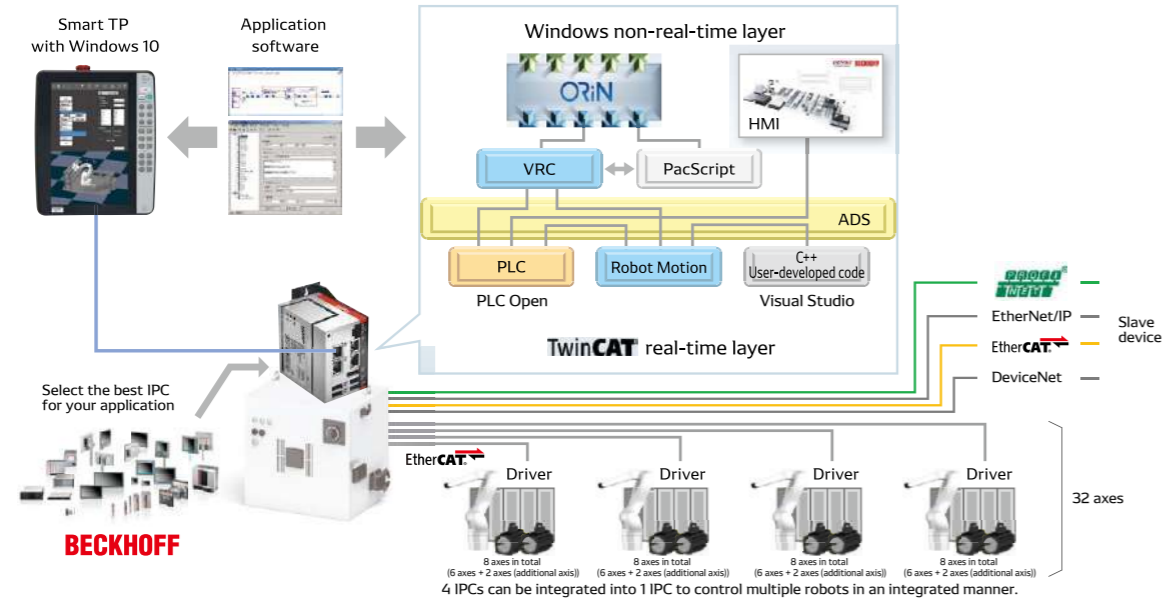


Robot Controller

RC9 ■ Applicable robots : VM1500/1800
VL2500

Controller that realizes integrated equipment control

RC9 can be provided with firmware. Since it has the selectivity that can be optimized according to the application, the openness that can fuse the technologies of users, Siers, and manufacturers, and the expandability that can simply integrate the entire system, it realizes simple equipment integrated control.



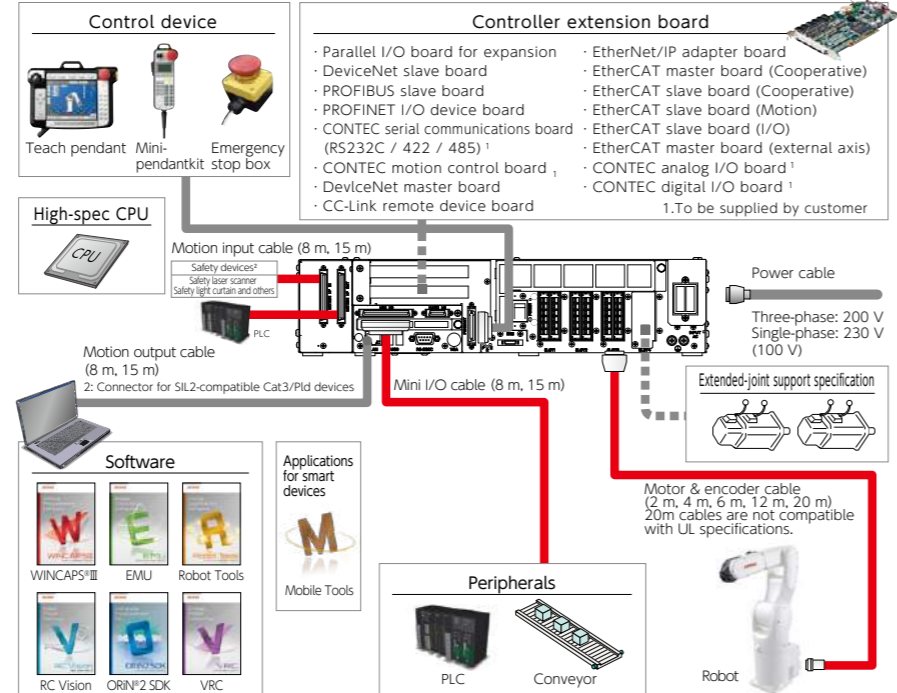
RC8A



- External dimensions (mm) : 357×320×94
- Weight (kg) : Safety I/O-less specification, Standard specification: Approx. 10kg, Safety motion specification: Approx. 11kg¹
- Applicable robots : VP-5243/6242²
VS050/060
VS050S2
VS068/087
VS-6556/6577
VM-6083/60B1
HSR® 048/055/065
HS035A1/045A1/055A1
HM-4****
XR-43***

1: Does not include the supplied cables.
2: Power for the 100 VAC specification is *Single-phase 100 VAC -5% to 110 VAC +10% 50/60 Hz, 1 kVA.

