Retract Control





External Retract Control Air Balancer Series



KBA-EX Cable



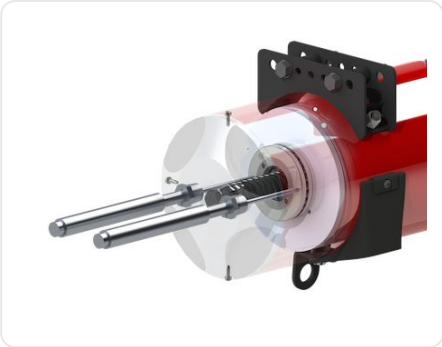
KBA-EX Open view



KBC-EX Chain



KBC-EX Open view



KBA/KBC-EX cross-section

External Safety Retract Control

Series: KBA / KBC / RKBA / RKBC / TKBA / TKBC – EX

The external safety retract control is an adjustable feature that controls the **vertical travel speed** of the balancer. If the load is lost, the cable or chain **retracts slowly into the unit** instead of accelerating suddenly upward. A hydraulic damper applies resistance to the thrust bearing, giving a slow, controlled retraction.

The EX series is typically used in two specific situations:

1. When the tooling attached to the balancer is **a light hook lifting a heavy part**.
2. When parts tend to **get stuck in the dunnage**.

In both applications, the retract control prevents the cable or chain from suddenly accelerating upward, keeping the operator safe.

*** Technical note:** We recommend using **80% of rated capacity** for lifting applications (to compensate for plant air pressure fluctuations). Units are rated at 100 psi [6.8 bar].
Example: Plant pressure 60 psi, 350 lbs unit: 0.60 × 350 = 210 × 0.80 = **168 lbs working capacity**.

Features & Benefits

Features

- CE compliant
- Cable or chain type available
- Hands-free operation
- Standard "Float" mode
- Built-in centrifugal retract control
- Requires clean, dry, non-lubricated air
- Maximum balanced load: **1,400 lbs [635 kg]**
- Standard travel: up to **110 in. [2,794 mm]**

Benefits & Options

- Optional travel limit switch
- Optional High Relieving & Feathertouch controls
- Multiple suspension kits available

- Easy integration with Knight aluminum rail (RAD4110/6110/7510)
- Supports rotary union connection
- High safety – prevents sudden acceleration if the load is lost

Specifications – Single EX Series

*** Note:** FULLSHARP can advise on custom configurations for specific applications. Contact us for a quotation and technical drawings.

Single EX – Cable (KBA)

Model	Load lbs [kg]	Travel in. [mm]
KBA150-076-EX	150 [68]	76 [1,930]
KBA225-073-EX	225 [102]	73 [1,854]
KBA225-110-EX	225 [102]	110 [2,794]
KBA350-073-EX	350 [159]	73 [1,854]
KBA450-054-EX	450 [204]	54 [1,371]
KBA500-080-EX	500 [227]	80 [2,032]
KBA700-054-EX	700 [317]	54 [1,371]

Single EX – Chain (KBC)

Model	Load lbs [kg]	Travel in. [mm]
KBC150-070-EX	150 [68]	70 [1,778]
KBC200-110-EX	200 [91]	110 [2,794]
KBC225-067-EX	225 [102]	67 [1,701]
KBC350-067-EX	350 [159]	67 [1,701]
KBC450-052-EX	450 [204]	52 [1,320]
KBC500-080-EX	500 [227]	80 [2,032]
KBC700-052-EX	700 [317]	52 [1,320]

Specifications – Dual Chain SDS EX Series

Model	Load Capacity		Travel	
	lbs	kg	in	mm
KBC250S-054-EX	250	113	54	1,371
KBC450S-052-EX	450	204	52	1,321
KBC500S-084-EX	500	226	84	2,133
KBC700S-052-EX	700	317	52	1,321

Specifications – Reeved EX Series (Double Capacity)

Reeved EX – Cable (RKBA)

Model	Load lbs [kg]	Travel in. [mm]
RKBA450-036-EX	450 [204]	36 [914]
RKBA450-055-EX	450 [204]	55 [1,397]
RKBA700-036-EX	700 [318]	36 [914]
RKBA1000-040-EX	1,000 [454]	40 [1,016]
RKBA1400-027-EX	1,400 [635]	27 [685]

