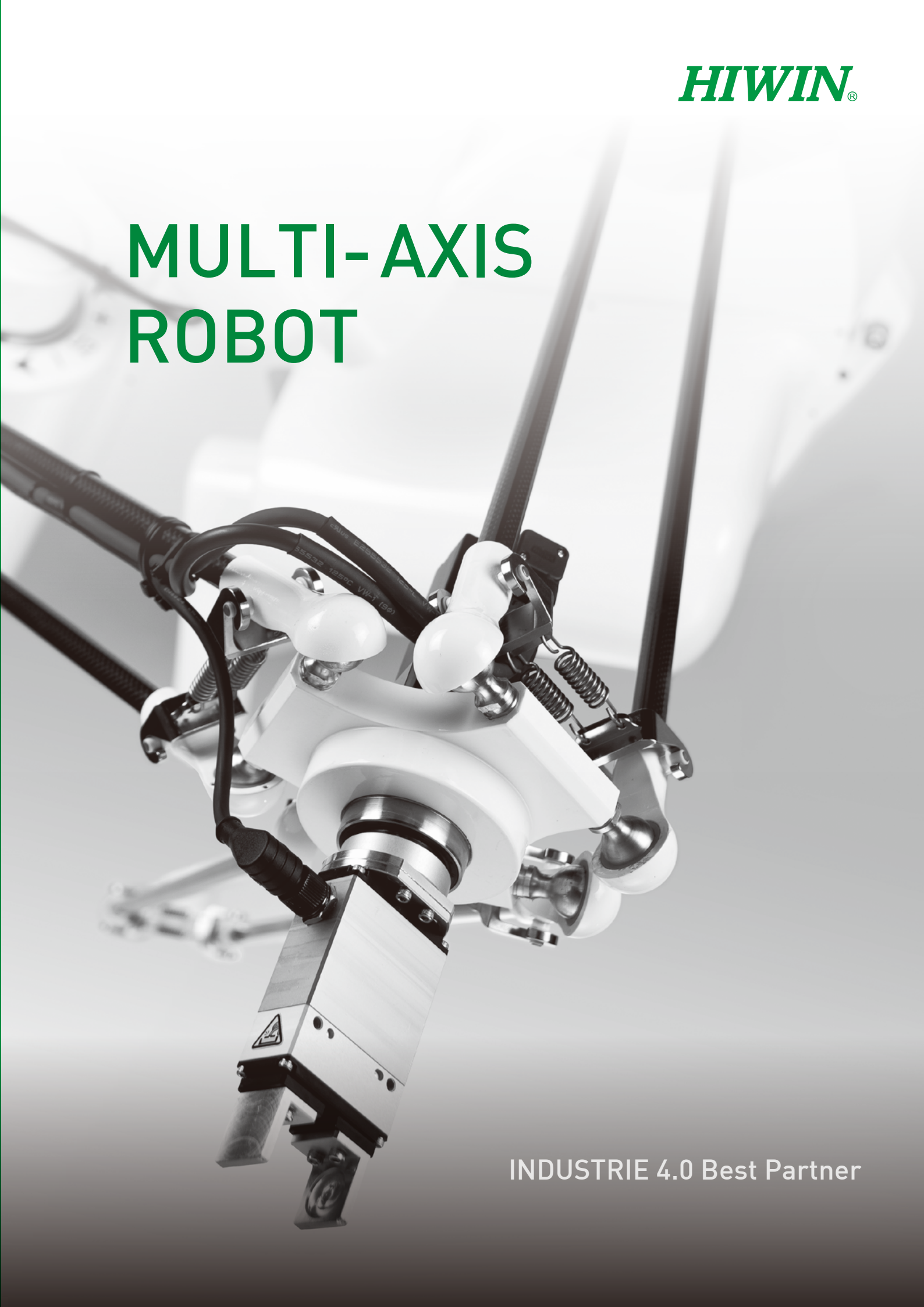


**HIWIN®**

# MULTI-AXIS ROBOT



INDUSTRIE 4.0 Best Partner

# Articulated Robot

# RA605 RT605



RT605-710-GB

RA605-710-GB

## Dimensions

## Features

- A compact sized Articulated Robot with arm length and payload similar to a human arm, its flexible design makes it useful in application like assembly line, compact spaced equipments and can also be used in overhanging application to save space.

