

Automation for a Changing World

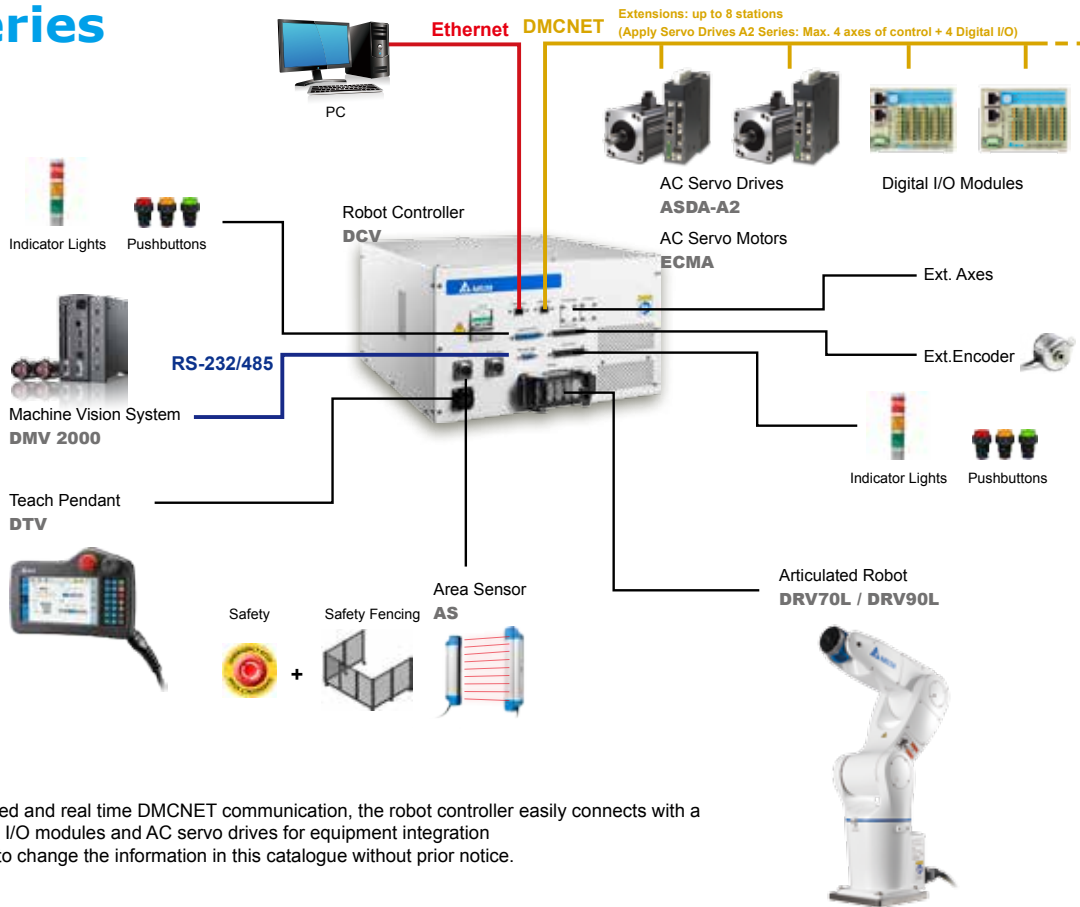
# Delta Articulated Robots DRV70L/DRV90L



- Provides 7-kg payload with 710 mm and 900 mm working range to choose from
- High precision, high speed
- Built-in 3 solenoid valves for quick integration and application
- Hollow design of the robot wrist (the 6th axis) for wiring and tool placement
- Slim and compact body design
  - Overall width: Max. 235 mm
  - Footprint: 190 x 190 mm
- Applied in industries including 3C, electrical and electronic, metal, rubber and plastic for applications e.g. inspection, load/unload and screw driving



# Robot Controller Interface DCV Series

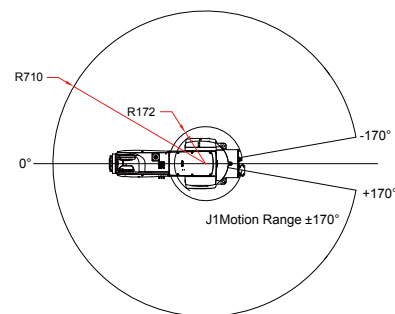
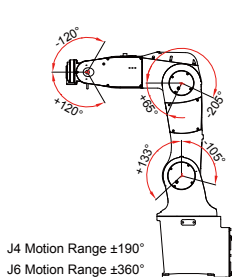
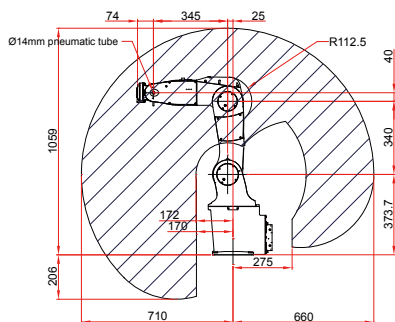