Reeved EX – Chain (RKBC)

Model	Load lbs [kg]	Travel in. [mm]
RKBC400-055-EX	450 [204]	55 [1,397]
RKBC450-033-EX	450 [204]	33 [818]
RKBC700-033-EX	700 [318]	33 [818]
RKBC1000-040-EX	1,000 [454]	40 [1,016]
RKBC1400-026-EX	1,400 [635]	27 [685]

Specifications – Tandem EX Series (Dual End)

Tandem EX – Cable (TKBA)

Model	Load lbs [kg]	Travel in. [mm]
TKBA700-073-EX	700 [318]	73 [1,854]
TKBA1000-080-EX	1,000 [454]	80 [2,032]
TKBA1400-052-EX	1,400 [635]	54 [1,371]

Tandem EX – Chain (TKBC)

Model	Load lbs [kg]	Travel in. [mm]
TKBC700-067-EX	700 [318]	67 [1,701]
TKBC1000-080-EX	1,000 [454]	80 [2,032]
TKBC1400-052-EX	1,400 [635]	52 [1,320]

Load Attachments & Gauges



Chain Wear Gauge For 4mm & 5mm zinc-plated chain KSAA1003 0.87 lbs [0.39 kg] Gauge



Safety Chain Shackle 360° swivel, connects the safety cable BPA2410 2.7 lbs [1.23 kg] Shackle



Balancer Chain Hook Crosby® Bullard – self-closing BPA2113 2.4 lbs [1.08 kg] Hook



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

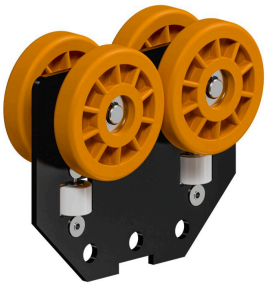


Lif-Lok® Latching Hook For KBA cable balancers BPA2020 0.8 lbs [0.36 kg] 2,000 lbs

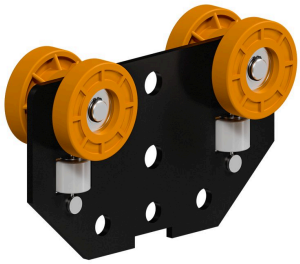


Reeved Cable Pulley Doubles capacity, with steel guard BPA2065 4.4 lbs [2.0 kg] Reeved

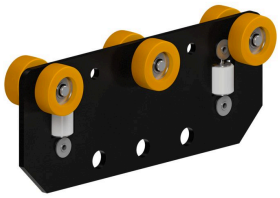
Load Trolleys



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



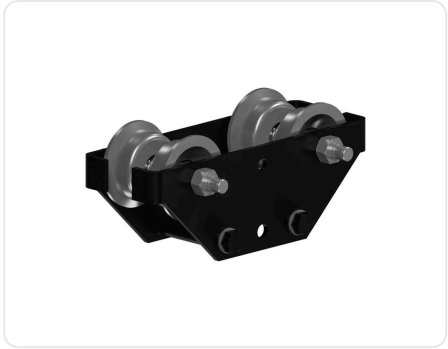
Load Trolley – Rail RAD6110 Max. load 1,600 lbs [725 kg] MRTA6106 6 lbs [2.72 kg] RAD6110



Load Trolley – Rail RAD4110 Recommended – max. load 1,100 lbs MRTA4442 5 lbs [2.26 kg] RAD4110



Load Trolley – Rail TR2000 Max. load 550 lbs [250 kg] TRT2001 2 lbs [0.90 kg] TR2000

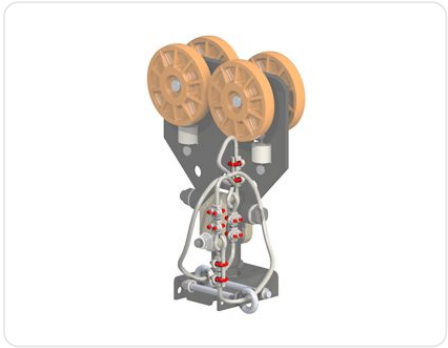


W / I-Beam Load Trolley Max. load 3,000 lbs [1,360 kg] RTA2013 23 lbs [10.4 kg] W-Beam · I-Beam

