

ES165RD II ES200RD II

SPOT WELDING

KEY BENEFITS

Proven integrated cable harness for power and utilities increases cable life and reduces life cycle cost

Industry's first one-year spot harness warranty

Integrated control for spot guns with servo-motor drives improves weld quality

DX200 can control up to eight robots and reduces cycle time due to improved motion control of arm and gun

SPECIFICATIONS

151.5 kg payload (ES165RD II)
186.5 kg payload (ES200RD II)
3,140 mm horizontal reach
4,782 mm vertical reach
±0.2 mm repeatability

CONTROLLERS



DX200



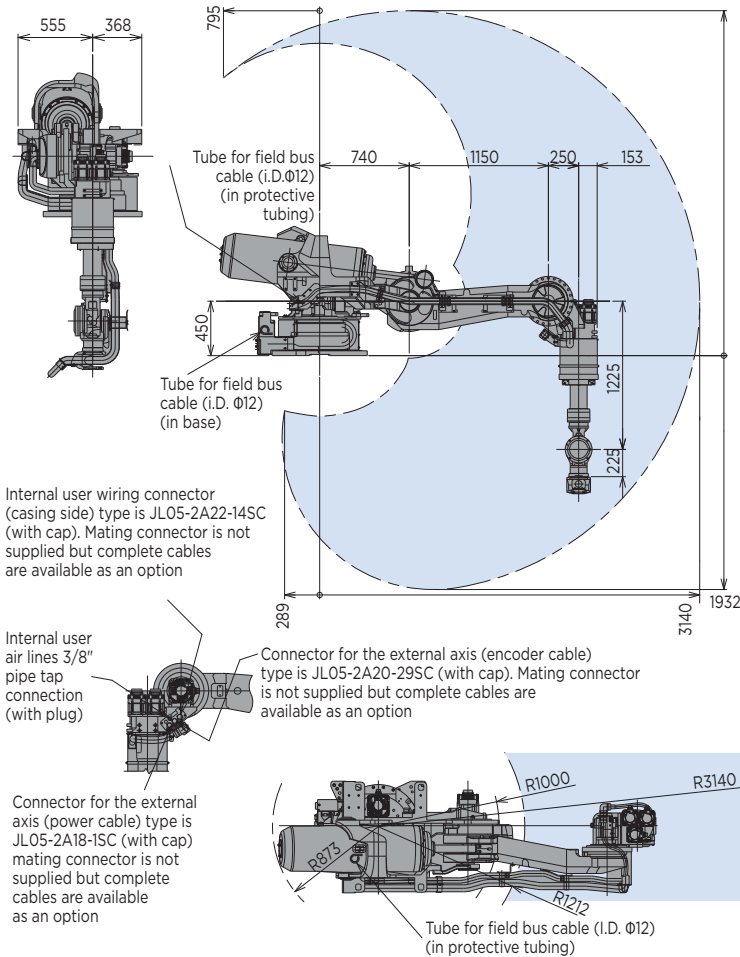
FS100



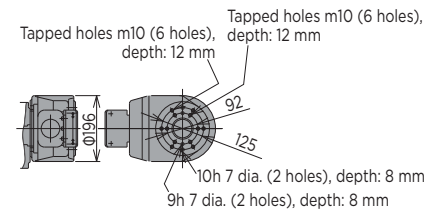
MLX200

- High-speed spot robots are specifically designed to deliver unmatched performance and reliability in spot welding applications.
- Shelf-mounting saves floorspace, expands work envelope and improves access to parts.
- To increase cable life, enhance safety and reduce teaching time, servo gun cables and air and water lines are routed through robot base and upper arm to robot wrist.
- Compact, slim design allows robot to reduce cycle time and reach into confined spaces, improving system productivity.
- Process-specific design, together with patented multiple robot controller, ensures maximum productivity in spot welding applications.
- Floor-mounted versions (MS165 and MS210) available.
- ES165RD II and ES200RD II robots can be combined with MS100 II and MS80W II models for high-density installations with improved throughput.
- Controller connectivity provides simple wiring to spot timers and robot pendant weld programming for Medar® and Nadex® brand timers.
- Numerous spot welding functions to take advantage of servo gun control including:
 - Work thickness detection
 - Multi-step pressure file
 - Tip wear compensation
 - Work search function
 - Servo tip dresser
 - Pendant o-scope
- Spot harness connections
 - Connections from base to upper arm