## Application

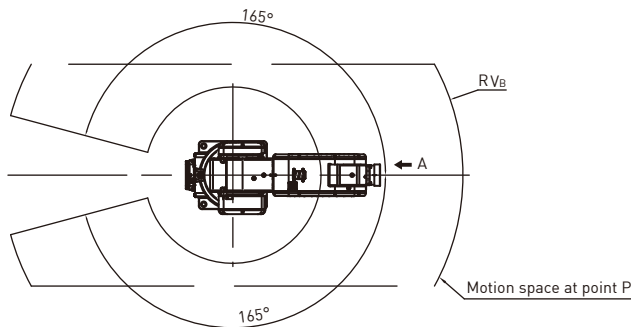
- Assembly, dispensing, visual inspection, small components loading and unloading, upside down application.

Model	RA605-GB	RT605-GB	
Degrees of freedom	6		
Rated payload [kg]	5		
Maximum Payload [kg]	7		
Max. reach radius [mm]	710	710	909
Working range [deg]	J1	± 165	
	J2	+85 / -125	
	J3	+185 / -55	
	J4	± 190	
	J5	± 115	
	J6	± 360	
Repeatability [mm]	± 0.02	± 0.03	± 0.04
Cycle time [s]*Note 1	0.5		
Weight [kg]	40	40	45
Protection rating	IP65	IP32	
Controller	RCA605-GB	RCT605-GB	
Tool pneumatic pipes	Three pneumatic solenoid valves connections	Two channels of tracheal connection	

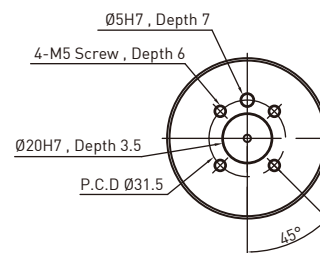
\* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

Model / Dimensions	V <sub>A</sub>	V <sub>B</sub>	V <sub>C</sub>	V <sub>D</sub>	V <sub>E</sub>	V <sub>F</sub>	V <sub>G</sub>	V <sub>H</sub>	V <sub>I</sub>	V <sub>J</sub>
RA605-710-GB RT605-710-GB	650	710	1215	1055	272	67	338	R242	R304	R249
RT605-909-GB	848.1	909.8	1571	1254.8	334.2	24.7	438	R302.5	R439.8	R564.3

