Single Cable/Chain





Single cable/chain pneumatic balancer



KBA cable balancer



KBC chain balancer

KBA & KBC single air balancer series

Series: KBA (cable) / KBC (chain)

Knight single air balancers are used in applications that require **"float" mode** – allowing final positioning of the load **hands-free**. Lifting and lowering are faster than with a conventional hoist, allowing fine adjustment ("feathering") when positioning the load. The ergonomic control handle has color-coded thumb levers.

When selecting an air balancer, it is recommended that the working load **use only 80% of the rated capacity** to compensate for normal fluctuations in the plant air system. The working load includes the part weight and the weight of the handling tooling. Balancers are designed for 100 psi [6.8 bar].

Calculation: Plant air 60 psi, 350 lbs model, 80% factor → (0.60 × 350) × 0.80 = **168 lbs actual working capacity**.

***Single cable models (KBA):** KBA150-076, KBA225-073, KBA225-110, KBA350-073, **KBA450-054 (NEW)**, KBA500-080 & KBA700-054.
***Single chain models (KBC):** KBC150-070, KBC200-110, KBC225-067, KBC350-067, **KBC450-052 (NEW)**, KBC500-080 & KBC700-052.

Features & benefits

Features

- CE compliant
- Choice of cable (KBA) or chain (KBC)
- Hands-free operation
- Standard "Float" mode
- Internal centrifugal retract control
- Requires clean, dry, non-lubricated air
- Maximum balancing capacity: **700 lbs [317 kg]**
- Standard travel: up to **110 in [2,794 mm]**
- Cable lubrication: food-grade extreme-pressure lubricant (Lubriplate® 1241)
- Chain lubrication: SAE 50÷90 EP oil or equivalent

Benefits & options

- Longer travel on selected models
- Optional external retract control
- Optional travel limit switch
- Optional High Relieving & Feathertouch controls
- Optional Reeved (double-sheave) and Tandem series
- Suitable for tool-bench scale applications
- Wide choice of suspension kits
- Integrates with Knight aluminum rails (RAD4110/6110/7510)

Single cable series (KBA) specifications

***Note:** All KBA series models use high-quality stainless steel cable. Regular lubrication with Lubriplate® 1241 or equivalent is recommended to extend cable life.

Model	Capacity		Travel		Product weight	
lbs	kg	in	mm	lbs	kg	
KBA150-076	150	68	76	1,930	49	22
KBA225-073	225	102	73	1,854	61	28
KBA225-110	225	102	110	2,794	88	40
KBA350-073	350	159	73	1,854	76	34
KBA450-054 NEW	450	204	54	1,371	72	33
KBA500-080	500	227	80	2,032	112	51
KBA700-054	700	317	54	1,371	91	41

Single chain series (KBC) specifications

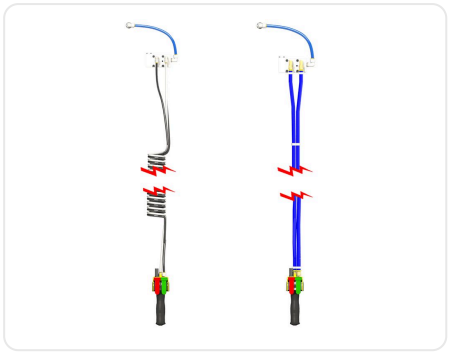
***Note:** The KBC series uses dedicated Grade 80 chain. Regular lubrication with SAE 50÷90 EP oil or an equivalent gear or machine oil is recommended.

Model	Capacity		Travel		Product weight	
lbs	kg	in	mm	lbs	kg	
KBC150-070	150	68	70	1,778	51	23
KBC200-110	200	91	110	2,794	93	42
KBC225-067	225	102	67	1,701	63	28
KBC350-067	350	159	67	1,701	78	35
KBC450-052 NEW	450	204	52	1,320	77	35
KBC500-080	500	227	80	2,032	115	52
KBC700-052	700	318	52	1,320	95	43

Pneumatic controls



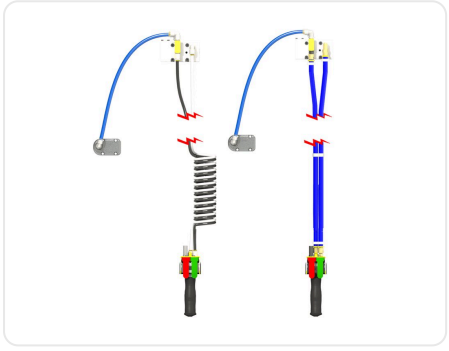
Feather-Touch control handle Horizontal / vertical handle, 10 ft straight hose BCS2213 / BCS2214 12.4 lbs [5.64 kg] 100lbs



Up/down pendant + manifold kit straight hose (3017) / coiled hose (3320) BCS3017 / BCS3320 10 ft [3 m] Standard



