



Almega Friendly series II

Multipurpose Robot

NEW FD-B6LH

Multipurpose specification



Fast, Slim, User-Friendly

Improved all performances!
New hollow arm Multipurpose robot



Max. Payload 6kg
Long arm & high speed
contributes to reduced
cycle times and minimized
system size.

| | |
|-------------|----------------------|
| PICKING | SPOT WELDING |
| CUTTING | Used for... ASSEMBLY |
| LOAD/UNLOAD | FINISHING |
| ARC WELDING | SORTING |

Improved all performances! New hollow arm Multipurpose robot

FD-B6LH
Multipurpose specification

Fast

Industry leading level speed.
Reduce cycle time

User friendly

Built-in application cable for
various hand tools.

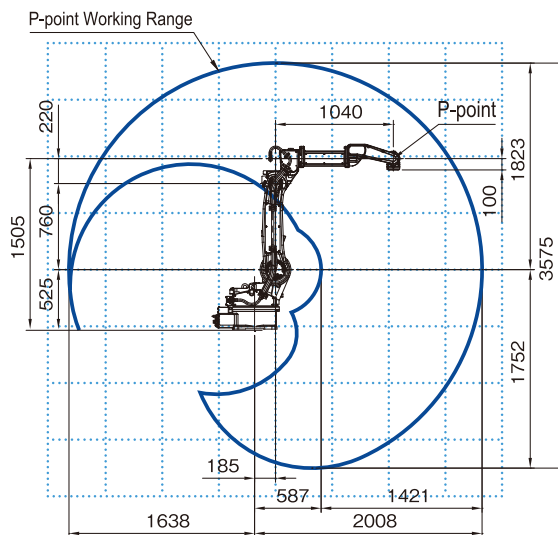
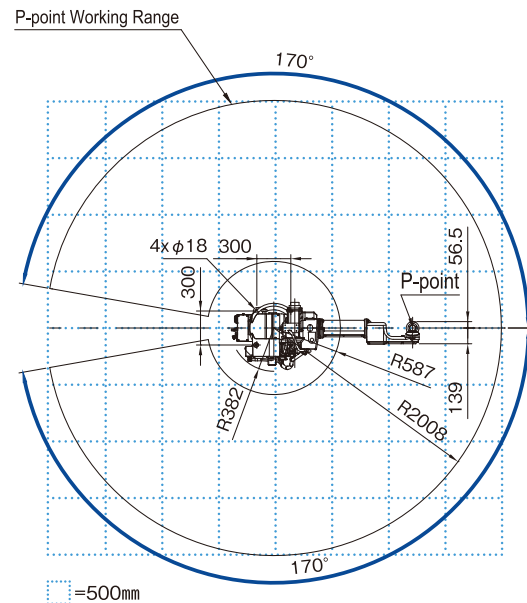
Slim

30% reduce in foot print
High-density layout

Tough

IP65 Dust-proof and
splash-proof design.

Manipulator Working Range



Manipulator Specifications

| | | Specification | |
|-----------------------------------|-----------------------------|---|--|
| Name | | FD-B6LH | |
| Structure | | Vertically articulated type | |
| Number of Axes | | 6 | |
| Wrist Capacity | | 6 kg | |
| Positional Repeatability (Note 1) | | ±0.05mm (Note 1) | |
| Driving Method | | AC servo motor | |
| Driving Capacity | | 4632W | |
| Positional Feedback | | Absolute encoder | |
| Working Range | Arm | J1 (Rotation) | ±170°(±50°) (Note 2) |
| | | J2 (Front/back) | -155°~+100°(Note 3) |
| | | J3 (Up/down) | -170°~+190° |
| | Wrist | J4 (Swing) | ±155°(±170°) (Note 4) |
| | | J5 (Bending) | -45°~+225°(Note 5) |
| | | J6 (Twist) | ±205°(±360°)(Note 4,5) |
| Maximum Speed | Arm | J1 (Rotation) | 3.93 rad/s{225°/s} (3.05 rad/s{175°/s}) (Note 2) |
| | | J2 (Front/back) | 3.58 rad/s{205°/s} |
| | | J3 (Up/down) | 3.84 rad/s{220°/s} |
| | Wrist | J4 (Swing) | 7.50rad/s {430°/s} |
| | | J5 (Bending) | 7.50rad/s {430°/s} |
| | | J6 (Twist) | 11.00rad/s {630°/s} |
| Wrist Allowable Load | Allowable Moment | J4 (Swing) | 10.5N·m |
| | | J5 (Bending) | 10.5N·m |
| | | J6 (Twist) | 5.9N·m |
| | Allowable Moment of Inertia | J4 (Swing) | 0.28 kg·m ² |
| | | J5 (Bending) | 0.28 kg·m ² |
| | | J6 (Twist) | 0.06 kg·m ² |
| Arm Cross-sectional Area | | 6.37m ² ×340° | |
| Environmental Conditions | | Temp: 0~45°C, Hmd: 20~80%RH (No Condensation) | |
| Mass (weight) | | 237 kg | |
| Capacity of Upper Arm | | 20 kg (Note 6) | |
| Installation Method | | Floor-/Ceiling-/Wall-mounted | |
| Paint Color | | White (Munsell notation 10GY 9/1) | |

(Note 1) Positional repeatability of the tool center point (TCP) value complies with the JIS -B-8432 Standard.
 (Note 2) Specifications for wall mounting appear in parentheses.
 (Note 3) The working range of the J2 axis may be restricted when wall-mounted.
 (Note 4) This specification applies when a single-wire power cable is fed through the hollow part of J4 and J6.
 The value in parentheses represents all other specifications.
 (Note 5) Working range of J6 axis may be restricted by the position of J5 axis.
 (Note 6) The capacity of the upper arm varies with the wrist capacity.

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Note This product and the technologies (including software) used in the product are subject to Catch-All Controls. When exporting any of them, verify the users, applications, etc. according to the applicable laws and regulations and take appropriate procedures such as applications for export permission to the Minister of Economy, Trade and Industry if required.

●The information contained in this catalog is current as of April 2021 and is subject to revision without notice.

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