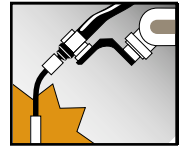




# ALMEGA AX SERIES

## AX-V4L AP



HIGHLY VERSATILE ARC WELDING ROBOT

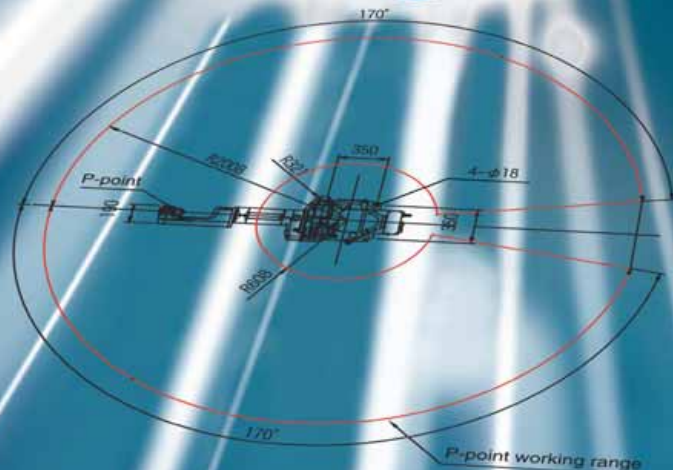
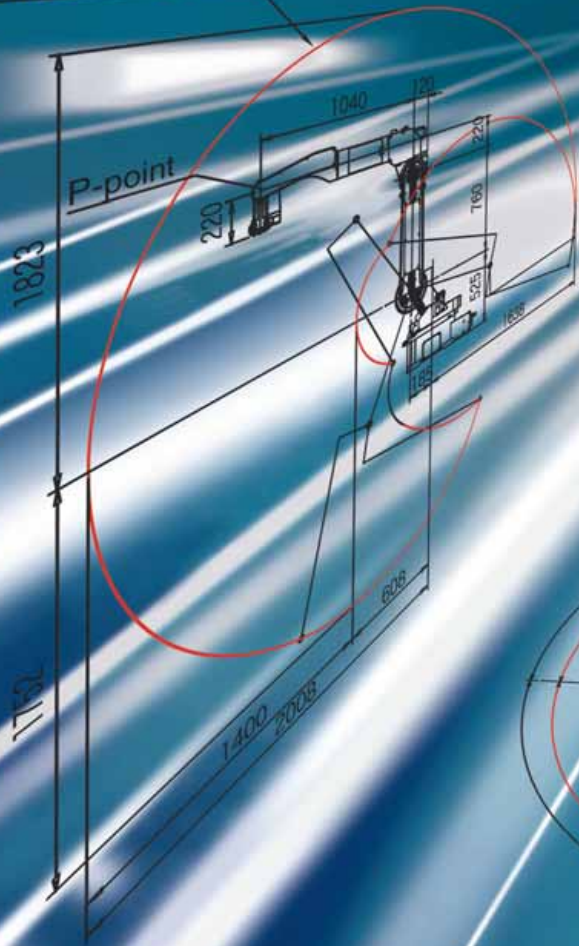
# Almega

