The MH5F and MH5LF models are compact and powerful robots designed for small parts assembly, material handling and packaging. The FS100 is a powerful controller with unmatched open software architecture.

The “slim arm” design reduces potential interference between the robot tooling and upper arm. This new design also improves the B-axis range of motion and shortens the distance between the B-axis and the T-axis mounting flange, providing increased carrying capacity.

**Compact, Powerful and Economical**

- MH5F model: 706 mm reach; ±0.02 mm repeatability. Widest work envelope in its class.
- MH5LF extended-reach model: 895 mm reach; ±0.03 mm repeatability. For applications requiring a larger work envelope.
- 5 kg payload. High moment ratings provide increased carrying capacity.
- Robot adjusts performance based on load. Effective for payloads less than 1 kg.
- Small footprint and minimal interference radius (179 mm) maximizes floorspace utilization.
- Floor-, wall- or ceiling-mounted options. Brakes on all axes.
- Internally routed cables and hoses maximize system reliability.
- User utility connections on top of the upper arm for better cable management.

**FS100 Controller**

- Small, compact controller.
- 470 mm wide, 200 mm high, 420 mm deep.
- Designed for packaging and small parts handling robots with payloads of 20 kg and under.
- Compatible with integrated MotoSight™ 2D vision (optional).
- High-speed I/O response and millisecond resolution timers.
- Open architecture enables software customization in widely accepted environments such as C, C++ and C#.Net.
- Uses same programming pendant hardware as DX100 controller, providing a consistent programming interface with current products.
- Built-in collision avoidance with multiple robots.

**TOP REASONS TO BUY**

- Compact design allows maximum performance using minimal floor space
- Yields extraordinary production results while requiring minimal capital investment
- Offers superior performance in packaging, material handling, machine tending and assembly applications
- Open architecture enables programming and control through a wide variety of platforms
MH5F/MH5LF ROBOTS

**FS100 CONTROLLER SPECIFICATIONS**

- **Dimensions (mm)**: 470 (w) x 200 (h) x 420 (d) (18.5" x 7.9" x 16.5")
- **Approximate Mass**: 20 kg (44.1 lbs)
- **Cooling System**: Direct cooling
- **Ambient Temperature**: During operation: 0°C to 40°C (32°F to 104°F)
  During transit and storage: -10°C to 60°C (14°F to 140°F)
- **Relative Humidity**: 90% max. non-condensing
- **Primary Power Requirements**: Single-phase or 3-phase power, 200/230 VAC at 50/60 Hz
- **External Transformer (optional)**: For 480/575 VAC installations
- **Digital I/O**: NPN-Standard;
  PNP-Optional;
  Max. I/O (optional): 168 inputs/16 outputs
- **Position Feedback**: Absolute encoder
- **Program Memory**: JOB: 10,000 steps, 1,000 instructions
  CIO Ladder: 1,500 steps
- **Pendant Dim. (mm)**: 169 (w) x 314.5 (h) x 50 (d) (6.7" x 12.4" x 2")
- **Pendant Weight**: 998 kg (2.2 lbs)
- **Interface**: One Compact Flash slot; One USB port (1.1)
- **Pendant Playback Buttons**: Teach/Play/Remote Keyswitch selector Servo On, Start, Hold, and Emergency Stop Buttons
- **Programming Language**: INFORM III, menu-driven programming, MotoPlus SDK (C language) – optional
- **Maintenance Functions**: Displays troubleshooting for alarms
- **Number of Robots/Axes**: Up to 2 robots, 16 axes (requires 2 controllers)
- **Multi Tasking**: Up to 6 concurrent jobs, 1 system job
- **Fieldbus**: All common networks supported
- **Ethernet**: 10-Base T/100 Base TX
- **Safety**: Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release

*Note: Use DX100 controller for arc welding applications.**

**See FS100 Controller data sheet (DS-509) for complete specifications.**

**MH5F (YR-MH5F-A00) shown. All dimensions are metric (mm) and for reference only. Please request detail drawings for all design/engineering requirements.**