Aero-Motive®

balancers

and tool support

Includes

- Positioners
- Retractors
- Balancers
- Torque Reels
- Workstation Assemblies
- Accessories

Woodhead

www.woodhead.com

Aero-Motive® Balancers Enhance Productivity

It's a simple fact. Make a job easier to do, and you can do it better, faster, longer. Balancers and tool support systems by Woodhead improve the productivity of light assembly, packaging, and many other shop floor workers by keeping their tools out of the way when not needed. With balancers, workstations can be organized more efficiently by ensuring that tools are always in the right place. Expensive power tools suspended from balancers are safeguarded from being accidentally dropped onto the floor or onto other expensive products or equipment.

Selection Guide

When selecting a balancer, be sure that all items to be supported are considered: tools, drill bits, sockets, hoses, cable, etc. This Selection Guide is to be used only as a reference for non-ratchet lock devices. See the main pages for ratchet balancer specs. Actual selection depends on weight to be balanced and cable travel required.

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Always use a secondary support on overhead-mounted balancers to prevent the possibility of the balancer accidentally falling. See page 15 to select a secondary support chain.

Tool Positioner

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
GM31	0.5 – 5.4	1.4	1.0 – 10.0	4.7

Retractors

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
RB2	0.5 – 0.9	2.0	1.0 – 2.0	6.6
RB4	0.9 – 1.8	2.0	2.0 – 4.0	6.6
RF6	1.8 – 2.7	2.0	4.0 – 6.0	6.6
RF8	2.7 – 3.6	2.0	6.0 – 8.0	6.6
5F	0.4 – 2.3	2.4	1.0 – 5.0	8.0
10F	1.8 – 4.5	2.4	4.0 – 10.0	8.0
15F	3.6 – 6.8	2.4	8.0 – 15.0	8.0
22F	7.3 – 10.0	2.4	16.0 – 22.0	8.0

Balancers

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
BF6	1.4 – 2.7	2.0	3.0 – 6.0	6.6
BF9	2.7 – 4.1	2.0	6.0 – 9.0	6.6
BF13	4.1 – 5.9	2.0	9.0 – 13.0	6.6
BF18	5.9 – 8.2	2.0	13.0 – 18.0	6.6
BF24	8.2 – 10.9	2.0	18.0 – 24.0	6.6
EB25000	8.2 – 11.4	2.0	18.0 – 25.0	6.6
EB35000	11.4 – 15.9	2.0	25.0 – 35.0	6.6
EB45000	15.9 – 20.5	2.0	35.0 – 45.0	6.6
EB48S00	15.9 – 21.8	1.5	35.0 – 48.0	4.9
EB60S00	20.5 – 27.3	1.5	45.0 – 60.0	4.9
10EA	2.3 – 5.0	1.8	5.0 – 11.0	6.0
20EA	5.0 – 9.0	1.8	11.0 – 20.0	6.0
30EA	9.0 – 14.0	1.8	20.0 – 31.0	6.0
40EA	13.0 – 18.0	1.8	29.0 – 40.0	6.0
20JA	6.0 – 11.0	2.1	13.0 – 25.0	7.0
30JA	11.0 – 16.0	2.1	24.0 – 35.0	7.0
40JA	13.0 – 20.0	2.1	29.0 – 45.0	7.0
50JA	18.0 – 25.0	2.1	40.0 – 55.0	7.0
70JA	24.0 – 32.0	2.1	53.0 – 70.0	7.0
80JA	31.0 – 39.0	2.1	68.0 – 86.0	7.0
90JA	36.0 – 41.0	2.1	79.0 – 90.0	7.0
100JA	40.0 – 45.0	2.1	88.0 – 100.0	7.0
110KA	38.0 – 52.0	2.1	84.0 – 115.0	7.0
120KA	52.0 – 57.0	2.1	115.0 – 126.0	7.0
134KA	56.0 – 66.0	2.1	124.0 – 146.0	7.0
156KA	65.0 – 75.0	2.1	143.0 – 165.0	7.0
170KA	72.0 – 79.0	2.1	159.0 – 175.0	7.0
192KA	79.0 – 91.0	2.1	174.0 – 200.0	7.0
220KA	91.0 – 100.0	1.8	200.0 – 221.0	6.0
240KA	100.0 – 110.0	1.8	221.0 – 243.0	6.0
210LA	79.0 – 95.0	2.1	174.0 – 210.0	7.0
230LA	95.0 – 107.0	2.1	209.0 – 236.0	7.0
250LA	106.0 – 113.0	2.1	234.0 – 250.0	7.0
260LA	113.0 – 120.0	2.1	249.0 – 265.0	7.0
280LA	120.0 – 127.0	2.1	265.0 – 280.0	7.0
290LA	127.0 – 132.0	2.1	280.0 – 291.0	7.0
300LA	131.0 – 136.0	2.1	289.0 – 300.0	7.0
330LA	136.0 – 150.0	1.5	300.0 – 331.0	5.0
350LA	150.0 – 159.0	1.5	330.0 – 350.0	5.0
370LA	163.0 – 168.0	1.5	350.0 – 370.0	5.0

Positioner

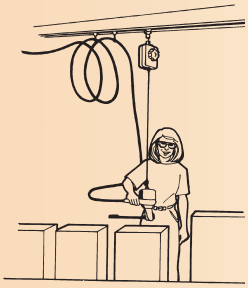
- Supports weight mid-stroke
- Must lift tool to upper position
- Support up to 4.5 kg/10 lb

Positioners use an adjustable friction brake to support the weight of the suspended tool or object. The object can be placed in any position within the cable travel range and it will remain in that position. The object can be moved downward with very little effort, depending on the adjustment; however, the full weight of the object must be lifted to move it upward.

Retractors

- Retracts tools to upper position
- Light force to hold mid-stroke
- Retract up to 10 kg/22 lb

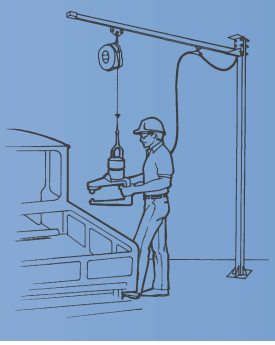
Retractors are designed to retract the cable when no force is applied. An amount of downward force must be continually applied to keep the suspended object at its extended position. The torque output of the rewind spring increases as the cable is extended, retracting the suspended object to the uppermost adjusted position when released.

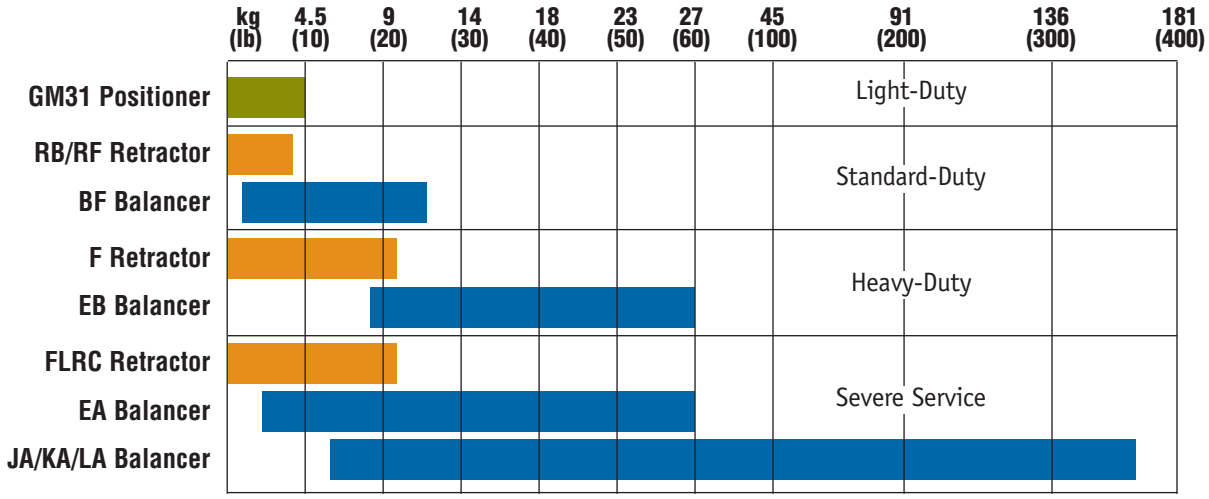


Balancers

- Balances tool in any position
- Very little effort to move tool
- Balance up to 168 kg/370 lb

Balancers allow the worker to move the suspended tool or object up or down with very little effort. Depending on the spring adjustment, object will remain in position or retract when no force is applied. With a spiral groove on a tapered drum, the winding radius is increased to match the torque buildup of the spring, thus neutralizing it and achieving a balance condition.





