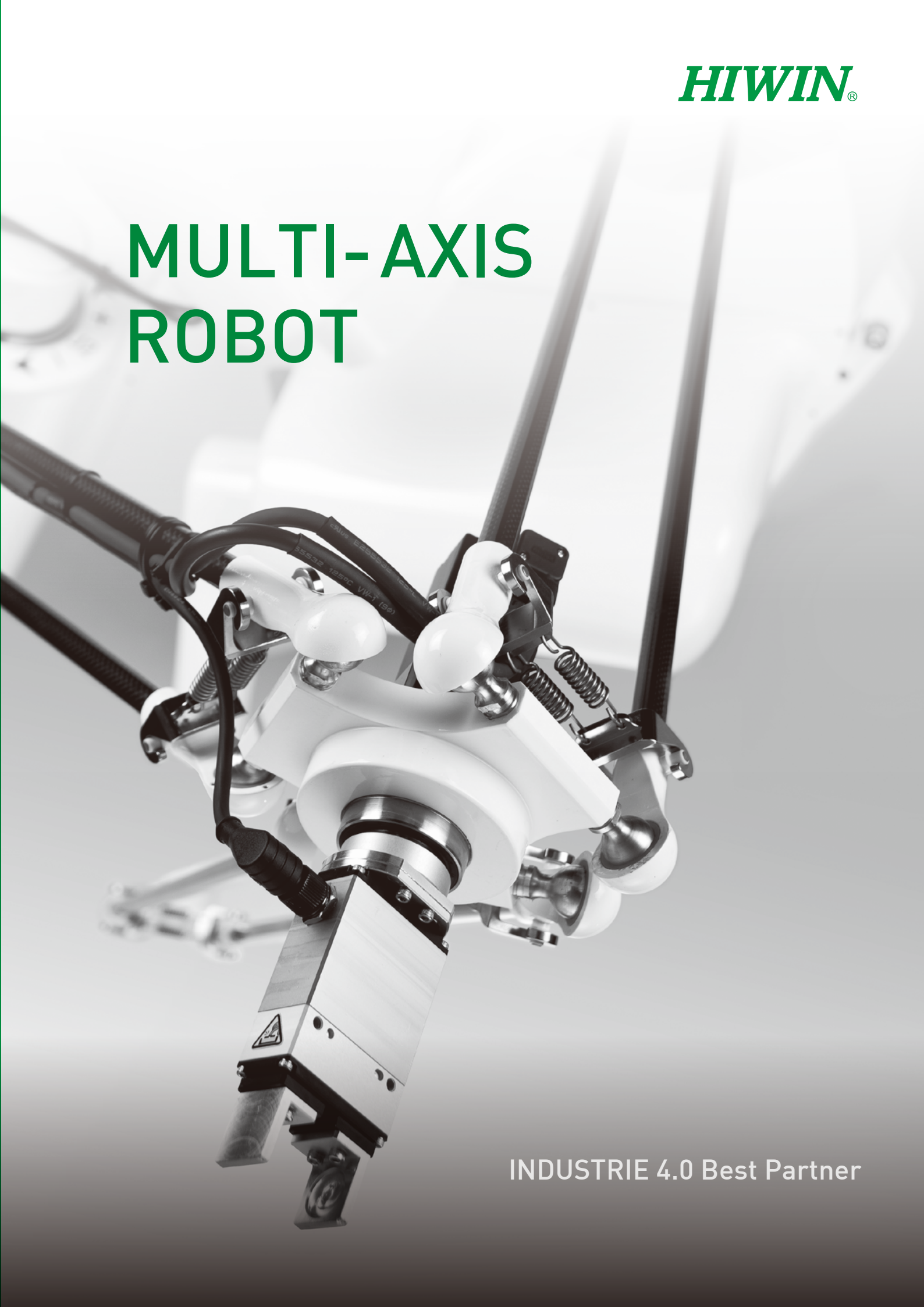


**HIWIN®**

# MULTI-AXIS ROBOT



INDUSTRIE 4.0 Best Partner

# Articulated Robot

# RT605-GB RA605-GC ● NEW



RT605-710-GB

RA605-710-GC CE RoHS

## 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.

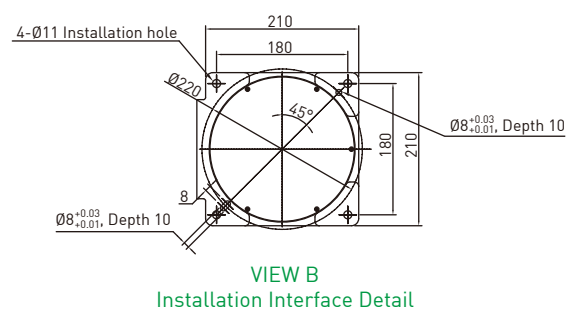
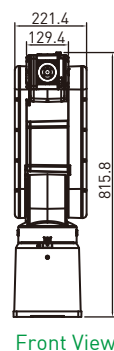
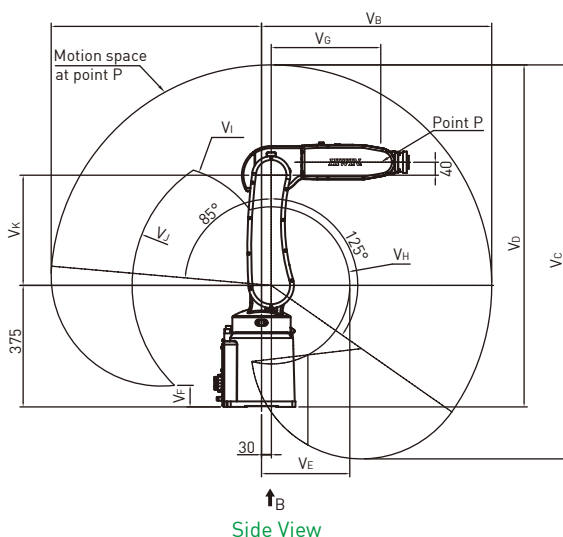
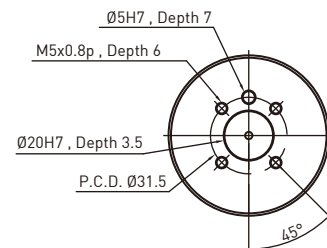
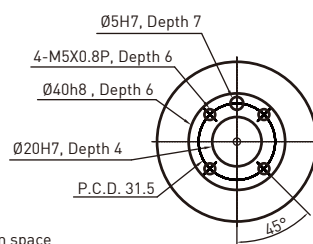
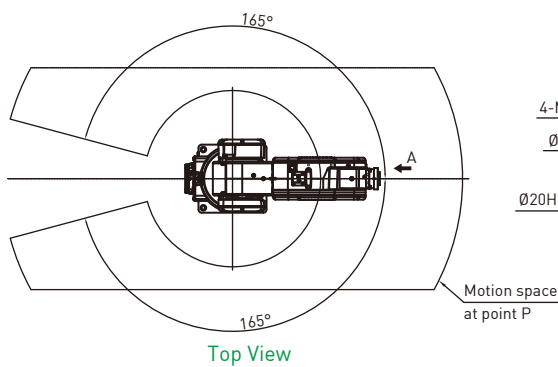
| Model                         | RT605-GB                             |            | RA605-GC   |       |
|-------------------------------|--------------------------------------|------------|------------|-------|
| Degrees of freedom            | 6                                    |            |            |       |
| Rated payload[kg]             | 5                                    |            |            |       |
| Maximum payload[kg]           | 7                                    |            |            |       |
| Max. reach radius[mm]         | 710                                  | 909        | 710        | 909   |
| Working range [deg]           | J1                                   | ±165       |            |       |
|                               | J2                                   | +85 / -125 |            |       |
|                               | J3                                   | +185 / -55 |            |       |
|                               | J4                                   | ±190       |            |       |
|                               | J5                                   | ±115       |            |       |
|                               | J6                                   | ±360       |            |       |
| Repeatability[mm]             | ±0.03                                | ±0.04      | ±0.02      | ±0.03 |
| Cycle time[s]*Note 1          | 0.5                                  |            |            |       |
| Weight[kg]                    | 40                                   | 45         | 40         | 45    |
| Protection rating             | IP32                                 |            | IP65       |       |
| Controller                    | RCT605-GB                            |            | RCA605-GC  |       |
| Tool pneumatic pipes          | Two channels of pneumatic connection |            |            |       |
| Safety/Environmental Standard | -                                    |            | CE/RoHS2.0 |       |

