

NEW VS SERIES 700-900 MM

The new DENSO VS-Series six-axis articulated robots are ideal for applications where operational space is limited. Features of the 700- and 900-mm models include:

- Exceptionally fast cycle times from 0.36 to 0.33 sec.
- Outstanding repeatability of ± 0.03 to ± 0.02 mm
- Payloads up to 7 kg
- Reaches from 700 to 900 mm
- High maximum allowable moment of inertia
- Compact design, with ultraslim arms, saves space and facilitates integration
- Floor- wall- or ceiling-mount, with no special hardware needed
- Optional IP67 protection resists cutting chips and high-pressure washing
- Optional internal wiring allows easy mounting of Gigabit Ethernet devices and servo grippers on flange
- Optional bottom-side cable connection saves floor space



VS068G



VS087G



	VS-068	VS-087
Number of axes	6	
Overall arm length (mm)	340 (first arm) + 340 (second arm) = 680	445 (first arm) + 430 (second arm) = 875
Arm offset (mm)	J1 (swing): 30 J3 (front arm): 20 J6 (flange): 80	
Reach (to center of 5th axis, mm)	710	905
Minimum motion area (mm)	203	235
Maximum payload (kg)	7	
Weight, approx. (kg)	49	51
Cycle time (sec.)	0.33 (with 1-kg weight)	0.36 (with 1-kg weight)
Range of motion (°)	J1: ± 170 J2: +135, -100 J3: +153, -120 J4: ± 270 J5: ± 120 J6: ± 360	J1: ± 170 J2: +135, -100 J3: +153, -136 J4: ± 270 J5: ± 120 J6: ± 360
Maximum payload (kg)	7	
Maximum composite speed (mm/sec.)	11,000	
Maximum joint speed (°/sec.)	J1: 450 J2: 360 J3: 510 J4, J5: 540 J6: 864	J1: 360 J2: 300 J3: 408 J4, J5: 540 J6: 864
Repeatability ¹ (mm)	± 0.02	± 0.03
Max. allowable moment of inertia (kgm ²)	J4 and J5: 0.450 J6: 0.100	
Max. allowable moment (Nm)	J4 and J5: 16.2 J6: 6.86	
Position detection	Absolute encoder	
Drive motors and brakes	AC servomotors and brakes for all axes	
Air piping (in-arm integrated) option	7 systems ($\phi 4 \times 6$, $\phi 6 \times 1$); 3 solenoid valves (2-position, double solenoid); 3 solenoid valves (3-position, center open); 3 solenoid valves (3-position, center close)	
Wiring (in-arm integrated)	10 lines (max. 1 A per line) ² LAN (1000BASE-TX) \times 1 (option) ³ 17-line electrical wire for cameras, etc. ³ Option set with LAN ³	
Air source (operating pressure, MPa)	0.10–0.39	
Air source (maximum allowable pressure, MPa)	0.49	
Protection class	Standard: IP40; option: IP67 (dust- and splashproof)	
Ceiling- and wall-mount	✓	

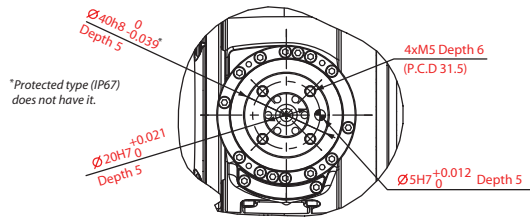
1. In every direction. 2. Four lines with LAN option. 3. Option only for IP40 model



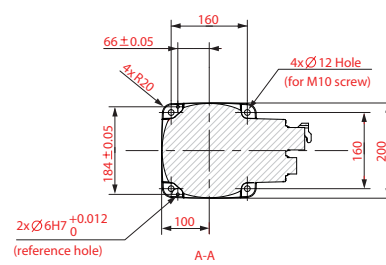
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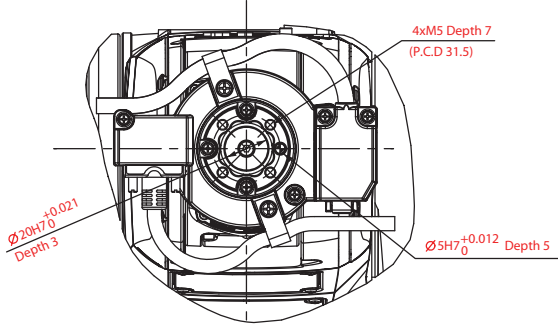
Detailed drawing of end-effector mounting face (Standard Flange)



