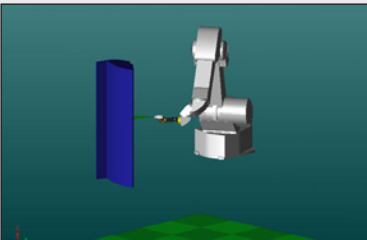




HOLLOW WRIST WITH BELL APPLICATOR (EXAMPLE)



EXPLOSION PROOF TEACH PENDANT (OPTIONAL)



MOTOSIM® EG OFF-LINE PROGRAMMING

TOP REASONS TO BUY

- Motoman Robotics is a global leader with a large install base
- High wrist/upper arm payload capacity for mounting paint application equipment
- Easy-to-use touch screen teach pendant
- MotoSim® EG simulation software (optional)

EPX2050

COATING • DISPENSING

Payload: 15 kg

Versatile Coating Robot

- High-speed, versatile six-axis EPX2050 robot is ideal for automotive and other industrial coating applications.
- Offers superior performance and creates smooth, consistent finish with outstanding efficiency for painting and dispensing applications.
- Hollow wrist design is ideal for painting contoured parts such as interior/exterior surfaces; well-suited for mounting spray equipment applicators. Inside diameter is 50 mm (1.97"). Interference between the hose and parts/fixtures is avoided; ensures optimum cycle time and robot reach/access.
- Factory Mutual (FM) approved for Class 1, Div. 1 use in hazardous environments.
- 15 kg (33.1 lb) payload; 2,054 mm (80.9") horizontal reach; 2,806 mm (110.5") vertical reach; ± 0.5 mm (± 0.02 ") repeatability.
- Highly flexible, compact design.

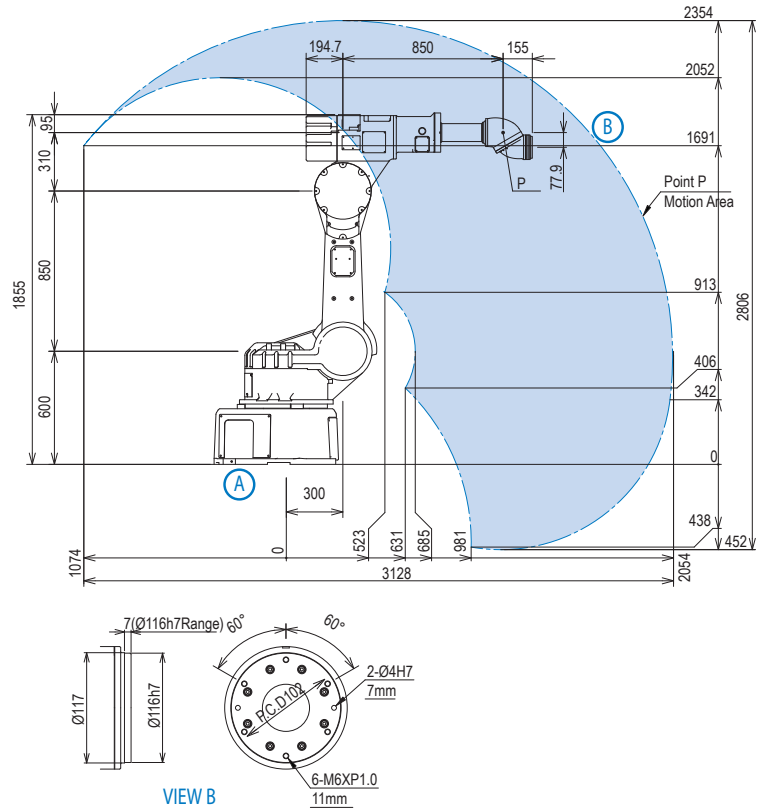
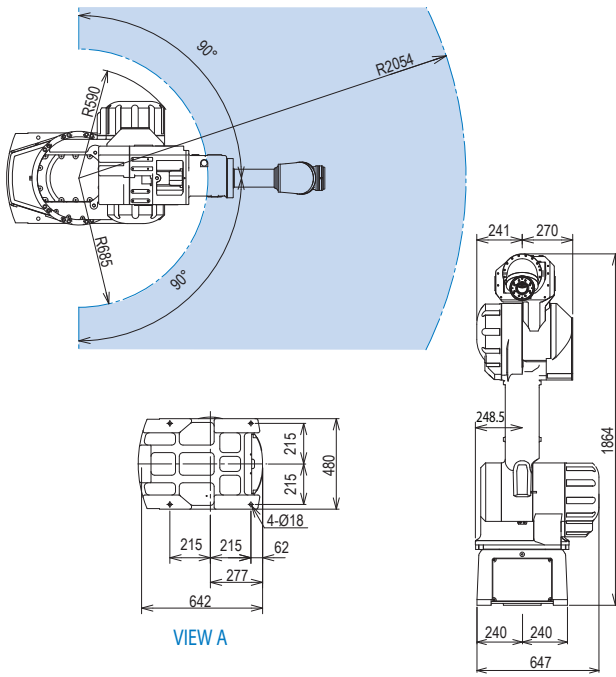
Advanced NX100-FM Controller

