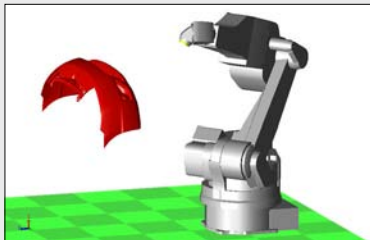




PAINTING OF AUTOMOTIVE BUMPERS



EXPLOSION PROOF TEACH PENDANT



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
- Wrist options to optimize coating application
- MotoSim® EG simulation software (optional)
- MotoMax® III warranty (standard)

EPX2900

• COATING • DISPENSING •



Payload: 20 kg

Versatile Coating Robot

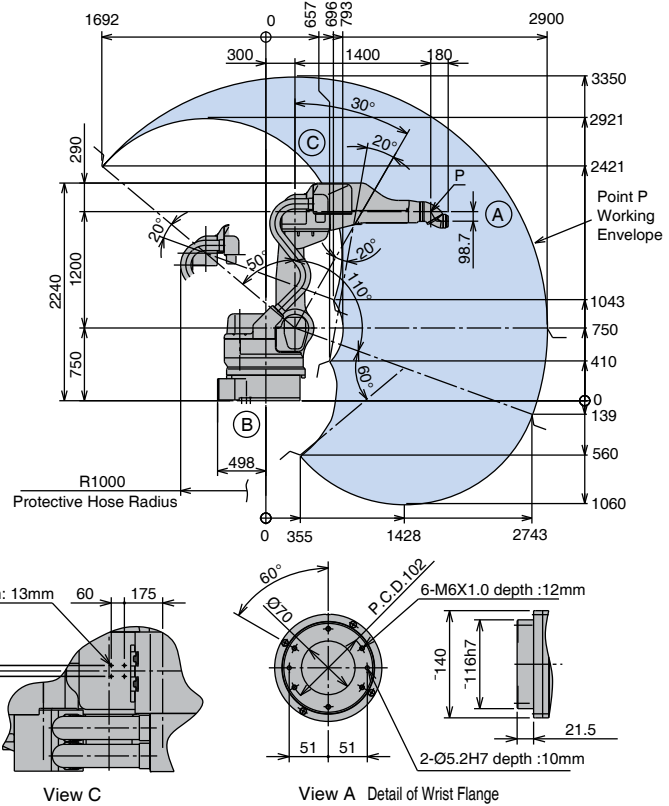
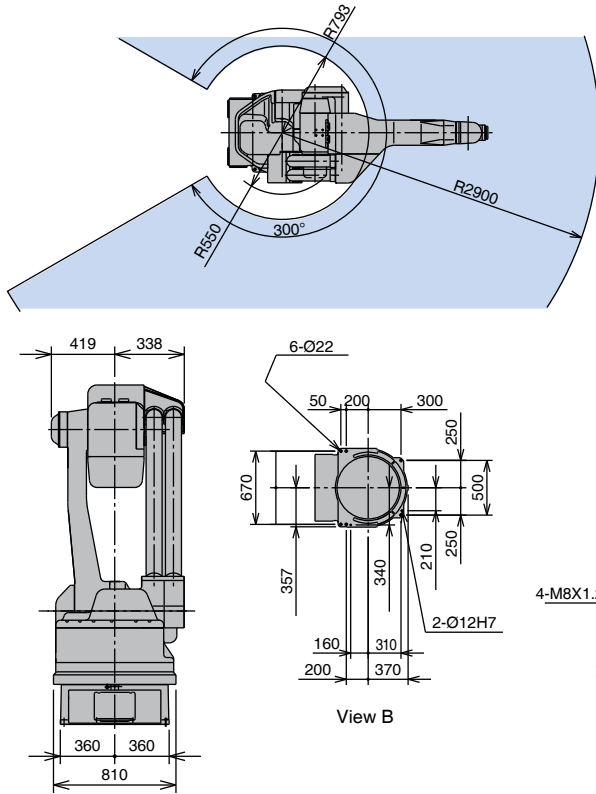
- High-speed, versatile six-axis EPX2900 is ideal for painting automotive bodies and plastic component parts; agricultural equipment; and other machinery and large parts.
- Offers superior performance and creates smooth, consistent finish with outstanding efficiency for painting and dispensing applications.
- Factory Mutual (FM) approved for Class 1, Div. 1 use in hazardous environments.
- 70 mm (2.76") diameter hollow wrist facilitates mounting of spray equipment. Interference between the hose and parts/fixtures is avoided; ensures optimum cycle time and robot reach/access.
- Optional devices such as 24-color change valve (CCV), flushable gear pump (FGP), flushing unit valve and master valve can be mounted on the upper arm; reduces cycle time and paint waste.
- 20 kg (44.1 lb) payload; 2,900 mm (114.2") horizontal reach; 4,410 mm (173.6") vertical reach; ± 0.5 mm (± 0.02 ") repeatability.

Advanced NX100-FM Controller

- Factory Mutual (FM) approved for Class 1, Div. 1 use in hazardous environments.
- 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.

EPX2900 ROBOT

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



EPX2900 SPECIFICATIONS

Structure	Vertical jointed-arm type
Controlled Axes	6
Payload	20 kg (44.1 lb)
Vertical Reach	4,410 mm (173.6")
Horizontal Reach	2,900 mm (114.2")
Repeatability	±0.5 mm (0.02")
Maximum Motion Range	S-Axis (Turning/Sweep) ±150° L-Axis (Lower Arm) +110°/-50° U-Axis (Upper Arm) +90°/-70° R-Axis (Wrist Roll) ±360° (R & T: ±360° or less) B-Axis (Bend/Pitch/Yaw) ±360° T-Axis (Wrist Twist) ±360° (R & T: ±360° or less)
Maximum Speed	S-Axis 2.7 rad/s, 155°/s L-Axis 2.2 rad/s, 125°/s U-Axis 2.7 rad/s, 155°/s R-Axis 7.9 rad/s, 450°/s B-Axis 9.6 rad/s, 550°/s T-Axis 11.3 rad/s, 650°/s
Approximate Mass	1,030 kg (2,271.2 lb)
Brakes	All axes
Power Consumption	5 kVA
Allowable Moment	R-Axis 72 N·m B-Axis 51.5 N·m T-Axis 19.6 N·m
Allowable Moment of Inertia	R-Axis 10.5 kg·m ² B-Axis 6.5 kg·m ² T-Axis 0.8 kg·m ²
Mounting	Floor

NX100-FM CONTROLLER SPECIFICATIONS

Structure	Free-standing, enclosed type
Dimensions (mm)	800 (w) x 1,200 (h) x 600 (d) (31.5" x 47.2" x 23.6")
Approximate Mass	200 kg (441 lb)
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° C (32° F) to 45° C (113° F) During transit 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
Scavenging Control	Equipped with scavenging control unit for internal pressure explosion-proof manipulator

www.motoman.com

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