 - DeviceNet signal and power
 - Connections from base to wrist (gun)
 - Servo motor and encoder
 - Air hose (2) 6.5 mm ID, (1) 8 mm ID
 - Water hose (4) 8 mm ID
 - Weld power (2) 22 mm², (1) 14 mm²
 - Transformer thermostat (3) 0.75 mm²
 - User I/O (9) twisted pair + (1) 0.3 mm²

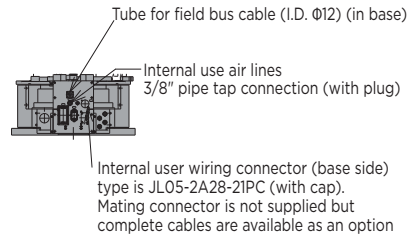
ES165RD II | ES200RD II



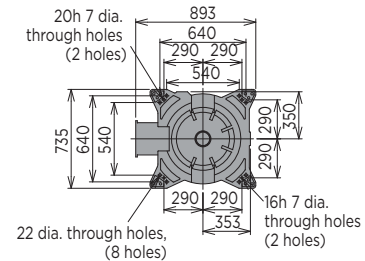
VIEW A



VIEW B



VIEW C



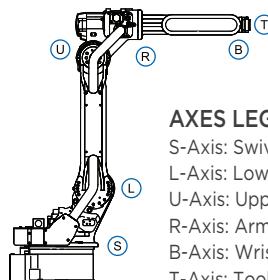
All dimensions are metric (mm) and for reference only.
Request detailed drawings for all design/engineering requirements.

SPECIFICATIONS: ES165RD II | ES200RD II

Axes	Maximum motion range [°]		Maximum speed [°/sec.]		Allowable moment [N•m]		Allowable moment of inertia [kg•m ²]		Controlled axes	ES165RD II	ES200RD II
	ES165RD II	ES200RD II	ES165RD II	ES200RD II	ES165RD II	ES200RD II	ES165RD II	ES200RD II			
S	±180	±180	105	90	-	-	-	-	6	6	6
L	+80/-130	+80/-130	105	85	-	-	-	-	Maximum payload [kg]	151.5	186.5
U	+208/-112	+208/-107	105	85	-	-	-	-	Repeatability [mm]	±0.2	±0.2
R	±205	±205	175	120	868	1,291	83	141	Horizontal reach [mm]	3,140	3,140
B	±120	±120	150	120	868	1,291	83	141	Vertical reach [mm]	4,782	4,782
T	±180	±180	240	190	490	715	45	80	Temperature [°C]	0 to +45	0 to +45
									Humidity [%]	20 - 80	20 - 80
									Weight [kg]	1,790	1,860
									Power supply, average [kVA]	5	5

OPTIONS

- Extended length manipulator cables
- Robot risers and base plates
- External axis kits for servo guns
- Wide variety of fieldbus cards
- Vision systems
- Digital interface (Dnet or EIP) for Medar
- MedWeld 6000 spot timer



AXES LEGEND

- S-Axis: Swivel Base
- L-Axis: Lower Arm
- U-Axis: Upper Arm
- R-Axis: Arm Roll
- B-Axis: Wrist Bend
- T-Axis: Tool Flange

Yaskawa America, Inc.
Motoman Robotics Division

100 Automation Way
Miamisburg, OH 45342
Tel: 937.847.6200
Fax: 937.847.6277

motoman.com

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