

DENSO

50th Anniversary of Robot Development

DENSO Robotics® Lineup



DENSO Robotics Lineup

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
Cycle time ⁴	0.99 sec (for 1 kg payload)
Options	● Standard type

VS Series RC8A RC8

VS-050 / 060



Maximum arm reach	505 / 605 mm
Maximum payload	4 kg
Position repeatability ³	±0.02 mm
Cycle time ⁴	0.35 sec (for 1 kg payload)
Options	● Standard type ● Protected type (IP67) ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (ISO Class 3/5) ● UL specifications

VS-068 / 087



Maximum arm reach	710 / 905 mm
Maximum payload	7 kg
Position repeatability ³	±0.02 to ±0.03 mm
Cycle time ⁴	0.31 / 0.34 sec (for 1 kg payload)
Options	● Standard type ● Protected type (IP67) ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (ISO Class 3/5) ● UL specifications

4-AXIS ROBOTS

HSR Series RC8A

HSR-048 / 055 / 065



Arm reach	480 / 550 / 650 mm
Vertical stroke	100 / 200 / 320 mm
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	● Standard type ● Bellows type ● Dust & splash proof type (IP65) ● Cleanroom type (ISO Class 3)⁷ ● UL specifications ● Ceiling type ● H1 Grease type (IP65)

HS-A1 Series RC8A

HS-035A1 / 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	● Standard type ● Bellows type ● Dust & splash proof type (IP65) ● Cleanroom type (ISO Class 3)⁷ ● UL specifications⁷ ● 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	● Standard type ● Dust & splash proof type (IP65) ● UL specifications⁸ ● Ceiling type

VM Series RC8A RC8

VS-6556 / 6577



653 / 854 mm
7 kg ⁵
±0.02 to ±0.03 mm
0.49 / 0.59 sec (for 1 kg payload)
● Standard type ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (Class 10/100)

VM-6083 / 60B1



1,021 / 1,298 mm
13 kg ⁶
±0.05 to ±0.07 mm
0.89 / 0.95 sec (for 5 kg payload)
● Standard type ● Dust & splash proof type (wrist: IP65, unit: IP54) ● Cleanroom type (Class 100)

Pharmaceutical/ Medical Robots

RC8A RC8

VS-050S2



520 mm
4 kg
±0.02 mm
0.35 sec (for 1 kg payload)
● 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	● Standard type

COLLABORATIVE ROBOTS

COBOTTA[®]

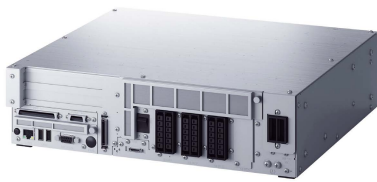
CVR038



Total arm length (No. 1 arm + No. 2 arm)	342.5 (165+177.5) mm
Rated payload (Maximum payload)	0.5 kg (0.7 kg within ±10 degrees with the wrist angled downward) *Without electric gripper
Position repeatability ³	±0.05 mm
Software	● Standard version ● OSS version

- 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: Floor type only.
- 8: Standard type/Dust- and splash proof type

