

GLOBAL SUPPLIER OF ADVANCED ROBOTICS TECHNOLOGY

As one of the world's largest automotive parts manufacturers, DENSO has been a leader and pioneer in manufacturing automation, including the design and manufacturing of industrial robot arms, since the 1960s. DENSO is also the world's largest user of small assembly robots, from four-axis SCARA robots to five- and six-axis articulated robots.

More than 27,000 DENSO small industrial robots are employed in the company's own manufacturing facilities, and more than 143,000 additional DENSO small industrial robots are used by other companies worldwide.

COLLABORATIVE ROBOTS

COBOTTA®

CVR038



Total arm reach (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
Options	<ul style="list-style-type: none"> • IP30 Standard type • OSS version

COMPACT GANTRY ROBOTS

XR Series

XR-43***



Arm reach	200/250/300mm
X-Axis stroke	450/760/1060mm
Maximum payload	5 kg
Position repeatability ³	±0.05 mm
Cycle time ⁴	0.56 sec (for 3 kg payload)
Options	<ul style="list-style-type: none"> • IP40 Standard type

4-AXIS ROBOTS

HSR® Series

RC8A

HSR® 048 / 055 / 065



HS-A1 Series

RC8A

HS035A1 / 045A1 / 055A1



HM Series

RC8A
RC8

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



LPH Series

RC8A
RC8

LPH-040



Arm reach	480 / 550 / 650 mm	350 / 450 / 550 mm	600 / 700 / 850 / 1,000 mm	400 mm
Vertical stroke	100 / 200 / 320 / 510 mm ⁷	100 / 150 / 200 / 320 mm	100 / 150 / 200 / 300 / 400 mm	150 mm
Maximum payload	8 kg	5 kg	10 / 20 kg	3 kg
Position repeatability ³	±0.01 to ±0.012 mm	±0.01 mm	±0.02 to ±0.025 mm	±0.02 mm
Cycle time ⁴	0.28 - 0.31 sec (for 2 kg payload)	0.29 sec (for 2 kg payload)	0.29 - 0.31 sec (for 2 kg payload)	0.45 sec
Options	<ul style="list-style-type: none"> • IP40 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) 	<ul style="list-style-type: none"> • IP40 Standard type • Bellows type • Dust & splash proof type (IP65) • Cleanroom type (ISO Class 3)⁸ • UL specifications⁸ • Ceiling type 	<ul style="list-style-type: none"> • IP40 Standard type • Dust & splash proof type (IP65) • UL specifications⁹ • Ceiling type 	<ul style="list-style-type: none"> • IP40 Standard type

1. If downward movement of wrist and neck exceed ±45°, maximum payload is 2.5 kg. 2. If downward movement of wrist and neck exceed ±45°, maximum payload is 2 kg. 3. Position repeatability (center of tool mounting face) is the precision at constant ambient temperature. 4. Time required for 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 210mm. 8. Floor type only. 9. Standard type/dust-and splash proof type. 10. 0.7kg within ±10° with the wrist angled downward.

5- AND 6-AXIS ROBOTS

PHARMACEUTICAL/ MEDICAL ROBOTS

VP Series RC8A RC8

VP-5243 / 6242



VSA Series

VS-050 / 060



VSG Series RC8A RC8

VS-068 / 087



VS-S2 Series RC8A RC8

VS-6556 / 6577



VS-S2 Series RC8A RC8

VS-050S2



Maximum arm reach	430 / 432 mm	505 / 605 mm	710 / 905 mm	653 / 854 mm	520 mm
Maximum payload	3 ¹ / 2.5 ² kg	4 kg	7 kg	7 kg ⁵	4 kg
Position repeatability ³	±0.02 mm	±0.02 mm	±0.02 to ±0.03 mm	±0.02 to ±0.03 mm	±0.02 mm
Cycle Time ⁴	0.99 sec	0.35 sec (RC8)	0.31 sec / 0.34 sec (RC8)	0.49 sec / 0.59 sec	0.35 sec
Options	<ul style="list-style-type: none"> • IP30 Standard type 	<ul style="list-style-type: none"> • IP40 Standard type • Protected type (IP67) • Dust & splash proof type (wrist: IP65, unit: IP54) • Cleanroom type (ISO Class 3/5) • UL specifications 	<ul style="list-style-type: none"> • IP40 Standard type • Protected type (IP67) • Dust & splash proof type (wrist: IP65, unit: IP54) • Cleanroom type (ISO Class 3/5) • UL specifications 	<ul style="list-style-type: none"> • IP40 Standard type • Dust & splash proof type (wrist: IP65, unit: IP54) • Cleanroom type (Class 10/100) 	<ul style="list-style-type: none"> • H202-resistant • UL specifications

5- AND 6-AXIS LARGE ROBOTS

VM Series RC8A RC8

VM-6083 / 60B1



VMB Series RC9

VMB-2515 / 2518



VL Series RC9

VLA-4025 / 6022



Maximum arm reach	1,021 / 1,298 mm	1,506 / 1,804 mm	2,503 mm / 2,257 mm
Maximum payload	13 kg ⁶	25 kg	40 kg / 60 kg
Position repeatability ³	±0.05 to ±0.07 mm	±0.05 mm	±0.06 mm
Cycle Time	0.89 sec / 0.95 sec	—	—
Options	<ul style="list-style-type: none"> • IP40 Standard Type • Dust & splash proof type (wrist: IP65, unit: IP54) • Cleanroom type (Class 100) 	<ul style="list-style-type: none"> • IP40 Standard Type • IP67 Protected Type 	<ul style="list-style-type: none"> • Wrist IP67 / Unit IP65 Standard Type

1. If downward movement of wrist and neck exceed ±45°, maximum payload is 2.5 kg. 2. If downward movement of wrist and neck exceed ±45°, maximum payload is 2 kg. 3. Position repeatability (center of tool mounting face) is the precision at constant ambient temperature. 4. Time required for 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 210mm. 8. Floor type only. 9. Standard type/dust-and splash proof type. 10. 0.7kg within ±10° with the wrist angled downward.

DENSO ROBOTICS

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