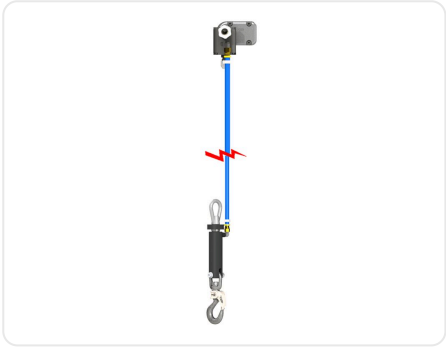
Dual control handle Supports 2 zero-gravity weight settings BCS2215 / BCS2323 10.2 lbs [4.63 kg] Dual



Tandem up/down pendant For Tandem air balancers BCS2326 / BCS3330 10 ft [3 m] Tandem



Single control module Ideal for tightening tools BCS2018 2.2 lbs [0.99 kg] 150lbs



Module High Relieving 2090: ≤250 lbs / 2322: ≤500 lbs BCS2090 / BCS2322 10 ft [3 m] Heavy

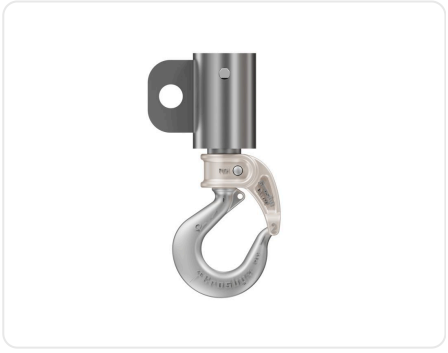
Cable / chain attachments & gauges



Chain wear gauge for 4mm & 5mm chain KSAA1003 0.87 lbs [0.39 kg] Gauge



Safety chain shackle 360° swivel, connects the safety chain BPA2410 2.7 lbs [1.23 kg] KBC



Balancer chain hook Crosby® Bullard self-closing, 360° swivel BPA2113 2.4 lbs [1.08 kg] KBC



Quick disconnect 360° swivel, with safety chain pin BPA2035 4.8 lbs [2.22 kg] 700lbs



Bail hook & lif-lok® latch bronze alloy – for KBA cable BPA2020 2,000 lbs [907 kg] KBA



Reeved cable sheave (doubles capacity) for RKBA reeved cable balancers BPA2065 4.4 lbs [2.0 kg] Reeved

Load trolleys



Load trolley – RAD4110 rail Glass-fiber reinforced nylon wheels MRTA4442 5 lbs [2.26 kg] RAD4110



Load trolley – RAD6110 rail Max. load 1,600 lbs [725 kg] MRTA6106 6 lbs [2.72 kg] RAD6110



Load trolley – RAD7510 rail Max. load 3,000 lbs [1,360 kg] MRTA7706 9 lbs [4.08 kg] RAD7510



Load trolley – TR2000 rail Max. load 550 lbs [250 kg] TRT2001 2 lbs [0.90 kg] TR2000

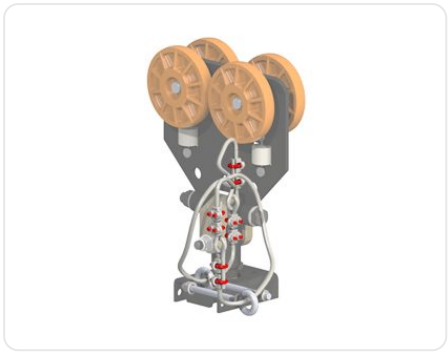


W-beam load trolley Steel wheels, for W/I-beams RTA2013 23 lbs [10.4 kg] W-Beam · I-Beam

Safety cable kits



Standard safety cable 4 Crosby® clips + 2 thimbles RWA4133 6 ft [1.8 m] / 6mm Standard



Safety cable with eye bolt eye bolt safety cable kit FDA4133 10 ft [3 m] / 6mm Eye Bolt



Safety cable with oval sleeves 2 copper oval sleeves + 2 thimbles NICORWA4133 2 lbs [0.91 kg] Oval

Technical documents

Brochures

- Knight Global Air Balancer Brochure PDF
- Knight Rotary Union Brochure PDF

Spec sheets & CAD drawings

- KBA Cable Series Spec Sheet PDF
- KBC Chain Series Spec Sheet PDF
- CAD Drawings KBA Series (.zip) ZIP
- CAD Drawings KBC Series (.zip) ZIP

Manuals & operating instructions

- Balancer Operation Manual 2019 (English) PDF
- Balancer Troubleshooting Guide 2021 PDF
- Balancer Periodic Inspection Form PDF

Installation & connection guides

- Air Connection Diagram – Logic Box PDF
- Air Connection Diagram – Manifold PDF
- Eye Bolt Safety Cable Installation Guide PDF
- External Safety Retract Control Information PDF
- Knight Rotary Union Guide PDF

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For advice on the right KBA / KBC balancer configuration for your project, please contact a FULLSHARP representative for a quotation and detailed design drawings.

Contact us for consultation and a quotation

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