**Zimmerman Series Jib Cranes**

### Accessories:

#### Air supply kits

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>90027</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>90038</td>
</tr>
</tbody>
</table>

Note: Includes filter regulator assembly, tagline, tagline assembly, and coiled hose.

#### Electrification kits

<table>
<thead>
<tr>
<th>Boom</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 12’</td>
<td>29030000-1</td>
</tr>
<tr>
<td>Greater than 12’</td>
<td>29030000-2</td>
</tr>
</tbody>
</table>

Note: Includes 3 suspension brackets, 3 anchor bracket, suitable length tag line wire with clamps and eyebolt assembly, and cable trolleys.

#### Hoist trolleys

<table>
<thead>
<tr>
<th>Boom</th>
<th>Capacity lb (kg)</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZRA1</td>
<td>500 (225)</td>
<td>29030013</td>
</tr>
<tr>
<td>ZRA2</td>
<td>1,000 (450)</td>
<td>29030014</td>
</tr>
<tr>
<td>ZRA2</td>
<td>2,000 (900)</td>
<td>29030000</td>
</tr>
<tr>
<td>ZRS1/1/2</td>
<td>1,000 (450)</td>
<td>29030015</td>
</tr>
<tr>
<td>ZRS1/1/2</td>
<td>2,000 (900)</td>
<td>29030000</td>
</tr>
</tbody>
</table>

#### Adjustable boom rotation stops

<table>
<thead>
<tr>
<th>Jib Series</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>J00 Series - 360° Rotation</td>
<td>29030493</td>
</tr>
<tr>
<td>M00 and M01 Series - 270° Rotation</td>
<td>29030900</td>
</tr>
</tbody>
</table>

Also available upon request:

- Portable pallet base — Provides jib mobility using a fork truck compatible base
- Custom designs for special applications

---

**Balancers**

*The strength behind Ingersoll Rand ergonomic handling*

**Ingersoll Rand offers:**

- Pneumatic balancers
- InteLIFT® intelligent assist devices
- Mechanical spring balancers
Zimmerman Series Pneumatic Balancers

**The Ingersoll Rand Pneumatic Balancer ADVANTAGE**

- **Precise, strain-free positioning** — Float leaves both hands free to raise, lower, or shift the load with virtually no resistance; no more “hold control” fist-and-mass spotting
- **Simple adjustment** — Clear access to air-flow calibration controls allows quick, easy adjustment of the float
- **Rugged reliability** — For continuous duty with minimal maintenance

**PLUS:**
- **Low air consumption** — Approximately 1/8 cfm required per cycle (one-fifth of that of an air hoist) means very low energy costs
- **Clean, oil-free operation** — Pre-lubricated design eliminates air line lubrication and oil mist exhaust; ideal for food processing and clean manufacturing environments

Progress is greener with Ingersoll Rand

**Zimmerman Series Pneumatic Balancers**

**50 to 2000 lb (22 to 909 kg) capacity**

**Safety is standard**
- Built in overload protection. The klined load can never exceed the unit’s maximum rated capacity
- Minimal cable recoil due to loss of load — If the load is accidentally lost, a centrifugal brake (3 brakes) automatically stops rapid upward cable travel

**Versatile configuration**
- Wide range of capacities up to 2000 lbs (907 kg)
- Added protection — The optional 2 Stop offers protection against the drifting of loads in the event the main air supply is lost
- Control is easy — ZA (pendant) controls let you handle varying loads; an EA (single) balance control is ideal for a constant load, and an EA for 2 loads
- Mounting — Suspension kits for Ingersoll Rand and other overhead crane manufacturers as well as I-beam, patented track, and hook mount
- CE certification — Meets the requirements for the European Union

**Z Stop:**
- For continuous duty with minimal maintenance
- Clear access to air-flow calibration controls
- Pre-lubricated design eliminates air line lubrication

**Controls —**
- **ZA** (pendant) control
- **EA** (single) balance control

**Features:**
- **Standard balancer features:**
  - High speed precise positioning
  - 12 ft (3.7 m) standard hose length

**Selection Tips:**
- Actual operating capacity is determined by available plant air pressure. Operating capacity decreases 1% for every 1 psi below 100 psi inlet air pressure. For example at 50 psi, a 350 lb capacity balloon has a 175 lb operating capacity (50 x 350%)
- For lifting applications, working load should not exceed 80% of operating capacity
- Working load includes part weight and handling device weight

**Z Break Safety Restriction System (Patent No. 6,691,945)**

Standard on all units, prevents violent initiation in the event of a sudden release of a suspended or lost load. The brake will also accelerate a suspended load to a rotating speed of 1 rpm and lock the load. The brake can also stop the load from moving farther down in the event the “up” tension is present in the cable end effectors.

