



KNIGHT GLOBAL
CREATING A NEW STANDARD

Extending
Beyond your
Reach

Pneumatic Arms

VER. 12/12

Knight Pneumatic, Extension, Vertical and Servo Arms Series provide a wide variety of configurations to move product to and from conveyors, dunnage, assembly lines and much more. Knight arms allow for the positioning of a fixture or end effector within a specified work cell or typical work area with precision.

Pneumatic Arms are available in various sizes and lifting configurations that utilize either a Knight Balancer, single or twin cylinder to achieve a greater lifting capacity while reducing the overall mass of the tool. Used to lift, rotate, balance and manipulate product from conveyors, dunnage and assembly lines. Overhead mount travels on the X and Y axis.

Pneumatic Arm Features

- Lifts, Rotates, Balances, and Moves product with minimal effort.
- Various Control Configurations.
- Reduces Operator Fatigue.
- Absorbs Torque Reaction.
- Medium Duty and Heavy Duty Configurations
- Overhead and Pedestal Mounted Configurations.

Pneumatic Arm Series

Max. Capacity(lbs)	Max. Travel(in.)	Max. Reach(in.)
up to 470 lbs	up to 48 in.	up to 48 in.

* Listed capacities, travels and reaches vary by configuration. Listed specifications rated at 100 psi. For more detailed information, please contact a Knight representative or visit www.knight-ind.com.



Light Duty arms are used for suspending single or multiple spindle torque tools. Medium Duty Arms are low profile for limited space, overhead applications. Heavy Duty arms are for loads that require a greater lifting capacity.

Lower Mass Arms

If your application requires an overall range of motion less than 84° degrees, then the BCA Lower Mass Arm can be used. Due to the lighter weight that the Lower Mass Arm provides; it will improve the overall ergonomics of the application.

The Lower Mass Arms can use a tie-bar and optional locking and latching end pivot mechanisms to improve precision for pick-up and set down. This saves process time and eliminates the need for the operator to locate the part themselves.

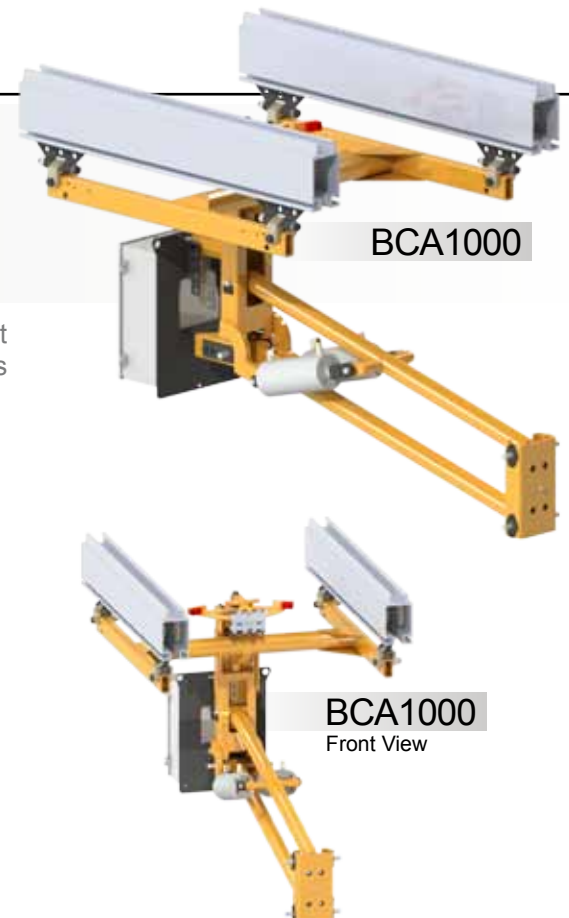
Lower Mass Arm Features

- Provides a restricted range of motion.
- Lighter weight improves ergonomics.
- Various Control Configurations.
- Reduces Operator Fatigue.
- Absorbs Torque Reaction.

Lower Mass Arm Series

Max. Capacity(lbs)	Max. Travel(in.)	Max. Reach(in.)
up to 350 lbs	up to 24 in.	up to 72 in.

* Listed capacities and travels vary by configuration. Listed specifications are rated at 80 psi. For more detailed information, please contact a Knight representative or visit www.knight-ind.com.



Knight Extension Arms enable the operator to extend beyond the working limits of an overhead rail system within a workstation. A Knight Pneumatic Balancer or Servo Hoist mounts to the arm which lifts and lowers the load.

KEAA Series Single or Dual Bridge Extension Arms expand the working area of a typical pneumatic hoist. They allow for a 360° rotation of the extension arm and have a (4) four position adjustable reach.

Extension Arm Features

- Single and Dual Bridge Configurations.
- Expands the work area of a typical balancer.
- Various Control Configurations.
- Angular Adjustment in 10° increments. (10° UP / 10° DOWN)
- Horizontal Adjustments: Up to 6.8 in. [172mm]. (2.3 in. Increments)
- Requires Non-Lubricated Clean/Dry Air.
- Allows for 360° rotation.
- CE Compliant.
- *(Contact Knight for this option)

Extension Series

Max. Capacity(lbs)	Max. Travel(in.)	Max. Reach(in.)
up to 700 lbs	up to 110 in.	up to 45 in.

* Listed capacities, travels and reaches vary by configuration. Listed specifications rated at 100 psi. For more detailed information, please contact a Knight representative or visit www.knight-ind.com.



Extending your Workstation Reach

Vertical Arms

Vertical Arms are typically used in applications that require significant up/down travel and precision placement. Vertical Arms improve ergonomics by eliminating the need for an operator to bend or reach for the control handles when positioning the part in a specified location.

Allows for end tooling to be mounted to a rigid vertical mast. Vertical travel is achieved with a Knight Pneumatic Balancer, Servo Hoist, Air Cylinder, or a Chain Hoist. Arm handles are in a fixed ergonomic position on the mast.

Vertical Arm Features

- Handles are fixed in an ergonomic position on the mast.
- Eliminates operator bending or reaching.
- Various Control Configurations.
- Reduces Operator Fatigue.
- 360° Rotation or Fixed Mounted.

Vertical Series

Max. Capacity(lbs)	Max. Torque(ft. lbs)	Max. Travel(in.)
up to 1,335 lbs	up to 853 ft. lbs	Varies

* Listed capacities, torques and travels vary by configuration. Listed specifications rated at 100 psi. For more detailed information, please contact a Knight representative or visit www.knight-ind.com.

