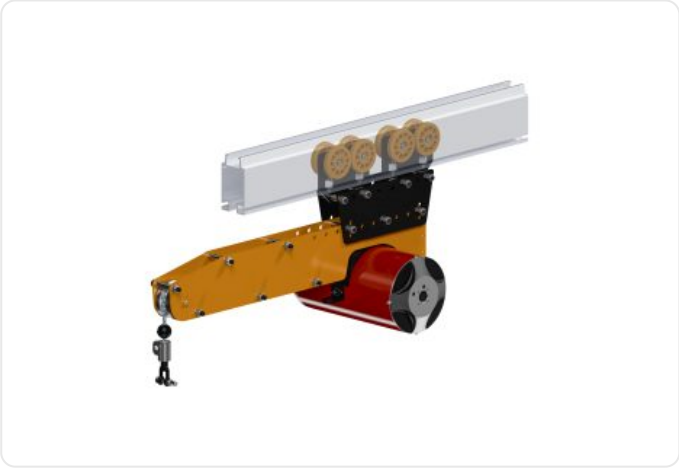
Extension Arm



Extension arm pneumatic Balancer Series



KEAA2000 - Dual bridge



KEAA2500 - Single bridge

Extension arm pneumatic balancer

P/N: KEAA2000 / KEAA2500

The Knight Global **KEAA2000 and KEAA2500** extension arm pneumatic balancer series lets operators **reach beyond the working envelope** of the overhead rail system within a workstation. An air balancer is mounted on the extension arm to provide **controlled lifting and lowering** of the load.

The KEAA2000 and KEAA2500 travel inside Knight Global **RAD4110, RAD6110 or RAD7510** aluminum rail systems. Two main versions are available:

KEAA2500 - Single Bridge: suited to light and medium duty applications, with a compact, lightweight structure.
KEAA2000 - Dual Bridge: higher load capacity and greater stability when handling heavy and offset loads.

When selecting an air balancer, FULLSHARP recommends sizing the working load at **80% of rated capacity** to allow for fluctuations in plant air pressure and ensure stable operation. Balancers are rated at a standard pressure of 100 psi [6.8 bar].

Actual lifting capacity formula: Example - plant air 60 psi, 350 lbs balancer, 80% load factor → (60/100) x 350 lbs = 210 lbs x 0.80 = **168 lbs** actual working capacity.

Features & benefits

Features

- Single bridge or dual bridge configuration.
- Travels inside Knight RAD4110, RAD6110 or RAD7510 rail systems.
- **CE Compliant**.
- Wide range of control configurations.
- Angle adjustment in 10° increments (10° up / 10° down).
- Horizontal adjustment up to 6.8 in. [172 mm] in 2.3 in. increments.
- Requires clean, dry, non-lubricated air.
- Maximum balancing capacity: up to 700 lbs [317 kg].
- Chain configuration.

Benefits

- Extends the working area of a standard balancer.
- Reaches beyond the limits of the overhead rail system.
- Allows 360° rotation.
- Controlled lifting and lowering with drop protection.
- Reduces operator fatigue and increases productivity.
- Integrates easily with existing Knight rail systems.
- Controls sold separately (Up/Down or Balance).
- Easily customized for specific applications.

Maintenance recommendation: Knight Global recommends a food grade, high pressure, anti-wear penetrating lubricant — Lubriplate® 1241 for wire rope, or SAE 50-90 EP machine/gear oil for load chain.

Specifications - KEAA2500 (Single bridge)

Part number	Capacity (lbs / kg)	Stroke (in / mm)	Balancer length (in / mm)
KEAA2500-200	200 lbs [90 kg]	110 in [2,794 mm]	16.3 in [414 mm]

Part number	Capacity (lbs / kg)	Stroke (in / mm)	Balancer length (in / mm)
KEAA2500-350	350 lbs [158 kg]	67 in [1,702 mm]	16.3 in [414 mm]
KEAA2500-500	500 lbs [226 kg]	80 in [2,032 mm]	21.5 in [546 mm]
KEAA2500-700	700 lbs [317 kg]	50 in [1,270 mm]	21.5 in [546 mm]

Specifications - KEAA2000 (Dual bridge)

Part number	Capacity (lbs / kg)	Stroke (in / mm)	Balancer length (in / mm)
KEAA2000-200	200 lbs [90 kg]	110 in [2,794 mm]	16.3 in [414 mm]
KEAA2000-350	350 lbs [158 kg]	67 in [1,702 mm]	16.3 in [414 mm]
KEAA2000-500	500 lbs [226 kg]	80 in [2,032 mm]	21.5 in [546 mm]
KEAA2000-700	700 lbs [317 kg]	50 in [1,270 mm]	21.5 in [546 mm]

Capacity and stroke are measured at a standard pressure of **100 psi [6.8 bar]**. An actual working capacity of 80% of rated capacity is recommended to compensate for plant air pressure fluctuations.