\* With Delta's high speed and real time DMCNET communication, the robot controller easily connects with a wide range of remote I/O modules and AC servo drives for equipment integration

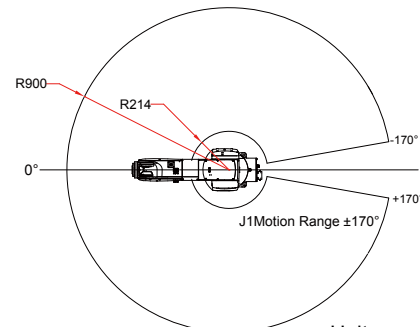
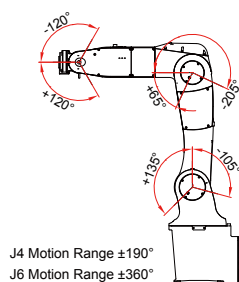
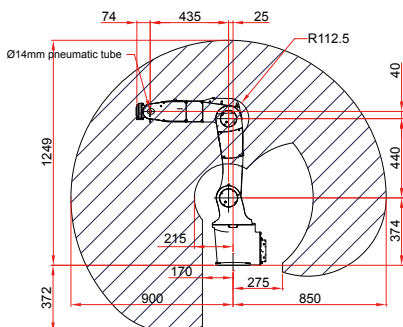
\* We reserve the right to change the information in this catalogue without prior notice.

## Dimensions - Working Range

### DRV70L



### DRV90L

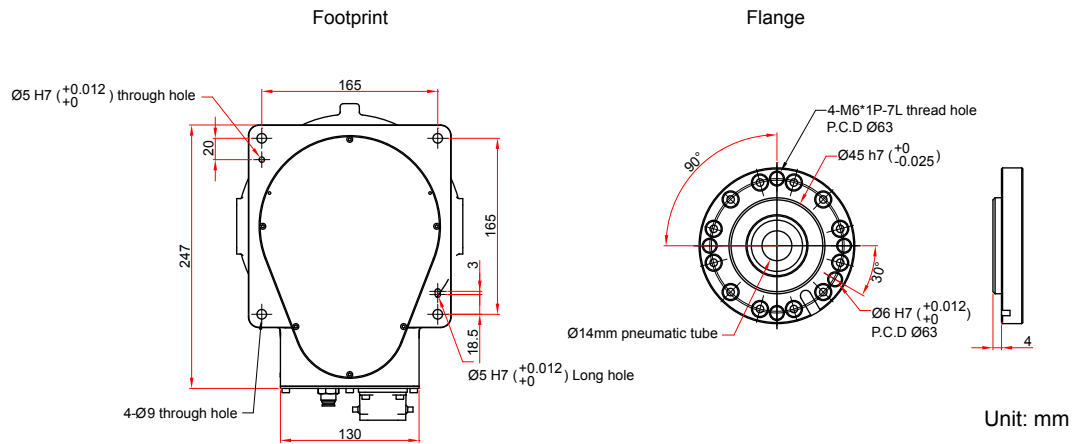


Unit: mm

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# Dimensions - Footprint and Flange

## DRV70L / 90L



## Specifications

Model		DRV70L7A6213N	DRV90L7A6213N
Number of Axes		6	
Max. Working Range		710 mm	900 mm
Max. Payload		7 Kg	
Motion Range	J1	±170°	
	J2	+133° / -105°	+135° / -105°
	J3	+65° / -205°	
	J4	±190°	
	J5	±120°	
	J6	±360°	
Max. Speed	J1	450°/sec	370°/sec
	J2	340°/sec	260°/sec
	J3	510°/sec	410°/sec
	J4	550°/sec	550°/sec
	J5	550°/sec	555°/sec
	J6	820°/sec	820°/sec
Maximum Composite Speed (mm/sec)		11,000 mm/sec	10,600 mm/sec
Allowable Inertia	J4	0.47 kg*m <sup>2</sup>	
	J5	0.47 kg*m <sup>2</sup>	
	J6	0.15 kg*m <sup>2</sup>	
Allowable Moment	J4	16.6 Nm	
	J5	16.6 Nm	
	J6	9.4 Nm	
Standard Cycle Time <sup>*1</sup>		0.32sec	0.35sec
Repeatability		±0.02 mm	±0.03 mm
Installations		Desk mounted, wall mounted, ceiling mounted <sup>*2</sup>	
Built-in Design		One 12Pos. connector for sensor connections and two Ø6 pneumatic tubings (one is for three built-in solenoids, the other is for extension purpose).	
IP Rating <sup>*3</sup>		IP40(Standard) / IP65 (Optional)	
Environment	Ambient Temperature	0°C ~ 40°C	
	Humidity	20~85 %RH	
	Vibration	0.5 G	
Weight		37Kg	39Kg
Robot Controller		DCV series	