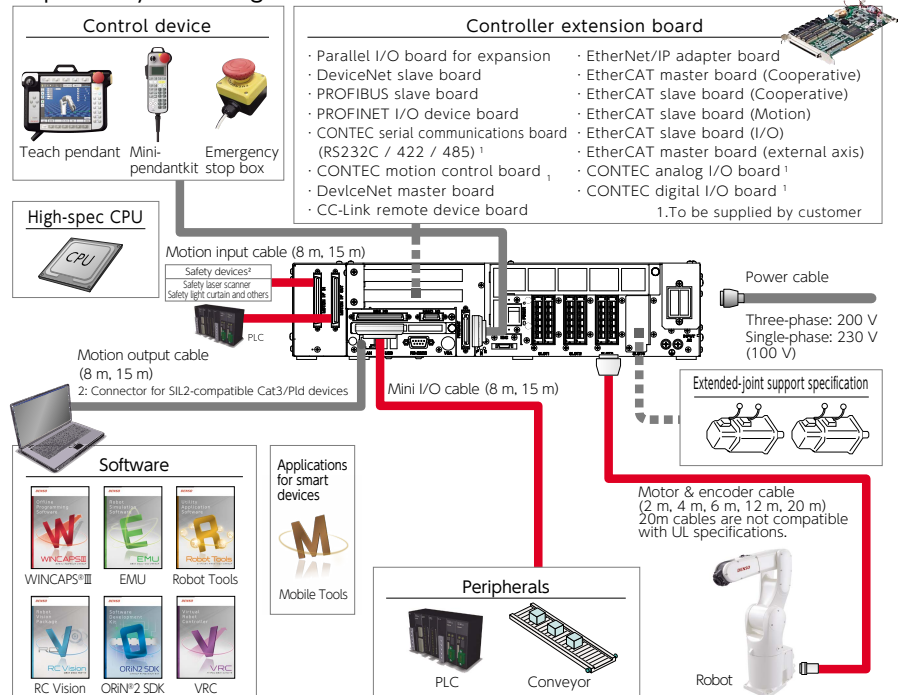
Robot Controller RC8A



- External dimensions (mm) : 357×320×94
- Weight (kg) : Safety I/O-less specification, Standard specification: Approx. 10kg, Safety motion specification: Approx. 11kg ¹
- Applicable robots : VP-5243/6242 ²
VS-050/060
VS-050S2
VS-068/087
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



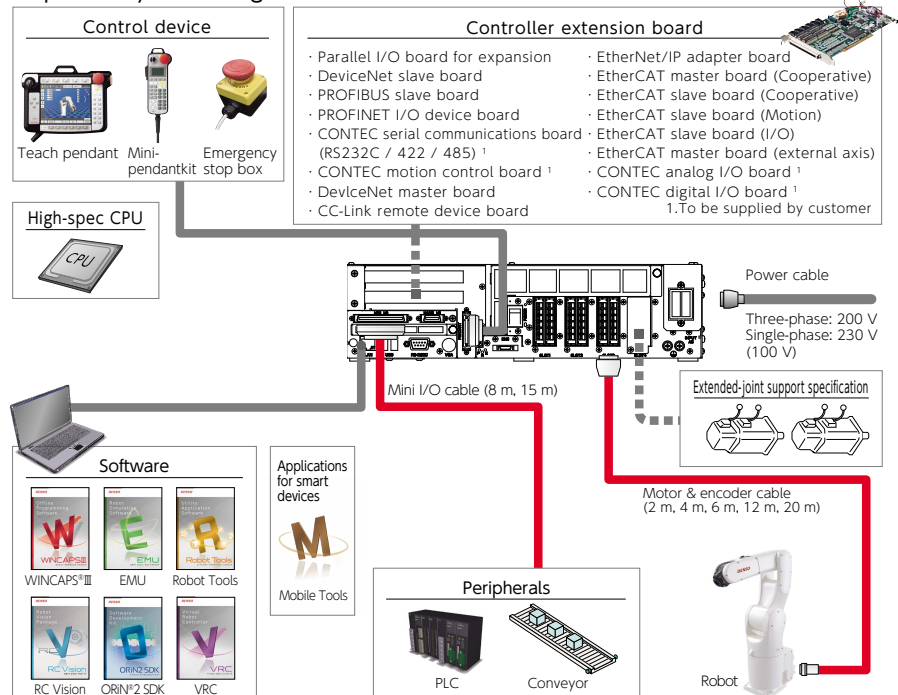
RC8



- External dimensions (mm) : 357×300×94
- Weight (kg) : Approx. 10kg ¹
- Applicable robots : VP-5243/6242
VS-050/060
VS-050S2
VS-068/087
VS-6556/6577
VM-6083/60B1
HM-4****
XR-43***
SC-****

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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