

DENSO

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The QR-Code's inventor



The New VS 068/087

The fastest of all our 6-axis robots with speed of up to 11,000 mm/s. Perfect for applications that require high speed and longer arm reach (up to 905 mm)

	PAYLOAD (KG)	ARM REACH (MM)
VS-068	7	710
VS-087	7	905

- **FAST:** fastest possible cycle time of 0.33 s
- **PRECISE:** from ± 0.02 mm
- **OPTIONAL SPECIFICATIONS:** robots are available as Standard (IP40), Dust & splash proof (IP65/54), Protected (IP67), Cleanroom classes ISO 3 and 5, and H₂O₂ + UV resistant (only VS-087*)

* For more information about this robot see page 47

NEW VS SERIES

PAYLOAD ARM REACH
 NEW VS-068 | 7 kg 710 mm
 NEW VS-087 | 7 kg 905 mm

VS-068



VS-087

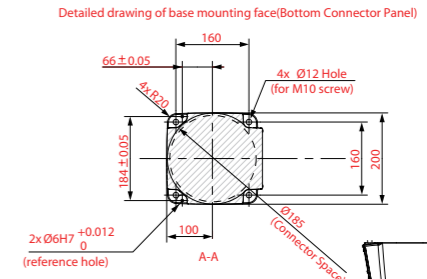
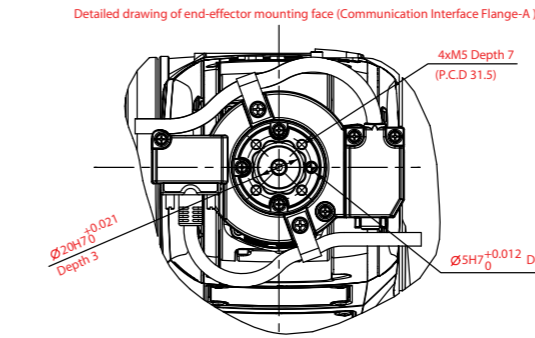
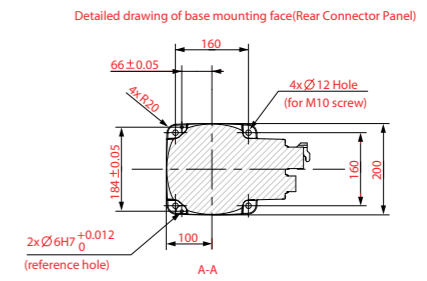
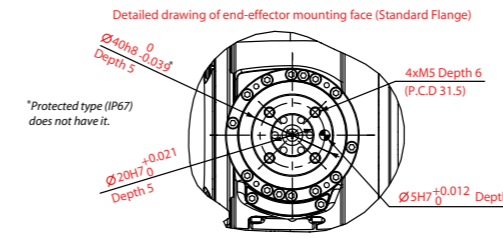


Mounting Options

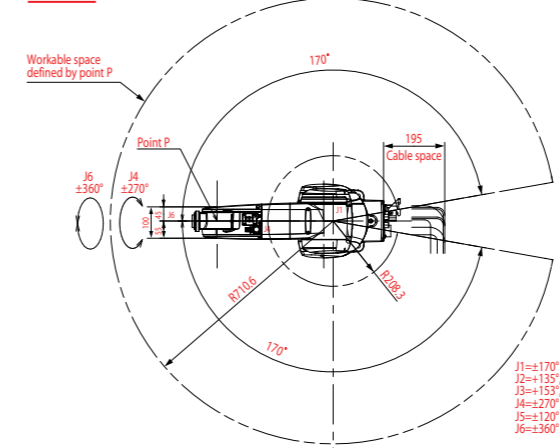


		Unit	VS-068	VS-087
Number of axis			6	6
Maximum arm area (Point P: Wrist center)		mm	710	905
Payload		kg	7	7
Maximum composite speed		mm/s	11,000	11,000
Cycle time		s	0.33 (with 1 kg weight)	0.36 (with 1 kg weight)
Position repeatability (1)		mm	±0.02 (2)	±0.03 (2)
Communication Interface Flange-A [Option]			17 line power wire for cameras, etc. (3) LAN (1000BASE-T) x 1 (4)	
Environment resistance	Protection class		IP40, IP65/54 (IP65 only in J4, J5 and J6), IP67 (5)	
	Cleanroom class		Class ISO 5 and 3	
UL specification			-	-
Motion range	J1	deg	±170 (6)	±170 (6)
	J2		+135, -100	+135, -100
	J3		+153, -120	+153, -136
	J4		±270	±270
	J5		±120	±120
	J6		±360	±360
Maximum allowable inertia	J4	kgm ²	0.450	0.450
	J5		0.450	0.450
	J6		0.100	0.100
Maximum allowable moment	J4	N-m	16.2	16.2
	J5		16.2	16.2
	J6		6.86	6.86
Signal Line & Air Piping	Signal Line		10 line (for proximity sensor signals, etc.) (3), (7)	
	Air Piping		7 systems (φ4x6, φ6x1) -3 x solenoid valves (2 position, double solenoid) -3 x solenoid valves (3 position, Exhaust Center) -3 x solenoid valves (3 position, Closed Center)	
Brakes			Brakes for all joints	
Mounting configuration			Floor, Ceiling, Wall	Floor, Ceiling, Wall
Arm weight		kg	49	51