\*1. When carrying a payload of 1 Kg and reciprocating 25 mm in vertical and 300 mm in horizontal directions under an operating temperature of 25 °C and within a humidity of 45% ~ 65% RH (non-condensing).

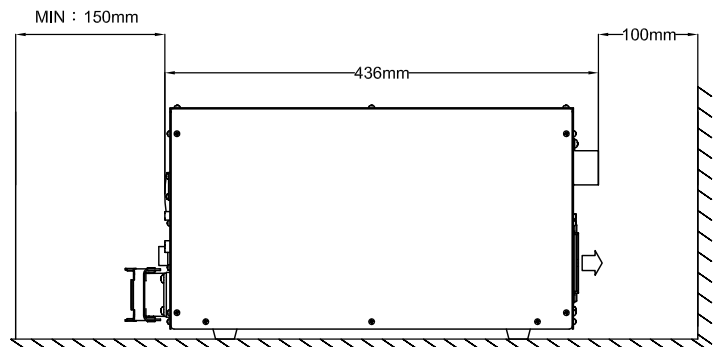
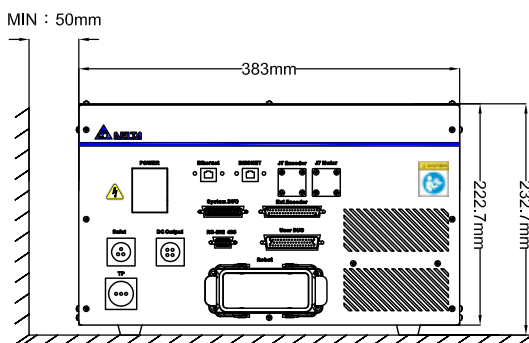
\*2. For ceiling-mount installation, please refer to local sales for further information

\*3. We reserve the right to change the information in this catalogue without prior notice.

# Robot Controller Specifications

## DCV Series

DCV Series		
Power Supply	Single Phase : 200-230Vac+PE · 50/60Hz · 15 A	
Dimensions (W) x (H) x (D) / Weight	383mm x 223mm x 406mm / 22 kg	
Cooling Method	Fan Cooling	
Robot Control	Programming Language	Delta robot language
	Motion Mode	Point-to-point motion, linear interpolation, and circular interpolation
	Memory Capacity	20MB: for programming editor and data users 1K location point is available for global variables (which can be shared among different programs) 30K location point is available for all programming editors
Digital Input (DI) / Output (DO)	Standard DI/O	System DI/O : 7 DI, 8 DO User DI/O : 24 DI, 12 DO
Communication Interface	Ethernet	1 channel, RJ-45
	DMCNET	1 channel, RJ-45, connects with Delta DMCNET products
	RS-232 / RS-485	1 connecting port, D-sub 9P/Female
	Teach pendant	1 circular connector
	Safety	8Pin circular connector Provide dual channels for emergency stop and connection with other safety components
	Ext .Encoder	D-sub 37P/Female · provide 1 external encoder feedback signals
	DC Power	3Pin circular connector · Provide DI/O options to meet diverse needs
	Power IN	3Pin terminal block connector for power supply
Environment	Robot	Multipole connectors / Female
	Installed Location	Indoor (avoid direct sunlight), no corrosive liquid and gas (avoid fume, flammable gas and dust)
	Altitude	Altitude 1000m or lower above sea level
	Atmospheric Pressure	86kPa ~ 106kPa
	Ambient Temperature	0°C ~ 40°C (If ambient temperature is above 45°C, forced cooling will be required)
	Humidity	0 ~ 90% RH (non-condensing)
	Vibration	20Hz following 9.80665 m/s <sup>2</sup> ( 1G ) · 20 ~ 50Hz 5.88 m/s <sup>2</sup> ( 0.6G )
	IP Rating	IP20
Power System	TN System : A power distribution system having one point directly earthed, the exposed conductive parts of the installation being connected to that point by a protective earth conductor.	



Unit: mm

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