

KNIGHT

PROVEN INNOVATORS
of Material Handling Systems

Balancers

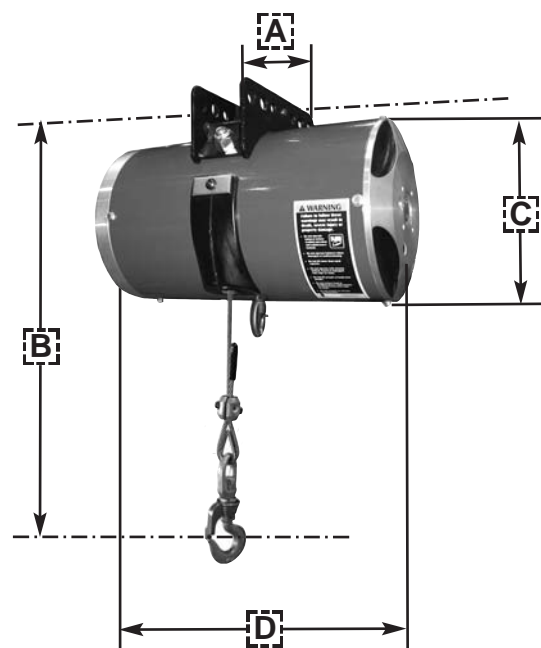


Single Cable

Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]
KBA100-028	100 [45]	28 [71]	34 [15]	8.5 [22]	14.5 [37]	6.5 [17]	9.38 [24]
KBA150-076	150 [68]	76 [193]	49 [22]	8.5 [22]	14.5 [37]	6.5 [17]	15.5 [39]
KBA225-073	225 [102]	73 [185]	61 [28]	8.5 [22]	16.75 [43]	8.75 [22]	16.75 [43]
KBA225-110	225 [102]	110 [279]	88 [40]	9.75 [25]	18.75 [48]	10.75 [27]	16.25 [43]
KBA350-073	350 [159]	73 [185]	76 [34]	9.75 [25]	18.75 [48]	10.75 [27]	16.25 [43]
KBA500-080	500 [227]	80 [203]	112 [51]	9.75 [25]	18.75 [48]	10.75 [27]	21.81 [55]
KBA700-054	700 [318]	54 [137]	91 [41]	9.75 [25]	18.75 [48]	10.75 [27]	21.81 [55]

Capacity rated at 100 PSI air supply

KBA150-076 rated at 110 PSI air supply

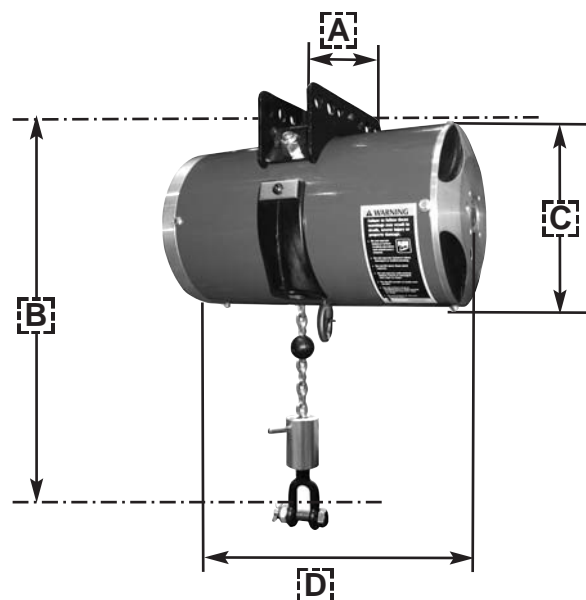


Single Chain

Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]
KBC150-070	150 [68]	70 [177]	50 [23]	8.5 [22]	16.25 [43]	6.5 [17]	15.5 [32]
KBC200-110	200 [91]	110 [275]	92 [42]	10.75 [27]	20.5 [52]	10.75 [27]	16.25 [43]
KBC225-067	225 [102]	67 [170]	63 [29]	8.75 [22]	18.5 [47]	8.75 [22]	16.75 [43]
KBC350-067	350 [159]	67 [170]	78 [35]	9.75 [25]	20.5 [52]	10.75 [27]	16.25 [43]
KBC500-080	500 [227]	80 [203]	115 [52]	9.75 [25]	20.5 [52]	10.75 [27]	21.81 [55]
KBC700-052	700 [318]	52 [132]	95 [43]	9.75 [25]	20.5 [52]	10.75 [27]	21.81 [55]