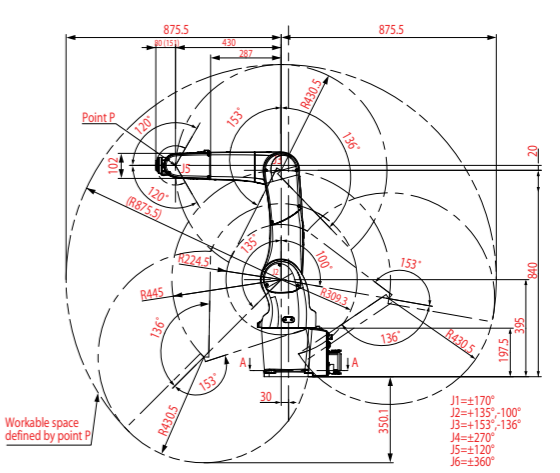
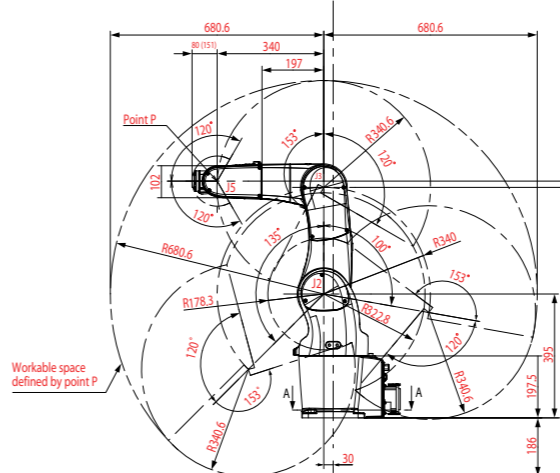
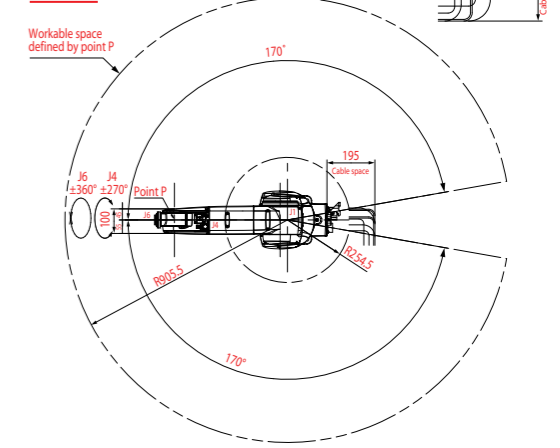
1. Position repeatability is the value at constant ambient temperature. 2. In every direction. 3. Allowable current is limited. 4. LAN cable connected with robot must be shorter than 20 m. 5. Do not operate the robot in water. 6. Limited motion when wall mounted. 7. 4 lines when Communication Interface Flange-A [Option] is installed.



VS-068



VS-087



Legend

Robot name: VS [] [] [] [] - A V6 - [] [] N - [] [] N [] N - [] NNN

Paint/Surface finish:
 N: DENSO standard colors (*2)
 A: Unpainted (*3)

Signal lines / Air pipe solenoid valve:
 B: 3 x solenoid valves (2 position, double solenoid)
 C: 3 x solenoid valves (3 position, exhaust center solenoid)
 D: 3 x solenoid valves (3 position, closed center solenoid)
 N: Specification without signal lines / air pipe solenoid valve

Flange:
 N: Standard flange
 A: Communication interface flange-A (*1)

Connector panel:
 N: Rear connector panel
 A: Bottom connector panel

Protected:
 NN: Standard type
 W7: Protected type (IP67)
 W4: Dust & splash proof type (wrist: IP65, unit: IP54)
 C3: Cleanroom type (ISO class 3)
 C5: Cleanroom type (ISO class 5)

Mounting orientation:
 A: All directions
 V6: 6-axis

Robot name:
 VS: DENSO 5- and 6-axis robots
 Total arm length:
 068 A2: 680 mm RC7M supported
 087 A2: 875 mm RC7M supported
 068 A4: 680 mm RC8 supported
 087 A4: 875 mm RC8 supported

*1: Standard flange specification only when protected type (IP67) is selected *2: When standard type is selected *3: When protected type (IP67) is selected (DENSO standard colors are a special specification (option)). For details, please contact our sales representative.