Safety Cable Kits



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



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

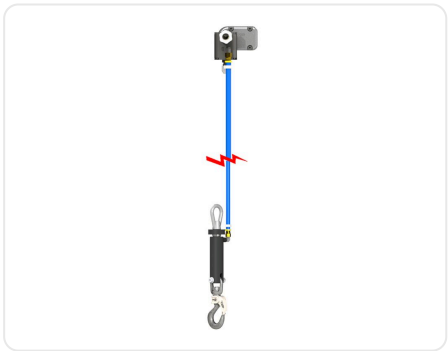


Oval Sleeve Safety Cable 2 oval copper sleeves + 2 thimbles NICORWA4133 2 lbs [0.91 kg] Oval

Pneumatic Controls



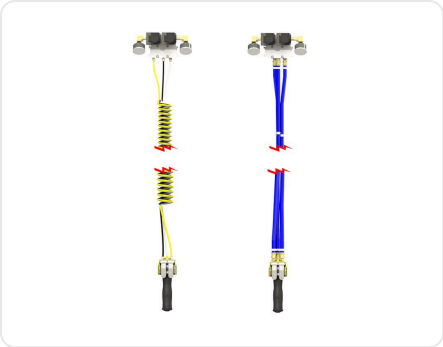
Single Balance Module Ideal for tightening tools BCS2018 2.2 lbs [0.99 kg] 150 lbs



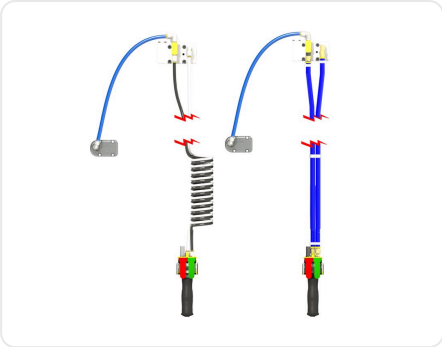
High Relieving Module 2090: ≤250 lbs / 2322: ≤500 lbs BCS2090 / BCS2322 10 ft [3 m] Heavy



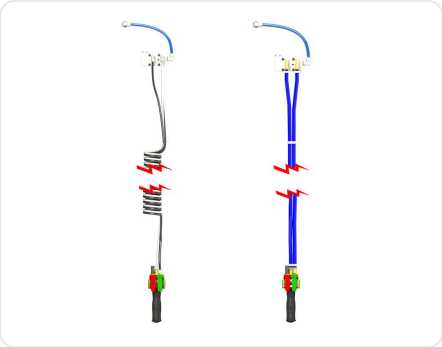
Feather-Touch Handle Horizontal / vertical handle BCS2213 / BCS2214 12.4 lbs [5.64 kg] 100 lbs



Dual Control Handle Supports 2 zero-gravity weights BCS2215 / BCS2323 10.2 lbs [4.63 kg] Dual



Tandem Up/Down Pendant Coiled / straight hose 10 ft [3 m] BCS2326 / BCS3330 2 buttons Tandem



Up/Down Pendant + Manifold Kit Straight / coiled hose 10 ft [3 m] BCS3017 / BCS3320 2 buttons Standard

Technical Documents

Brochure

- Knight Global Air Balancer Catalog (2026) PDF

Manuals & Operating Instructions

- Balancer Operation Manual 2019 (English) PDF
- Troubleshooting Guide 2021 PDF
- Troubleshooting Guide 2017 PDF
- Periodic Inspection Form PDF

Installation & Connection Guides

- Air Connection Diagram – Logic Box PDF
- Air Connection Diagram – Manifold PDF
- External Safety Retract Control Information (2023) PDF
- Eye Bolt Safety Cable Installation Guide PDF
- Safety Cable Installation – End Truck, Trolley & Hanger Bar PDF

Manuals in Other Languages

- Operation Manual (French) PDF
- Operation Manual (German) PDF
- Operation Manual (Spanish) PDF

FULL-SHARP AUTOMATIZED VN (FULLSHARP)

Authorized distributor of Knight Global air balancers and lifting equipment in Vietnam

For help selecting the right EX 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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Specifications may vary with the ordered configuration. Please contact FullSharp for exact details.