

IRBP D

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 D

This positioner features a twin station solution where the robot works on one side and the operator loads and unloads on the other side. A screen is fitted between the two stations, which protects the operator from the arc.

The positioner IRBP D, which comes in two versions, is designed to handle workpieces including fixture of a weight up to 600 kg. It is suitable for applications where the workpiece has to be rotated around two axes and a supporting tailstock is needed.

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™) following of the programmed path (TrueMove™).

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.

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Specification

Variants	Handling capacity (kg)	Max load diff. sides 1 and 2 (kg)	Index time (s)	Weld to weld time (s)	Repetitive accuracy (r=500)	Max rotation speed (°/s) Axis 1	Max rotation speed (°/s) Axis 2
IRBP D-600	600 (each side)	250	3.7 - 4.4	6.1 - 6-8	+/-0.05	90	150

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Measurements

Variants	A	ØB	C	D	E	ØF	ØG
IRBP D-600/1000	1600	1000	1000	2290	2000	3986	2615
	2000	1000	1000	2290	2000	4264	3001
IRBP D-600/1200	1600	1200	1000	2490	2000	4324	2615
	2000	1200	1000	2490	2000	4544	3001

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

Dimension drawings