\* 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> |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 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         |
| RA605-710-GC       | 650            | 710            | 1215           | 1055           | 272            | 67             | 338            | R242           | R304           | R249           |
| RA605-909-GC       | 848.1          | 909.8          | 1571           | 1254.8         | 334.2          | 24.7           | 438            | R302.5         | R439.8         | R564.3         |

Unit:mm



# Articulated Robot

# RA610-GC ● NEW



RA610-1476-GC



## 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

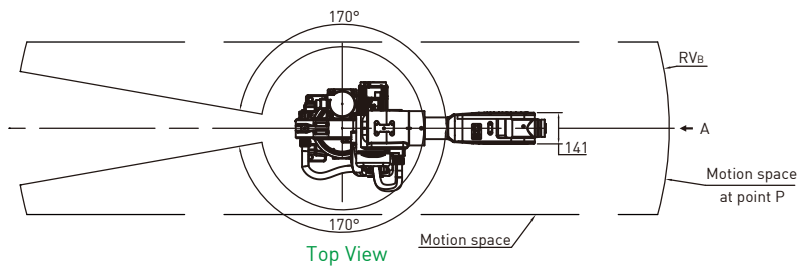
- Packaging, deburring, dispensing, visual inspection, loading and unloading.

| Model                         | RA610-GC                             |            |       |      |
|-------------------------------|--------------------------------------|------------|-------|------|
| Degrees of freedom            | 6                                    |            |       |      |
| Rated payload[kg]             | 12                                   | 10         | 10    | 7    |
| Maximum payload[kg]           | 14                                   | 12         | 12    | 9    |
| Max. reach radius[mm]         | 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 |      |
| Cycle time[s]*Note 1          | 1                                    |            |       |      |
| Weight[kg]                    | 143                                  | 147        | 150   | 152  |
| Protection rating             | IP54(Wrist:IP65)                     |            |       |      |
| Controller                    | RCA610-GC                            |            |       |      |
| Tool pneumatic pipes          | Two channels of pneumatic connection |            |       |      |
| Safety/Environmental Standard | CE/RoHS2.0                           |            |       |      |

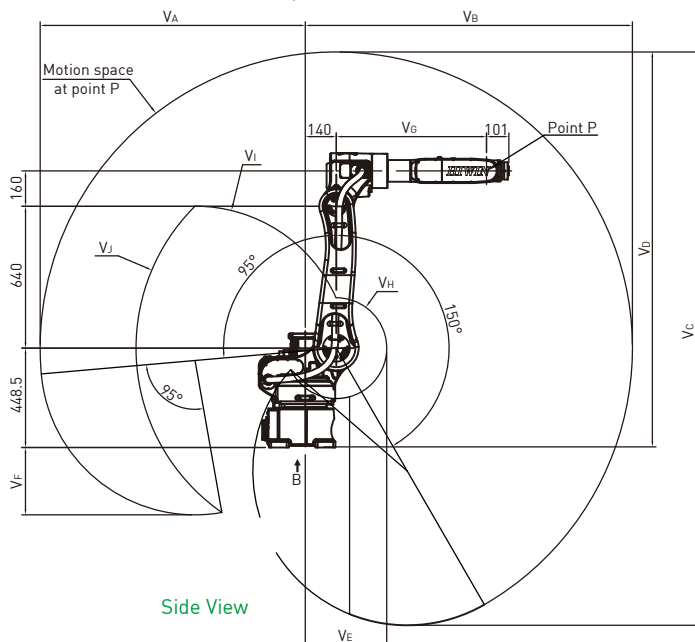
\* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

## Dimensions

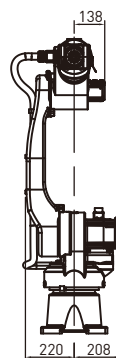
| Model / Dimensions | V <sub>A</sub> | V <sub>B</sub> | V <sub>C</sub> | V <sub>D</sub> | V <sub>E</sub> | V <sub>F</sub> | V <sub>G</sub> | V <sub>H</sub> | V <sub>I</sub> | V <sub>J</sub> |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------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



