

#### ROBOTICS

# **IRBP A**

# Industrial robot 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 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. Standardized 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 and accurate movements (QuickMove $^{\text{TM}}$ ) following of the programmed path (TrueMove $^{\text{TM}}$ ).

The Load ID-function is used to calculate the center 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.

### Specification

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

## Measurements

Variants	Α	øΒ	С	D	E	F	G	Н	øl	J	K
IRBP A-250	900	1180	0	900	1210	1293	910	440	1000	173	0°
IRBP A-500/1000 &	700	1000	100	950	1110	1457	1026	700	1000	0	45°
IRBP A-750/1000	800	1000	0	950	1210	1457	1026	700	1000	0	45°
	900	1000	0	950	1310	1457	1026	700	1000	0	45°
IRBP A-500/1450 &	700	1450	250	950	1110	1682	1026	700	1450	0	45°
IRBP A-750/1450	800	1450	0	950	1210	1682	1026	700	1450	0	45°
	900	1450	0	950	1310	1682	1026	700	1450	0	45°

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

#### Dimension drawings