## AX-V4L AP ROBOT

Total Solutions from the  
Single Source Provider

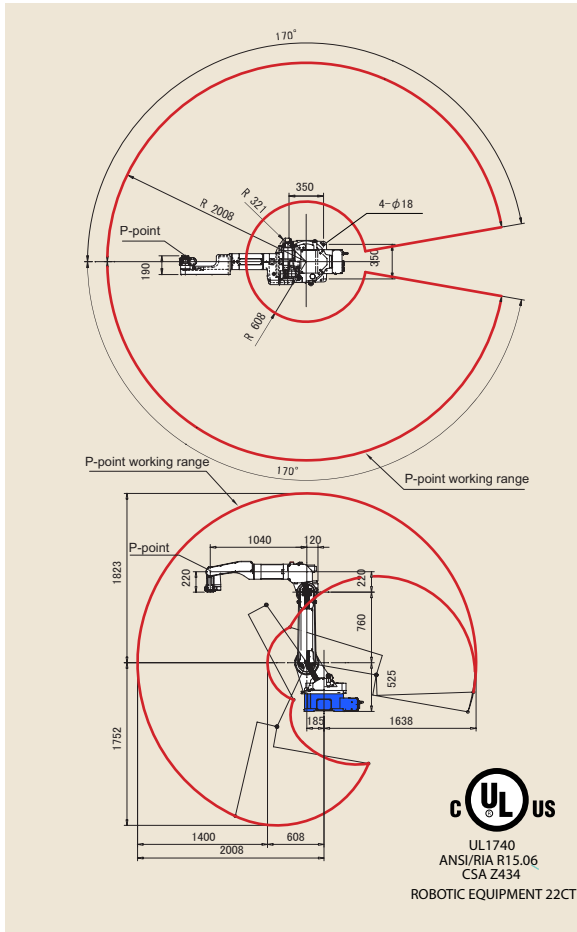


P-point working range



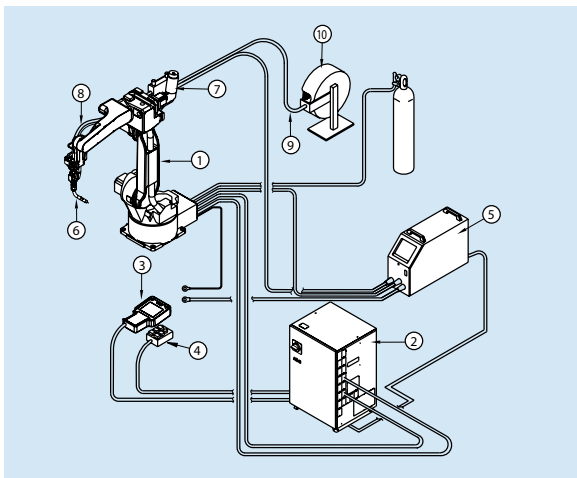
# STANDARD SPECIFICATIONS

## AX-V4L AP DIMENSIONS AND STANDARD SPECIFICATIONS



Item		Specifications	
Name		AX-V4L AP (ARC PROFESSIONAL)	
Structure		Vertical Articulated Type	
Number of Axes		6	
Max. Payload Capacity		8.82 lbs (4 kg)	
Positional Repeatability		±0.003 " (±0.10mm) <small>note 1</small>	
Drive System		AC Servo Motor	
Drive Capacity		5150W	
Position Feedback		Absolute Encoder	
Working Range	Arm	J1 (Rotation)	±170 ° (±50°) <small>note 2</small>
		J2 (Lower Arm)	-155 ° ~ +100
		J3 (Upper Arm)	-170 ° ~ +190°
	Wrist	J4 (Swing)	±155 °
		J5 (Bending)	-45 ° ~ +225°
		J6 (Twist)	±205 °
Max. Speed	Arm	J1 (Rotation)	2.97 rad/s (150 ° /s)
		J2 (Lower Arm)	2.97 rad/s (160 ° /s)
		J3 (Upper Arm)	3.05 rad/s (170 ° /s)
	Wrist	J4 (Swing)	6.11 rad/s (340 ° /s)
		J5 (Bending)	5.93 rad/s (340 ° /s)
		J6 (Twist)	9.08 rad/s (520 ° /s)
Wrist Load	Allowable Moment	J4 (Swing)	10.1 N · m
		J5 (Bending)	10.1 N · m
		J6 (Twist)	2.94 N · m
	Allowable Moment of Inertia	J4 (Swing)	0.38 kg · m <sup>2</sup>
		J5 (Bending)	0.38 kg · m <sup>2</sup>
		J6 (Twist)	0.03 kg · m <sup>2</sup>
Arm operation cross-sectional area		6.53 m <sup>2</sup> x 340 °	
Ambient Temperature		0~45° C	
Ambient Humidity		20~80% RH (No Condensation)	
Mass (Weight)		595 lbs (270 kg)	
Upper Arm Payload Capacity		26 lbs (12 kg)	
Installation Type		Floor, Ceiling or Wall Hanging Type	
Origin Return		Not Necessary <small>note 3</small>	
Paint Color		Arm: White, Base: Blue	

Notes 1. Positional repeatability calculated after operating conditions stabilize from repeated automatic operations.  
 2. The value shown in ( ) indicates wall-mounted conditions.  
 3. Positional data protected by battery-backed storage inside the manipulator.



## TYPICAL CONFIGURATION

ITEM		CO <sub>2</sub> /MAG	Pulsed MAG
1	Manipulator	AX-V4L AP	
2	Controller	AX-C	
3	Teach Pendant	AXTPDSON-EC08	
4	Operation Box	AXOP-0005	
5	Welding Power Source	DM350	DP400/DP500
6	Welding Torch	MTXC-3531 (350A, Aircooled) MTXCW-5031 (500A, Watercooled)	
7	Wire Feeder	AF-4001	
8	Coaxial Power Cable	•	
9	Conduit	•	
10	Wire Reel Stand	•	

Note: AX-V4 shown in layout

For more information on **OTC** brand products from DAIHEN INC. visit our web site at [daihen-usa.com](http://daihen-usa.com), or send us E-mail at [sales@daihen-usa.com](mailto:sales@daihen-usa.com)



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