YASKAWA’s smallest type of the MH-series, the MOTOMAN MH3F, is a powerful high-speed 6-axis robot, designed for more compact, lighter payload applications. The high repeatability of 0.02 mm offers superior performance in small part handling and assembly and is ideal for lab automation, education and research applications. The base width of only 170 mm allows it to be mounted in confined spaces. The compact design and built-in collision avoidance features with multiple robot control allow up to two robots to be used together to optimise productivity. Furthermore, the internally routed cables and hoses maximize the system reliability. This robot can be driven by the FS100 compact controller.

Key benefits
- Excellent value for money makes this an affordable robot
- 6 axes design provides high flexibility
- 3 kg payload is ideal for light duty handling and process applications
- High repeatability delivers accurate process
- Compact body design with internally routed services allow for small installation footprint
- Floor, wall and ceiling mounting options provide integration flexibility

MOTOMAN MH3F
General purpose and handling
### Specifications MH3F

<table>
<thead>
<tr>
<th></th>
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<td>–</td>
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</tr>
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</table>

### Mounting options:
- Floor, ceiling, wall

### All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-MH0003F-A00, A-04-2013, A-No. 161753
Handling & General Applications with the MH-series

The MOTOMAN MH5S, MH5F and MH5LS, MH5LF are compact, high-speed 6-axis robots that offer superior performance in a variety of applications such as packaging, material handling, machine tending and dispensing, where versatility is required. The MH5S, MH5F and MH5LS, MH5LF feature high reach and offer the widest work envelope in its class. Its compact design and built-in collision detection feature with multiple robot control allow up to eight robots to be used together to optimize productivity. This all-round robots can be driven by the high-performance-controller DX100 as well as the compact-controller FS100.

Key benefits
- Compact, powerful and economical
- Compact design allows maximum performance using minimal floor space
- Yields extraordinary production results while requiring minimal capital investment
- Internally routed cables and hoses maximize system reliability

MOTOMAN MH5S, MH5F
MOTOMAN MH5LS, MH5LF
General purpose and handling
## Specifications MH5S, MH5F

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<th>Maximum motion range [°]</th>
<th>Maximum speed [°/sec.]</th>
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<th>Allowable moment of inertia [kg · m²]</th>
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**Controlled axes**: 6

- Max. payload [kg]: 5
- Repeat. pos. accuracy [mm]: ±0.02
- Max. working range [mm]: R = 706
- Temperature [°C]: 0 to +45
- Humidity [%]: 20 – 80
- Weight [kg]: 27
- Power supply, average [KVA]: 1
Specifications MH5LS, MH5LF

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<td>5</td>
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</table>
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robotics@yaskawa.eu.com

Technical data may be subject to change without previous notice.
Handling, Picking and Packing with the MPK-series

The MOTOMAN MPK2, MPK2F is a five-axis, high-speed robot that is particularly suitable in the following areas: order-picking, high-speed handling, picking-packing and many other handling applications.

With its Wash-Down paintwork, the MPK2, MPK2F has been developed especially for use in the food industry and in environments with strict cleanliness requirements.

Thanks to its compact and streamlined design, the robot can operate even in confined workspaces.

The hollow-wrist design of the MPK2, MPK2F allows integrated supply lines for energy, fluids and air – all the way from the robot base to the tool.

This high-speed robot, with a payload of 2 kg, is characterized by its very high velocity and acceleration. With a maximum of 133 cycles/minute, this robot combines performance and reliability in all handling applications.

This all-round robot can be driven by the high-performance-controller DX100 as well as the compact-controller FS100.

Key benefits

- "Wash-down-painting" for maximum hygiene
- Minimal footprint
- Fast acceleration, high speed increase productivity
- Optional vision and conveyor tracking for maximum flexibility
- Mounting options: Floor, ceiling, wall to suit cell integration

MOTOMAN MPK2, MPK2F
Picking and packing

YASKAWA
### Specifications MPK2, MPK2F

<table>
<thead>
<tr>
<th>Axes</th>
<th>Maximum motion range [°]</th>
<th>Maximum speed [°/sec.]</th>
<th>Allowable moment [Nm]</th>
<th>Allowable moment of inertia [kg · m²]</th>
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<td>320</td>
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<td>L</td>
<td>±120</td>
<td>330</td>
<td>–</td>
<td>–</td>
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<td>U</td>
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<td>2000</td>
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<td>0.012</td>
</tr>
</tbody>
</table>

- **Controlled axes**: 5
- **Max. payload [kg]**: ±0.5
- **Repeat. pos. accuracy [mm]**: ±0.1
- **Max. working range [mm]**: R = 900
- **Temperature [°C]**: 0 to +40
- **Humidity [%]**: 20 – 80
- **Weight [kg]**: 72
- **Power supply, average [KVA]**: 2.0

### Optional Accessory:
- Wash Down Cover – Order Number 151915

---

**All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-MPK0002-B01 (DX100), YR-MPK002F-A00 (FS100), F-10-2012, A-No. 150304**
The MOTOMAN MPK2F-5 is a five-axis, high-speed robot that is particularly suitable in the following areas: order-picking, high speed handling, picking and packing.