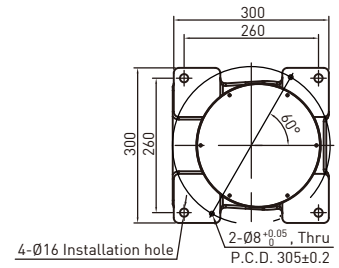
Unit:mm



VIEW A  
Mounting Flange Detail



Front View



VIEW B  
Installation Interface Detail

# 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.

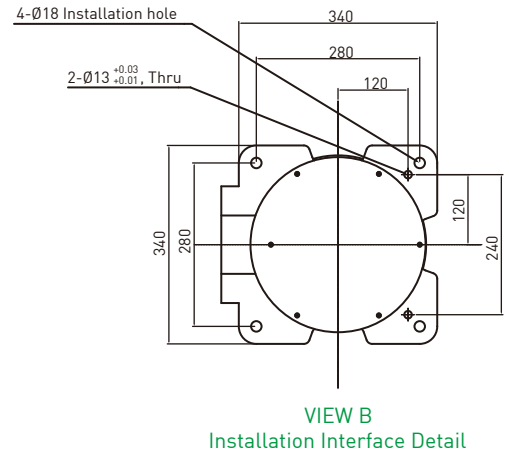
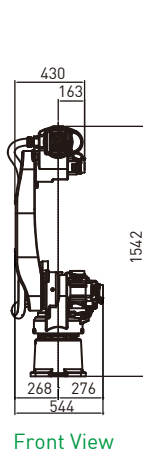
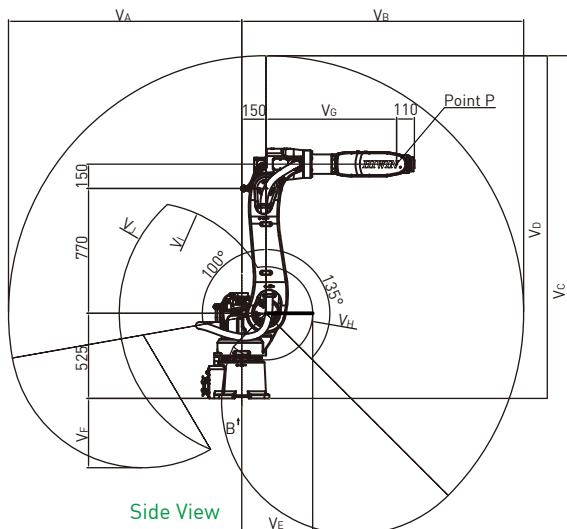
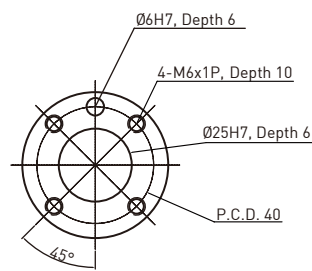
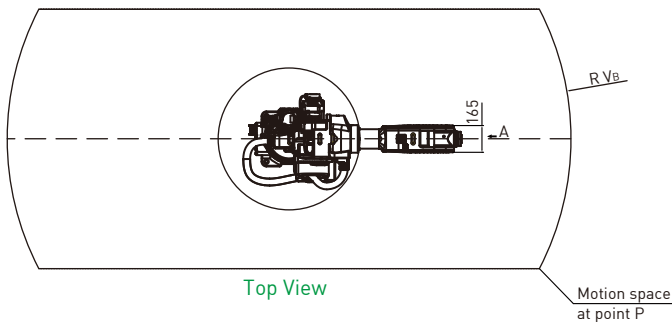
|                       |                                             |             |
|-----------------------|---------------------------------------------|-------------|
| freedom               | 6                                           |             |
| Rated payload[kg]     | 30                                          | 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 CE ROHS

