

DAIHEN (OTC) · Selection Guide

FD series multi-purpose industrial robots

6-axis multi-purpose robots from 6 kg to 210 kg payload

About this series

The FD series is the DAIHEN (OTC) 6-axis multi-purpose industrial robot range, used for arc welding, laser hybrid welding, spot welding, dispensing, handling and thermal spraying. Models are organised by payload and the official product centre lists 18 of them. This page records those models together with the specifications published in text form; for 8 models the manufacturer publishes the specification as a datasheet image only, so no values are shown rather than guessed.

Technical characteristics

- 6-axis vertical articulated structure; several models support floor, ceiling and wall mounting
- Published payloads range from 6 kg to 210 kg with repeatability from ± 0.01 mm to ± 0.15 mm
- FD-V80 / FD-V100 / FD-V130 are vertical articulated robots with AC servo drives and absolute encoders: IP54 on the base axes, IP65/67 on the arm axes, white body
- Motion envelope from 3.11 m² to 9.53 m², so the cell footprint can be matched to the workstation
- Combine with a positioner, welding power source and fixtures to build a robotic welding cell

Typical applications

Arc and laser hybrid welding · Spot welding and dispensing · Handling and palletising · Thermal spraying · Volume welding lines

Representative models (18)

FD-B6	6-axis · 6 kg payload · repeatability ± 0.08 mm · 145 kg
FD-B6L	6-axis · 6 kg payload · repeatability ± 0.08 mm · 278 kg
FD-V8	6-axis · 8 kg payload · repeatability ± 0.08 mm · 140 kg
FD-V8L	6-axis · 8 kg payload · repeatability ± 0.08 mm · 273 kg
FD-V25	6-axis · 25 kg payload · repeatability ± 0.07 mm · 278 kg
FD-V80	6-axis · 80 kg payload · repeatability ± 0.08 mm · 780 kg
FD-V100	6-axis · 100 kg payload · repeatability ± 0.08 mm · 770 kg
FD-V130	6-axis · 130 kg payload · repeatability ± 0.08 mm · 765 kg

FD-V166	6-axis · 166 kg payload · repeatability ± 0.01 mm · 1010 kg
FD-V210	6-axis · 210 kg payload · repeatability ± 0.15 mm · 1040 kg
FD-H5	Official specification is published as a datasheet; request it from us
FD-A20	Official specification is published as a datasheet; request it from us
FD-V50	Official specification is published as a datasheet; request it from us
FD-V280L	Official specification is published as a datasheet; request it from us
FD-V350	Official specification is published as a datasheet; request it from us
FD-V400L	Official specification is published as a datasheet; request it from us
FD-V600	Official specification is published as a datasheet; request it from us
FD-V700	Official specification is published as a datasheet; request it from us

This document is a selection reference. Models, configurations and detailed specifications follow the technical documentation shipped with the equipment.

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