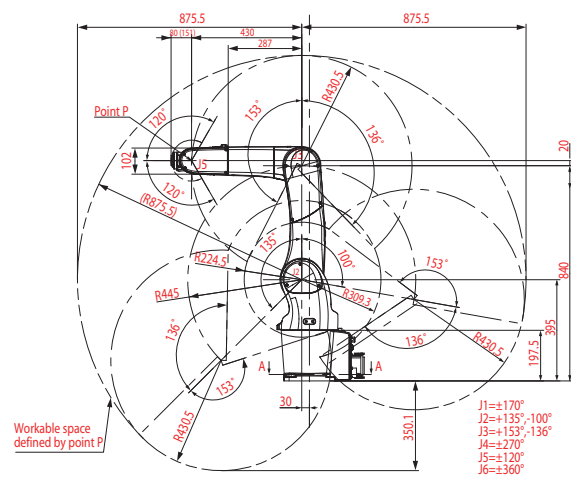
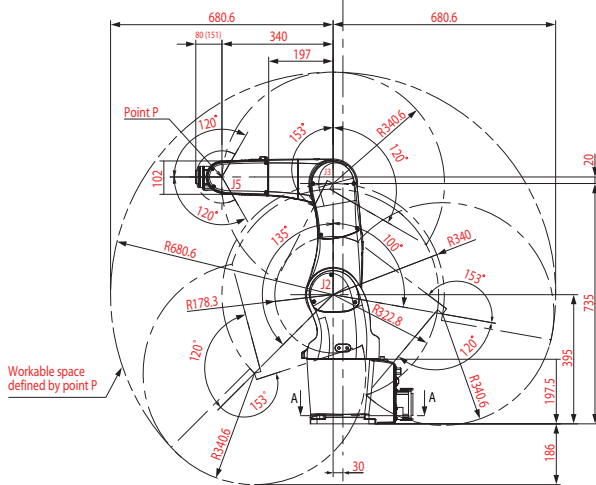
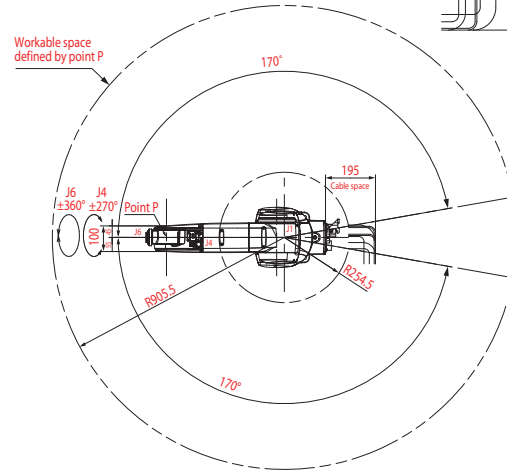
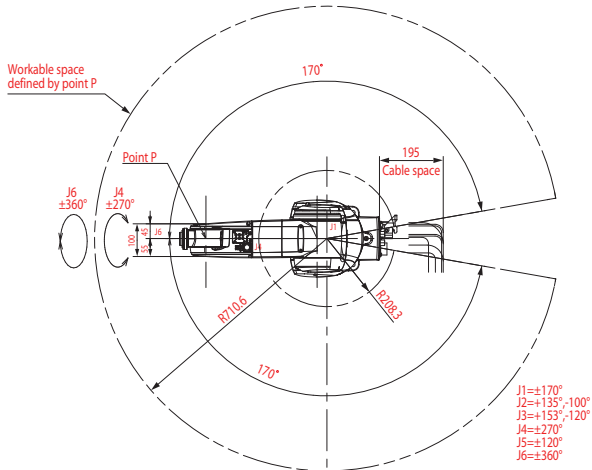
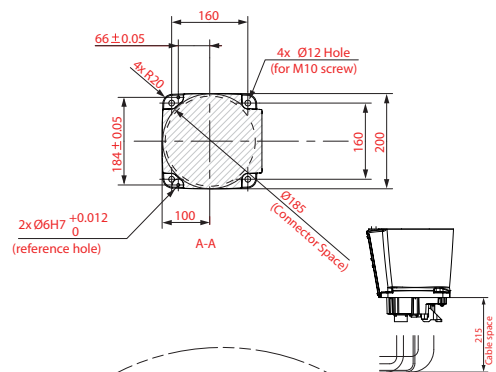
Detailed drawing of base mounting face (Rear Connector Panel)



Detailed drawing of end-effector mounting face (Communication Interface Flange-A)



Detailed drawing of base mounting face (Bottom Connector Panel)



() is Communication interface Flange-A

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