---

**Control options:**

**Basic unit, without control**
- **Features:**
  - Standard balancer features

**Balancer with pendant control**
- **Features:**
  - Ergonomic up/down pendant control

**Balancer with service control**
- **Features:**
  - Weld gun suspension

---

**Low-Friction Cable Guide**

- Low-friction cable guide ensures smooth cable travel for the cable reel.

---

**Single Ended Hose**

<table>
<thead>
<tr>
<th>Capacity (lb)</th>
<th>Travel (in)</th>
<th>Net Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>15 (38)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>250</td>
<td>15 (38)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>300</td>
<td>15 (38)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>350</td>
<td>20 (51)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>400</td>
<td>20 (51)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>450</td>
<td>20 (51)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>500</td>
<td>20 (51)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>550</td>
<td>20 (51)</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td>600</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>650</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>700</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>750</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>800</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>850</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>900</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>950</td>
<td>30 (76)</td>
<td>3 (1.3)</td>
</tr>
<tr>
<td>1000</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1050</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1100</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1150</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1200</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1250</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1300</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1350</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1400</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1450</td>
<td>40 (102)</td>
<td>4 (1.8)</td>
</tr>
<tr>
<td>1500</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1550</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1600</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1650</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1700</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1750</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1800</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
<tr>
<td>1850</td>
<td>50 (127)</td>
<td>5 (2.3)</td>
</tr>
</tbody>
</table>

**Fits all Ingersoll Rand suspensions and most trolleys from other manufacturers.**

**Selection Tips:**
- Actual operating capacity is determined by available plant air pressure. Operating capacity decreases 1% for every 1 psi below 100 psi inlet air pressure. For example at 50 psi, a 350 lb capacity balloon has a 175 lb operating capacity (50 x 350%)
- For lifting applications, working load should not exceed 80% of operating capacity
- Working load includes part weight and handling device weight

---

**Single use with remote control**
- **Features:**
  - Standard balancer features

**Balancer with pendant control**
- **Features:**
  - Ergonomic up/down pendant control

**Balancer with service control**
- **Features:**
  - Weld gun suspension

---

**Anti-friction half-cable**

- Creates smooth, smooth rotation path for the cable reel.

---

**Ball screw:**

- Anti-friction

---

**Heavy-duty thrust bearing**

- Alleviates piston force and transfers wear stress from ball screw.

---

**Air chamber and piston:**

- Forms the heart of the unit. Air entering the chamber pushes the piston to rotate the spindle, causing the cable to travel. Exhausting air from the air chamber balances the load, creating a zero gravity float.
Zimmerman Series Pneumatic Balancers

The Ingersoll Rand Pneumatic Balancer   ADVANTAGE

- Precise, strain-free positioning — Float leaves both hands free to raise, lower, or shift the load with virtually no resistance; no more “hoist control” fatiguing spotting
- Simple adjustment — Clear access to air-flow calibration controls allows quick, easy adjustment of the float
- Rugged reliability — For continuous duty with minimal maintenance

PLUS:
- Low air consumption — Approximately 1/8 cfm required per cycle (one fiftieth of an air hoist) means very low energy costs
- Clean, oil-free operation — Pre-lubricated the European controls due to upward handle varying loads; a calibration allows for minimal maintenance loss of load — If the load is accidentally lower, 2 loads or tools during shut down or at night when lost, a brake design eliminates energy costs
- Safety is standard
- Built-in overload protection — The kibid load can never exceed the unit’s maximum rated capacity
- Minimal cable recid due to loss of load — If the load is accidentally lost, a centrifugal brake (2 bricks) automatically stops rapid upward cable travel
- Versatile configuration
- Wide range of capacities up to 5,000 lbs (907 kg)
- Added protection — The optional 2 Stop offers protection against the drifting of loads in the event the main air supply is lost
- Controls — ZA (pendant) control lets you handle varying loads, a BA (single) balance control is ideal for a constant load, and an EA for 2 loads
- Mounting — Suspension kits for Ingersoll Rand and other enclosed track manufacturers as well as 1-beam, patented track, and hook mount
- CE certification — Meets the requirements for the European community
- Safety is standard — Built-in overload protection
- Minimal cable recid due to loss of load
- Anti-friction, Rugged steel housing: All steel housing for added durability
- Standard on units, prevents violent damage to tools or objects below the suspended load. Available for use on all 10 inch (254 mm) diameter units.
- Anti-friction cable guide
- Heavy-duty shaft bearing
- Air chamber and pistons: Guards the heart of the unit, air entering the chamber pushes the piston to raise the load, shifting more air into the chamber and pistons, creating a zero gravity float.