GM	0.5 - 4.5 kg
1.0 - 10.0 lb	**TOOL POSITIONER**

- Holds an object in desired position within travel range without use of a ratchet or locking device
- Easy downward tool mobility
- Simple upward repositioning of load, requiring only a force equal to the weight of the suspended object
- Minimizes operator fatigue in repetitive-motion applications with light loads
- Easy tension adjustment by placing screwdriver or coin into slot of shaft.
- For light duty use

Accessory Tool Clip (only)
Model #01146P0015

Tool Positioner

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
GM31	0.5 – 4.5	1.4	1.0 – 10.0	4.7

See page 24 for dimensions

RB 0.5 - 1.8 kg
1.0 - 4.0 lb RETRACTORS

- Heavy-duty, long-life spring for lasting performance
- Easy tension adjustment with no tools required
- Full range of motion with 360˚ swivel hanger
- Quick installation
- Durable nylon cord for long life and reduced maintenance
- Convenient snap-type tool clip for easy tool handling
- Alignment of hanger and tool hook for smooth, efficient use

See page 24 for dimensions

RB Retractors

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
RB2	0.0 – 0.9	2.0	0.0 – 2.0	6.6
RB4	0.9 – 1.8	2.0	2.0 – 4.0	6.6
RB210	0.5 – 0.9	2.54	1.0 – 2.0	10.0

RF 1.8 - 3.6 kg
4.0 - 8.0 lb RETRACTORS

- Heavy-duty, long-life spring for lasting performance
- Easy tension adjustment with no tools required
- 360° forged steel swivel hanger for full range of motion
- Quick installation
- Durable nylon-covered steel cable for consistent service & easy maintenance
- Alignment of hanger and tool hook for smooth, efficient use
- Simplified tool attachment and removal with convenient snap-type tool clip
- Ratchet lock available (RFL models) for free movement when required

See page 24 for dimensions

RF Retractors

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
RF6	1.8 – 2.7	2.0	4.0 – 6.0	6.6
RF8	2.7 – 3.6	2.0	6.0 – 8.0	6.6

RFL Retractors with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
RFL6	1.8 – 2.7	2.0	4.0 – 6.0	6.6
RFL8	2.7 – 3.6	2.0	6.0 – 8.0	6.6

F — 0.4 - 10.0 kg
1.0 - 22.0 lb — RETRACTORS

- Easy tension adjustment with no special tools required
- Heavy-duty steel construction for long life
- Long-lasting mainspring designed to minimize spring flexing and fatigue
- Tool can be set at desired position with adjustable cable stop
- Durable 3/32"-diameter stranded steel aircraft cable
- Ratchet lock (on FLR models) locks out retraction tension for unrestricted tool movement (ON/OFF switchable)

5F Retractor

10F Retractor

See page 24 for dimensions

F Retractors

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
5F	0.4 – 2.3	2.4	1.0 – 5.0	8.0
10F	1.8 – 4.5	2.4	4.0 – 10.0	8.0
15F	3.6 – 6.8	2.4	8.0 – 15.0	8.0
22F	7.3 – 10.0	2.4	16.0 – 22.0	8.0

FLR Retractors with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
5FLR	0.4 – 2.3	2.4	1.0 – 5.0	8.0
10FLR	1.8 – 4.5	2.4	4.0 – 10.0	8.0
15FLR	3.6 – 6.8	2.4	8.0 – 15.0	8.0
22FLR	7.3 – 10.0	2.4	16.0 – 22.0	8.0

FLRC — 0.8 - 10.0 kg
2.0 - 22.0 lb — CAST ALUMINUM RETRACTOR

See page 25 for dimensions

- Durable heavy-walled cast aluminum housing ensures long life
- Recessed tension adjustment knobs minimize damage from rough use
- 360° swivel design maintains balancer and tool alignment and minimizes wear
- Forged-steel mounting shackle ensures safe operation
- Standard ratchet lock allows cable locking at desired position and can be turned off if desired
- 3/32" diameter stranded galvanized steel cable

FLRC Retractor with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
5FLRC	0.8 – 3.2	2.4	2.0 – 7.0	8.0
10FLRC	1.8 – 4.5	2.4	4.0 – 10.0	8.0
15FLRC	3.6 – 6.8	2.4	8.0 – 15.0	8.0
22FLRC	7.3 – 10.0	2.4	16.0 – 22.0	8.0

Make tools virtually weightless for faster, safer production

Aero-Motive® balancers suspend tools where they are easy to reach and use. They allow workers to move faster with less risk of fatigue and repetitive motion stress. They also help prevent tools from being misplaced or damaged.

True precision for optimimum productivity Many balancers on the market promise "zero gravity" but deliver only within a narrow segment of their range. TrueBalancers always live up to their name. That is why we offer hundreds of choices ranging from 1.4 to 168 kg (3 to 370 lb) capacity. Advances such as high-impact housings, spiral-grooved tapered drums, manual drum locks and replaceable spring assemblies, ensure long-term performance and value.

Safer & easier to use Redundant safety features are built into every balancer. Simple tension adjustment and easy cable replacement also help make Aero-Motive balancers from Woodhead leaders in safety and convenience.

SAFETY/CONVENIENCE
- *Steel shackle*
- *360° rotation*

SAFETY
- *Manual drum lock for easy, safe cable change*

SAFETY
- *Automatic drum lock prevents load from falling in the event of a spring failure*

MINIMUM EFFORT OF MOVEMENT
- *Tapered drum matches spring mid-range for constant torque and maximum spring life.*

EASY INSTALLATION/ MAINTENANCE
- *External tension adjustment*

WIDE WEIGHT RANGE
- *Simple spring adjustment*
- *Easily interchangeable spring assemblies*

SAFETY
- *Swaged cable assembly for maximum flexibility*

BF shown

(Some features listed not available on BF)

BF 1.4 - 10.9 kg
3.0 - 24.0 lb BALANCERS

- Heavy-duty, long-life spring for lasting performance
- Automatic lock prevents load from falling if spring loses tension
- Snap-type tool clip for simplified attachment and removal
- Forged steel 360˚ swivel hanger
- High-impact composite housing for extra durability
- Ratchet lock (on BFL models) holds cable at desired position
- Shackle design instead of hook and spring clip provides extra-secure mounting
- 3/32" diameter stranded galvanized steel cable

See page 25 for dimensions

BF Balancers

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
BF6	1.4 – 2.7	2.0	3.0 – 6.0	6.6
BF9	2.7 – 4.1	2.0	6.0 – 9.0	6.6
BF13	4.1 – 5.9	2.0	9.0 – 13.0	6.6
BF18	5.9 – 8.2	2.0	13.0 – 18.0	6.6
BF24	8.2 – 10.9	2.0	18.0 – 24.0	6.6

BFL Balancers with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
BFL6	1.4 – 2.7	2.0	3.0 – 6.0	6.6
BFL9	2.7 – 4.1	2.0	6.0 – 9.0	6.6
BFL13	4.1 – 5.9	2.0	9.0 – 13.0	6.6
BFL18	5.9 – 8.2	2.0	13.0 – 18.0	6.6
BFL24	8.2 – 10.9	2.0	18.0 – 24.0	6.6

EB 8.2 - 27.3 kg
18.0 - 60.0 lb BALANCERS

- Cast aluminum construction
- Containerized mainspring for safe, easy spring handling
- Automatic drum lock secures load even if tension drops suddenly
- Manual drum lock for easy tool replacement
- Full range of motion with 360° swivel hanger
- Easy external adjustment with no special tools
- Swaged steel cable assembly
- Easy cable replacement without disassembly
- Extra-secure mounting with a shackle design, as opposed to hook and spring clip, which can disengage on impact
- Ratchet lock version (EB/R) holds cable at desired position
- Locking gate hook option available
- 1/8" diameter stranded galvanized steel cable

See pages 15-16 for options
See page 25 for dimensions

EB Balancers

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
EB25000	8.2 – 11.4	2.0	18.0 – 25.0	6.6
EB35000	11.4 – 15.9	2.0	25.0 – 35.0	6.6
EB45000	15.9 – 20.5	2.0	35.0 – 45.0	6.6
EB48S00	15.9 – 21.8	1.5	35.0 – 48.0	4.9
EB60S00	20.5 – 27.3	1.5	45.0 – 60.0	4.9

EB/R Balancers with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
EB2500R	8.2 – 11.4	2.0	18.0 – 25.0	6.6
EB3500R	11.4 – 15.9	2.0	25.0 – 35.0	6.6
EB4500R	15.9 – 20.5	2.0	35.0 – 45.0	6.6
EB48S0R	15.9 – 21.8	1.5	35.0 – 48.0	4.9
EB60S0R	20.5 – 27.3	1.5	45.0 – 60.0	4.9

EA 2.3 - 28.0 kg
5.0 - 62.0 lb BALANCERS

- Tapered drum minimizes tension buildup
- Wear-Guard® coated drum protects cable
- Automatic drum lock secures load even if tension drops
- 1/8" diameter stranded galvanized steel cable
- Manual drum lock for easy tool replacement
- Containerized mainspring for safe, easy spring handling
- Declutching hub prevents spring damage

See pages 15-16 for options
See page 26 for dimensions

EA Balancers with heavy cast aluminum housing and cover

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
10EA	2.3 – 5.0	1.8	5.0 – 11.0	6.0
20EA	5.0 – 9.0	1.8	11.0 – 20.0	6.0
30EA	9.0 – 14.0	1.8	20.0 – 31.0	6.0
40EA	13.0 – 18.0	1.8	29.0 – 40.0	6.0
50EA	18.0 – 23.0	1.8	40.0 – 51.0	6.0
60EA	23.0 – 28.0	1.8	51.0 – 62.0	6.0