Optional systems diagram



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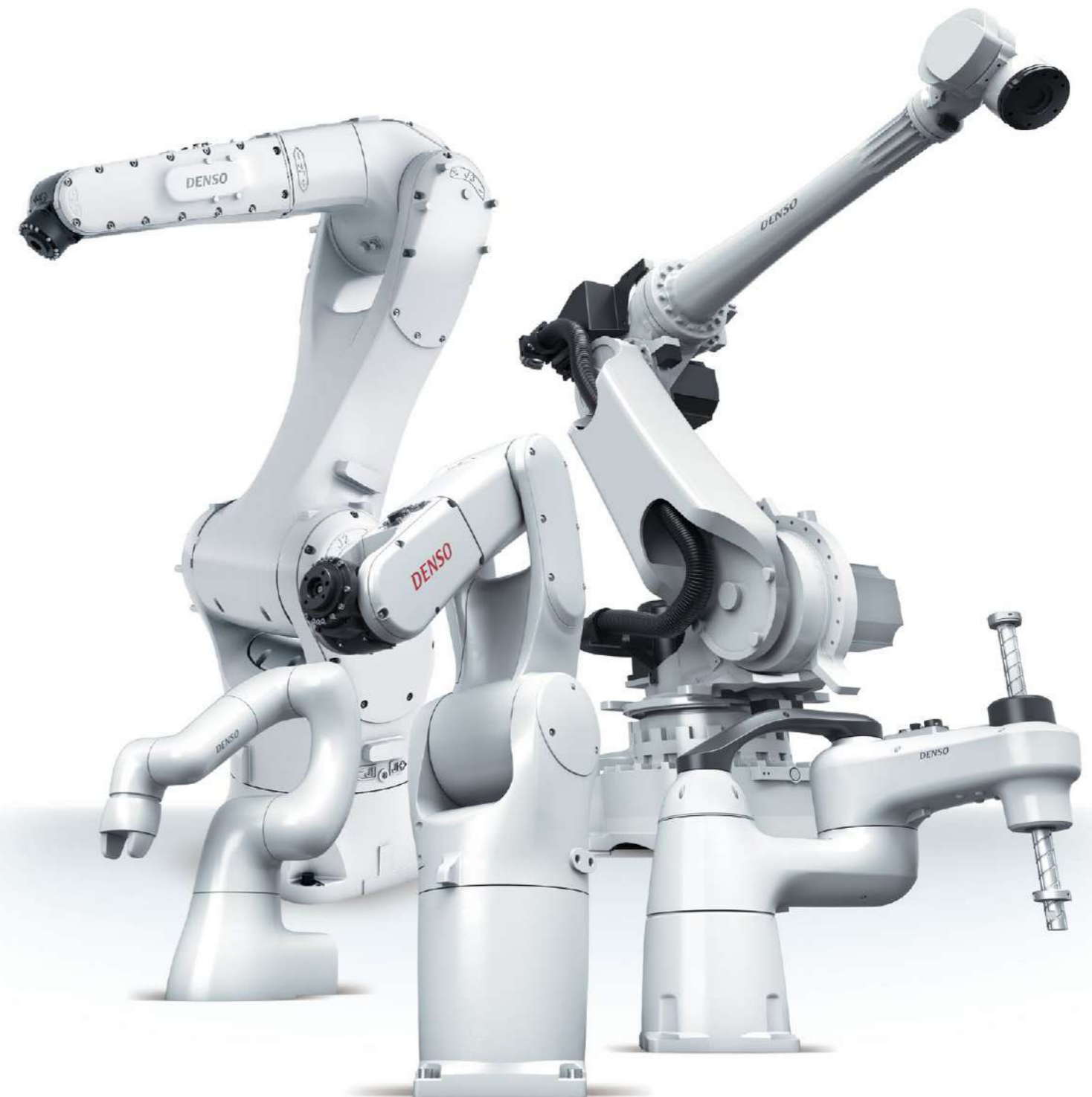
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DENSO Robotics® Robot Lineup

2020

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5-AND 6-AXIS ROBOTS

VP Series **RC8A**
RC8

VP-5243 / 6242



Maximum arm reach	430 / 432 mm
Maximum payload	3 ¹ / 2.5 ² kg
Position repeatability ³	±0.02 mm
Options	<ul style="list-style-type: none"> ● Standard type

VS Series **RC8A**
RC8

VS050 / 060



Maximum arm reach	505 / 605 mm
Maximum payload	4 kg
Position repeatability ³	±0.02 mm
Options	<ul style="list-style-type: none"> ● Standard type ● Protected type (IP67) ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (ISO Class 3/5) ● UL specifications

VS068 / 087



Maximum arm reach	710 / 905 mm
Maximum payload	7 kg
Position repeatability ³	±0.02 to ±0.03 mm
Options	<ul style="list-style-type: none"> ● Standard type ● Protected type (IP67) ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (ISO Class 3/5) ● UL specifications