Safety features:
- Standard on all units — Prevents violent loss of load
- Built-in overload protection
- Minimal cable recid due to loss of load
- CE certification — Meets the requirements for the European community

Control options:
- Basic unit, without control
- Features:
- Standard balancer
- No control
- Suitable for:
- Integration with end effector

Balancer with pendant control
- Features:
- Ergonomic up / down control
- High speed precise positioning
- Suitable for:
- Toy and plane
- Precision assembly

Balancer with servos control
- Features:
- Single balance control
- Maintains constant tension through full range of motion
- Suitable for:
- Weld suspension
- Feature suspension

Ingersoll Rand controls — Due to upward handle varying loads

High-speed precise positioning controls — Single balance control

Selection Tips:
- Actual operating capacity is determined by available plant air pressure
- Operating capacity decreases 1% for every 1 psi below 100 psi inlet air pressure
- For example at 50 psi, a 350 lb capacity balancer has a 175 lb operating capacity (50 x 350 / 100 = 175)
- For lifting applications, working load should not exceed 80% of operating capacity
- Working load includes part weight and handling device weight

Z Stop:
- The optional Z Stop is a patented device that will eliminate the down-drift of suspended loads or tools during shut down or at night when the air supply is shut off. The Z Stop will stop drift that will eliminate the down-drift of suspended loads or tools during shut down or at night when the air supply is shut off.

Distributed by Ergonomic Partners  |  Sales@ErgonomicPartners.com  |  (314) 884-8884  |  www.ErgonomicPartners.com

BW020120  ZAW020120  BAW020120  EAW020120  200  (90)  120  (3048)  62  (30)
BW015080  ZAW015080  BAW015080  EAW015080  150  (68)  80  (2032)  52  (23)
BW00040  ZAW00040  BAW00040  EAW00040  40  (20)  40  (1016)  28  (12)
BW00020  ZAW00020  BAW00020  EAW00020  20  (10)  40  (1016)  28  (12)
BW000060  ZAW000060  BAW000060  EAW000060  6  (3)  30  (762)  14  (6)

BW050080  ZAW050080  BAW050080  EAW050080  500  (227)  80  (2032)  110  (50)
BW040060  ZAW040060  BAW040060  EAW040060  400  (181)  60  (1524)  67  (30)
BW032080  ZAW032080  BAW032080  EAW032080  325  (147)  80  (2032)  62  (28)
BW020080  ZAW020080  BAW020080  EAW020080  200  (90)  80  (2032)  67  (30)
BW010080  ZAW010080  BAW010080  EAW010080  100  (45)  80  (2032)  67  (30)
BW00040  ZAW00040  BAW00040  EAW00040  40  (20)  40  (1016)  26  (12)

BW065040S2  ZAW065040S2  BAW065040S2  EAW065040S2  650  (294)  40  (1016)  67  (30)
BW050080S2  ZAW050080S2  BAW050080S2  EAW050080S2  500  (227)  80  (2032)  110  (50)
BW0350801  ZAW0350801  BAW0350801  EAW0350801  350  (158)  80  (2032)  62  (28)
BW032080S2  ZAW032080S2  BAW032080S2  EAW032080S2  325  (147)  80  (2032)  62  (28)
BW020080S2  ZAW020080S2  BAW020080S2  EAW020080S2  200  (90)  80  (2032)  62  (28)
BW015080S2  ZAW015080S2  BAW015080S2  EAW015080S2  150  (68)  80  (2032)  62  (28)
BW0100801  ZAW0100801  BAW0100801  EAW0100801  100  (45)  80  (2032)  50  (23)
BW007080  ZAW007080  BAW007080  EAW007080  70  (30)  120  (3048)  50  (23)
BW005080  ZAW005080  BAW005080  EAW005080  50  (23)  80  (2032)  50  (23)
BW000060  ZAW000060  BAW000060  EAW000060  6  (3)  30  (762)  28  (12)

Zimmerman Series Pneumatic Balancers

50 to 2,000 lb (22 to 909 kg) capacity
Zimmerman Series Pneumatic Balancers
50 to 2,000 lb (22 to 909 kg) capacity

Suspension options:

<table>
<thead>
<tr>
<th>Option Code</th>
<th>Description</th>
<th>50 lb</th>
<th>150 lb</th>
<th>200 lb</th>
<th>350 lb</th>
<th>500 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>No suspension</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>S2</td>
<td>200 lb steel red</td>
<td>1600</td>
<td>1440</td>
<td>1200</td>
<td>1080</td>
<td>960</td>
</tr>
<tr>
<td>S3</td>
<td>350 lb steel red</td>
<td>1600</td>
<td>1440</td>
<td>1200</td>
<td>1080</td>
<td>960</td>
</tr>
<tr>
<td>S1M</td>
<td>Hook mount</td>
<td>1590</td>
<td>1440</td>
<td>1200</td>
<td>1080</td>
<td>960</td>
</tr>
<tr>
<td>T8</td>
<td>1 x 8&quot; Bomb</td>
<td>1600</td>
<td>1440</td>
<td>1200</td>
<td>1080</td>
<td>960</td>
</tr>
<tr>
<td>A1</td>
<td>2 x 1/4&quot; aluminum red</td>
<td>1530</td>
<td>1410</td>
<td>1200</td>
<td>1070</td>
<td>960</td>
</tr>
<tr>
<td>A1</td>
<td>2 x 1/2&quot; aluminum red</td>
<td>1530</td>
<td>1410</td>
<td>1200</td>
<td>1070</td>
<td>960</td>
</tr>
</tbody>
</table>

