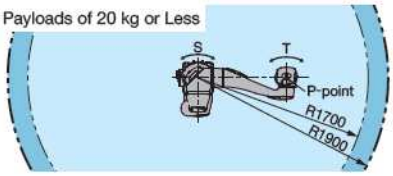
HC30PL

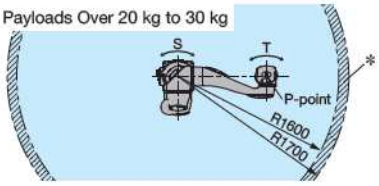
(Dust- and Drip-poof Specification)

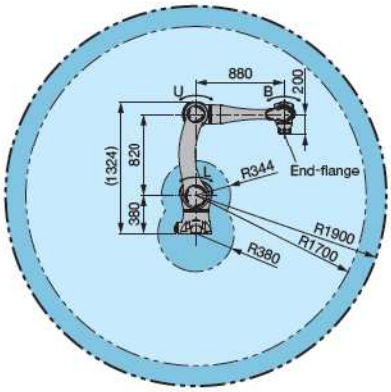
■Dimensions Units: mm ⬚: P-point Maximum Envelope ⬚: End-flange Maximum Envelope

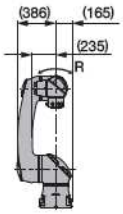
For Payloads of 20 kg or Less

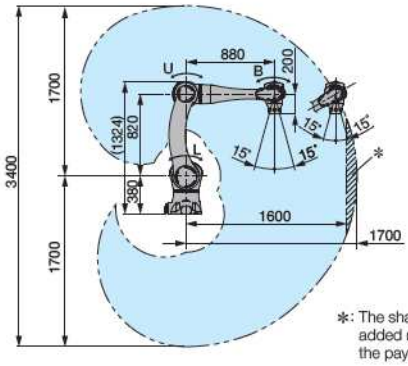


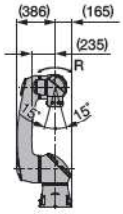
For Payloads Over 20 kg to 30 kg











*: The shaded area shows the added range of motion when the payload is 27 kg or less.

Model		MOTOMAN-HC30PL (Dust- and Drip-proof Spec.)	
Type		YR-1-06VXCP30-B00	
Controlled Axis		6 (vertically articulated)	
Payload		20 kg or Less	Over 20 kg to 30 kg
Maximum Reach		1900 mm (up to end-flange)	1600 mm *6
Repeatability*1		0.05 mm	
Range of Motion*2	S -axis (turning)	-210°– +210°	
	L -axis (lower arm)	-180°– +180°	-154°–+180°
	U -axis (upper arm)	- 67°– +247°	
	R -axis (wrist roll)	-210°– +210°	- 15°–+ 15°
	B -axis (wrist pitch/yaw)*3	- 90°– +270°	- 15°–+ 15°
	T -axis (wrist twist)	-210°– +210°	
Maximum Speed*4	S -axis (turning)	1.40 rad/s, 80°/s	
	L -axis (lower arm)	1.40 rad/s, 80°/s	
	U -axis (upper arm)	2.09 rad/s, 120°/s	
	R -axis (wrist roll)	2.27 rad/s, 130°/s	1.95 rad/s, 112°/s
	B -axis (wrist pitch/yaw)	3.14 rad/s, 180°/s	2.30 rad/s, 132°/s
	T -axis (wrist twist)	3.14 rad/s, 180°/s	
Maximum Speed of the Tip*4	Collaborative operation mode	1000 mm/s *7	
	Normal operation mode	2000 mm/s	
Allowable Moment	R -axis (wrist roll)	58.8 N·m	-
	B -axis (wrist pitch/yaw)	58.8 N·m	-
	T -axis (wrist twist)	29.4 N·m	-
Allowable Inertia (GD²/4)	R -axis (wrist roll)	4.0 kg·m²	-
	B -axis (wrist pitch/yaw)	4.0 kg·m²	-
	T -axis (wrist twist)	2.0 kg·m²	
Approx. Mass		140 kg	
IEC Protection Class		IP67 *8	
Ambient Conditions	Temperature	0 ℃ to +40 ℃	
	Humidity	20% to 80%RH (non-condensing)	
	Vibration	4.9 m/s² (0.5 G) or less	
	Altitude	1000 m or less	
Power Requirements*5		1.5 kVA	
Mounting		Floor *9	
Compatible Controller		YRC1000micro, YRC1000	

*1: Repeatability conforms to ISO 9283.
*2: The range of motion differs when the workpiece mass is over 20 kg or is 20 kg or less.
*3: The range of motion of the B-axis is an angle in the downward vertical direction. In some postures, however, the motion of B-axis may be restricted depending on the angle with respect to the upper arm.
*4: The maximum speed in this table is the available maximum value and will vary depending on the load, posture, or range of motion.
*5: The power requirement value is obtained using Yaskawa's in-house measurement conditions and will vary depending on the load, motion pattern, or cycle time.
*6: The maximum reach is 1700 mm for payloads of 27 kg or less.
*7: A safe speed must be set based on the results of the risk assessment.
*8: The entire manipulator is dust-proof and water-proof against water jets with protection rating IP66, and dust-proof and drip-proof against water immersion with protection rating IP67.
*9: This manipulator can be mounted on the floor only. Ceiling-, wall-, and tilt-mounting methods are not available.