FD-VT8L

Highly flexible 7-axis high-speed robot for welding, manufacturing and trading with an extended arm length.

The 7-axis arc welding robot VT8L from the FD series impresses with its slim design and an expanded degree of freedom, which enables a constant torch orientation when immersing in tight work spaces. Compared to the VT8, the VT8L has an extended arm, which is why the range is increased again. In addition the payload for expanding applicability is increased by 30% compared to the model V6S model.

Specification

Type	FD-VT8L
Number of axes	7
Working range (P-Point)	R 2006 mm
Max. payload capacity	8 Kg
Additional payload capacity axis 3	20 Kg (Note 7)
Installation type	F
Weight	330 Kg
Ambient temperature and humidity	0 ~ 45°C, 20 ~ 80 % RH (No condensation)

Performance

Position repeatability (ISO 9283)	± 0.06 mm

Product information

Order No.	116000037
Model No.	0

	Working Range	Max Speed	Wrist load
Axis 1	+/- 170°	3.93 rad/s 220°/s	
Axis 2	- 145° ~ + 75°	3.49 rad/s 225°/s	
Axis 3	-170° ~ + 160°	3.84 rad/s 220°/s	
Axis 4	+/- 180°	7.85 rad/s 450°/s	0,43 kg m²
Axis 5	- 50° ~ + 230° (Note 2)	7,50 rad/s {430°/s}	0,43 kg m²
Axis 6	+/- 360°	11,0 rad/s {630°/s}	0,09 kg m²
Axis 7	±90°	2.79 rad/s 160°/s	

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.