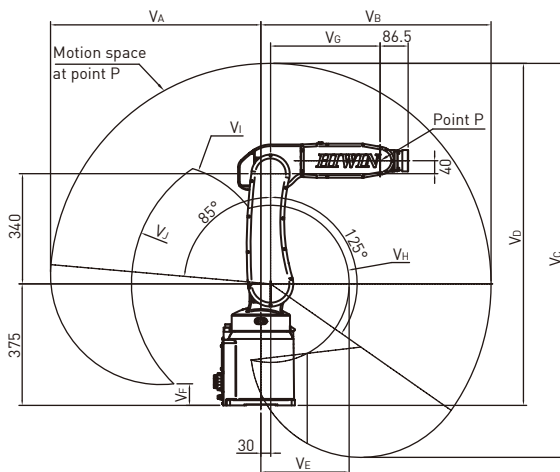
Unit:mm



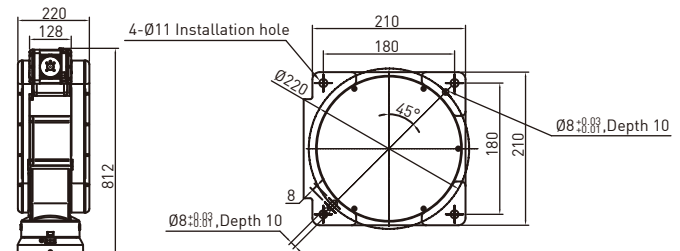
Top View



View A  
Mounting Flange Detail



Side View



View B  
Installation Interface Detail

Front View

# Articulated Robot

# RA610 RT610

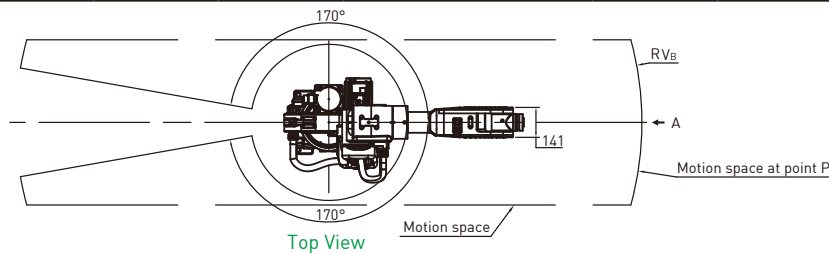


RT610-1476-GB

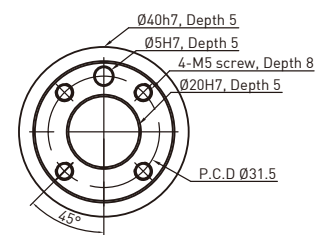
RA610-1476-GB

## Dimensions

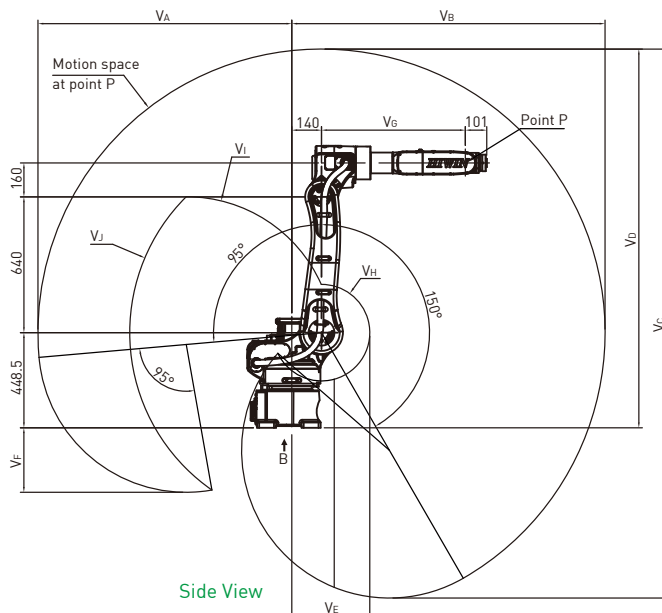
Model / Dimensions	V <sub>A</sub>	V <sub>B</sub>	V <sub>C</sub>	V <sub>D</sub>	V <sub>E</sub>	V <sub>F</sub>	V <sub>G</sub>	V <sub>H</sub>	V <sub>I</sub>	V <sub>J</sub>
RA610-1355-GB RT610-1355-GB	1075	1355	2343	1663	372.5	182	552	R232.5	R575	R688
RA610-1476-GB RT610-1476-GB	1196	1476	2587	1785	368	304	678	R228	R697	R904
RA610-1672-GB RT610-1672-GB	1392	1672	2979	1981	463	500	878	R323	R892	R951
RA610-1869-GB RT610-1869-GB	1589	1869	3374	2178	630	697	1078	R490	R1089	R1129



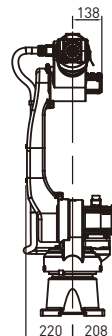
Top View



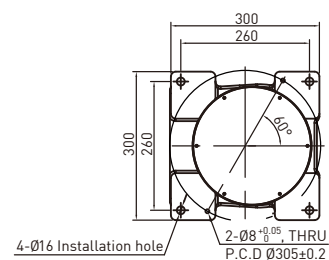
View A  
Mounting Flange Detail



Side View



Front View



View B  
Installation Interface Detail

## Features

- Slender and agile Articulated Robot with high degree-of-freedom, it can meet customers' optimal load and work range requirements. Its design is specially suitable for machine tending application and can also be integrated with vision system for material inspection.