## 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.

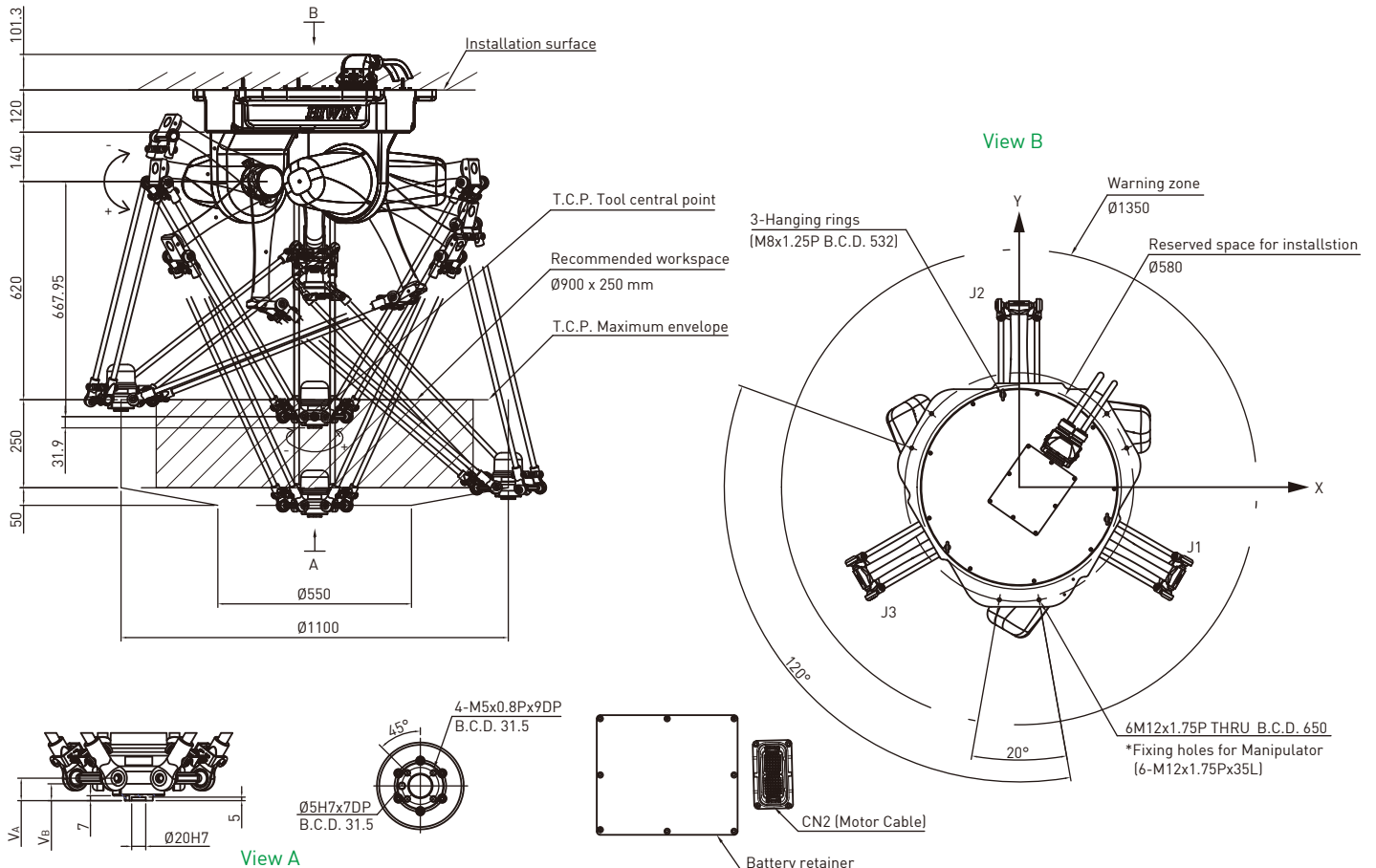
| Model                                                   | RD403-1100-FS | RD403-1100-PR-GB |
|---------------------------------------------------------|---------------|------------------|
| Degrees of freedom                                      |               | 4                |
| Rated payload[kg]                                       |               | 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 Safety/Environmental Standard | EN1672-2      | -                |
|                                                         | RoHS          | CE/RoHS          |

\* 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-FS      | 31.9           | 23.9           |
| RD403-1100-PR-GB   | 39.5           | 31.5           |

Unit:mm



# SCARA Robot

# RS405

# RS410



RS405 Standard



RS410 Protection



## 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       |       | ±150     |       |        |
|                               | J3[mm]    | 200/400    |       |          |       |        |
|                               | J4[deg]   | ±360       |       |          |       |        |
| Cycle time[s]*Note 1          |           | 0.42       |       | 0.52     |       |        |
| Repeatability                 | J1-J2[mm] | ±0.01      | ±0.02 | ±0.02    | ±0.02 | ±0.025 |
|                               | J3[mm]    | ±0.01      |       |          |       |        |
|                               | J4[deg]   | ±0.01      |       |          |       |        |
| Pneumatic joint [mm]          |           | Ø6x2, Ø4x1 |       | Ø6x3     |       |        |
| Weight[kg]                    |           | 22         | 23    | 30       | 31    | 32     |
| Protection rating             |           | IP20/★IP40 |       |          |       |        |
| Controller                    |           | RC4        |       |          |       |        |
| Safety/Environmental Standard |           | CE/RoHS2.0 |       |          |       |        |
| Environment                   |           | Standard   |       |          |       |        |