EL 5.0 - 18.1 kg
11.0 - 40.0 lb BALANCERS

See pages 15-16 for options
See page 26 for dimensions

- Cast aluminum housing and cover provide added strength
- Tapered drum minimizes tension buildup
- Wear-Guard coated drum protects cable
- Automatic drum lock secures load even if tension drops
- Manual drum lock for easy tool replacement
- Containerized mainspring for safe, easy spring handling
- Declutching hub prevents spring damage
- Standard ratchet lock
- 1/8" diameter stranded galvanized steel cable
- On/Off switchable ratchet lock

EL Balancers with Ratchet Locks

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
25EL	5.0 – 11.3	1.8	11.0 – 25.0	6.0
40EL	11.8 – 18.1	1.8	26.0 – 40.0	6.0

JA 4.0 - 45.0 kg
10.0 - 100.0 lb BALANCERS

- Wear-Guard® coated drum protects cable and prevents premature failure
- Quick, easy tool changes with manual drum lock
- Automatic drum lock secures load even if tension drops
- Containerized mainspring for safe, easy handling
- Easy external adjustment with no special tools
- Full range of motion with 360° swivel hanger
- Declutching hub prevents spring damage
- Shackle design provides extra-secure mounting
- Constructed from high tensile strength cast aluminum
- 3/16" diameter stranded galvanized steel cable

See pages 15-16 for options
See page 26 for dimensions

JA Balancers

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
20JA	6.0 – 11.0	2.1	13.0 – 25.0	7.0
30JA	11.0 – 16.0	2.1	24.0 – 35.0	7.0
40JA	13.0 – 20.0	2.1	29.0 – 45.0	7.0
50JA	18.0 – 25.0	2.1	40.0 – 55.0	7.0
70JA	24.0 – 32.0	2.1	53.0 – 70.0	7.0
80JA	31.0 – 39.0	2.1	68.0 – 86.0	7.0
90JA	36.0 – 41.0	2.1	79.0 – 90.0	7.0
100JA	40.0 – 45.0	2.1	88.0 – 100.0	7.0

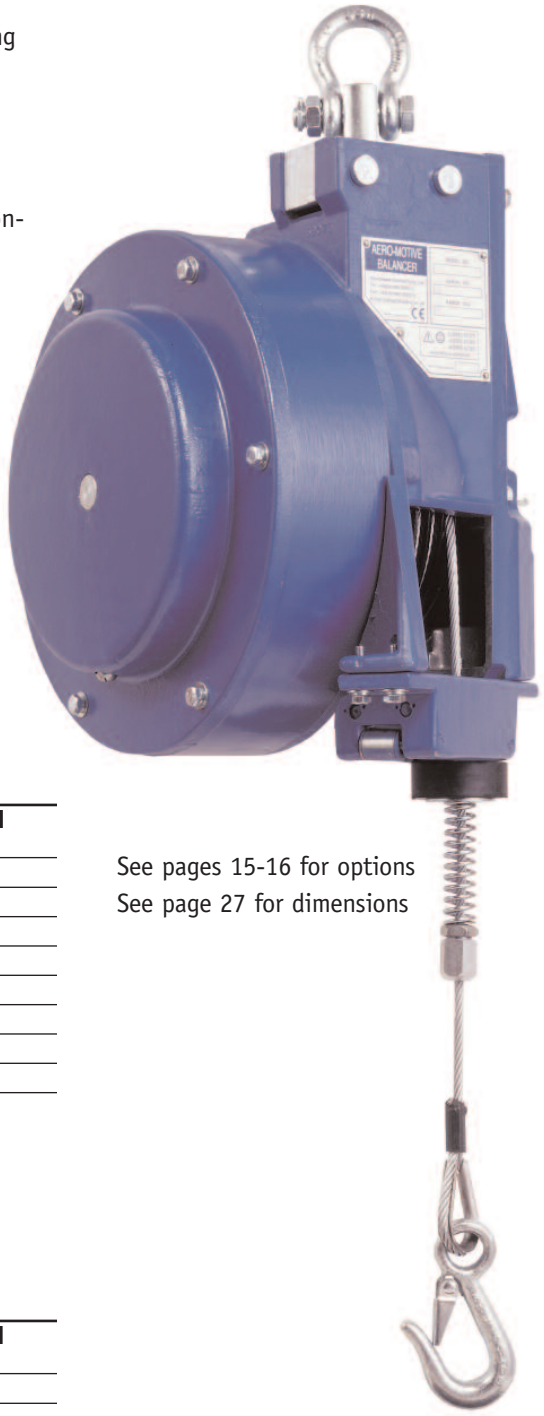
JA Balancers with Extended Cable Travel*

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
9020JA	4.0 – 9.0	2.7	10.0 – 20.0	9.0
9030JA	9.0 – 14.0	2.7	20.0 – 30.0	9.0
9040JA	13.0 – 18.0	2.7	30.0 – 40.0	9.0
9050JA	18.0 – 23.0	2.7	40.0 – 50.0	9.0
9060JA	to – 29.0	2.7	to – 65.0	9.0
9070JA	to – 33.0	2.7	to – 72.0	9.0

*Longer lead times may apply.

KA 36.0 - 110.0 kg
80.0 - 243.0 lb BALANCERS

- Premature failure is prevented by a Wear-Guard® coating on the drum and a four-roller guide, which protect the cable and drum from excessive wear
- Quick, easy tool changes with manual drum lock
- Automatic drum lock secures load even if tension drops
- Safe, easy spring handling is ensured with heavy-duty containerized mainspring
- Easy external adjustment with no special tools
- Full range of motion with 360° swivel hanger
- Spring damage prevented by declutching hub, even if spring is reverse wound
- Shackle design provides extra-secure mounting
- Cast aluminum construction for long life
- Extra durable cast aluminum housing
- 3/16" diameter stranded galvanized steel cable



See pages 15-16 for options
See page 27 for dimensions

KA Balancers

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
110KA	38.0 – 52.0	2.1	84.0 – 115.0	7.0
120KA	52.0 – 57.0	2.1	115.0 – 126.0	7.0
134KA	56.0 – 66.0	2.1	124.0 – 146.0	7.0
156KA	65.0 – 75.0	2.1	143.0 – 165.0	7.0
170KA	72.0 – 79.0	2.1	159.0 – 175.0	7.0
192KA	79.0 – 91.0	2.1	174.0 – 200.0	7.0
220KA	91.0 – 100.0	1.8	200.0 – 221.0	6.0
240KA	100.0 – 110.0	1.8	221.0 – 243.0	6.0

KA Balancers with Extended Cable Travel*

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
9110KA	36.0 – 50.0	2.7	80.0 – 110.0	9.0
9120KA	52.0 – 57.0	2.7	115.0 – 125.0	9.0
9140KA	56.0 – 58.0	2.7	125.0 – 130.0	9.0
9150KA	to – 66.0	2.7	to – 145.0	9.0

*Longer lead times may apply.

LA 70.0 - 168.0 kg
155.0 - 370.0 lb BALANCERS

- Premature failure is prevented by a Wear-Guard® coating on the drum and a four-roller guide, which protect the cable and drum from excessive wear
- Quick, easy tool changes with manual drum lock
- Automatic lock secures load if tension drops
- Caged mainspring for safe, easy spring handling
- Easy external adjustment with no special tools
- Full range of motion with 360° swivel hanger
- Declutching hub prevents spring damage, even if spring is reverse wound
- Cast aluminum construction for long life
- High tensile strength
- 3/16" cable diameter

See pages 15-16 for options
See page 27 for dimensions

LA Balancers

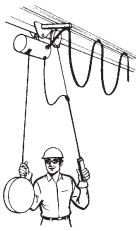
model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
210LA	79.0 – 95.0	2.1	174.0 – 210.0	7.0
230LA	95.0 – 107.0	2.1	209.0 – 236.0	7.0
250LA	106.0 – 113.0	2.1	234.0 – 250.0	7.0
260LA	113.0 – 120.0	2.1	249.0 – 265.0	7.0
280LA	120.0 – 127.0	2.1	265.0 – 280.0	7.0
290LA	127.0 – 132.0	2.1	280.0 – 291.0	7.0
300LA	131.0 – 136.0	2.1	289.0 – 300.0	7.0
330LAS	136.0 – 150.0	1.5	300.0 – 331.0	5.0
350LAS	150.0 – 159.0	1.5	330.0 – 350.0	5.0
370LAS	163.0 – 168.0	1.5	350.0 – 370.0	5.0

LA Balancers with Extended Cable Travel*

model	weight range (kg)	travel (m)	weight range (lb)	travel (ft)
9160LA	70.0 – 75.0	2.7	155.0 – 165.0	9.0
9198LA	85.0 – 90.0	2.7	188.0 – 198.0	9.0
9200LA	81.0 – 86.0	2.7	180.0 – 190.0	9.0
9210LA	90.0 – 95.0	2.7	200.0 – 210.0	9.0
9230LA	95.0 – 98.0	2.7	210.0 – 215.0	9.0

*Longer lead times may apply.

1515T 2.3 - 6.8 kg / 5.0 - 15.0 lb TORQUE REELS



Torque reels are reeling devices primarily designed for suspending push-button pendent stations weighing up to 15 lbs. A lock mechanism permits the operator to stop a load at a desired height, while a slight pull on the cable releases the lock.