With its wash down paintwork, the MPK2F-5 has been developed especially for use in the food industry and in environments with strict cleanliness requirements. Thanks to its compact and streamlined design, the robot can operate even in confined workspaces. The hollow-wrist design of the MPK2F-5 allows integrated supply lines for energy, fluids and air – all the way from the robot base to the tool.

This high speed robot, with a payload of 5 kg, is characterised by its very high velocity and acceleration. With a maximum of 133 cycles/minute, this robot combines performance and reliability in all handling applications. This all-round robot can be driven with the compact FS100 controller.

**Key benefits**

- "Wash-down-painting" for maximum hygiene
- Minimal footprint
- Fast acceleration, high speed increase productivity
- Integrated supply lines for energy, fluids and air facilitates integration
- Optional vision and conveyor tracking for maximum flexibility
- Mounting options: Floor, ceiling, wall to suit cell integration

**MOTOMAN MPK2F-5**

Picking and packing
Specifications MPK2F-5

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<th>Axes</th>
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<th>Allowable moment of inertia [kg · m²]</th>
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<td>320</td>
<td>–</td>
<td>–</td>
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<tr>
<td>L</td>
<td>±120</td>
<td>330</td>
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<td>U</td>
<td>+240/–60</td>
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<td>–</td>
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<td>R</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>B</td>
<td>±15</td>
<td>380</td>
<td>2.26</td>
<td>0.012</td>
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<tr>
<td>T</td>
<td>±270</td>
<td>2000</td>
<td>0</td>
<td>0.012</td>
</tr>
</tbody>
</table>

Controlled axes: 5
Max. payload [kg]: 5
Repeat. pos. accuracy [mm]: ±0.5
Max. working range [mm]: R = 900
Temperature [°C]: 0 to +40
Humidity [%]: 20 – 80
Weight [kg]: 72
Power supply, average [KVA]: 1.5

Optional accessory: Wash down cover – Order number 151915

All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-MPK002F-A20, A-11-2012, A-No. 159027
The MOTOMAN MPP3 4-axis high-speed robot with parallel kinematic system combines the speed of the delta design with a high payload capacity and a large working range. Due to the high torque of the fourth axis, the so-called wrist axis, the MOTOMAN MPP3 moves payloads of up to 3 kg at unprecedented speeds. This delta robot for demanding picking tasks rounds out the MOTOMAN product range from YASKAWA.

It was developed for the fields of order picking, high-speed picking and other handling applications, and is used primarily in the food and solar industries.

**Key benefits**

- **Payloads with unprecedented speed:**
  - 140 cycles per minute with 3 kg payload
  - 230 cycles per minute with 1 kg payload
- **Total stroke of 500 mm with a working range of 1300 mm**
- **High-precision, high-speed conveyor tracking**
- **Maximum machine accuracy**
- **Space-saving installation directly above the conveyor**
- **Protection classification IP65**
**Specifications MPP3**

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<th>Pattern</th>
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<th>CPM</th>
<th>Payload [kg]</th>
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<td>130</td>
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<td>95</td>
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**Conveyor speed [mm/s]**

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<th>Conveyor position repeat accuracy [mm]</th>
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<td>1300</td>
<td>1.5</td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
</tr>
</tbody>
</table>

**Controlled axes**

- Max. payload [kg]: 3
- Repeat. pos. accuracy [mm]: ±0.1
- Repet. rotational accuracy of T-axis [arc x min⁻¹]: ±1
- Max. working range [mm]: R = 1300
- Temperature [°C]: 0 to +40
- Humidity [%]: 20 – 80
- Weight [kg]: 115
- Power supply, average [KVA]: 1.5
- IP class: IP65

**View A**

- 4 x M5, depth 9 mm
- PCD 31.5
- 2 x Ø 5, depth 7 mm

**View B**

- Mounting options: Ceiling
- 2 x Air
- Internal user wiring connector
- Media connector

**Allowable wrist load**

- P-point
- All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-MPP003-A00, D-11-2012, A-No. 152095

---

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Picking, Packing & Handling with the MYS-series

MOTOMAN MYS-series

YASKAWA
### MOTOMAN MYS-series Technical Data

#### Specifications MYS-series

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<td>± 0,005</td>
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<td>± 0,005</td>
<td>± 0,005</td>
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* Mecanical stop
MOTOMAN MYS-series  Technical Data

All dimensions in mm | Technical data may be subject to change without previous notice |
Please request detailed drawings at robotics@yaskawa.eu.com –
YR-MYS450-A00, YR-MYS550L-A00, YR-MYS5850L-A00, YR-MYS1000-A00, C-07-2012, A-No. 150784

**MOTOMAN-MYS850L**

View B

View A

*Mechanical stop

**MOTOMAN-MYS1000L**

View B

View A

*Mechanical stop
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Technical data may be subject to change without previous notice.

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