DESIGNED FOR HIGH QUALITY WELDS AND REDUCED INSTALLATION COSTS

MEDIUM DUTY SPOT WELDING GUNS
16-38 KVA rated @ 50% duty cycle, air operated and water-cooled. Integrated microprocessor-based solid-state digital controls.

FEATURES
- High electrode force allows for smaller dimensions and safer components.
- Transformers meet ISO 5826 standards.
- Accurate maneuverability at any angle is guaranteed by gyro suspension mounted on sealed bearings, coupled with a TECNA balancer.
- Adjustable weld stroke.

HEAVY DUTY SPOT WELDING GUNS
32-75 KVA rated @ 50% duty cycle, air operated and water-cooled. Microprocessor-based solid-state digital controls are available as either integrated or external units.

FEATURES
- Rotation lock features allows locking of multiple axes of motion.
- Long weld stroke enables welding in difficult-to-reach areas, including welding reinforcements and ribs.
- Temporary extra stroke allows reaching into tough spots.
- Lube-free pneumatic circuit eliminates oil mist from your shop environment.
- Lube-free oil-less chromium-plated cylinder and shaft offer a long service life.
- Trigger-handle controls enable selection between 2 welding programs, as well as operation of retraction valve and ‘weld/no-weld’ function.
- High electrical efficiency.
- Copper secondary circuit is completely water-cooled.
- Safety prevents accidental initiation.
- Accepts a broad range of standard and special arms to accommodate special applications. "C" type gun assists in accessing unconventional areas.

OPTIONAL EQUIPMENT
Arms and electrodes (in addition to those listed in this brochure, many special configurations are available to satisfy various requirements).
Various lengths of supply cables/hoses are available at customer request. 50’ is standard length supplied.
Available long-life shielded supply cable.
STANDARD EQUIPMENT

- Suspended Spot Gun with choice of built-in control unit (TE300, TE450 or TE470).
- Integrated earth leakage detection and circuit breaker/GFCI. Must specify voltage and frequency of welder at time of order.
- Integrated Filter-Regulator Unit with gauge.
- Includes 50’ of supply cable and hoses.
- Emergency stop causes operation to cease immediately.

**CONTROL UNIT TE 300** (Standard)

- 2 welding programs with direct recall by toggle switch on trigger handle.
- Pre-weld, slope and impulse functions.
- Single and auto-repeat modes.
- Programming lockout switch with removable key (option 3111).

**CONTROL UNIT TE 450/470**

- 63 welding programs, 2 with direct recall by toggle switch on trigger handle.
  *Additional options available, see below.
- Display of welding current (KA) and conduction angle.
- Constant Current Mode.
- Weld Current or Conduction Angle Limits.
- Stepper Function with programmable curve.
- Automatic retraction stroke function.
- Slope, impulse, pre- and post-weld functions.
- Adjustment of time in half-cycles.
- Weld counter.
- *Trigger handle options include: 1 trigger handle allowing direct selection between 2 programs (included with TE450); 1 trigger handle allowing direct selection between 4 programs (optional, requires TE470); 2 trigger handles, each allowing direct selection between 2 programs, for a total of 4 programs (optional, requires TE470).
ARMS FEATURES WITH LTG-3321

<table>
<thead>
<tr>
<th>L (in)</th>
<th>F*</th>
<th>Set weight (approx.)</th>
<th>Short stroke</th>
<th>Long Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.6 (190)</td>
<td>744 (338)</td>
<td>7.3 (3.3)</td>
<td>0.2 (5)</td>
<td>0.8 (20)</td>
</tr>
<tr>
<td>9.8 (250)</td>
<td>590 (268)</td>
<td>9.5 (4.3)</td>
<td>0.2 (6)</td>
<td>1.0 (25)</td>
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<tr>
<td>13.8 (350)</td>
<td>438 (199)</td>
<td>12.8 (5.8)</td>
<td>0.3 (8)</td>
<td>1.3 (34)</td>
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<tr>
<td>20 (508)</td>
<td>264 (120)</td>
<td>18.7 (8.0)</td>
<td>0.5 (13)</td>
<td>2.2 (56)</td>
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<td>25.6 (650)</td>
<td>249 (113)</td>
<td>23.4 (10.6)</td>
<td>0.6 (15)</td>
<td>2.4 (60)</td>
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<tr>
<td>31.5 (800)</td>
<td>205 (93)</td>
<td>28.7 (13)</td>
<td>0.7 (18)</td>
<td>2.9 (73)</td>
</tr>
</tbody>
</table>

* Electrode force at 87 psi (6 bar)

ARMS FEATURES WITH LTG-3322

<table>
<thead>
<tr>
<th>L (in)</th>
<th>F*</th>
<th>Set weight (approx.)</th>
<th>Short stroke</th>
<th>Long Stroke</th>
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<tbody>
<tr>
<td>7.5 (190)</td>
<td>629 (286)</td>
<td>7.3 (3.3)</td>
<td>0.2 (6)</td>
<td>1.0 (25)</td>
</tr>
<tr>
<td>9.8 (250)</td>
<td>499 (227)</td>
<td>9.5 (4.3)</td>
<td>0.3 (7)</td>
<td>1.2 (30)</td>
</tr>
<tr>
<td>13.8 (350)</td>
<td>397 (168)</td>
<td>12.8 (5.8)</td>
<td>0.4 (10)</td>
<td>1.6 (41)</td>
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<tr>
<td>20 (508)</td>
<td>264 (120)</td>
<td>18.7 (8.0)</td>
<td>0.5 (13)</td>
<td>2.2 (56)</td>
</tr>
<tr>
<td>25.6 (650)</td>
<td>203 (95)</td>
<td>23.4 (10.6)</td>
<td>0.7 (18)</td>
<td>2.8 (72)</td>
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* Electrode force at 87 psi (6 bar)
ARMs FEATURES WITH LTG-3323

