

Presto ST-F Series Robot

NACHI
NACHI ROBOTIC SYSTEMS INC.

- Improved performance, 10-15% faster than previous model
- Redesigned gear structure drastically increases arm rigidity
- Integral air, water, and power available at the upper arm to support numerous applications
- Robot parts and options are interchangeable with all ST Series robots
- Improved Cable Management System with larger work envelope
- Easy access to wrist motor and simplified grease replenishment / replacement
- IP67 rated wrist and IP54 rated body



Presto ST-F Series Robot

Specifications									
ITEM			ST133F-01	ST133F-01A	ST166F-01	ST166F-01A	ST210F-01	ST210F-01A	
Construction			Articulate						
Number of Axis			6						
Drive			AC servo motor						
Maximum Stroke	Arm	J1 Swivel	+/- 180°						
		J2 Back & Forth	+80° ~ -60°						
		J3 Up & Down	+150° ~ -138°						
	Wrist	J4 Rotation 2	+/- 360°	+/- 210°	+/- 360°	+/- 210°	+/- 360°	+/- 210°	
		J5 Bend	+/- 135°	+/- 120°	+/- 135°	+/- 120°	+/- 130°	+/- 120°	
		J6 Rotation 1	+/- 360°	+/- 205°	+/- 360°	+/- 205°	+/- 360°	+/- 205°	
Maximum Velocity	Arm	J1 Swivel	130°/sec		110°/sec		100°/sec		
		J2 Back & Forth	130°/sec		110°/sec		100°/sec		
		J3 Up & Down	130°/sec		110°/sec		95°/sec		
	Wrist	J4 Rotation 2	230°/sec		170°/sec / 195°/sec		130°/sec		
		J5 Bend	230°/sec		170°/sec / 195°/sec		130°/sec		
		J6 Rotation 1	305°/sec		260°/sec		200°/sec		
Loading Weight	Wrist	133kg		166kg		210kg			
	Upper Arm	45kg	15kg	45kg	15kg	45kg	15kg		
Wrist Torque	J4 Rotation 2	76kg · m		97kg · m		137kg · m			
	J5 Bend	76kg · m		97kg · m		137kg · m			
	J6 Rotation 1	42kg · m		50kg · m		74kg · m			
Allowable Moment of Inertia	J4 Rotation 2	60.9kg · m ²		88.9kg · m ²		141.1kg · m ²			
	J5 Bend	60.9kg · m ²		88.9kg · m ²		141.1kg · m ²			
	J6 Rotation 1	30.2kg · m ²		45.0kg · m ²		79.0kg · m ²			
Repeatability			+/- 0.2mm				+/- 0.3mm		
Ambient Temperature			0~45°C (32~113°F)						
Installation			Floor						
Robot Body Weight			1070kg	1170kg	1070kg	1170kg	1110kg	1210kg	