- Easy load height adjustment; a slight pull on the cable releases the lock
- Features an Off switch to disengage locking mechanism when constant tension is required
- Easy external tension adjustment
- Adjustable cable stop, snap hook, multi-directional guide, forged clevis top mount, and 15 feet of cable
- Rigid mount included on model 1515TR
- 3/32" diameter stranded galvanized steel cable

See page 27 for dimensions

1515T Hanging Torque Reel

1515TR Rigid Mount Torque Reel

Torque Reels

model	weight (kg)	travel (m)	tension buildup(kg)	weight (lb)	travel (ft)	tension buildup(lb)
0515T	2.3	1.58	3.20	5.0	15.0	7.0
1015T	4.5	1.58	5.50	10.0	15.0	12.0
1515T	6.8	4.58	8.64	15.0	15.0	19.0
1515TR	6.8	4.58	8.64	15.0	15.0	19.0

STATIC DISCHARGE GROUNDING REELS

ELIMINATES STATIC BUILD-UP. SPRING-OPERATED, AUTOMATIC RETRIEVAL.

- Spring operated, automatic retrieve reel
- Stranded steel aircraft cable is 3/32".
- Provides light, constant spring tension on the cable
- 100 ampere ground clamp
- Rubber cable stop
- 2050Y Reel with a "Y" bridle allows two ground connections at the same time, providing maximum efficiency.

Static Discharge Grounding Reels

Model	Cable length m	Cable length ft	Net weight kg	Net weight lb	Resistance ohms
2050	15.24	50	5.44	12	2.0
2050Y*	15.24	50	5.44	12	2.0
2050NC	15.24	50	5.44	12	2.0
2050CT	15.24	50	5.44	12	2.0
2050NCCT	15.24	50	5.44	12	2.0

"NC" = nylon coated cable 3/32"

"CT" = constant tension models.

*2050 Reel with "Y" Bridle (30 ft. payout then 20 ft. bridle for each branch, with clamps) allows simultaneous grounding at two points.

OVERHANG CABLE 0.9 - 10.6 Meters
3.0 - 35.0 Feet

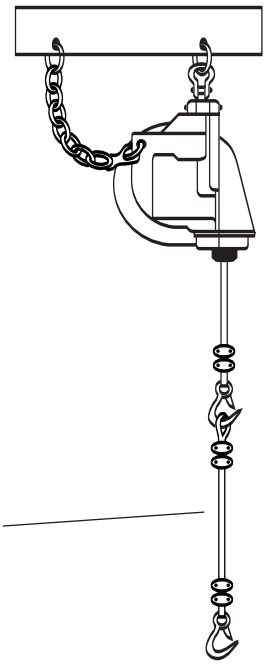
Overhang Cable for RB, RF, BF, F & FLRC (Fixed length)

model	Length (m)	Length (ft)
CBOF009	0.9	3.0
CBOF015	1.5	5.0
CBOF030	3.0	10.0
CBOF045	4.5	15.0
CBOF060	6.0	20.0
CBOF076	7.6	25.0
CBOF091	9.1	30.0
CBOF106	10.6	35.0

Overhang Cable for EA, EB, JA, KA & LA (Adjustable w/ clamps)

model	Length (m)	Length (ft)
CBOL020	2.0	6.5
CBOL050	5.0	16.4
CBOL0100	10.0	32.8

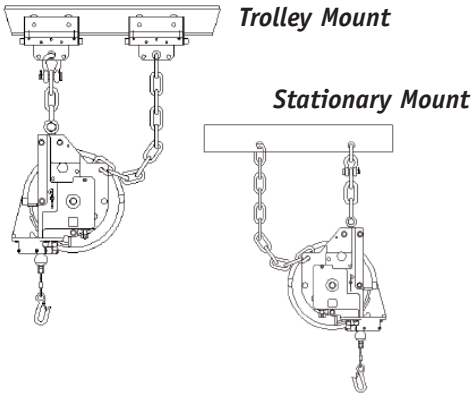
- Provides additional length by attaching to retractable cable supplied with balancer
- Allows balancer to be mounted at a higher elevation
- ★ DOES NOT RETRACT INTO HOUSING



SECONDARY SUPPORT CHAINS AND CABLE
FOR BALANCERS AND TORQUE REELS

- Provides additional safety by preventing balancer from accidentally falling due to failure of the support structure
- Chain or cable attaches to the balancer and to a support other than the balancer support

The length of the chain or cable should be kept to an absolute minimum and may need to be adjusted.



*Support Chain**

model	Length (mm)	Length (in)	Description
SSPLC	483	19	for EA, JA, KA & LA
SSPEC	508	20	for EB, F, FLRC & 1515T

*Support Wire Cable**

model	Length (mm)	Length (in)	Description
SSPBR	508	20	for RF & BF
SSPRR	388	15.25	for RB

*To omit support device from balancer, add suffix "D" to model number. Suffixes are added in alphabetical order. A price reduction may apply.

SPECIAL CABLE HOOK OPTIONS

FOR E, JA, KA AND LA

Field Kits / Replacement Parts for Balancers

Upper Hook Assembly

Model	Description
UHKEB	Bullard Type for EA
UHKKB	Bullard Type for JA, KA
UHKLB	Bullard Type for LA (2.1m/7ft)
UHK9B	Bullard Type for LA (2.7m/9ft)
UHKES	Shackle Type for EA
UHKKS	Shackle Type for JA, KA
UHKLS	Shackle Type for LA (2.1m/7ft)
UHK9S	Shackle Type for LA (2.7m/9ft)

Cable & Lower Hook

Model	Description
CBAEB	Bullard Type for EA
CBAEBL	Bullard Type for EL
CBALB7	Bullard Type for JA, KA, LA (2.1m/7ft)
CBALB9	Bullard Type for JA, KA, LA (2.7m/9ft)
CBAET	Tool Clip Type for EA
CBAETL	Tool Clip Type for EL
CBALT7	Tool Clip Type for JA, KA, LA (2.1m/7ft)
CBALT9	Tool Clip Type for JA, KA, LA (2.7m/9ft)

- Bullard hooks and clamp and insulator options are available to upgrade standard hook configurations.
- EA, EB, JA, KA and LA come standard with upper shackle and tool clip.
- All Bullard hook options have a locking gate

Hook Upgrade

To upgrade hooks, find desired option in chart below, and add suffixes to model number in alphabetical order. Example: 80JABU = balancer with upper Bullard and bottom Bullard Hooks.

Upper Hook Assembly	Upper Shackle				Upper Mercedes Hook	Upper Bullard Hook
Bottom Hook Assembly	Bottom Tool Clip	Bottom Bullard Hook	Bottom Clamps	Bottom Insulator		
EA	Standard	B	C	I	M	U
EB	Standard	B		I	M	U
JA, KA	Standard	B	C	I	M	U
LA	Standard	B	C	I	M	U

Shackle Hook

Bullard Hook

BT3 — 0.0 - 136.0 kg / 0.0 - 300.0 lb TROLLEYS

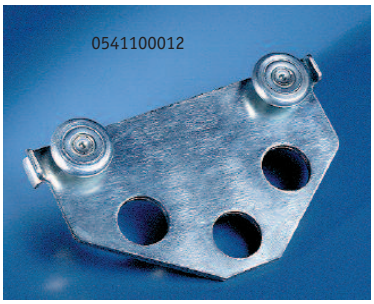
- Quiet operation & long-lasting performance, with polyurethane wheels on either 4" I-beam or 3¼" patented rail
- Insulated trolleys are safeguarded from electrical charges, with suspended load electrically insulated from the support beam above

BT5 — 0.0 - 227.0 kg / 0.0 - 500.0 lb TROLLEYS

- High-speed design with steel wheels & presealed high-speed bearings
- Available for 4" I-beam or 3¼" patented rail

Model	Description	Wheels
BT34I	Trolley for 4" I-Beam	Polyurethane
BT3PR	Trolley for 3¼" Patented Rail	Polyurethane
BT34IW	Insulated Trolley for 4" I-Beam	Polyurethane
BT3PRW	Insulated Trolley for 3¼" Patented Rail	Polyurethane
BT54I	Trolley for 4" I-Beam	Steel
BT5PR	Trolley for 3¼" Patented Rail	Steel

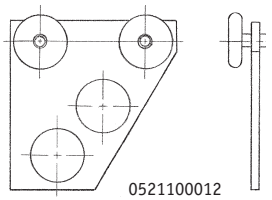
See page 23 for dimensions



BALANCER TROLLEY

FOR USE WITH OVERHEAD TRACK

- 0541100012 is compatible with 5400 tracks and 0521100012 is compatible with 5200 tracks
- 5400- max. 22 Kg (50lb) capacity
  5200- max. 13 Kg (30lb) capacity



See page 22-23 for track selection.

HOSE AND CABLE SUPPORTS

FOR 12.5mm - 32mm (0.49" - 1.25") DIAMETER

- Increases worker safety by keeping hoses/cables out of the way
- Increases hose/cable life and efficiency
- Allows easy access to hose/cable when needed
- Works well with Aero-Motive® balancers and torque reels featuring ratchet lock

Model	Hose / Cable Diameter
6102000000	12.5mm - 23mm (0.49"-0.91")
6102100000	23mm - 32mm (0.91"-1.25")

Hose support adapts to GM31, RB, BF and FLRC Balancer, and No. 1515T Torque Reel only.

