

VP-G Series

Specifications: Basic model

Item	Basic model	
	5-axis model (Note 1)	6-axis model
Model name of robot set (Note 2)	VP-5243G	VP-6242G
Model name of robot unit	VP-5243GM	VP-6242GM
Overall arm length	210(first arm)+ 220(second arm)=430mm	210(first arm)+ 210(second arm)=420mm
Arm offset	-	J3(front arm) : 75mm
Maximum motion area	R=500mm(end-effector mounting face) R=430mm(Point P : J5, J6 center)	R=502mm(end-effector mounting face) R=432mm(Point P : J4, J5, J6 center)
Motion angle	J1 : ±160° J2 : ±120° J3 : +136°, -128° (No J4 axis) J5 : ±120° J6 : ±360°	J1 : ±160° J2 : ±120° J3 : +160°, +19° J4 : ±160° J5 : ±120° J6 : ±360°
Maximum payload	2.5kg(3kg : at wrist direction downward)	2kg(2.5kg : at wrist direction downward)
Maximum composite speed	3900mm/s(at the center of an end-effector mounting face)	
Position repeatability (Note 3)	In each of X, Y and Z directions : ±0.02mm(at the center of an end-effector mounting face)	
Maximum allowable inertia moment	Around J5 : 0.040kgm ² Around J6 : 0.010kgm ²	Around J4, J5 : 0.030kgm ² Around J6 : 0.007kgm ²
Position detection	Absolute encoder	
Drive motor and brake	AC servomotors and breaks for all joints	
User air piping	4 systems (φ4x4)	
User signal line	9(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	IP30	
Weight	approx. 13kg (29lb)	approx. 15kg (32lb)

Note 1 : 5-axis model doesn't have the 4th-axis(J4).

Note 2 : The model name of robot set refers to the model name of a complete set including a robot unit, controller.

Note 3 : Position repeatability is the value at constant ambient temperature.