

VM-G Series
Specifications : Cleanroom model

Item	Cleanroom model	
Model name of robot set (Note 1)	VM-6083G-P100	VM-60B1G-P100
Model name of robot unit	VM-6083GM-P100	VM-60B1GM-P100
Overall arm length	385(first arm)+445(second arm)=830mm	520(first arm)+590(second arm)=1,110mm
Arm offset	J1(swing) : 180mm J3(front arm) : 100mm	
Maximum motion area	R=1,111mm(end-effector mounting face) R=1,021mm(Point P : J4, J5, J6 center)	R=1,388mm(end-effector mounting face) R=1,298mm(Point P : J4, J5, J6 center)
Motion angle	J1 : ±170° J2 : +135°, -90° J3 : +165°, -80° J4 : ±185° J5 : ±120° J6 : +360°	J1 : ±170° J2 : +135°, -90° J3 : +168°, -80° J4 : ±185° J5 : ±120° J6 : +360°
Maximum payload	10kg	
Maximum composite speed	8300mm/s(at the center of an end-effector mounting face)	
Position repeatability (Note 2)	In each of X, Y and Z directions : ±0.05mm (at the center of an end-effector mounting face)	In each of X, Y and Z directions : ±0.07mm (at the center of an end-effector mounting face)
Maximum allowable inertia moment	Around J4, J5 : 0.36kgm ² Around J6 : 0.064kgm ²	
Position detection	Absolute encoder	
Drive motor and brake	AC servomotors for all joints, Brakes for joints J2 to J6	
User air piping	6 systems(φ4x6), 3 solenoid valves (2-position, double solenoid)	
User signal line	10(for proximity sensor signals, etc.)	
Air source	Operating pressure	1.0 x 10 ⁵ Pa to 3.9 x 10 ⁵ Pa
	Maximum allowable pressure	4.9 x 10 ⁵ Pa
Clean class (FED-STD-209D)	class100(0.3μ) (at point-of use)	
Weight	approx. 86 kg (189 lb)	approx. 88 kg (193 lb)

Note 1 : The model name of robot set refers to the model name of a complete set including a robot unit, controller.

Note 2 : Position repeatability is the value at constant ambient temperature.