Robotics

IRBP A Positioner

The ABB positioners are optimized to be used for manipulating of work pieces in arc welding, thermal cutting and other applications. All axes can be fully coordinated with the robot when programming as well as during operation.



IRBP A

This positioner is for workpieces that have to be rotated around two axes to reach the optimal process position. It is suitable for applications requiring one or two stations.

The positioner IRBP A, which comes in three variants, is designed to handle workpieces including fixture of a weight up to 750 kg.

The modular design, few and heavy-duty moving parts as well as minimal maintenance demands make the positioner service friendly.

Dynamically adaptive software plus high speed drives result in fast changeovers and high productivity.

General positioner features

All ABB positioners offer users a complete and efficient solution. They are of a robust design to ensure excellent stability and are well protected for operation in harsh production environments. All positioners can be combined with any ABB six axes robots except the small IRB 120.

The positioners are easy to use with clear, simple instructions for programming. The control equipment is located in the robot controller and uses the same drive system and software as the robots.

ABB's positioners are designed to be highly functional yet compact to make maximum use of available floor space. Standardised dimensions for all rotating plates greatly simplify the exchange of fixtures.

Dynamic modelling allows rapid acceleration, fast movements and re-orientation so that cycle times are kept to a minimum. The dynamic model automatically compensates for the effects of gravity, inertia and friction to provide fast movements (QuickMove $^{\text{TM}}$) and accurate following of the programmed path (TrueMove $^{\text{TM}}$).

The Load ID-function is used to calculate the centre of gravity and the inertia of the workpiece and of the fixture.

To meet requirements from our users the positioners can be supplied, or retrofitted, with a comprehensive range of pneumatic swivels (1 and 2 channels) and slip-rings (10 power signals and ProfiBus).

ABB positioner systems can be supplied with all necessary safety equipment.



IRBP A

Specification					
Variants		A-250	A-500	A-750	
Handling capacity	kg	250	500	750	
Max continuous torque	Nm	350	650	900	
Repetitive accuracy (r=500)	mm	+/-0.05	+/-0.05	+/-0.05	
			Axis 1 Axis 2		
Max rotation speed	°/s	150 180	90 150	90 150	

Measurements	Α	øΒ	С	D	E	F	G	Н	øl	J
A-250	900	1180	-		1210				1000	173
A-500/1000 &										
A-750/1000	700	1000	100	950	1110	1457	1026	700	-	-
	800	1000	-	950	1210	1457	1026	700	-	-
	900	1000	-		1310				-	-
A-500/1450 &										
A-750/1450	700	1450	100	950	1110	1682	1026	700	-	-
	800	1450	-	950	1210	1682	1026	700	-	-
	900	1450	-	950	1310	1682	1026	700	-	-

For complementary information, please see the product specification. ABB reserves the right to change data without notice.