Capacity rated at 100 PSI air supply

KBA150-070 rated at 110 PSI air supply



Dual Drum

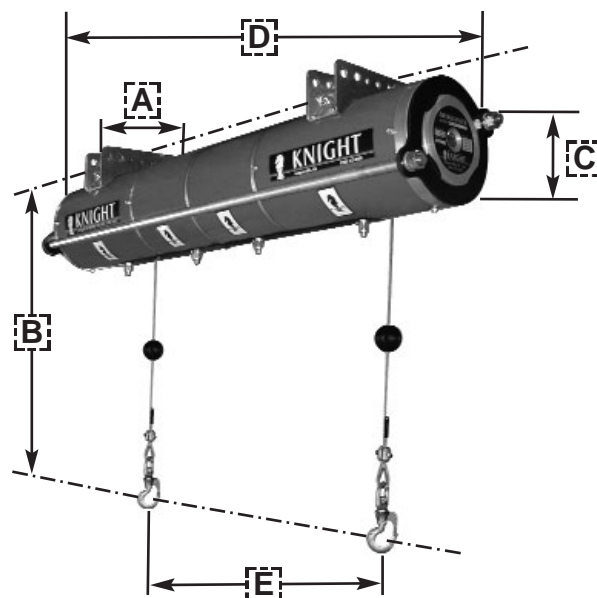
When ordering a Dual Drum Balancer, please specify the "E" dimension as part of the order number.

(Ex. DKBA100-028-023 has a 23 in. "E" dimension)

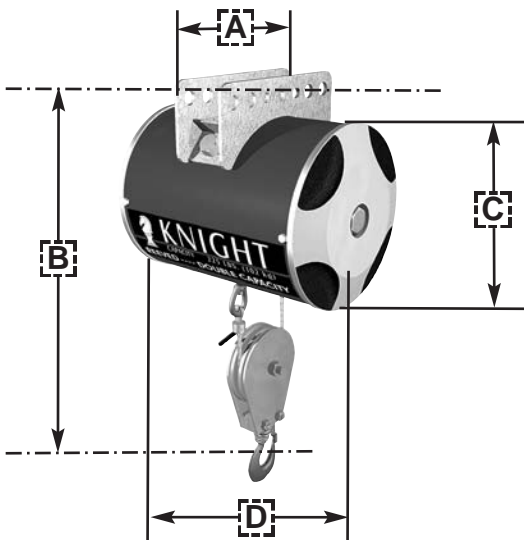
RWA4170 trolley adapter is required.

Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]	E Dim in [cm]
DKBA120-076-E	120 [54]	76 [193]	Varies w/ length	8.5 [22]	14.5 [37]	6.50 [17]	Dim E + 15.5 [39]	18-41 [46-104]
DKBA225-073-E	225 [102]	73 [185]	Varies w/ length	8.5 [22]	16.75 [43]	8.75 [22]	Dim E + 16.75 [43]	18-41 [46-104]
DKBA225-110-E	225 [102]	110 [279]	Varies w/ length	9.75 [25]	18.75 [48]	10.75 [27]	Dim E + 16.25 [43]	18-41 [46-104]
DKBA350-073-E	350 [159]	73 [185]	Varies w/ length	9.75 [25]	18.75 [48]	10.75 [27]	Dim E + 16.25 [43]	18-41 [46-104]
DKBA500-080-E	500 [227]	80 [203]	Varies w/ length	9.75 [25]	18.75 [48]	10.75 [27]	Dim E + 21.81 [55]	24-41 [61-104]
DKBA700-054-E	700 [318]	54 [137]	Varies w/ length	9.75 [25]	18.75 [48]	10.75 [27]	Dim E + 21.81 [55]	24-41 [61-104]