VS-6556 / 6577



Maximum arm reach	653 / 854 mm
Maximum payload	7 kg ⁵
Position repeatability ³	±0.02 to ±0.03 mm
Options	<ul style="list-style-type: none"> ● Standard type ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (Class 10/100)

VM Series **RC8A**
RC8

VM-6083 / 60B1



Maximum arm reach	1,021 / 1,298 mm
Maximum payload	13 kg ⁶
Position repeatability ³	±0.05 to ±0.07 mm
Options	<ul style="list-style-type: none"> ● Standard type ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (Class 100)

VM Series **RC9**

VM1500/VM1800



Maximum arm reach	1,506 / 1,804 mm
Maximum payload	25 kg
Position repeatability ³	±0.05 mm
Options	<ul style="list-style-type: none"> ● Standard type

VL Series **RC9**

VL2500



Maximum arm reach	2,503 mm
Maximum payload	40 kg
Position repeatability ³	±0.06 mm
Options	<ul style="list-style-type: none"> ● Standard type

4-AXIS ROBOTS

HSR® Series **RC8A**
RC8

HSR®048 / 055 / 065



Arm reach	480 / 550 / 650 mm
Vertical stroke	100 / 200 / 320 / 510 mm ⁷
Maximum payload	8 kg
Position repeatability ³	±0.01 to ±0.012 mm
Cycle time ⁴	0.28 - 0.31 sec (for 2 kg payload)
Options	<ul style="list-style-type: none"> ● Standard type ● Bellows type ● Dust & splash proof type (IP65) ● Cleanroom type (ISO Class 3)⁸ ● UL specifications ● Ceiling type ● H1 Grease type (IP65) ● Metal-detecting bellows type ● Dust and splash proof type (IP65 / metal-detecting bellows)

HS-A1 Series **RC8A**
RC8A

HS035A1 / 045A1 / 055A1



Arm reach	350 / 450 / 550 mm
Vertical stroke	100 / 150 / 200 / 320 mm
Maximum payload	5 kg
Position repeatability ³	±0.01 mm
Cycle time ⁴	0.29 sec (for 2 kg payload)
Options	<ul style="list-style-type: none"> ● Standard type ● Bellows type ● Dust & splash proof type (IP65) ● Cleanroom type (ISO Class 3)⁸ ● UL specifications⁸ ● Ceiling type

HM Series **RC8A**
RC8

HM-40*** / 4A***



Arm reach	600 / 700 / 850 / 1,000 mm
Vertical stroke	100 / 150 / 200 / 300 / 400 mm
Maximum payload	10 / 20 kg
Position repeatability ³	±0.02 to ±0.025 mm
Cycle time ⁴	0.29 - 0.31 sec (for 2 kg payload)
Options	<ul style="list-style-type: none"> ● Standard type ● Dust & splash proof type (IP65) ● UL specifications⁹ ● Ceiling type

LPH Series **RC8A**
RC8

LPH-040



Arm reach	400 mm
Vertical stroke	150 mm
Maximum payload	3 kg
Position repeatability ³	±0.02 mm
Cycle time ⁴	0.45 sec
Options	<ul style="list-style-type: none"> ● Standard type

COLLABORATIVE ROBOTS

COBOTTA®

CVR038



Total arm length (No. 1 arm + No. 2 arm)	342.5 (165+177.5) mm
Rated payload (Maximum payload)	0.5 kg ¹⁰ *Without electric gripper
Position repeatability ³	±0.05 mm
Software	<ul style="list-style-type: none"> ● Standard version ● OSS version

Pharmaceutical/Medical Robots

VS Series **RC8A**
RC8

VS050S2



Maximum arm reach	520 mm
Maximum payload	4 kg
Position repeatability ³	±0.02 mm
Cycle time ⁴	0.35 sec (for 1 kg payload)
Options	<ul style="list-style-type: none"> ● H₂O₂-resistant ● UL specifications

COMPACT GANTRY ROBOTS

XR Series **RC8A**
RC8

XR-43***



Arm reach	200 / 250 / 300 mm
X-Axis stroke	450 / 760 / 1060 mm
Maximum payload	5 kg
Position repeatability ³	±0.015 mm
Cycle time ⁴	0.56 sec (for 3 kg payload)
Options	<ul style="list-style-type: none"> ● Standard type

- 1: If wrist and neck downward movement exceed ± 45°, the maximum payload is 2.5 kg.
- 2: If wrist and neck downward movement exceed ± 45°, the maximum payload is 2 kg.
- 3: Position repeatability (center of tool mounting face) is the precision at constant ambient temperature.
- 4: Time required for a robot to move a 1 kg payload between two points 300 mm apart at a height of 25 mm.
- 5: If wrist and neck downward movement exceed ± 45°, the maximum payload is 6 kg.
- 6: If the payload exceeds 11 kg, flange downward movement is limited to ±10°.
- 7: Available standard type Z-axis strokes are 100mm, 200mm, 320mm and 510mm.
- 8: Floor type only.
- 9: Standard type/Dust- and splash proof type
- 10: 0.7kg within ±10 degrees with the wrist angled downward.