## Application

- Packaging, deburring, dispensing, visual inspection, loading and unloading.

Model	RA610-GB				RT610-GB			
Degrees of freedom	6							
Rated payload [kg]	12	10	10	7	12	10	10	7
Maximum Payload [kg]	14	12	12	9	14	12	12	9
Max. reach radius [mm]	1355	1476	1672	1869	1355	1476	1672	1869
Working range [deg]	J1	±170						
	J2	+95 / -150						
	J3	+185 / -85						
	J4	±190						
	J5	±135						
	J6	±360						
Repeatability [mm]	±0.05	±0.06	±0.05	±0.06	±0.05	±0.06	±0.05	±0.06
Cycle time [s]*Note 1	1							
Weight [kg]	143	147	150	152	143	147	150	152
Protection rating	IP54(Wrist:IP65)				IP32			
Controller	RCA610-GB				RCT610-GB			
Tool pneumatic pipes	Two pneumatic channel connections				Two channels of tracheal connection			

\* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

Unit:mm

# Articulated Robot RA620



RA620-1739

## Features

- Strong and powerful Articulated Robot far beyond the scope of human working range and loading capacity, with a solid mechanical and practical software design, it is suitable for application like welding, polishing, grinding, palletizing and machine tending of large components.

## Application

- Packaging, deburring, loading and unloading, welding, polishing, stacking.

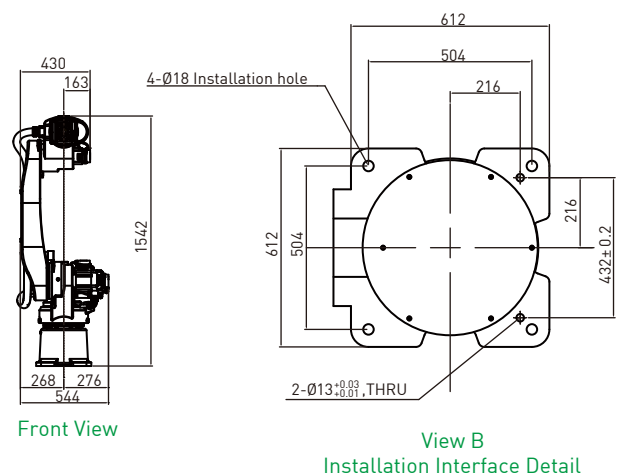
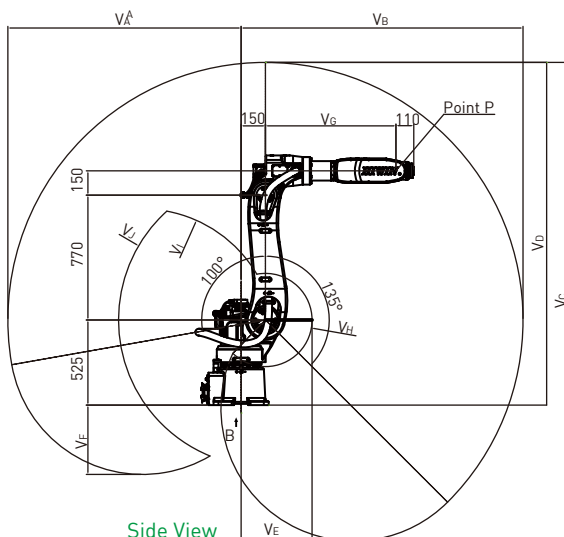
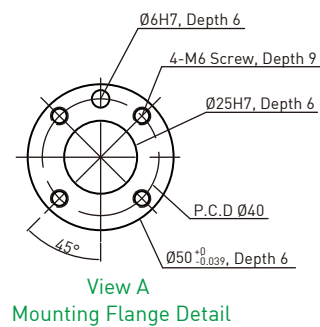
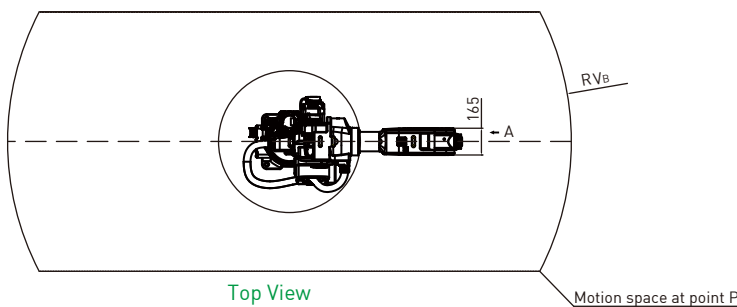
Degrees of freedom	6	
Rated payload [kg]	30	20
Maximum Payload [kg]	33	23
Max. reach radius [mm]	1621	1739
Working range [deg]	J1	± 180
	J2	+100 / -135
	J3	+190 / -80
	J4	± 200
	J5	± 130
	J6	± 360
Repeatability [mm]	± 0.06	
Cycle time [s]*Note 1	0.9	
Weight [kg]	226	230
Protection rating	IP54(Wrist:IP65)	
Controller	RCA620	
Tool pneumatic pipes	Three pneumatic solenoid valves connections	

\* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

## Dimensions

Model / Dimensions	V <sub>A</sub>	V <sub>B</sub>	V <sub>C</sub>	V <sub>D</sub>	V <sub>E</sub>	V <sub>F</sub>	V <sub>G</sub>	V <sub>H</sub>	V <sub>I</sub>	V <sub>J</sub>
RA620-1621	1321	1621	1996	721	443	310	685	R293	R701	R821
RA620-1739	1439	1739	2114	838	438	428	805	R288	R819	R906

Unit:mm



# Delta Robot RD403



RD403-1100-FS

## Features

- By utilizing a parallel linkage mechanism, the RD403 can execute high speed motion in a larger work area, with motion stability, short cycle times, high accuracy, high load capacity.
- Integrated with conveyor tracking and a vision positioning system, the RD403 achieves efficient, high-speed, in-line sorting, picking and placing.
- With IP65 certification, the RD403 can be used for automation applications in industries that have requirements for health and safety compliance.
- The RD403-1100-FS design complies with EN1672-2 requirements for food safety and can be used in food industry automation.

## Application

- Packaging, arranging, assembly, picking, stacking and inspection.

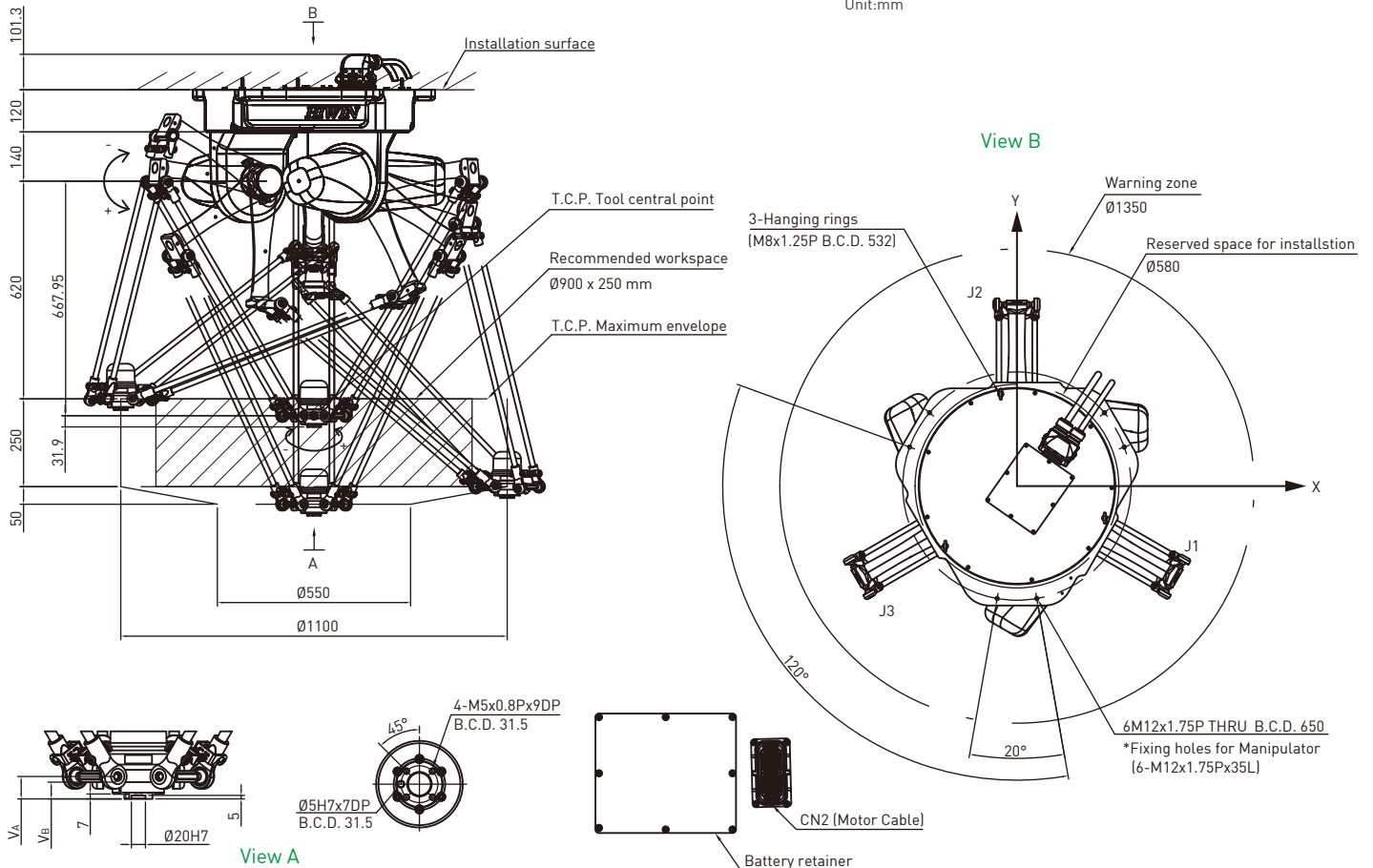
Model	RD403-1100-GB	RD403-1100-FS	RD403-1100-PR-GB
Degrees of freedom	4		
Rated payload [kg]	3		
Max working diameter [mm]	1100		
Max working height [mm]	300		
Repeatability [mm]	± 0.1		
Cycle time [s]*Note 1	0.3		
Weight [kg]	95		
Protection rating	IP65		
Controller	RCD403-GB		
Food processing machinery	-	EN1672-2	-

\* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

## Dimensions

Model / Dimensions	V <sub>A</sub>	V <sub>B</sub>
RD403-1100-GB RD403-1100-FS	31.9	23.9
RD403-1100-PR-GB	39.5	31.5

Unit:mm





# SCARA Robot

## RS405

## RS410



### Features

- High precision and high flexibility Scara Robot is widely used in various automation field, it can be easily integrated with peripheral control units and combined with linear modules, vision system, end effector etc. In addition to stand alone operations, it can also be used in a system workstation, can easily adapt to changes in production line and enhance quality and efficiency.