BALANCER SERVICE KITS

FOR EA, EB, JA, KA AND LA

Model	Description
CBGE	Cable Guide Assy for EA Balancers
CBGK	Cable Guide Assy for JA, KA Balancers
CBGL	Cable Guide Assy for LA Balancers
STAL7	Star Wheel Kit /Cable Length 7 ft(std) for JA, KA, LA Balancers
STAL9	Star Wheel Kit /Cable Length 9 ft(extd) for JA, KA, LA Balancers
DLKE	Drum Lock Kit for EA Balancers
DLKK	Drum Lock Kit for JA, KA, EB Balancers
DLKL	Drum Lock Kit for LA Balancers
DRME7	Drum Kit for EA Balancers (2.1m/7ft)
DRMK7	Drum Kit for JA, KA Balancers (2.1m/7ft)
DRMK9	Drum Kit for JA, KA Balancers (2.7m/9ft)
DRML7	Drum Kit for LA Balancers (2.1m/7ft)
DRML9	Drum Kit for LA Balancers (2.7m/9ft)
SHFE	Shaft Kit for EA Balancers
SHFJ	Shaft Kit for JA Balancers
SHFK	Shaft Kit for KA Balancers
SHFL	Shaft Kit for LA Balancers
WRME	Worm Gear Kit for EA Balancers
WRMJ	Worm Gear Kit for JA, KA Balancers
WRML	Worm Gear Kit for LA Balancers
DSLK	Drop Stop Lever Kit for JA, KA, Balancers
DSAEA	Drop Stop Actuator Kit for EA
DSAJA	Drop Stop Actuator Kit for 20JA/9020JA
DSAJB	Drop Stop Actuator Kit for 30-60JA/9030-60JA
DSAJC	Drop Stop Actuator Kit for 70-100JA/9070JA
DSAKA	Drop Stop Actuator Kit for 110-130KA/9110-20KA
DSAKB	Drop Stop Actuator Kit for 140-160KA/9140-50KA
DSAKC	Drop Stop Actuator Kit for 170-200KA

CBG Cable Guide

STAL Star Wheel Kit

DRM Drum Kit

WRM Worm Gear Kit

SHF Shaft Kit

DLK Drum Lock Kit

DSL Drop Stop Lever Kit

DSA Drop Stop Actuator Kit

Note: Photos on this page are representative. Included parts may vary by model.

BALANCER SPRING ASSEMBLY KITS

FOR E, EL, JA, KA AND LA

Balancer	Spring Assembly
10E	4191200000
20E	3165900020
30E	3165900030
40E	3165900040
50E	3165900050
60E	3165900060
25EL	4191000000
40EL	3167200040
60EL	3167200060
20JA/9020JA	3118400020
30JA/9030JA	3118400030
40JA/9040JA	3118400040
50JA/9050JA	3118400050
60JA/9060JA	3118400060
70JA/9070JA	3118400070
80JA	3118400080
90JA	3118400090
100JA	3118400100

Balancer	Outer Spring	Inner Spring
110KA/9110KA	3127600110	3127700110
120KA/9120KA	3127600120	3127700120
130KA-140KA/9030-40KA	3127600140	3127700140
150KA-160KA/9150-60KA	3127600160	3127700160
170KA	3127600170	3127700170
190KA	3127600190	3127700190
192KA & 200KA	3127600200	3127700200

Balancer	Spring Assembly
210LA	3139800008
230LA/9230LA	3139800009
250LA	3139800013
260LA	3139800010
280LA	3139800010
290LA	3139800011
300LA	3139800015
330LA	3139800019
350LA	3139800018
370LA	3139800017
9160LA	3139800012
9198LA	3139800006
9200LA	3139800007
9210LA	3139800001

Spring Assembly

Workstation Assemblies

Woodhead offers all the workstation assemblies and components you need. With Aero-Motive® workstation assemblies, you can optimize your use of space through bench, wall, or floor-mounted arms, as well as extended runways that increase horizontal space options. Pivoting fixture and trolley mounts provide quick access to tools and greater freedom of movement.

Layout Guidelines

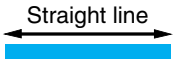
• What kind of work flow occurs in the area in question? Is it a straight-line application? An X-Y axis? A radius application? In this catalog, we have indicated which workstations and components are suitable for each application.

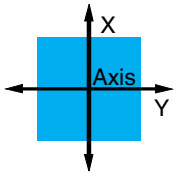
• Consider the type of tool used and how much of the work area the tool must be able to reach.

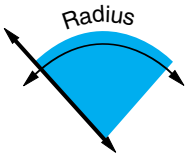
• System total suspended weight should not exceed 50 pounds for 5400 products, 30 pounds for 5200. Total suspended weight includes tool balancer, suspended tool, balancer trolley and cable or hose.

• Maximum unsupported horizontal track length is 6 feet. When mounting horizontal lengths of track, it is essential that any one unsupported length of track not exceed this length.

• Maximum unsupported vertical track length is 6 feet. When using vertical lengths of track, it is essential that any one unsupported length of track not exceed this length. Unsupported vertical lengths of track that exceed 6 feet in height should be mounted to walls or work benches using a Model No. 5400-SC support clamp.

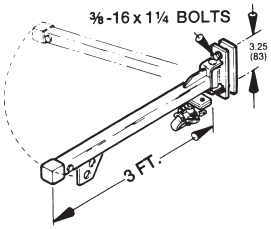






5200

WORKSTATION ASSEMBLIES



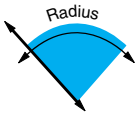
Wall-Mounted 180° Swinging Jib

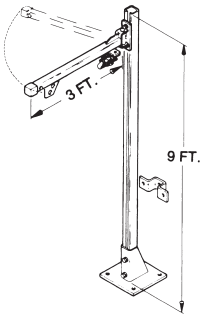
Model No. 0525200034

Max. Capacity 30 lbs. (13.6 Kg)
Total Length 3 ft. (0.9 m)

With Trolley and End Clamp

.49" - 1.25" O.D.





Floor/Bench-Mounted Swinging Jib

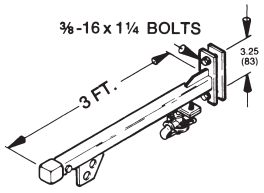
Model No. 0526200034

Max. Capacity 30 lbs. (13.6 Kg)
Total Length 3 ft. (0.9 m)

With Trolley and End Clamp

.49" - 1.25" O.D.

(Must be used in conjunction with bench)



Wall-Mounted Fixed Jib

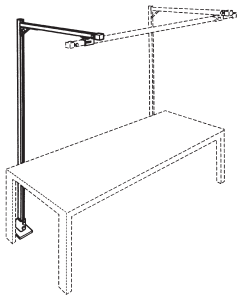
Model No. 0525100034

Max. Capacity 30 lbs. (13.6 Kg)
Total Length 3 ft. (0.9 m)

With Trolley and End Clamp

.49" - 1.25" O.D.

5400
WORKSTATION ASSEMBLIES

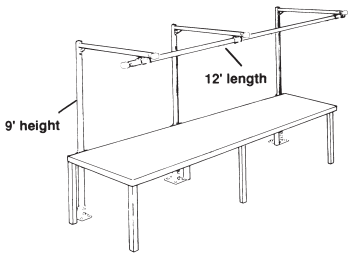


Floor-Mounted Runway Extension

Model No. 0544100069

Includes all necessary hardware — just add track to extend the system.

Straight line



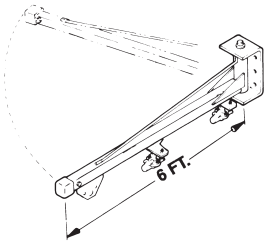
Triple Floor-Mounted Runway

Model No. 0544100012

Max. Capacity 50 lbs. (22.7 Kg)
Total Length 12 ft. (3.7m)

Bench and Cars not included

Straight line



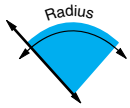
Wall-Mounted 180° Swinging Jib

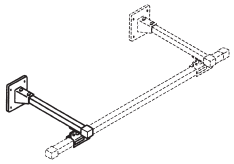
Model No. 0545200064

Max. Capacity 50 lbs. (22.7 Kg)
Total Length 6 ft. (1.8m)

With Trolley, Intermediate Car and End Clamp

.49" - 1.25" O.D.



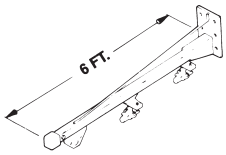


Wall-Mounted Runway Extension

Model No. 0544300069

Includes all necessary hardware; just add track to extend the system.

Straight line



Wall-Mounted Fixed Jib

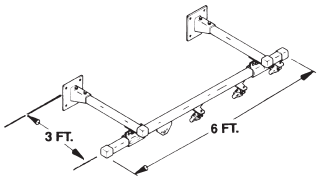
Model No. 0545100064

Max. Capacity 50 lbs. (22.7 Kg)
Total Length 6 ft. (1.8m)

With Trolley, Intermediate Car and End Clamp

.49" - 1.25" O.D.