Note: * NOT compatible with tandem balancers

Replacement parts:

- EA regulator/elbow
- Optional Z-Stop

Pneumatic Balancers model driver

Example: BAW005060

<table>
<thead>
<tr>
<th>Control Code</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Basic, no controls</td>
<td>NA</td>
</tr>
<tr>
<td>ZA</td>
<td>Pendent control</td>
<td>15300-12</td>
</tr>
<tr>
<td>EA</td>
<td>High, low, no load control</td>
<td>15310-12</td>
</tr>
</tbody>
</table>

Also available:

- BAW Series tool balancer

This air unit offers an incredible 2 to 50 pound (0.9 to 22 kg) load capacity and our exclusive friction feature.

Standard features:

- **Performance** — Float action provides ease of vertical travel, eliminating tension on load, making positioning capability far superior.
- **Versatility** — No need to change model when making tool change; one model (BAW005060) covers entire 50 lb (22 kg) range.
- **Headroom** — Requires only 20 inches (508 mm) from bottom of rail to bottom of hook.

**Specifications:**

- **Load Capacity:** 50 lb (22 kg)
- **Travel:** 23 inches (584 mm)
- **Net Weight:** 15.8 lb (7.18 kg)

Zimmerman Series Pneumatic Balancers

<table>
<thead>
<tr>
<th>Option Code</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Basic, no controls</td>
<td>NA</td>
</tr>
<tr>
<td>ZA</td>
<td>Pendent control</td>
<td>15300-12</td>
</tr>
<tr>
<td>EA</td>
<td>High, low, no load control</td>
<td>15310-12</td>
</tr>
</tbody>
</table>

Control Options Code

<table>
<thead>
<tr>
<th>B</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZA</td>
<td>Pendent control</td>
<td>15300-12</td>
</tr>
<tr>
<td>EA</td>
<td>High, low, no load control</td>
<td>15310-12</td>
</tr>
</tbody>
</table>

EZ Grip Ergonomic Control Handle

Quality handle manufactured by Ingersoll Rand, the world leader in ergonomically sound material handling equipment.

Zimmerman Series Pneumatic Balancers

Dimensions:

<table>
<thead>
<tr>
<th>Load Capacity</th>
<th>A Dimension in (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 lb (22 kg)</td>
<td>2.01</td>
</tr>
<tr>
<td>200 lb (90 kg)</td>
<td>8.10</td>
</tr>
<tr>
<td>350 lb (157 kg)</td>
<td>10.24</td>
</tr>
<tr>
<td>500 lb (227 kg)</td>
<td>12.38</td>
</tr>
</tbody>
</table>

**Note:**

- See Note (1) 15.68
- See Note (2) 3.75 (95.25 mm)
- See Note (3) 3.0 (76.2 mm)

Contact Information:

(800) 998-0872 - irtools.com/lifting

Part No. | Capacity (lbs) | Travel (in) | Net Weight (lbs) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BAW005060</td>
<td>2–50</td>
<td>23</td>
<td>15.8</td>
</tr>
</tbody>
</table>

**Stop Options:**

- Z-Stop
- ZRS2
- ZRS3

**Control Options:**

- Basic, no controls
- Pendent control
- High, low, no load control

**Note:**

- (1) ZRS2: 200 lb (90 kg) capacity for use with external regulator.
Zimmerman Series Pneumatic Balancers
50 to 2000 lb (22 to 909 kg) capacity

Suspension options:

<table>
<thead>
<tr>
<th>Option Code</th>
<th>Description</th>
<th>6.5&quot; Dia. 150 lb Unit</th>
<th>10&quot; Dia. ±50 lb Units</th>
<th>Competitor Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>No suspension</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>S2</td>
<td>2000 lb steel rail</td>
<td>3.25 (82)</td>
<td>90 (227)</td>
<td>NA</td>
</tr>
<tr>
<td>S3</td>
<td>3500 lb steel rail</td>
<td>3.25 (82)</td>
<td>90 (227)</td>
<td>NA</td>
</tr>
<tr>
<td>S4</td>
<td>Hook mount</td>
<td>3.25 (82)</td>
<td>90 (227)</td>
<td>NA</td>
</tr>
<tr>
<td>T8</td>
<td>5&quot; x 5&quot; beam</td>
<td>3.25 (82)</td>
<td>90 (227)</td>
<td>NA</td>
</tr>
<tr>
<td>A1</td>
<td>750 lb aluminum rail</td>
<td>3.05 (77)</td>
<td>81 (206)</td>
<td>NA</td>
</tr>
<tr>
<td>A1</td>
<td>750 lb aluminum rail</td>
<td>3.05 (77)</td>
<td>81 (206)</td>
<td>NA</td>
</tr>
<tr>
<td>A3</td>
<td>2000 lb aluminum rail</td>
<td>3.25 (82)</td>
<td>90 (227)</td>
<td>NA</td>
</tr>
<tr>
<td>D4</td>
<td>5&quot; dia aluminum rail</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>United</td>
</tr>
<tr>
<td>B8</td>
<td>5&quot; dia aluminum rail</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>United</td>
</tr>
<tr>
<td>R1</td>
<td>K85 steel rail</td>
<td>3.45 (88)</td>
<td>90 (227)</td>
<td>Demag</td>
</tr>
<tr>
<td>R2</td>
<td>K85 rubber shell</td>
<td>3.45 (88)</td>
<td>90 (227)</td>
<td>Demag</td>
</tr>
<tr>
<td>G1</td>
<td>Grooved 60° steel rail</td>
<td>3.67 (93)</td>
<td>90 (227)</td>
<td>Gorbel</td>
</tr>
<tr>
<td>K3</td>
<td>4&quot; Aluminum</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K4</td>
<td>5&quot; Aluminum</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K5</td>
<td>8&quot; Aluminum anti-kickback</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K6</td>
<td>4&quot; Steel</td>
<td>3.45 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K7</td>
<td>8&quot; Steel</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K8</td>
<td>6&quot; Steel</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K9</td>
<td>8&quot; Steel</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
<tr>
<td>K10</td>
<td>10&quot; Steel</td>
<td>3.46 (88)</td>
<td>90 (227)</td>
<td>Knight</td>
</tr>
</tbody>
</table>

Note: * Not compatible with tandem balancers.

Example: BW020120SS2

Pneumatic Balancers model driver

<table>
<thead>
<tr>
<th>Control Code</th>
<th>B = Basic, no controls</th>
<th>ZA = Pendant control</th>
<th>EA = High, low, no load control</th>
<th>Type</th>
<th>Capacity</th>
<th>Travel</th>
<th>Z-2-Step Options</th>
<th>Suspension Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>B = Basic, no controls</td>
<td>ZA = Pendant control</td>
<td>EA = High, low, no load control</td>
<td>W = Wire rope</td>
<td>020 = 200 lb (91 kg)</td>
<td>120 = 120 inches (3048 mm)</td>
<td>5 = 2-step</td>
<td>S2 = ZR52 steel rail</td>
</tr>
</tbody>
</table>

Replace part numbers:

<table>
<thead>
<tr>
<th>Z-2-Step Options Code</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>2-step, 200 lb capacity</td>
<td>1303</td>
</tr>
<tr>
<td>T</td>
<td>2-step, 250 lb capacity</td>
<td>1331</td>
</tr>
<tr>
<td>Z</td>
<td>2-step, 350 lb capacity</td>
<td>1332</td>
</tr>
</tbody>
</table>

Control Options Code

<table>
<thead>
<tr>
<th>Control Code</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Basic, no controls</td>
<td>NA</td>
</tr>
<tr>
<td>ZA</td>
<td>Pendant control</td>
<td>15300-12</td>
</tr>
<tr>
<td>EA</td>
<td>High, low, no load control</td>
<td>15310-12</td>
</tr>
</tbody>
</table>

Zimmerman Series Pneumatic Balancers

Balancing with 1-Beam/Patented Track trolley mount configuration

Balancing with hook mount configuration

Balancing with enclosed rail trolley mount configuration

EZ Grip Ergonomic Control Handle

Quality handle manufactured by Ingenroll Rand, the world leader in ergonomically sound material handling equipment.

ZA Pendant Control (15300-12)

Also available:

B&W series tool balancer

This air unit offers an incredible 2 to 50 pound (0.9 to 22 kg) load capacity and our exclusive Flotation feature.

Standard features:

- **Performance** — Float action provides ease of vertical travel, eliminating tension on load, making positioning capability far superior.
- **Versatility** — No need to change model when making tool change; one model (B&W/BW050500) covers entire 50 lb (22 kg) range.
- **Headroom** — Requires only 20 inches (508 mm) from bottom of rail to bottom of hook.
- **Adjustment** — Simple adjustment in seconds by means of external regulator.
- **Sequencing** — Can be sequenced via air signal to perform timed or “cycled” operation.
- **Maintenance** — Virtually maintenance-free. Normal maintenance can be done in place on the rail.

