

VS-G Series

Specifications: Basic model

Item		Basic model		Basic model with brakes	
Model name of robot set (Note 1)		VS-6556G	VS-6577G	VS-6556G-B	VS-6577G-B
Model name of robot unit		VS-6556GM	VS-6577GM	VS-6556GM-B	VS-6577GM-B
Overall arm length		270(first arm)+295(second arm)=565mm	365(first arm)+405(second arm)=770mm	270(first arm)+295(second arm)=565mm	365(first arm)+405(second arm)=770mm
Arm offset		J1(swing) : 75mm J3(front arm) : 90mm			
Maximum motion area		R=733mm(end-effector mounting face) R=653mm(Point P : J4, J5, J6 center)	R=934mm(end-effector mounting face) R=854mm(Point P : J4, J5, J6 center)	R=733mm(end-effector mounting face) R=653mm(Point P : J4, J5, J6 center)	R=934mm(end-effector mounting face) R=854mm(Point P : J4, J5, J6 center)
Motion angle		J1 : ±170°, J2 : +135°, -100°, J3 : +166°, -119°, J4 : ±190°, J5 : ±120°, J6 : ±360°	J1 : ±170°, J2 : +135°, -100°, J3 : +169°, -119°, J4 : ±190°, J5 : ±120°, J6 : ±360°	J1 : ±170°, J2 : +135°, -100°, J3 : +166°, -119°, J4 : ±190°, J5 : ±120°, J6 : ±360°	J1 : ±170°, J2 : +135°, -100°, J3 : +169°, -119°, J4 : ±190°, J5 : ±120°, J6 : ±360°
Maximum payload		6kg(7kg at wrist direction downward)			
Maximum composite speed		8200mm/s (at the center of an end-effector mounting face)	7600mm/s (at the center of an end-effector mounting face)	8200mm/s (at the center of an end-effector mounting face)	7600mm/s (at the center of an end-effector mounting face)
Position repeatability (Note 2)		In each of X, Y and Z directions : ±0.02mm (at the center of an end-effector mounting face)	In each of X, Y and Z directions : ±0.03mm (at the center of an end-effector mounting face)	In each of X, Y and Z directions : ±0.02mm (at the center of an end-effector mounting face)	In each of X, Y and Z directions : ±0.03mm (at the center of an end-effector mounting face)
Maximum allowable inertia moment		0.413kgm ² for around J4 and J5, 0.063kgm ² for around J6			
Position detection		Absolute encoder			
Drive motor and brake		AC servomotors for all joints, Brakes for joints J2 to J4		AC servomotors for all joints, Brakes for joints J2 to J6	
Brake releasing		Enter a brake release command with the teach pendant or mini-pendant.			
User air piping (Note 3)		7 systems(φ4x6,φ6x1), 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			
Degree of protection		IP40			
Airborne noise		80 dB or less (A-weighted equipment continuous sound pressure level)			
Weight		approx. 34kg(74lb)	approx. 35kg(76lb)	approx. 34kg(74lb)	approx. 35kg(76lb)

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.

Note 3 : Only the φ4x6 air piping system can be controlled by built-in solenoid valves.