stop functionality, integrated speed monitoring, manual brake release switch, and compliance with both ANSI/RIA R15.06-1999 and Canadian safety standards.

The NX100 offers unmatched connectivity through standard Ethernet and other network options: DeviceNet, ControlNet, Profibus-DP and EtherNet/IP.



EH80 SPECIFICATIONS

Structure	Vertical jointed-arm type	
Controlled Axes	6	
Payload	80 kg (176.4 lbs.)	
Vertical Reach	3,557 mm (140")	
Horizontal Reach	2,051 mm (80.7")	
Repeatability	±0.07 mm (0.003")	
Maximum Motion Range	S-Axis (Turning/Sweep)	±180°
	S-Axis (Wall Mount)	±25°
	L-Axis (Lower Arm)	+135°/-90°
	U-Axis (Upper Arm)	+280°/-160°
	R-Axis (Wrist Roll)	±360°
	B-Axis (Bend/Pitch/Yaw)	±125°
Maximum Speed	S-Axis	170°/s
	L-Axis	140°/s
	U-Axis	160°/s
	R-Axis	230°/s
	B-Axis	230°/s
	T-Axis	350°/s
Approximate Mass	570 kg (1,256.9 lbs.)	
Brakes	All axes	
Power Consumption	5.0 kVA	
Allowable Moment	R-Axis	313.6 N • m
	B-Axis	313.6 N • m
	T-Axis	147 N • m
Allowable Moment of Inertia	R-Axis	13 kg • m ²
	B-Axis	13 kg • m ²
	T-Axis	5.5 kg • m ²
Internal User I/O Cable	23 conductors + ground	
Internal User Air Line	1 - 3/8" pipe tap connection	

NX100 CONTROLLER SPECIFICATIONS*

Structure	Free-standing, enclosed type
Dimensions (mm)	650 (w) x 1,200 (h) x 650 (d) (25.6" x 47.2" x 25.6")
Approximate Mass	150-250 kg (330.8-551.3 lbs.)
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° C (32° F) to 45° C (113° F) During transmit and storage: -10° C (14° F) to +60° C (140° F)
Relative Humidity	90% max. non-condensing
Primary Power Requirements	3-phase, 240/480/575 VAC at 50/60 Hz
Grounding	Grounding resistance: ≤100 ohms Separate ground required
Digital I/O	Standard I/O: 40 inputs/40 outputs consisting of 16 system inputs/16 system outputs, 24 user inputs/24 user outputs Enabled to 1,024 inputs/1,024 outputs
Position Feedback	By absolute encoder
Drive Units	Servo packs for AC servo motors
Accel/Decel	Software servo control
Program Memory	60,000 steps 10,000 ladder instructions
Pendant Dim. (mm)	199 (w) x 338 (h) x 60 (d) (7.8" x 13.3" x 2.4")
Pendant Playback Buttons	Teach, Play, Remote, Servo On, Start, Hold, Emergency Stop, Edit Lock (Play Mode Enabled on Controller)
Concurrent I/O Ladder	10,000 Instructions
Multi Tasking	Up to 8 concurrent jobs
Fieldbus	DeviceNet Master/Slave, AB RIO, Profibus, Interbus-S, M-Net, CC Link, EtherNet IP/Slave
Ethernet	10 Base T/100 Base TX
E-Stop	Controlled stop
Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release Meets ANSI/RIA R15.06-1999 and Canadian safety standards

*See NX100 Controller data sheet (DS-232) for complete specifications