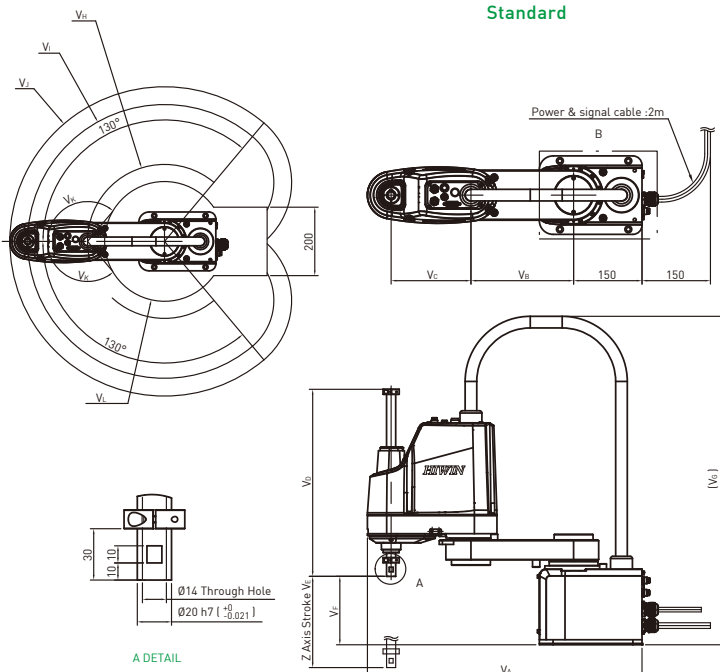
★ Optional \* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

## Dimensions

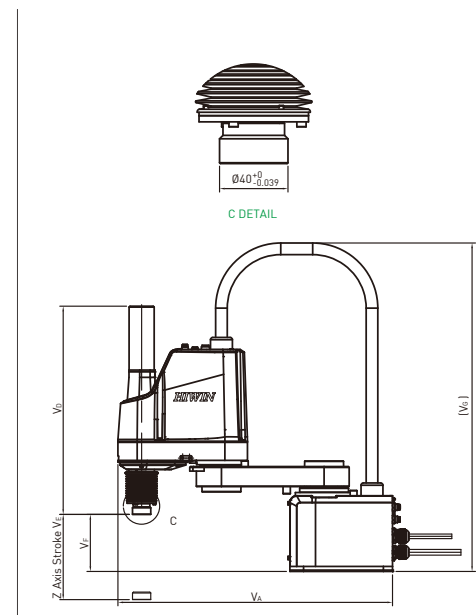
| Model / Dimensions    | V <sub>A</sub> | V <sub>B</sub> | V <sub>C</sub> | V <sub>D</sub> | V <sub>E</sub> | V <sub>F</sub> | V <sub>G</sub> | V <sub>H</sub> | V <sub>I</sub> | V <sub>J</sub> | V <sub>K</sub> | V <sub>L</sub> |
|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| RS405-400-200(20P)-LU | 602            | 225            | 175            | 410(456.5)     | 200            | 150(125)       | 720            | R225           | R400           | R452           | 130°           | R175.1         |
| RS405-400-400(40P)-LU |                |                |                | 610(655)       | 400            |                |                |                |                |                |                |                |
| RS405-500-200(20P)-LU | 702            | 325            |                | 410(456.5)     | 200            | 148(123)       |                | R325           | R500           | R552           |                |                |
| RS405-500-400(40P)-LU |                |                |                | 610(655)       | 400            |                |                |                |                |                |                |                |
| RS410-600-200(20P)-LU | 816            | 325            | 275            | 410(461)       | 200            | 167(142)       | 780            | R325           | R600           | R666           | 150°           | R162.7         |
| RS410-600-400(40P)-LU |                |                |                | 610(661)       | 400            |                |                |                |                |                |                |                |
| RS410-700-200(20P)-LU | 916            | 425            |                | 410(459)       | 200            |                |                | R425           | R700           | R766           |                |                |
| RS410-700-400(40P)-LU |                |                |                | 610(659)       | 400            |                |                |                |                |                |                |                |
| RS410-800-200(20P)-LU | 1016           | 525            | 410(459)       | 200            | R525           | R800           | R866           |                |                |                |                |                |
| RS410-800-400(40P)-LU |                |                | 610(659)       | 400            |                |                |                | R318.1         |                |                |                |                |