Straight line



Double Wall-Mounted Runway

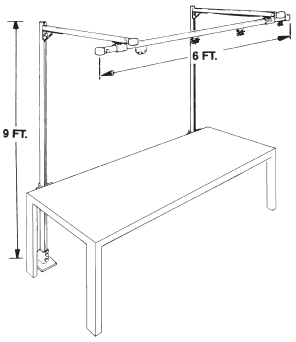
Model No. 0544300064

Max. Capacity 50 lbs. (22.7 Kg)
Total Length 6 ft. (1.8m)

With Trolley, Intermediate Car and End Clamp

.49" - 1.25" O.D.

Straight line



Double Floor-Mounted Runway

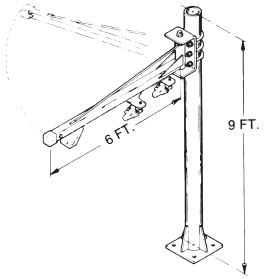
Model No. 0544100064

Max. Capacity 50 lbs. (22.7 Kg)
Total Length 6 ft. (1.8m)

With Trolley, Intermediate Cars and End Clamp

.49" - 1.25" O.D.

Straight line



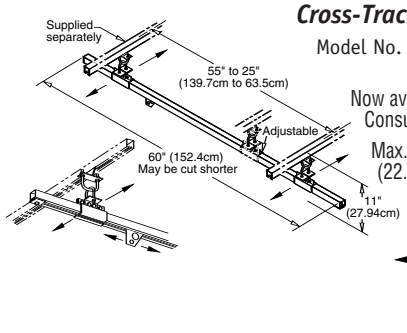
Floor-Mounted Swinging Jib

Model No. 0546200064

Max. Capacity = 50 lbs. (22.7 Kg)
Total Length = 6 ft. (1.8m)

With Trolley, Intermediate Cars and End Clamp

.49" - 1.25" O.D.



Cross-Tracker System

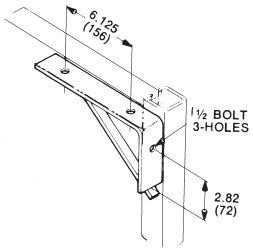
Model No. 54WB6
52WB6

Now available to cover X-Y axis. Consult factory.

Max. Capacity 50 lbs. (22.7 Kg) at 6 ft. span

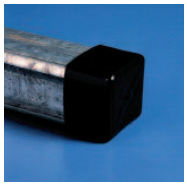
5200 & 5400

WORKSTATION COMPONENTS



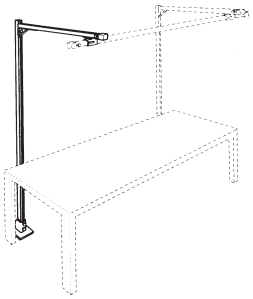
Angle Bracket

Model No. 5400AB



End Cap

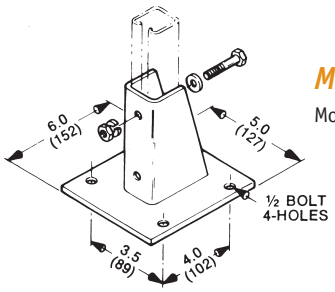
Model No. 5400EC
5200EC



Floor-Mounted Runway Extension

Model No. 0544100069

Includes all necessary hardware; just add track to extend the system.



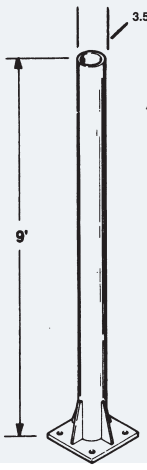
Mounting Plate

Model No. 5400MP

(For wall or floor mounting)

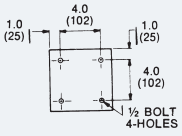
End Stop

Model No. 5400ES
5200ES



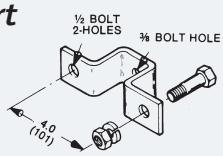
Vertical Support Column

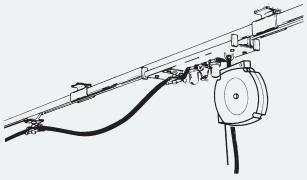
Model No. 0545400009



Support Clamp

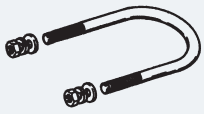
Model No. 5400SC





Ceiling-Mounted Runway

With FRL Trolley and BF Balancer

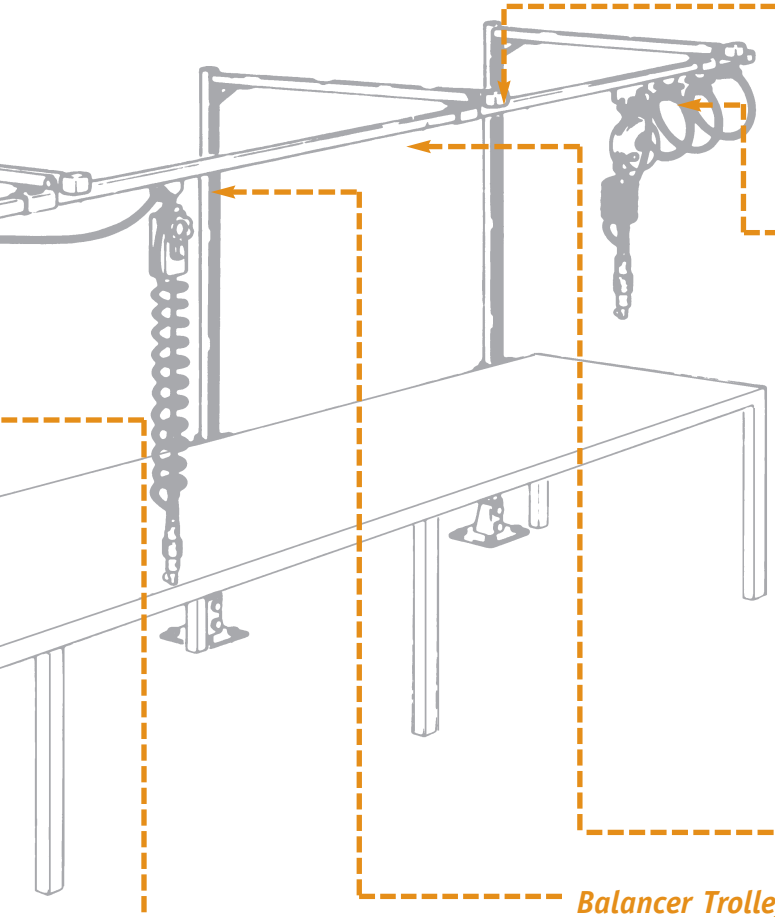


U-Bolt Assembly

Model No. 5400UB

Track Nut

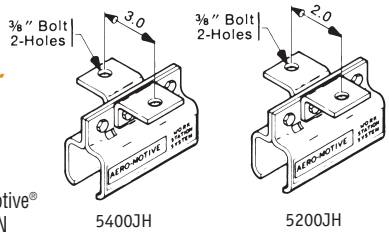
Model No. 5400TN



Joint Hanger Bracket

Model No. 5400JH
5200JH

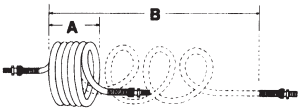
To hang from Aero-Motive® track, add two 5400-TN (Track Nuts)



5400JH 5200JH

Intermediate Car

Model No. 0542100012
(0.49" - 0.90" O.D.)
Model No. 0543100012
(0.91" - 1.25" O.D.)
Model No. 5221-1
(0.49" - 0.91" O.D.)
Model No. 5231-1
(0.91" - 1.25" O.D.)



RECOIL HOSE

Model	Size	A	B
0548200008	1/4"	6"	8'
0548200012	1/4"	8"	12'
0548300008	3/8"	6"	8'
0548300012	3/8"	8"	12'

Male swivel pipe fittings, both ends

Track

Model No. 54006: 6 ft. (1.5m)
52006: 6 ft. (1.5m)
Model No. 540012: 12 ft. (3.7m)
520012: 12 ft. (3.7m)

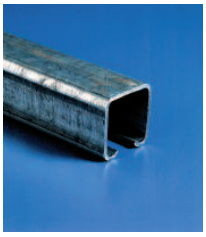
Horizontal Support Track

Model No. 0545300003: 3 ft. (.9m)

Vertical Support Track

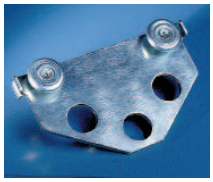
Model No. 0545300009: 9 ft. (2.7m)

5200 – max. 30lb capacity
5400 – max. 50lb capacity

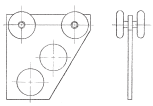


Balancer Trolley

Model No. 0541100012
0521100012



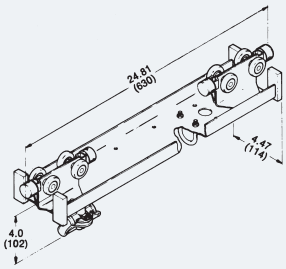
0541100012



0521100012

End Clamp

Model No. 54212, 52212
(0.49" - 0.90" O.D.)
Model No. 54312, 52312
(0.91" - 1.25" O.D.)



