

MPXL2600

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

10 kg wrist payload

2,100 mm horizontal reach

3,844 mm vertical reach

±0.5 mm repeatability

APPLICATION

Coating

Dispensing

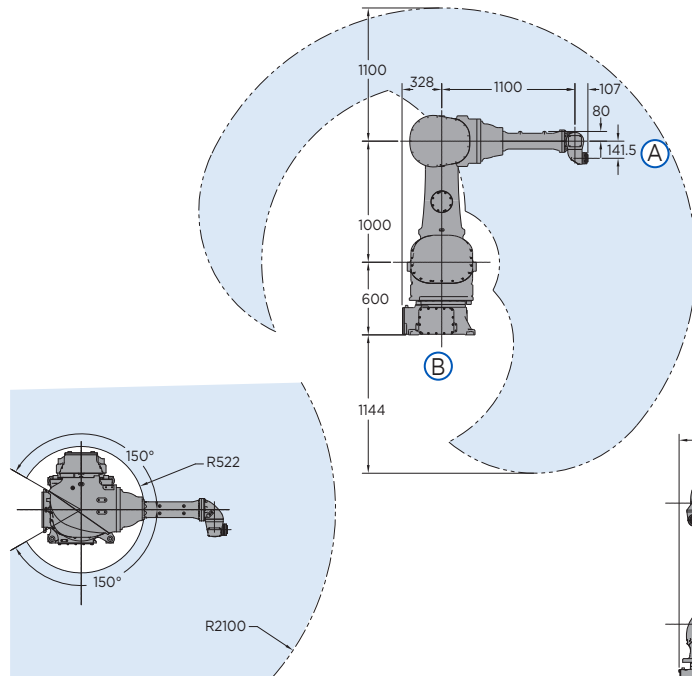


- High-speed, six-axis MPXL2600 robot with Lemma style wrist, is ideal for automotive components, as well as other industrial coating applications.
- Offers superior performance and creates smooth, consistent finish with outstanding efficiency for painting and dispensing applications.
- Wrist payload of 10 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.
- Optimized for reciprocating motion, the Lemma wrist is well-suited for painting horizontal and vertical planes in moving lines.

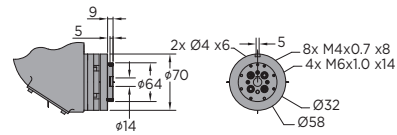
DX200-FM CONTROLLER

- 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.

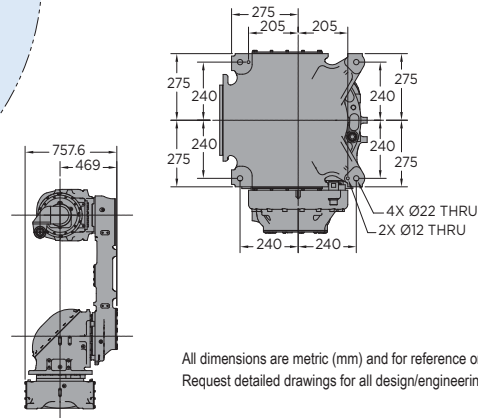
MPXL2600 ROBOT



VIEW A



VIEW B



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

SPECIFICATIONS

MPXL2600 SPECIFICATIONS			DX200-FM CONTROLLER SPECIFICATIONS (WITH STANDARD PENDANT)	
Structure			Structure	Free-standing, enclosed type
Controlled Axes			Dimensions (mm)	600 (w) x 1349 (h) x 520 (d) with transformer
Payload			Approximate Mass	250 kg with transformer
Vertical Reach			Cooling System	Indirect cooling
Horizontal Reach			Ambient Temperature	During operation: 0° C to 40° C During transit and storage: -10° C to +45° C
Repeatability			Relative Humidity	90% max. non-condensing
Maximum Motion Range	S-Axis (Turning/Sweep)	±150° (wall: ±90°)	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
	L-Axis (Lower Arm)	+130°/-65°	Grounding	Grounding resistance: ≤100 ohms Separate ground required
	U-Axis (Upper Arm) (relative angle of lower arm)	+180°/-65°		
	R-Axis (Wrist Roll)	±260°	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
	B-Axis (Bend/Pitch/Yaw)	±270° *		
Maximum Speed			Position Feedback	By absolute encoder
Approximate Mass			Drive Units	Servo packs for AC servo motors
Brakes			Accel/Decel	Software servo control
Power Consumption			Program Capacity	JOB: 200,000 steps; 10,000 instructions Concurrent I/O ladder: 20,000 steps
Allowable Moment	R-Axis	30.4 N • m	Fieldbus Options	CC Link, DeviceNet, Ethernet, EtherNet/IP, EtherCAT, PROFINET
	B-Axis	19.6 N • m	Ethernet	10 Base T/100 Base TX
	T-Axis	9.8 N • m	E-Stop	Controlled stop
Allowable Moment of Inertia	R-Axis	0.97 kg • m ²	Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Meets ANSI/RIA R15.06-1999 and Canadian safety standards
	B-Axis	0.40 kg • m ²	Pendant Dim. (mm)	169 (w) x 314.5 (h) x 50 (d)
	T-Axis	0.10 kg • m ²	Pendant Mass	0.99 kg
Mounting			Pendant Playback Buttons	Teach, Play, Remote, Servo On, Start, Hold, Emergency Stop, Edit Lock (Play Mode enabled on controller)
Mounting			* Request engineering drawing for B-axis maximum motion range limits	
Floor, Wall, Ceiling				
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)			

YASKAWA

YASKAWA AMERICA, INC. 100 Automation Way | Miamisburg, OH 45342
937.847.6200 | motoman.com

Technical specifications subject to change without notice. | Motoman is a registered trademark.
All other marks are the trademarks and registered trademarks of Yaskawa America, Inc.
DS-965 ©2021 Yaskawa America, Inc. OCTOBER 2021