- Includes application-specific software for paint applications.
- Coordinates operation of robot and painting devices, including spray gun.
- Supports gun control instructions such as spray start/stop and painting conditions.
- All painting position parameters can be filed and saved.
- Supports standard networks (such as DeviceNet, ControlNet, Profibus-DP and Interbus-S), enabling connection to paint equipment controllers and production line controllers.



EPX2050 ROBOT

All dimensions are metric (mm) and for reference only. Please request detail drawings for all design/engineering requirements. PRELIMINARY DRAWINGS SHOWN.



EPX2050 SPECIFICATIONS

Structure	Vertical jointed-arm type	
Controlled Axes	6	
Payload	15 kg (33.1 lbs.)	
Vertical Reach	2,806 mm (110.5")	
Horizontal Reach	2,054 mm (80.9")	
Repeatability	±0.5 mm (0.02")	
Maximum Motion Range	S-Axis (Turning/Sweep) L-Axis (Lower Arm) U-Axis (Upper Arm) <i>(relative angle of lower arm)</i> R-Axis (Wrist Roll) B-Axis (Bend/Pitch/Yaw) T-Axis (Wrist Twist)	±90° +100°/-50° +5°/163° ±360° ±360° ±360°
Maximum Speed	2.0 m/s	
Approximate Mass	540 kg (1,190 lbs.)	
Brakes	All axes	
Power Consumption	5 kVA	
Allowable Moment	R-Axis B-Axis T-Axis	45.8 N · m 33.8 N · m 10.8 N · m
Allowable Moment of Inertia	R-Axis B-Axis T-Axis	1.45 kg · m ² 0.79 kg · m ² 0.10 kg · m ²
Mounting	Floor	

OPTIONAL PENDANT SPECIFICATIONS

Dimensions	235 (w) x 203 (h) x 78 (d) (9.25" x 8" x 3.1")
Mass	1.25 kg (2.8 lb)
Material	Reinforced plastics
Operation Device	Select keys, axes keys, numerical/application keys, emergency stop button, enable switch
Display	5.7-inch monochrome LCD, backlit white LED, touch panel 320 x 240 pixels (Alphanumeric characters, Chinese characters, Japanese letters, Others)
IEC Protection Class	IP54
Cable Length	Standard: 8 m, Optional 20 m Max: 50 m (with optional extension cable)

NX100-FM CONTROLLER SPECIFICATIONS (WITH STANDARD PENDANT)

Structure	Free-standing, enclosed type
Dimensions (mm)	500 (w) x 1400 (h) x 550 (d) (19.7" x 55.1" x 21.7")
Approximate Mass	120 kg (264.6 lb)
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° C (32° F) to 40° C (104° F) During transit and storage: -10° C (14° F) to +45° C (113° 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 PNP-Optional 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)	169 (w) x 314.5 (h) x 50 (d) (6.6" x 12.4" x 2")
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 Options	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
Scavenging Control	Equipped with scavenging control unit for internal pressure explosion-proof manipulator

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