Filter Regulator Lubricator (FRL) Balancer Trolley

With provisions for FRL mounting
Model No. 5521FR (0.49" - 0.90" O.D.)
Model No. 5531FR (0.91" - 1.25" O.D.)

Balancer Trolley Hose Connector

Model No. 0547100001
May also be used with 5200 Balancer Trolley.

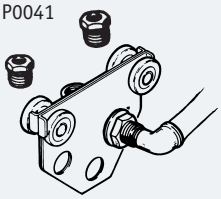
Hose Support

Model No. 6102000000
(0.49" - 0.90" O.D.)
Model No. 6102100000
(0.91" - 1.25" O.D.)
Hose/cable clamping capacity

Reducer Bushing

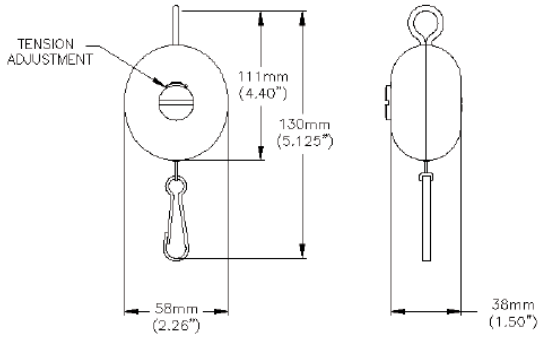
Model No. 00669P0041
(3/8" to 1/4")

Hose Connector shown with Model No. 0541100012



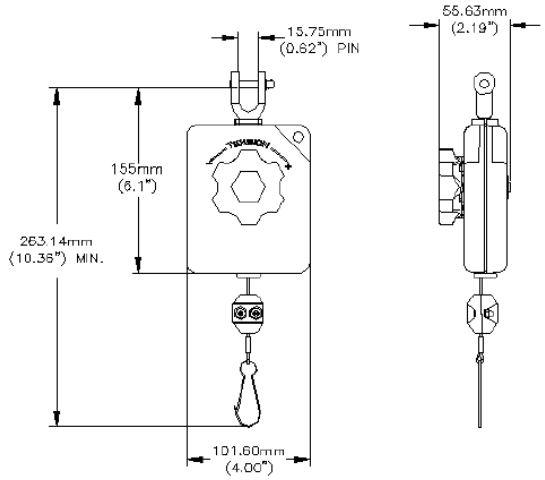
GM Positioner

(page 4)



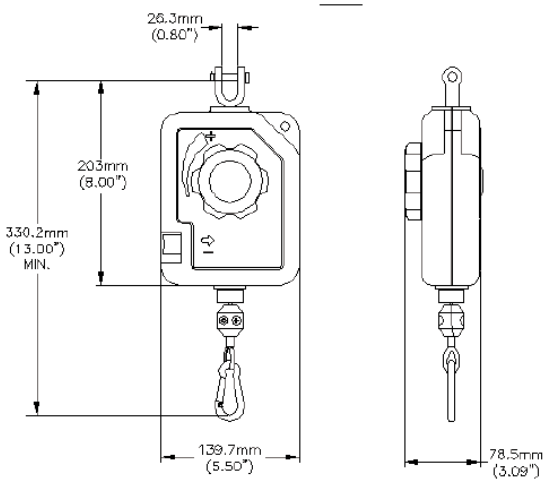
RB Retractor

(page 5)



RF Retractor

(page 5)

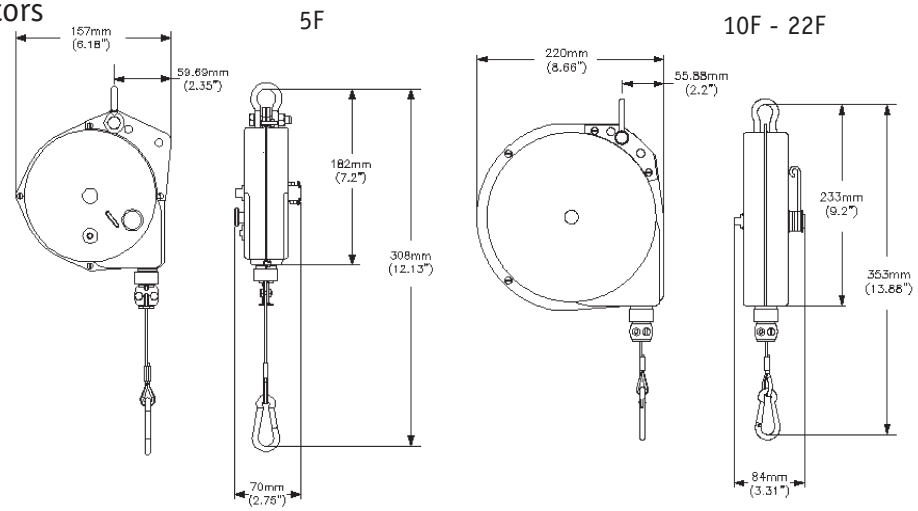


5F Retractors

(page 6)

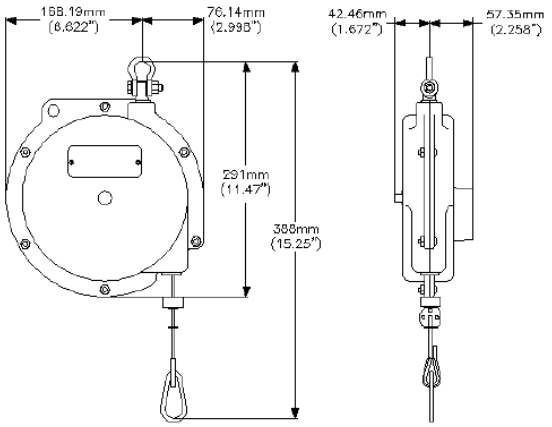
10F - 22F Retractors

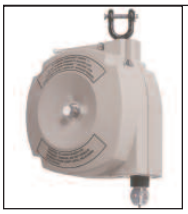
(page 6)



FLRC Retractors

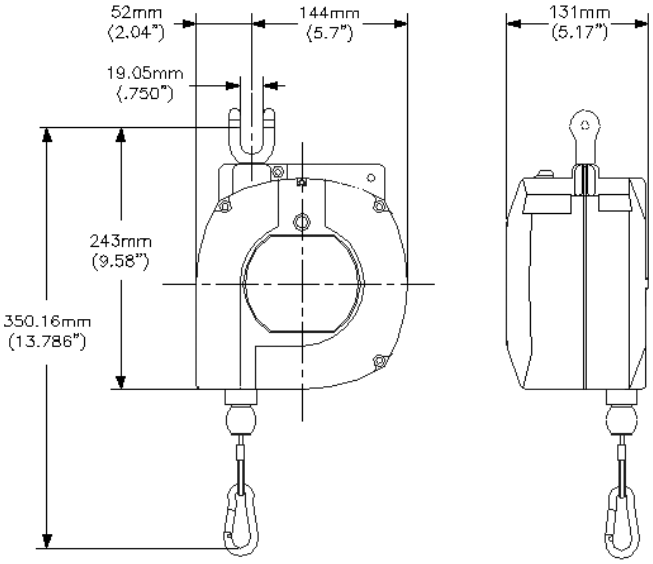
(page 6)





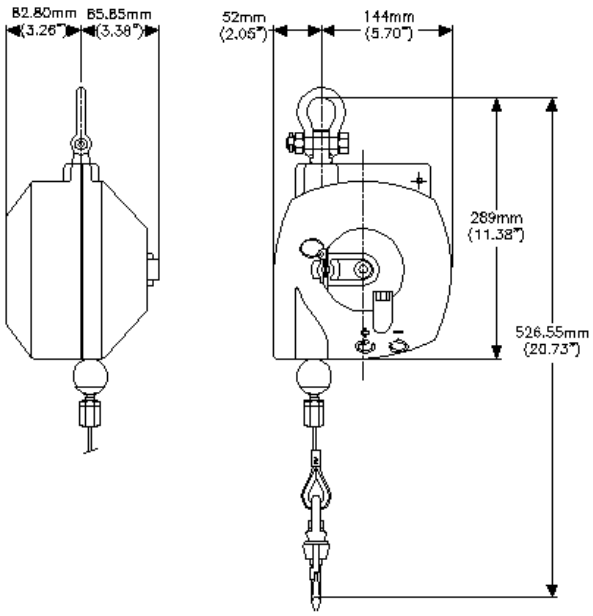
BF Balancer

(page 8)



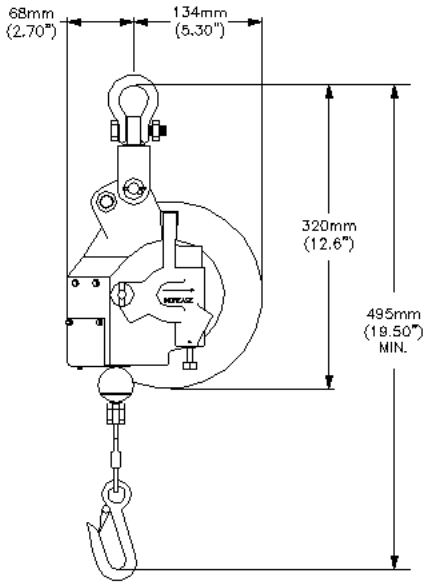
EB Balancer

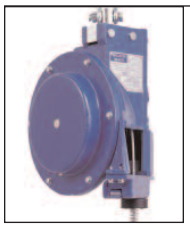
(page 9)