Typical applications

Automotive

- Hood assembly on the production line.
- Lifting and positioning engines and transmissions.
- Seat and windshield installation.
- Moving frames and chassis.
- Assembling parts beyond the reach of the rail.

Other industries

- Lifting and transferring casting molds and cores.
- Unloading products at the end of conveyors.
- Packing and palletizing.
- Assembling large electrical equipment.
- Handling heavy machining blanks.

Compatible accessories

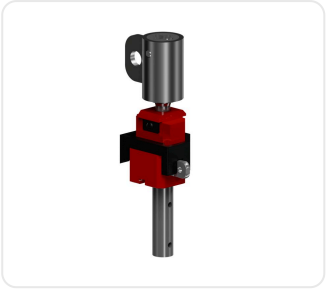
General accessories



Precision chain wear gauge For 4 mm & 5 mm chain | 0.39 kg KSAA1003



Safety chain coupler 360° swivel, bolt-hole base connection | 1.23 kg BPA2410



Quick Connect coupler Max. load 700 lbs [318 kg] BPA2035



Pneumatic Balancer chain hook Crosby® Bullard, 360° swivel | 1.08 kg BPA2113

Load trolleys



Yoke load trolley - RAD4110 Max. load: 1,100 lbs [499 kg] MRTA4009



Low profile trolley - RAD6110 Max. load: 1,600 lbs [725 kg] MRTA6123

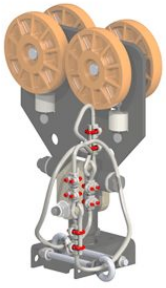


Yoke load trolley - RAD7510 Max. load: 3,000 lbs [1,360 kg] MRTA7723

Safety cables



Standard safety cable kit Ø 6 mm, 1.8 m long RWA4133



Safety cable kit with eye bolt Ø 6 mm, 3 m long FDA4133

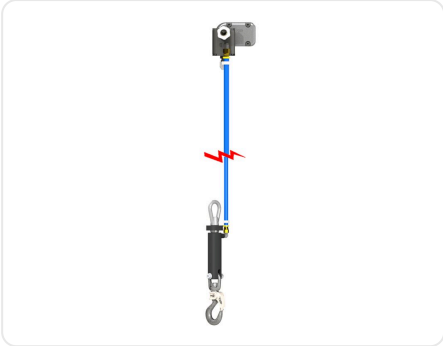


Oval sleeve safety cable kit Ø 6 mm, 3 m long | 0.91 kg NICORWA4133

Pneumatic controls



Single balance control module Max. load 150 lbs [68 kg] BCS2018



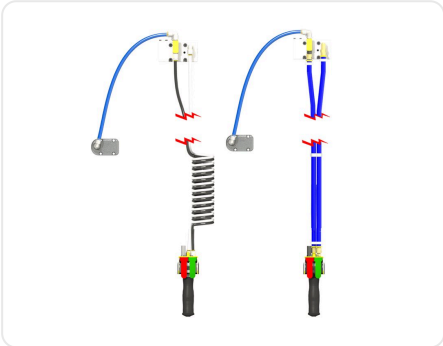
Single balance module with air bleed BCS2090: < 250 lbs / BCS2322: < 500 lbs BCS2090 / BCS2322



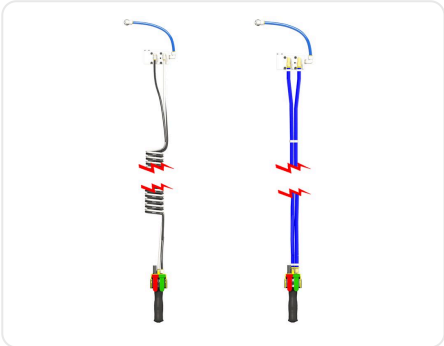
Feather-Touch control handle Max. load 100 lbs [45 kg] @ 80 psi BCS2213 / BCS2214



Dual balance control handle 2 load modes, ergonomic grip BCS2215 / BCS2323



Up/Down Tandem control handle 2 push buttons, 3 m coiled / straight hose BCS2326 / BCS3330



Up/Down control handle + Manifold Variable speed, 3 m coiled / straight hose BCS3017 / BCS3320

Technical documents

General catalogs

- Arms Brochure PDF
- Balancer Brochure PDF

Spec sheets

- KEAA2000 Extension Arm Balancer - Spec Sheet PDF
- KEAA2500 Extension Arm Balancer - Spec Sheet PDF

CAD drawings

- KEAA2000 Series - CAD Drawings ZIP
- KEAA2500 Series - CAD Drawings ZIP

Installation & troubleshooting guides

- Air Balancer Troubleshooting Guide PDF

FULL-SHARP AUTOMATIZED VN (FULLSHARP)
Authorized distributor of Knight Global pneumatic arms in Vietnam
For more details on the KEAA2000 / KEAA2500, please contact a FULLSHARP representative.

Contact us for consultation and a quotation

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Specifications may vary with the ordered configuration. Please contact FullSharp for exact details.