Capacity rated at 100 PSI air supply



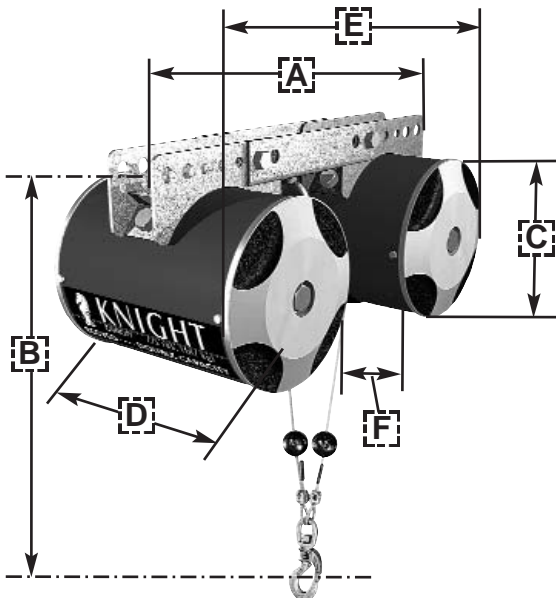
Reeved



Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]
RKBA450-036	450 [204]	36 [91]	66 [30]	8.5 [22]	19 [48]	8.75 [22]	16.75 [43]
RKBA450-055	450 [204]	55 [138]	92 [42]	9.75 [25]	19 [48]	10.75 [27]	16.25 [43]
RKBA700-036	700 [318]	36 [91]	78 [35]	9.75 [25]	21 [53]	10.75 [27]	16.25 [43]
RKBA1000-040	1000 [454]	40 [102]	117 [53]	9.75 [25]	21 [53]	10.75 [27]	21.81 [55]
RKBA1400-027	1400 [635]	27 [69]	95 [43]	9.75 [25]	21 [53]	10.75 [27]	21.81 [55]
RKBC400-055	400 [181]	55 [138]	98 [44]	9.75 [25]	21 [53]	10.75 [27]	16.25 [43]
RKBC450-033	450 [204]	33 [84]	69 [31]	8.5 [22]	19 [48]	8.75 [22]	16.75 [43]
RKBC700-033	700 [318]	33 [84]	79 [36]	9.75 [25]	21 [53]	10.75 [27]	16.25 [43]
RKBC1000-040	1000 [454]	40 [102]	121 [55]	9.75 [25]	21 [53]	10.75 [27]	21.81 [55]
RKBC1400-026	1400 [635]	26 [66]	100 [45]	9.75 [25]	21 [53]	10.75 [27]	21.81 [55]

Capacity rated at 100 PSI air supply

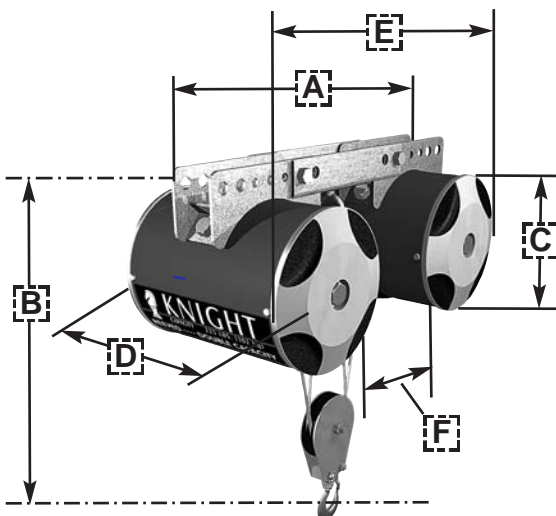
Tandem



Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]	E Dim in [cm]	F Dim in [cm]
TKBA700-073	700 [318]	73 [185]	155 [70]	24 [61]	18.75 [48]	10.75 [27]	16.25 [63]	24.75 [63]	3.25 [8]
TKBA1000-080	1000 [454]	80 [203]	230 [104]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]
TKBA1400-054	1400 [635]	54 [137]	186 [84]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]
TKBC700-067	700 [318]	67 [170]	162 [73]	24 [61]	18.75 [48]	10.75 [27]	16.25 [63]	24.75 [63]	3.25 [8]
TKBC1000-080	1000 [454]	80 [203]	236 [107]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]
TKBC1400-052	1400 [635]	52 [132]	196 [89]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]

Capacity rated at 100 PSI air supply

Tandem Reeved



Model Number	Balance Capacity lbs [kg]	Stroke in [cm]	Unit Weight lbs [kg]	A Dim in [cm]	B Dim (min) in [cm]	C Dim in [cm]	D Dim in [cm]	E Dim in [cm]	F Dim in [cm]
TRKBA700-036	2000 [907]	36 [91]	235 [107]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]
TRKBA1000-040	2800 [1270]	40 [102]	190 [86]	24 [61]	18.75 [48]	10.75 [27]	21.81 [55]	24.75 [63]	3.25 [8]

Capacity rated at 100 PSI air supply

Pneumatic Controls**BCS3017** Straight Hose**BCS3320** Coiled Hose

Up/Down Pendant Control Module for loading and unloading varying weights. The most commonly used control for all balancers.

**BCS3230** Straight Hose**BCS3326** Coiled Hose

Pendant Control Module for tandem units. Recommended for heavy fixtures

**BCS2090** Straight Hose**BCS2323** Coiled Hose

High Relieving Single Balance Control Module to support a constant weight at zero gravity. Used for near capacity or heavy weight applications greater

**BCS2018**

Single Balance Control Module to support a constant weight at zero gravity. Recommended for applications where the part weight is less than 150 lbs [68 kg].