EA/EL Balancers

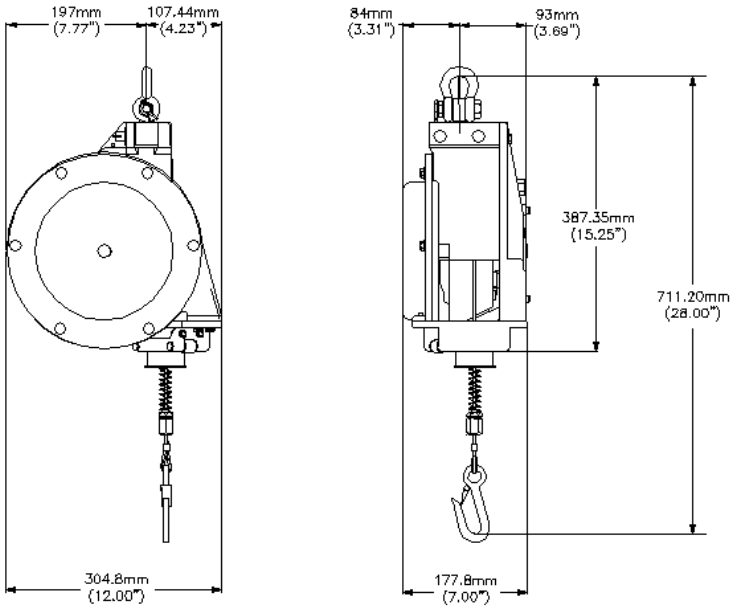
(page 10)

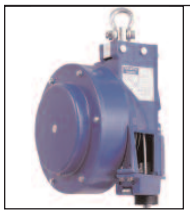




JA Balancer

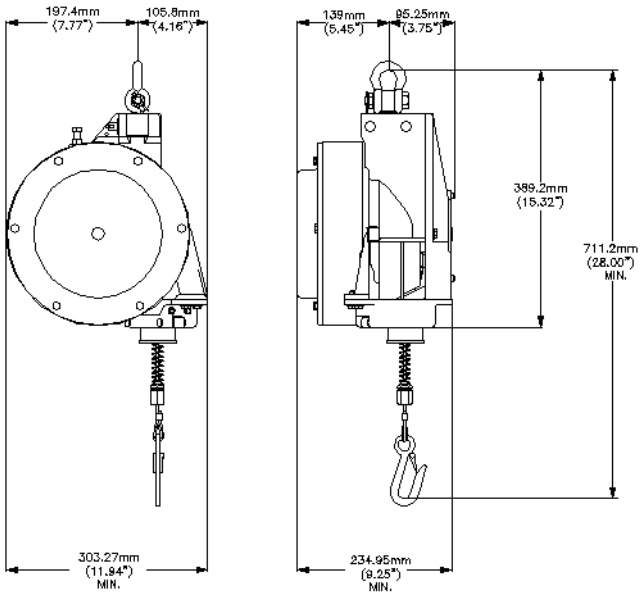
(page 11)



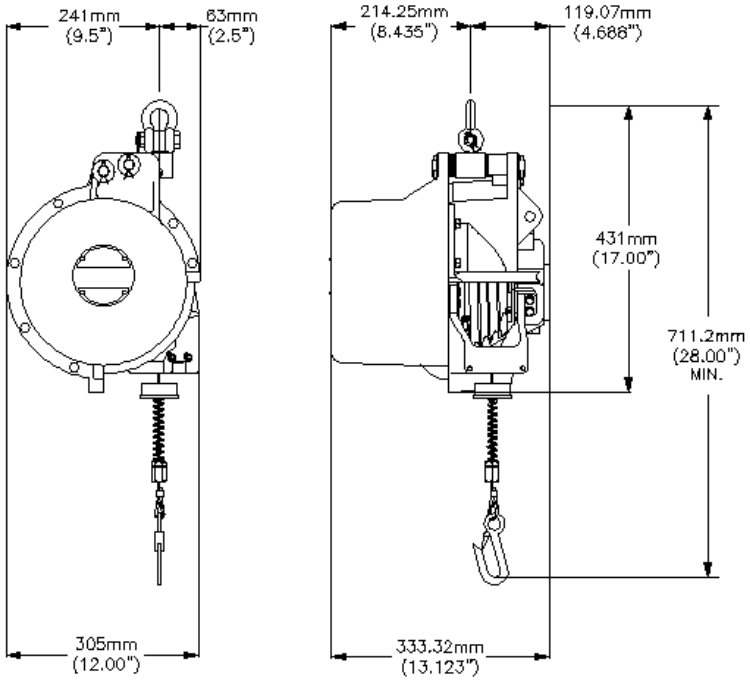


KA Balancer

(page 12)

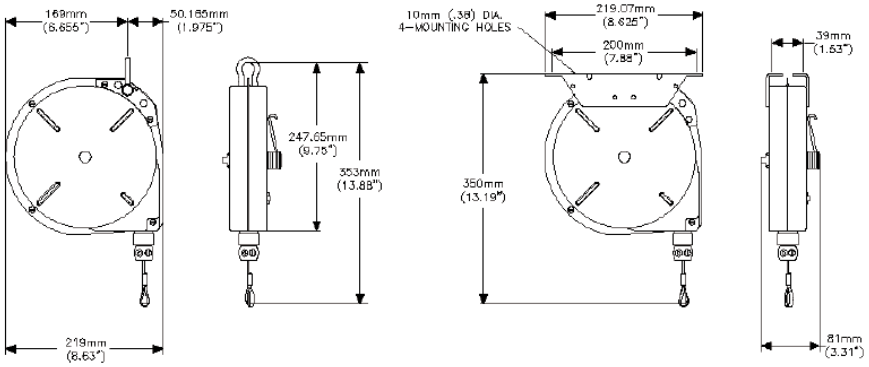


LA Balancer (page 13)



1515T Torque Reel (page 14)

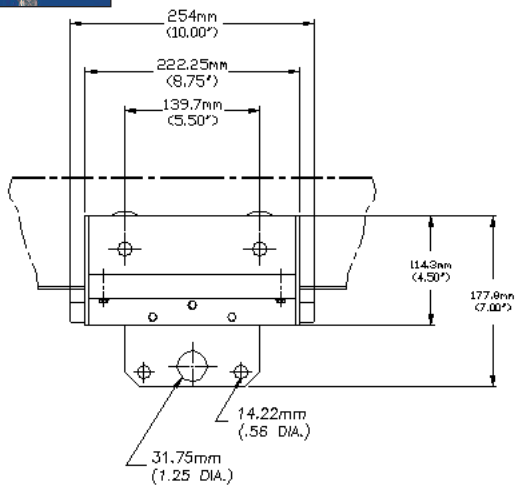
1515TR Torque Reel (page 14)

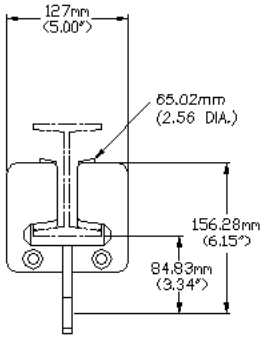


1515T

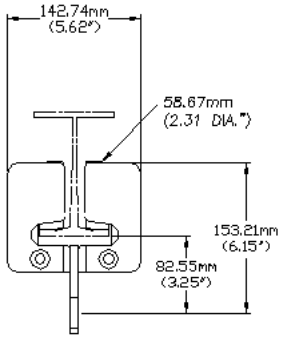
1515TR

Blancer Trolleys (page 17)





Trolley for 4" I-beam suspension



Trolley for 3 1/4" patented rail suspension

Tool Balancers...

- *Positioners*
- *Retractors*
- *Balancers*

Portable Lighting...

- *Wide Area Lamps*
- *Handlamps*
- *Temporary Lighting*

Cable Grips...

- *Strain Relief Grips*
- *Support Grips*
- *Pulling Grips*

Reels...

- *Cord Reels*
- *Cable Reels*
- *Hose Reels*

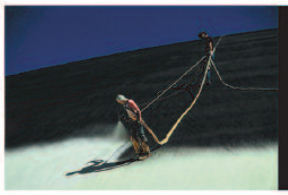
Wiring Devices...

- *Safeway+™*
- *Super-Safeway®*
- *Watertite®*

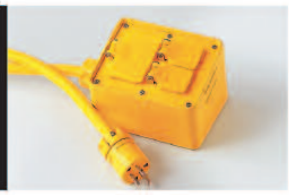
Pendant Stations...

- *Pushbuttons*
- *Test Instruments*
- *Electrical Specialties*

Portable Power...



- *GFCI*
- *Multiple Outlet Boxes*
- *Multi-Taps*



Mobile Electrification Systems...

- *Conductor Bar*
- *Festoon Systems*

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Океан Электроники
Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

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