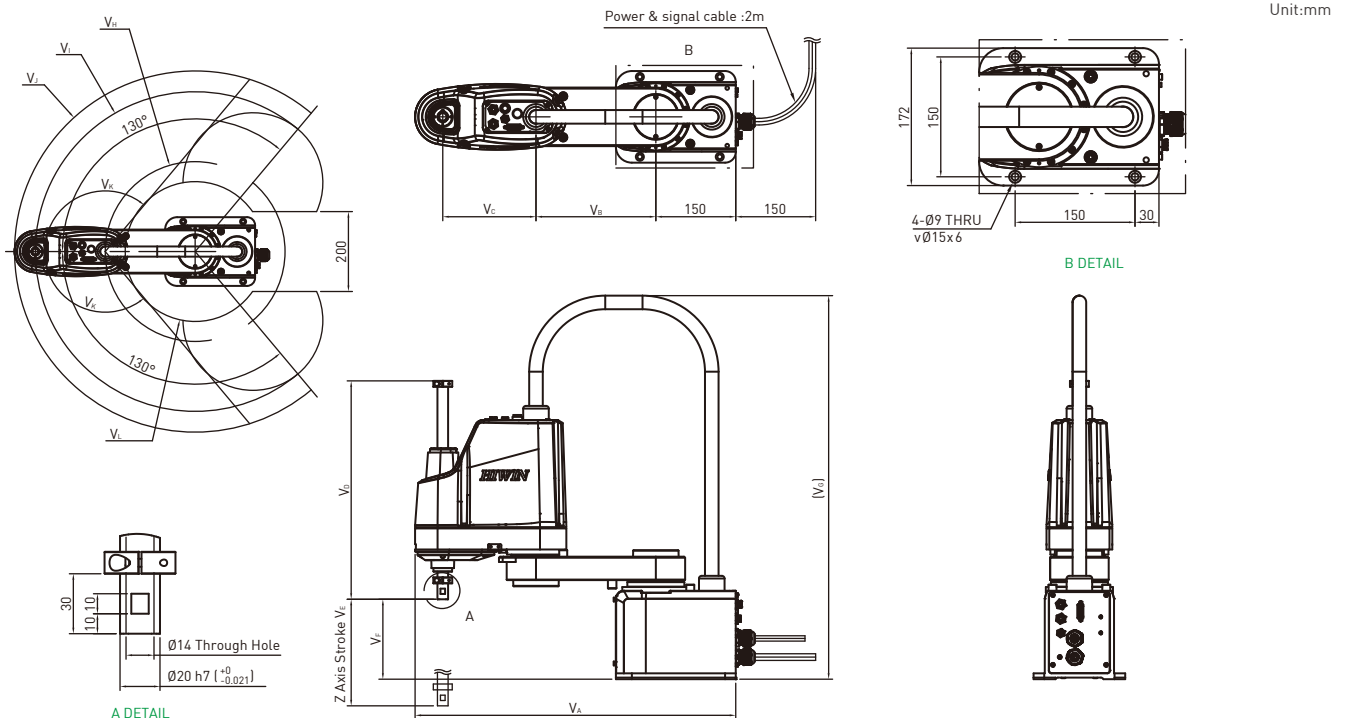
### Application

- Material handling, arranging, packaging, assembly, dispensing, plugin, inspection.

Model	RS405-LU	RS410-LU
Degrees of freedom	4	
Rated/Max. payload [kg]	2/5	5/10
Max. working radius [mm]	400/500	600/700/800
Working range	J1[deg]	± 130
	J2[deg]	± 130
	J3[mm]	200/400
	J4[deg]	± 360
Repeatability	J1-J2[mm]	± 0.02
	J3[mm]	± 0.01
	J4[deg]	± 0.01
Pneumatic joint [mm]	∅6 x 2 , ∅4 x 1	∅6 x 3
Weight [kg]	23	32
Protection rating	IP20	
Controller	RC4	

### Dimensions

Model / Dimensions	V <sub>A</sub>	V <sub>B</sub>	V <sub>C</sub>	V <sub>D</sub>	V <sub>E</sub>	V <sub>F</sub>	V <sub>G</sub>	V <sub>H</sub>	V <sub>I</sub>	V <sub>J</sub>	V <sub>K</sub>	V <sub>L</sub>
RS405-400-200-LU	602	225	175	410	200	150	720	R225	R400	R452	130°	R175
RS405-400-400-LU				610	400							R251
RS405-500-200-LU	702	325		410	200	148		R325	R500	R552		R251
RS405-500-400-LU				610	400							
RS410-600-200-LU	816	325	275	410	200	167	780	R325	R600	R666	150°	R162
RS410-600-400-LU				610	400							R231
RS410-700-200-LU	916	425		410	200			R425	R700	R766		R231
RS410-700-400-LU				610	400							
RS410-800-200-LU	1016	525	410	200	R525	R800	R866	R318				
RS410-800-400-LU			610	400								



