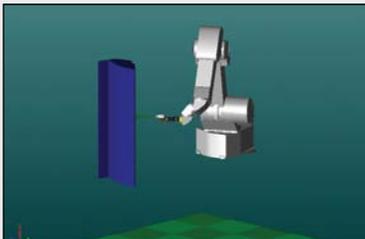




STANDARD TEACH PENDANT



MOTOSIM® EG OFF-LINE PROGRAMMING



OPTIONAL EXPLOSION-PROOF TEACH PENDANT



EPX1250

COATING • DISPENSING

Payload: 5 kg

Versatile Coating Robot

- High-speed, versatile six-axis EPX1250 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.
- Broadest motion range in its class; proven effective in painting multiple small parts simultaneously, as well as items such as instrument panels and headlamp assemblies.
- Factory Mutual (FM) approved for Class 1, Div. 1 use in hazardous environments.
- 5 kg (11 lb) payload; 1,256 mm (49.4") horizontal reach; 1,852 mm (72.9") vertical reach; ±0.15 mm (±0.006") repeatability.
- Highly flexible, compact design; easy to floor, wall or ceiling mount.
- 5 kg payload capacity allows use of air spray gun, electrostatic spray gun or a compact bell gun; providing the ability for higher efficiency and quality of surface coating.

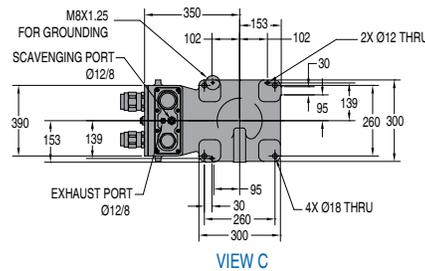
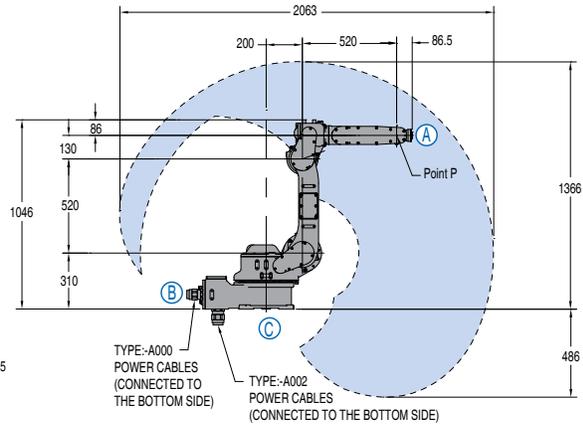
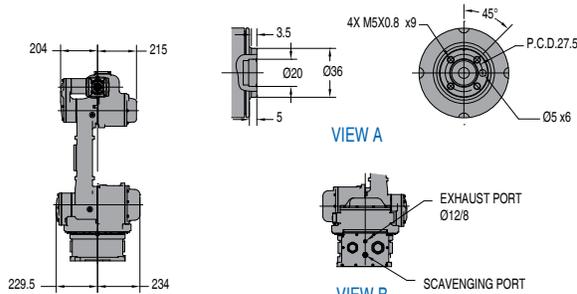
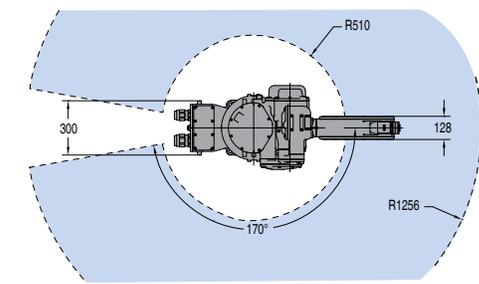
- Structure strength requirement for paint booth reduced due to lightweight design of EPX1250.

Advanced NX100-FM Controller

- Compact controller reduces installation space by 50% compared to conventional models.
- Supports standard networks (such as EtherNet/IP, DeviceNet, ControlNet, Profibus-DP and Interbus-S), enabling connection to paint equipment controllers and production line controllers.
- 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.

TOP REASONS TO BUY

- Motoman Robotics is a global leader with a large install base
- Easy-to-use touch screen teach pendant
- MotoSim® EG simulation software (optional)
- MotoMax® I warranty (standard)
- Optional intrinsically safe part positioner



EPX1250 SPECIFICATIONS

Structure	Vertical jointed-arm type	
Controlled Axes	6	
Payload	5 kg (11 lb)	
Vertical Reach	1,852 mm (72.9")	
Horizontal Reach	1,256 mm (49.4")	
Repeatability	±0.15 mm (0.006")	
Maximum Motion Range	S-Axis (Turning/Sweep)	±170°
	L-Axis (Lower Arm)	+120°/-65°
	U-Axis (Upper Arm)	+205°/-165°
	<i>(relative angle of lower arm)</i>	
	R-Axis (Wrist Roll)	±190°
	B-Axis (Bend/Pitch/Yaw)	±145°
Maximum Speed	T-Axis (Wrist Twist)	±360°
	S-Axis	185°/s
	L-Axis	185°/s
	U-Axis	185°/s
Approximate Mass	R-Axis	360°/s
	B-Axis	410°/s°
	T-Axis	500°/s
	All axes	
Brakes	All axes	
Power Consumption	1.5 kVA	
Allowable Moment	R-Axis	8.0 N · m
	B-Axis	8.0 N · m
	T-Axis	3.0 N · m
Allowable Moment of Inertia	R-Axis	0.20 kg · m ²
	B-Axis	0.20 kg · m ²
	T-Axis	0.07 kg · m ²
Mounting	Floor, ceiling, wall	

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, backlight 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	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