Zimmerman Series Pneumatic Balancers

Dimensions:

<table>
<thead>
<tr>
<th>Load Capacity</th>
<th>&quot;A&quot; Dimension (in mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 (68)</td>
<td>2.85 (72.4)</td>
</tr>
<tr>
<td>200 (90)</td>
<td>4.10 (104.1)</td>
</tr>
<tr>
<td>250 (100)</td>
<td>5.47 (140)</td>
</tr>
<tr>
<td>500 (200)</td>
<td>11.62 (295)</td>
</tr>
</tbody>
</table>

Notes:

- See Note (1) 15.68 in (mm)
- See Note (2)
- See Note (3)

Examples:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Capacity</th>
<th>Travel</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW020120SS2</td>
<td>2 - 50 lbs</td>
<td>15300-12</td>
<td>15.9 lbs</td>
</tr>
<tr>
<td>BW020120SS2</td>
<td>50 - 200 lbs</td>
<td>15310-12</td>
<td>15.9 lbs</td>
</tr>
</tbody>
</table>

(314) 884-8884 • www.ErgonomicPartners.com
Zimmerman InteLIFT® Series Balancers
Intelligent Lifting Systems

What is InteLIFT?
InteLIFT is an intelligent assist device (IAD), it converts intuitive operator input into smooth, effortless up / down motion. The force-sensing control handle responds to operator input quickly and seamlessly for precise positioning of loads.

The Ingersoll Rand InteLIFT Balancer

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-balancing</td>
<td>Intuitive speed control for different weights</td>
</tr>
<tr>
<td>Hands-on maneuvering</td>
<td>InteLIFT senses force input of the user and translates that to assisted lifting / lowering of the load without the need for up / down buttons</td>
</tr>
<tr>
<td>Float mode</td>
<td>Throughout entire range of motion</td>
</tr>
<tr>
<td>Robust design</td>
<td>Electric over air design allows continuous duty with minimal maintenance</td>
</tr>
<tr>
<td>Part present</td>
<td>Eliminates potential to accidentally drop part</td>
</tr>
<tr>
<td>3-Speed select</td>
<td>Enables speed selection to match application and operator comfort level</td>
</tr>
</tbody>
</table>

Same green features as the Pneumatic Balancer

- Low air consumption
- Clean, oil-free operation
- Compact, robust design
- Robust integration with end effector
- Precise, high-speed positioning
- Intuitive speed control for different weights
- Hands-on maneuvering
- Self-balancing

Ergonomic control handle: Integration of InteLIFT control module:

- Integral element of the balancer itself
- Simple programming of functions with a keypad and indicator lights
- Easy-to-read display window

Progress is greener with Ingersoll Rand

Zimmerman InteLIFT® Series Balancers
Intelligent Lifting Systems

Control options:

- InteLIFT basic unit, without control
- InteLIFT with pendant control and pre-coil cable
- InteLIFT with force-sensing control (without up / down buttons)
- InteLIFT with pendant control and straight cable

Selection Tips:

- Actual operating capacity is determined by available plant air pressure. Operating capacity decreases 1% for every 1 psi below 100 psi plant air pressure. For example: at 50 psi, a 200 lb capacity balancer has a 100 lb operating capacity (200 X 50%)
- For lifting applications, working load should not exceed 80% of operating capacity
- Working load includes part weight and handling device weight
- IC control option includes force-sensing load cell which must be mounted to end effector for proper operation
- See following page for additional InteLIFT options and complete model driver required to order product
Zimmerman InteLIFT® Series Balancers
Intelligent Lifting Systems

What is InteLIFT?
InteLIFT is an intelligent assist device (IAD); it converts intuitive operator input into smooth, effortless up / down motion. The force-sensing control handle responds to operator input quickly and accurately for precise positioning of loads.

The Ingersoll Rand InteLIFT Balancer

- **Self-balancing** — Intuitive speed control for different weights
- **Hands-on maneuvering** — InteLIFT senses force input of the user and translates that to assisted lifting / lowering of the load without the need for up / down buttons
- **Float mode** — Throughout entire range of motion
- **Robust design** — Electric over air design allows continuous duty with minimal maintenance
- **Part present** — Eliminates potential for accidentally air consumption

Same green features as the Pneumatic Balancer

- **Low air consumption**
- **Clean, oil-free operation**

**Integrated InteLIFT control module:**
- **Simple programming of functions with a keypad and indicator lights**
- **Easy-to-read display window**

**Ergonomic control handle:**
- **Up / down rocker switch**
- **Emergency stop / power off**
- **3-Speed select button**
- **InteLIFT feature selection button**
- **Power connection**
- **On / off circuit breaker switch**
- **UP / DOWN speed indicator lights**
- **Power “ON” indicator light**
- **InteLIFT indicator light**
- **LC display window**
- **Self-balancing**
- **Ergonomic handle**
- **Emergency stop / power off**
- **Up / down rocker switch**
- **Emergency stop / power off**
- **Power connection**
- **On / off circuit breaker switch**
- **UP / DOWN speed indicator lights**
- **Power “ON” indicator light**
- **InteLIFT indicator light**
- **LC display window**
- **Self-balancing**
- **Ergonomic handle**
- **Emergency stop / power off**
- **Up / down rocker switch**
- **Emergency stop / power off**
- **Power connection**
- **On / off circuit breaker switch**
- **UP / DOWN speed indicator lights**
- **Power “ON” indicator light**
- **InteLIFT indicator light**
- **LC display window**