# Controller Series



RCA620

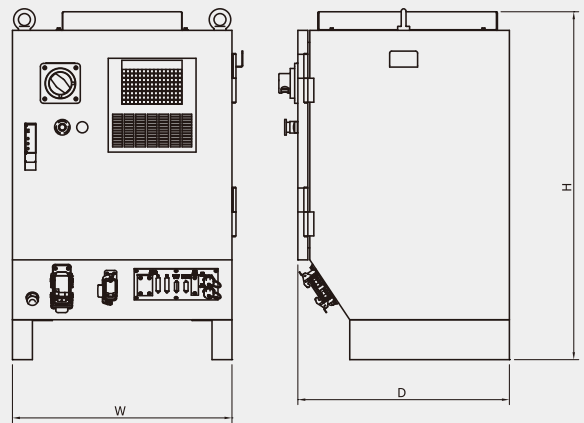


RCA605-GB

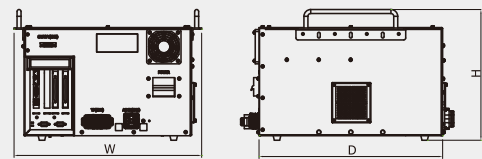


RC4

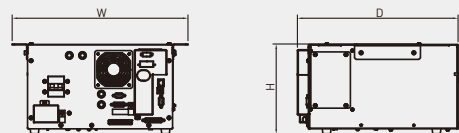
## Dimension



RCA620



RCA605-GB



RC4

## Specifications

Model		RCA605-GB, RCT605-GB	RCA610-GB, RCT610-GB	RCA620	RCD403-GB	RC4
Control number of Axes		6	6	6	4	4
Weight [kg]		34	43	80	34	13
Power	Input voltage / frequency	1Ø200-240V 50/60Hz	1Ø200-240V 50/60Hz	3Ø200-240V *Note 1 50/60Hz	3Ø200-240V*Note 2 50/60Hz	1Ø220-240V 50/60Hz
	Max. current(A)	8A	18A	22A	4.5A	6A
◆ Input/Output *Note 3	Function I/O	8in/8out	8in/8out	8in/8out	8in/8out	8in/8out
	Digital I/O	24in/24out	24in/24out	16in/16out	24in/24out	16in/16out
◆ Communication Interface	RS232	✓	✓	-	✓	✓
	Ethernet	✓	✓	✓	✓	✓
	★ Fieldbus	CC-Link, PROFINET	CC-Link, PROFINET	CC-Link, PROFINET	-	CC-Link, PROFINET
	USB	✓	✓	✓	✓	✓
★ Encoder Capture		★	★	★	◆ 4ch	★
Ambient temperature [°C]		0~45	0~45	0~40	0~45	5~45
Ambient humidity [%]		20~75 (Non-condensing)	20~75 (Non-condensing)	20~75 (Non-condensing)	20~75 (Non-condensing)	20~75 (Non-condensing)
Protection rating		IP20	IP20	IP54	IP20	IP20
Dimensions (W x H x D)*Note 4		470 x 328 x 460	470 x 328 x 554	550 x 872 x 530	470 x 328 x 460	400 x 205 x 366

◆ Standard

★ Optional

Unit:mm

\* Note 1: If the regional power source is 3Ø 380V, an additional transformer(3Ø 380V to 220V, 5KVA) should be applied.

Note 2: If the regional power source is 3Ø 380V, an additional transformer(3Ø 380V to 220V, 2KVA) should be applied.

Note 3: I/O can be expanded, but RCD403-GB is not included.

Note 4: Dimensions needed for cable installation is not included in the drawing.

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