**BCS2322** Straight Hose**BCS2215** Coiled Hose

Dual Balance Control Module to support two different weights at zero gravity. For applications where the part weight

**BCS2214** Vertical Handle length 18 1/2 in [470 mm]**BCS2213** Horizontal Handle length 14 in [356 mm]

Feather Touch Balance Control Module. Typically used for light weight applications. This control is activated by an up or down movement of the control handle.

**BCS2231** Straight Hose**BCS2327** Coiled Hose

High Relieving Pendant Control Module for tandem units. Recommended for light hooks or fixtures with heavy parts.

Retract Controls

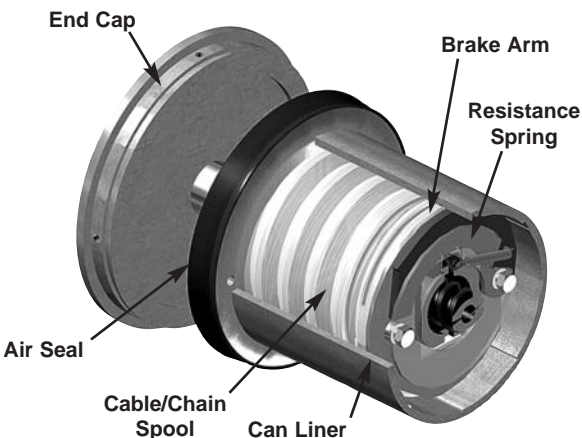
Knight Industries safety retract controls are designed to prevent the cable from accelerating upward if the load is lost. The internal retract control is standard equipment, the external control is available as an option.

The internal safety retract control* is activated by abnormally fast rotation of the chain/cable spool. The brake arm is held in place by a resistance spring during normal operation. If the load changes suddenly, centrifugal force causes the brake arm to overcome spring pressure and the brake arm lodges in the grooves in the balancer liner.

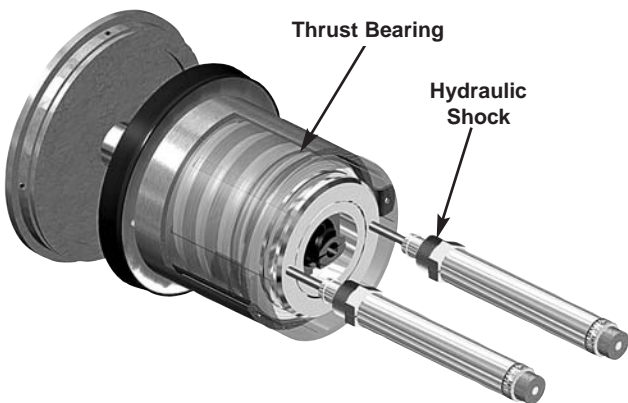
The external safety retract control consists of two hydraulic shocks mounted on the balancer cap opposite the air manifold. Within the balancer, a cable/chain spool winds and unwinds moving horizontally along a ball screw. The hydraulic shocks provide continuous resistance to the spools horizontal travel. If the load is lost, the constant resistance prevents the spool from accelerating.

Note: Some stroke length will be lost when using the external retract control.

* Activation of the internal retract control is not instantaneous. This device takes a brief moment to accelerate to a speed where the brake arm will engage.

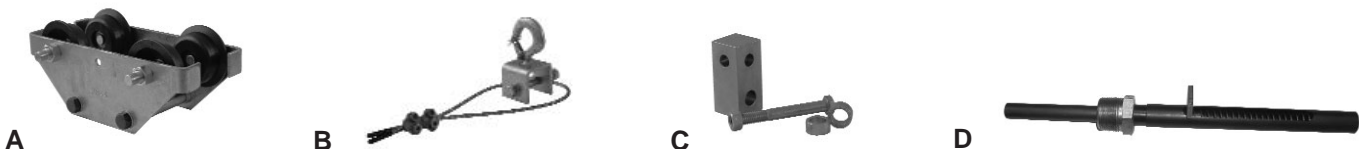


Standard Internal Retract Control
U.S. Patent Number 5,553,832



Optional External Retract Control
U.S. Patent Number 5,492,306

Balancer Accessories



	Model	Description
A	MRTA2013	I-Beam Trolley
B	BPA2016	Top Mount Single Hanger Hook Assembly
C	RWA4171	Dual Drum Balancer Trolley Adapter Assembly
D	BPA2224	Balancer Limit Switch Assembly