

MPX2600

VERSATILE MEDIUM-SIZED COATING ROBOT

KEY BENEFITS

Large global install base backed by Yaskawa's experience and reliability

Best-in-class wrist payload

High-performance axis drives

Easy-to-use touch screen teach pendant

MotoSim® EG-VRC 2017 (or later) simulation software (optional)

SPECIFICATIONS

15 kg wrist payload

2,000 mm horizontal reach

3,643 mm vertical reach

±0.2 mm repeatability

APPLICATION

Coating

Dispensing

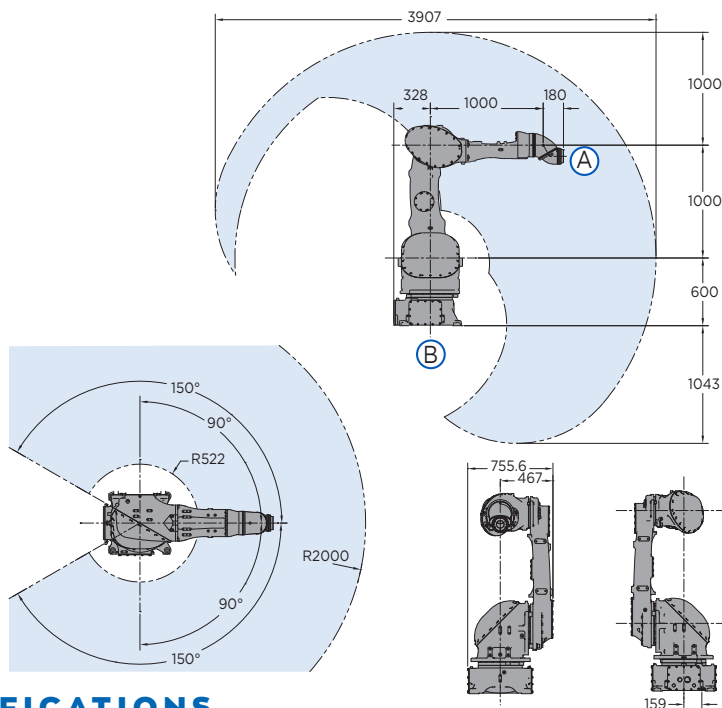


- High-speed, six-axis MPX2600 robot is ideal for automotive components, as well as other industrial coating applications.
- Offers superior performance and creates smooth, consistent finish with outstanding efficiency for painting and dispensing applications.
- Wrist payload of 15 kg; well-suited for mounting a variety of spray guns and large bells.
- Streamlined, upper arm is equipped with mounting points to optimize hose routing.
- Manipulator design enables effective use of work envelope, allowing closer installations to workpieces and efficient use of floorspace.
- Factory Mutual approved for use in Class I, Div. 1 hazardous environments.
- Versatile design can be floor, wall or ceiling mounted for layout flexibility.
- Large, 70 mm hollow wrist diameter helps prevent paint and air tube interference.

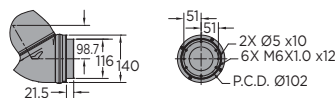
DX200-FM CONTROLLER

- Includes application-specific software for paint applications.
- Supports paint hardware configurations including: trigger delays, air calibrations and valve timing programs.
- Accommodates paint control instructions such as spray start/stop and painting condition files.
- Supports standard networks (such as EtherNet, EtherNet IP, CC-Link, and DeviceNet), enabling connection to paint equipment controllers and production line controllers.
- Intrinsically safe pendant (optional).
- The DX200-FM is available with Category 3 Performance Level d (PLd) Functional Safety Unit (FSU), which supports safety-rated speed control, safety-rated soft axis and space limiting, and safety-rated monitor stop. In addition to enabling safe operation in smaller spray booths with adjacent manual operations, these safety functions can be utilized to save costs and reduce floorspace requirements.

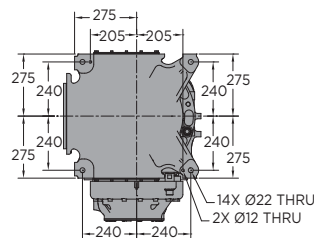
MPX2600 ROBOT



VIEW A



VIEW B



All dimensions are metric (mm) and for reference only.
Request detailed drawings for all design/engineering requirements.

SPECIFICATIONS

MPX2600 SPECIFICATIONS		
Structure		Vertical jointed-arm type
Controlled Axes		6
Payload		15 kg
Vertical Reach		3,643 mm
Horizontal Reach		2,000 mm
Repeatability		±0.2 mm
Maximum Motion Range	S-Axis (Turning/Sweep)	±150° (wall: ±90°)
	L-Axis (Lower Arm)	+130°/-65°
	U-Axis (Upper Arm)	+150°/-65°
	(relative angle of lower arm)	
	R-Axis (Wrist Roll)	±720°
	B-Axis (Bend/Pitch/Yaw)	±720°
	T-Axis (Wrist Twist)	±720°
Maximum Speed		2.0 m/s
Approximate Mass		485 kg
Brakes		All axes
Power Consumption		3 kVA
Allowable Moment	R-Axis	93.2 N • m
	B-Axis	58.8 N • m
	T-Axis	19.6 N • m
Allowable Moment of Inertia	R-Axis	3.75 kg • m ²
	B-Axis	2.225 kg • m ²
	T-Axis	0.20 kg • m ²
Mounting		Floor, Wall, Ceiling

DX200-FM CONTROLLER SPECIFICATIONS (WITH STANDARD PENDANT)	
Structure	Free-standing, enclosed type
Dimensions (mm)	600 (w) x 1349 (h) x 520 (d) with transformer
Approximate Mass	250 kg with transformer
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° C to 40° C During transit and storage: -10° C to +45° C
Relative Humidity	90% max. non-condensing
Primary Power Requirements	3-phase, 240/480/575 VAC at 50/60 Hz Optional external transformer allows 240/480/575 VAC at 50/60 Hz
Grounding	Grounding resistance: ≤100 ohms Separate ground required
Digital I/O	Specialized signals: 28 inputs and 7 outputs General signals: 40 inputs and 40 outputs (Specialized allocation: 24 inputs and 4 outputs; General allocation: 16 inputs and 16 outputs) Max. I/O (optional): 4,096 inputs and 4,096 outputs
Position Feedback	By absolute encoder
Drive Units	Servo packs for AC servo motors
Accel/Decel	Software servo control
Program Capacity	JOB: 200,000 steps; 10,000 instructions Concurrent I/O ladder: 20,000 steps
Fieldbus Options	CC Link, DeviceNet, Ethernet, EtherNet/IP, EtherCAT, PROFINET
Ethernet	10 Base T/100 Base TX
E-Stop	Controlled stop
Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Meets ANSI/RIA R15.06-1999 and Canadian safety standards
Pendant Dim. (mm)	169 (w) x 314.5 (h) x 50 (d)
Pendant Mass	0.99 kg
Pendant Playback Buttons	Teach, Play, Remote, Servo On, Start, Hold, Emergency Stop, Edit Lock (Play Mode enabled on controller)

INTRINSICALLY SAFE PENDANT SPECIFICATIONS (OPTIONAL)

Dimensions (mm)	235 (w) x 203 (h) x 78 (d)
Mass	1.3 kg
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)