Progress is greener with Ingersoll Rand

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Zimmerman InteLIFT® Series Balancers
Intelligent Lifting Systems

**Control options:**

- **InteLIFT basic unit, without control**
  - Features:
    - No controls
    - Standard InteLIFT features
  - Suitable for:
    - Integration with end effector

- **InteLIFT with pendant control and pre-coil cable**
  - Features:
    - Intuitive ergonomic pendant control handle with up / down rocker switch
    - Precise, high-speed positioning
    - 12 ft (3.7 m) pre-coiled cable including pre-coil air hose for handling device integration
  - Suitable for:
    - High-cycle pick and place
    - Precision assembly

- **InteLIFT with force-sensing control (without up / down buttons)**
  - Features:
    - Intuitive ergonomic force-sensing control
    - Intuitive up / down control
    - 12 ft (3.7 m) pre-coiled cable including pre-coil air hose for handling device integration
  - Suitable for:
    - High-cycle pick and place
    - Precision assembly

- **InteLIFT with pendant control and straight cable**
  - Features:
    - Intuitive ergonomic pendant control handle with up / down rocker switch
    - Precise, high-speed positioning
    - 12 ft (3.7 m) straight electric cable
  - Suitable for:
    - Pick and place
    - Precision assembly

**Selection Tips:**

- Actual operating capacity is determined by available plant air pressure. Operating capacity decreases 1% for every 1 psi below 100 psi plant air pressure. For example, at 50 psi, a 200 lb capacity balancer has a 100 lb operating capacity (200 x 0.5).

- For lifting applications, working load should not exceed 80% of operating capacity.

- Working load includes part weight and handling device weight
- IC control option includes force sensing load cell which must be mounted to end effector for proper operation
- See following page for additional InteLIFT options and complete model driver required to order product.
Zimmerman InteLIFT® Series Balancers

Suspension options:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>6.5” Dia. &gt;150 lb Unit</th>
<th>10” Dia. &gt;300 lb Unit</th>
<th>Competitor Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0</td>
<td>No suspension</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>S1</td>
<td>1/2&quot; steel rod</td>
<td>16000</td>
<td>16442</td>
<td>NA</td>
</tr>
<tr>
<td>S2</td>
<td>3/4&quot; steel rod</td>
<td>16000</td>
<td>16442</td>
<td>NA</td>
</tr>
<tr>
<td>S3</td>
<td>Hook mount</td>
<td>16000</td>
<td>16442</td>
<td>NA</td>
</tr>
<tr>
<td>S4</td>
<td>1/2&quot; x 3&quot; frame</td>
<td>16000</td>
<td>16442</td>
<td>NA</td>
</tr>
<tr>
<td>S5</td>
<td>3/4&quot; x 3&quot; frame</td>
<td>16000</td>
<td>16442</td>
<td>NA</td>
</tr>
<tr>
<td>A1</td>
<td>3/4&quot; aluminum rod</td>
<td>10305</td>
<td>10445</td>
<td>NA</td>
</tr>
<tr>
<td>A2</td>
<td>1&quot; aluminum rod</td>
<td>16305</td>
<td>16445</td>
<td>NA</td>
</tr>
<tr>
<td>A3</td>
<td>1-1/4&quot; aluminum rod</td>
<td>16315</td>
<td>16445</td>
<td>NA</td>
</tr>
<tr>
<td>A4</td>
<td>1-1/4&quot; steel rod</td>
<td>16325</td>
<td>16445</td>
<td>Demag</td>
</tr>
<tr>
<td>A5</td>
<td>1-1/4&quot; steel rod</td>
<td>16335</td>
<td>16445</td>
<td>Demag</td>
</tr>
</tbody>
</table>

Note:
Add 1” (25.4 mm) in length for Z-Stop option. Add 6” (152 mm) for revved units.

