

## FD19-H5

**High-speed 6-axis handling robot for small loads with integrated cable routing, improved collision protection and a higher free space in the area of the joint**

The FD-H5 (H) is a compact, high-speed handling robot for small loads. A larger free space in the area of the joint creates a large arm space. Like all robots in the FD series, the H5 model also has collision protection through improved fault detection / elimination. In addition, the integrated hose package guarantees optimal protection against getting caught during the robot operation.



### Specification

Type	FD19-H5
Number of axes	6
Working range	R 866mm
Max. payload capacity	5 Kg
Additional payload capacity Axis 3	1Kg
Protection class base and lower arm	(J1-J3 )IP64
Protection class upper arm	(J4-J6 )IP65
Installation type	F,W,C
Weight	58 Kg
Ambient temperature and humidity	0 ~ 45°C, 20 ~ 80 % RH (No condensation)

### Product information

Order No.	116000011
Model No.	0

### Performance

Position repeatability (ISO 9283) +/-0,05 mm (Note 1)

	Working Range	Max Speed	Wrist load
Axis 1	+/- 170°	3,49 rad/s {200°/s} (2,79 rad/s {160°/s})	
Axis 2	-125° ~+ 90°	3,49 rad/s {200°/s}	
Axis 3	-140° ~+ 245°	4,54 rad/s {260°/s}	
Axis 4	+/- 190°	6,63 rad/s {380°/s}	0,303 kg m <sup>2</sup>
Axis 5	-30° ~ + 210°	6,63 rad/s {380°/s}	0,303 kg m <sup>2</sup>
Axis 6	+/- 360°	8,90 rad/s {510°/s}	0,061 kg m <sup>2</sup>

Note 1: The value of the positional repeatability is at the tool center point (TCP) compliant to ISO 9283.

Note 2: The value in the parentheses indicates the wall-hung condition. J2 axis may occur the limitation of the working range.

Note 3: There are occasions where restrictions can be made to the operation range of the J2 axis when the wall-hung condition.

Note 4: The operation range of the J3 axis is restricted to -170 degrees to + 180 degrees when floor based welding is applied (In overhead mounting it's a combination of J2 + J3 axis).

Note 5: This is the specification for the case that the coaxial power cable are let into the centrum of J4 and J6 axis. The value given in parentheses presents for other specifications.

Note 6: There are occasions where restrictions can be made to the operation range of the J6 axis, depending on the J5 axis's posture.

Note 7: Max. Load to the upper shoulder, when loading the max. payload capacity at the end effector.

F= Floor W=Wall C=Ceiling