

Technical Specifications VP-5243/ VP-6242

Item		Specifications	
Model of robot unit		VP-5243	VP-6242
Axes		5	6
Position detection		Absolute encoder	
Drive motor and brake		All-axis servo motor / all-axis with brakes	
Total arm length (No. 1 arm + No. 2 arm)		430(210+220)mm	420(210+210)mm
Arm offset	J3 (forearm)	-	75mm
Maximum motion area (Point P)		430mm	432mm
Motion range	J1 (No.1 axis)	±160°	
	J2 (No.2 axis)	±120°	
	J3 (No.3 axis)	+136° -128°	+160° +19°
	J4 (No.4 axis)	-	±160°
	J5 (No.5 axis)	±120°	
	J6 (No.6 axis)	±360°	
Maximum payload		3kg (Wrist downward movement is within ±45°)(*3)	2.5kg (Wrist downward movement is within ±45°)(*4)
Maximum joint speed	J1	270deg/sec	
	J2	202.5deg/sec	
	J3	270deg/sec	
	J4 (*5)	-	324deg/sec
	J5	324deg/sec	
	J6	324deg/sec	
Cycle time(*1)		0.99sec	
Position repeatability (center of end-effector mounting face) (*2)		±0.02mm	
Maximum allowable moment of inertia	J4,J5	0.04kgm ² (*5)	0.03kgm ²
	J6	0.01kgm ²	0.007kgm ²
User air piping		4 systems(φ4×4)	
User signal line		9(for proximity sensor signals, etc.)	
Air source	Operating pressure	0.10MPa - 0.39MPa	
	Maximum allowable pressure	0.49MPa	
Airborne noise(A-weighted equivalent continuous sound pressure level)		80 db or less	
Weight		Approx. 13kg	Approx. 15kg

*1.Time required for a robot to move a 1 kg payload between two points 300 mm apart at a height of 25 mm.

*2.Position repeatability is the precision at constant ambient temperature.

*3.If wrist downward movement exceeds ±45°, the maximum payload is 2.5 kg.

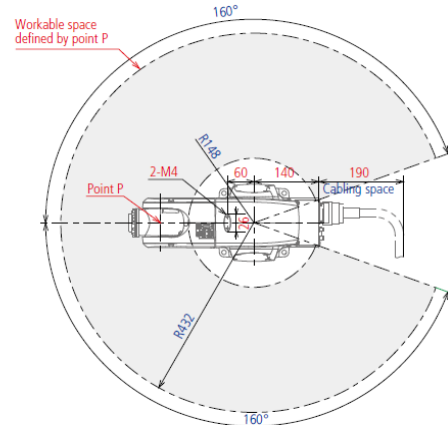
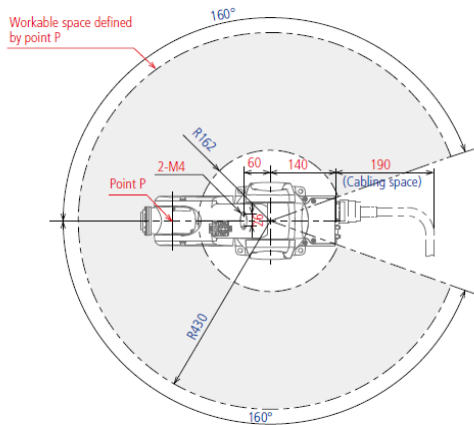
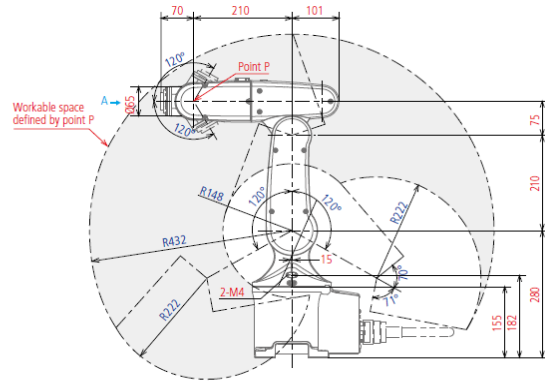
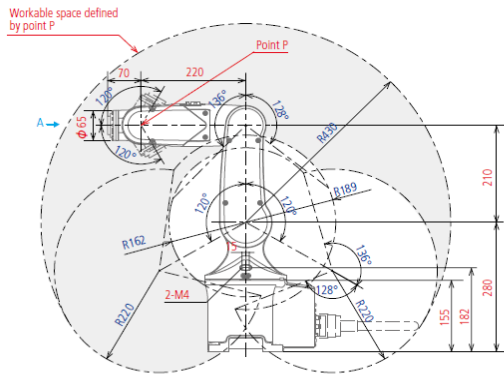
*4.If wrist downward movement exceeds ±45°, the maximum payload is 2 kg.

*5.VP-5243 has no J4.

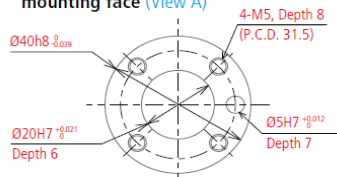
External dimensions for Standard Type Unit: mm

VP-5243

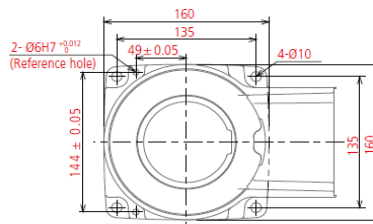
VP-6242



Detailed drawing of end-effector mounting face (View A)



Detailed drawing of base mounting face (Top view)



Legend

VP - [] 2 [] []

<p>Model : VP: Mini 5- and 6-axis robot</p>	<p>Axes : 5: 5-axis 6: 6-axis</p>	<p>Standard payload : 2: 2 kg (6-axis) 2.5 kg (5-axis) <small>*The maximum payload is 2.5 kg (6-axis) or 3 kg (5-axis)</small></p>	<p>Total arm length : 42: 420 mm 43: 430 mm</p>
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Standard Components

Group	Item	Q'ty
Robot & Accessoires	Robot unit	1
	Motor & encode cable (opriou)	1
	Sheet of direction indicator labels	1
	Connector set for hand signals (for CN20 and CN21)	1 set
	Dowel pins (internally threaded positioning pin and diamond-shaped pin)	1 set
Controller & Accessoires	Robot controller	1
	Power cable (5m)	1
	Pendantless conector (Dummy connector)	1
	Cable clamp	1
Software etc.	WINCAPS III trial version installer disc	1
	Manuals ("Manual Pack disc" and "Safety Precautions")	1 set
	Warning label	1