Example: IAW020120A21SP

InteLIFT model driver

<table>
<thead>
<tr>
<th>Type</th>
<th>Control IA</th>
<th>Power Cord</th>
<th>Voltage</th>
<th>Z-Stop S</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Power Cord</td>
<td>120=120”</td>
<td>115/200</td>
<td>020=20091</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>None</td>
<td>115V 50/60</td>
<td>115/200</td>
<td>020=20091</td>
<td></td>
</tr>
</tbody>
</table>

Dimensions:

110 lb Balancer
6.5 in (165 mm) diameter can
21” (533 mm) std
5/8” (15.9 mm) std
1/2” (12.7 mm) std

220 lb Balancer
10 in (254 mm) diameter can
21” (533 mm) std
5/8” (15.9 mm) std
1/2” (12.7 mm) std

Voltage option:
- 115V 50/60 Hz single-phase
- 230V 50/60 Hz single-phase

Power cord option:
- 6 ft (1.8 m) power cord

Integration solutions:
A complete range of end effectors can be used with InteLIFT controls for greater efficiency, from the simplest to the most complex device. The InteLIFT unit incorporates a fully grounded, fault-protected electrical system, with fused circuits and memory that automatically minimizes function selections following a power interruption. In every respect, the Ingersoll Rand InteLIFT air balancer is an essential solution for a more productive workplace, empowering individuals to work comfortably and effectively, significantly contributing to product and process quality.

Integrated solutions:

- The closed-loop feedback system delivers precise, responsive motion control suitable for a wide range of applications in:
  - Biotechnology
  - Electronics
  - Aerospace
  - Vehicle assembly
  - General industry
  - Beverage and warehouse

Zimmerman InteLIFT® Series Balancers

Error-proof assembly:
The device digitally displays the weight of the part picked up. Device will not allow the operator to move the part if not clamped properly. The key allows the operator the ability to lock the device. Allows 100% visual inspection of the assembly.

The warehouse-handling device shown is known for its versatility. The device mimics the human motion of picking up a part and placing it down. The same device can be used to pick up parts such as totes, trays, boxes, and milk crates. The self-balance feature allows the same device to pick up parts of different weights and sizes. Order P/N 16010209 in conjunction with IBW015080 InteLIFT balancer.

The engine-handling device shown uses the unique features of the InteLIFT balancer. Features include: auto clamp, interlock, up control disable, weight sensing with automatic alarm, and keyed lockout.
### Zimmerman InteLIFT® Series Balancers

**Suspension options:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>6.5&quot; Dia.</th>
<th>10&quot; Dia.</th>
<th>150 lb Unit</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0</td>
<td>No suspension</td>
<td>16300</td>
<td>16400</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>ZRA1 steel red</td>
<td>16315</td>
<td>16415</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>ZRA1 steel red</td>
<td>16325</td>
<td>16425</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>S7M</td>
<td>Hook mount</td>
<td>16320</td>
<td>16420</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>SH</td>
<td>7, 5, 3&quot; Beam</td>
<td>16305</td>
<td>16405</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>S1T</td>
<td>ZRA1 aluminum red</td>
<td>16330</td>
<td>16430</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>ZRA1 aluminum red</td>
<td>16335</td>
<td>16435</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**Voltage option:**

- 115V 50/60 Hz single phase
- 230V 50/60 Hz single phase

**Power cord option:**

- 6 ft (1.8 m) power cord

### Zimmerman InteLIFT® Series Balancers

**Integrated solutions**

A complete range of end effectors can be used with InteLIFT controls for greater efficiency, from the simplest to the most complex device. The InteLIFT unit incorporates a fully grounded, fault-protected electrical system, with fused circuits and memory that automatically minitates function selections following a power interruption. In every respect, the InteLIFT control unit is an essential solution for a more productive workplace, empowering individuals to work comfortably and effectively, significantly contributing to product and process quality.

The closed-loop feedback system delivers precise, responsive motion control suitable for a wide range of applications in:

- Vehicle assembly
- General industry
- Beverage and warehouse
- Aerospace
- Biotechnology
- Electronics

**Example:**

```
Example: A1W020120A21SP
```

**InteLIFT model driver**

<table>
<thead>
<tr>
<th>Control</th>
<th>Type</th>
<th>Capacity</th>
<th>Travel</th>
<th>Suspension</th>
<th>Voltage</th>
<th>Z-Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA</td>
<td>A</td>
<td>0-200 lb</td>
<td>120&quot;</td>
<td>ZRA2</td>
<td>115V</td>
<td>S=1</td>
</tr>
<tr>
<td>IC</td>
<td>A</td>
<td>0-200 lb</td>
<td>120&quot;</td>
<td>ZRA2</td>
<td>115V</td>
<td>S=1</td>
</tr>
<tr>
<td>IS</td>
<td>A</td>
<td>0-200 lb</td>
<td>120&quot;</td>
<td>ZRA2</td>
<td>115V</td>
<td>S=1</td>
</tr>
</tbody>
</table>

**Dimensions:**

<table>
<thead>
<tr>
<th>150 lb balance</th>
<th>% in (50.8 mm) diameter</th>
<th>200 lb balance</th>
<th>% in (50.8 mm) diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5&quot; dia.</td>
<td>6.5&quot; (165 mm)</td>
<td>10&quot; dia.</td>
<td>10&quot; (254 mm)</td>
</tr>
</tbody>
</table>

**Note:** Add 1" (25.4 mm) for 2-Stop option. Add 4" (101.6 mm) for reversed units.