Unit:mm

### Standard



### Protection



# Controller Series



RCA605-GC



RCA620

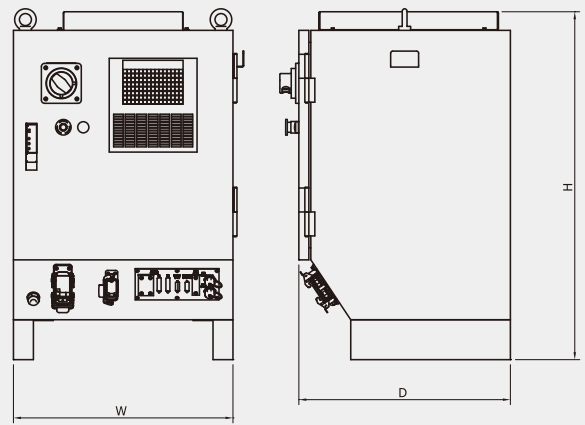


RCA605-GB

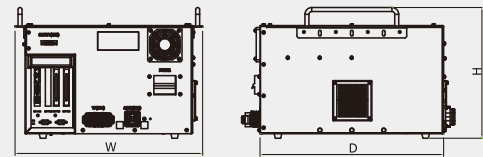


RC4

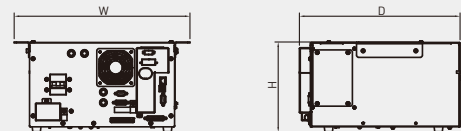
## Dimension



RCA620



RCA605-GC / RCA610-GC / RCA605-GB



RC4

## Specifications

| Model                         |                           | RCA605-GC                 | RCA610-GC                 | RCT605-GB                 | RCA620                        | RCD403-GB                     | RC4                       |
|-------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|-------------------------------|---------------------------|
| Control number of axes        |                           | 6                         | 6                         | 6                         | 6                             | 4                             | 4                         |
| Weight[kg]                    |                           | 29                        | 34                        | 29                        | 80                            | 34                            | 13                        |
| Power                         | Input voltage / frequency | 1Ø200-240V<br>50/60Hz     | 1Ø200-240V<br>50/60Hz     | 1Ø200-240V<br>50/60Hz     | 3Ø200-240V *Note 1<br>50/60Hz | 3Ø200-240V *Note 2<br>50/60Hz | 1Ø200-240V<br>50/60Hz     |
|                               | Max. current[A]           | 8A                        | 18A                       | 8A                        | 22A                           | 4.5A                          | 12A                       |
| ◆ Input/Output<br>*Note 3     | Function I/O              | 8in/8out                  | 8in/8out                  | 8in/8out                  | 8in/8out                      | 8in/8out                      | 8in/8out                  |
|                               | Digital I/O               | 24in/24out                | 24in/24out                | 24in/24out                | 16in/16out                    | 24in/24out                    | 16in/8out                 |
| ◆ Communication interface     | RS232                     | ✓                         | ✓                         | ✓                         | -                             | ✓                             | ✓                         |
|                               | RS485 [Modbus-RTU]        | ✓                         | ✓                         | -                         | -                             | -                             | ✓                         |
|                               | 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                      | 0~45                      | 0~40                          | 0~45                          | 5~45                      |
| Ambient humidity [%]          |                           | 20~75<br>(Non-condensing) | 20~75<br>(Non-condensing) | 20~75<br>(Non-condensing) | 45~85<br>(Non-condensing)     | 20~75<br>(Non-condensing)     | 20~75<br>(Non-condensing) |
| Protection rating             |                           | IP23                      | IP23                      | IP20                      | IP54                          | IP20                          | IP20   IP23               |
| Dimensions (W x H x D)*Note 4 |                           | 470 x 328 x 460           | 470 x 328 x 554           | 470 x 328 x 460           | 550 x 872 x 530               | 470 x 328 x 460               | 400 x 205 x 366           |
| Safety/Environmental Standard |                           | CE/RoHS2.0                | CE/RoHS2.0                | -                         | -                             | CE/RoHS                       | ★ CE/RoHS2.0              |

◆ Standard

★ Optional

\* 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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