<table>
<thead>
<tr>
<th>Part #</th>
<th>lbs (daN)</th>
<th>lbs (kg)</th>
<th>Short stroke</th>
<th>Long Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>4882</td>
<td>660 (300)</td>
<td>7.1 (3.2)</td>
<td>0.2 (5)</td>
<td>1.4 (35)</td>
</tr>
<tr>
<td>4884</td>
<td>660 (300)</td>
<td>8.6 (3.9)</td>
<td>0.2 (5)</td>
<td>1.4 (35)</td>
</tr>
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* Electrode force at 87 psi (6 bar)

ARMs FEATURES WITH LTG-3324

<table>
<thead>
<tr>
<th>Part #</th>
<th>lbs (daN)</th>
<th>lbs (kg)</th>
<th>Short stroke</th>
<th>Long Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>4874</td>
<td>656 (290)</td>
<td>7.5 (3.4)</td>
<td>0.2 (6)</td>
<td>1.4 (35)</td>
</tr>
<tr>
<td>4876</td>
<td>656 (290)</td>
<td>8.9 (4.0)</td>
<td>0.2 (6)</td>
<td>1.4 (35)</td>
</tr>
<tr>
<td>4878</td>
<td>656 (290)</td>
<td>12.5 (5.6)</td>
<td>0.5 (12)</td>
<td>1.9 (48)</td>
</tr>
<tr>
<td>4880</td>
<td>656 (290)</td>
<td>18.3 (8.3)</td>
<td>0.5 (12)</td>
<td>2.6 (65)</td>
</tr>
<tr>
<td>4882</td>
<td>660 (300)</td>
<td>9.9 (4.5)</td>
<td>0.2 (6)</td>
<td>1.4 (35)</td>
</tr>
<tr>
<td>4884</td>
<td>660 (300)</td>
<td>13.8 (6.2)</td>
<td>0.3 (8)</td>
<td>1.3 (34)</td>
</tr>
<tr>
<td>4886</td>
<td>660 (300)</td>
<td>20 (8.7)</td>
<td>0.5 (12)</td>
<td>1.9 (48)</td>
</tr>
<tr>
<td>4888</td>
<td>660 (300)</td>
<td>25.6 (111)</td>
<td>0.6 (15)</td>
<td>3.3 (84)</td>
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* Electrode force at 87 psi (6 bar)
ARMS FEATURES WITH LTG-3327

<table>
<thead>
<tr>
<th>Part #</th>
<th>Part A</th>
<th>Part B</th>
<th>Part C</th>
<th>Part D</th>
<th>Part E</th>
<th>Part F</th>
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<tbody>
<tr>
<td>4750</td>
<td>4756</td>
<td>4762</td>
<td>4768</td>
<td>4774</td>
<td>4752</td>
<td>4758</td>
</tr>
<tr>
<td>4751</td>
<td>4757</td>
<td>4763</td>
<td>4769</td>
<td>4775</td>
<td>4753</td>
<td>4764</td>
</tr>
<tr>
<td>4754</td>
<td>4759</td>
<td>4765</td>
<td>4770</td>
<td>4776</td>
<td>4757</td>
<td>4777</td>
</tr>
<tr>
<td>4758</td>
<td>4760</td>
<td>4766</td>
<td>4771</td>
<td>4778</td>
<td>4764</td>
<td>4778</td>
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* Electrode force at 87 psi (6 bar)

ARMS FEATURES WITH LTG-3328

<table>
<thead>
<tr>
<th>L</th>
<th>in (mm)</th>
<th>10.0 (255)</th>
<th>16.1 (408)</th>
<th>24.0 (610)</th>
<th>32.3 (820)</th>
<th>40.6 (1030)</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Part #</td>
<td>4750</td>
<td>4756</td>
<td>4762</td>
<td>4768</td>
<td>4774</td>
</tr>
<tr>
<td>B</td>
<td>Part #</td>
<td>4752</td>
<td>4758</td>
<td>4764</td>
<td>4770</td>
<td>4776</td>
</tr>
<tr>
<td>C</td>
<td>Part #</td>
<td>4751</td>
<td>4757</td>
<td>4763</td>
<td>4769</td>
<td>4775</td>
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<tr>
<td>D</td>
<td>Part #</td>
<td>4753</td>
<td>4759</td>
<td>4765</td>
<td>4771</td>
<td>4777</td>
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<tr>
<td>E</td>
<td>Part #</td>
<td>4754</td>
<td>4760</td>
<td>4766</td>
<td>4772</td>
<td>–</td>
</tr>
<tr>
<td>F</td>
<td>Part #</td>
<td>–</td>
<td>4761</td>
<td>4767</td>
<td>4773</td>
<td>–</td>
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* Electrode force at 87 psi (6 bar)
<table>
<thead>
<tr>
<th>Specifications</th>
<th>LTG-220</th>
<th>LTG-222</th>
<th>LTG-223</th>
<th>LTG-224</th>
<th>LTG-227</th>
<th>LTG-228</th>
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<tbody>
<tr>
<td><strong>Gun type</strong></td>
<td>L</td>
<td>L</td>
<td>C</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td><strong>Power at 60%</strong></td>
<td>16</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td><strong>Max power</strong></td>
<td>37</td>
<td>65</td>
<td>63</td>
<td>52</td>
<td>110</td>
<td>92</td>
</tr>
<tr>
<td><strong>Short circuit current</strong></td>
<td>16.000</td>
<td>21.000</td>
<td>21.000</td>
<td>16.000</td>
<td>27.000</td>
<td>22.500</td>
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<tr>
<td><strong>Thermal current at 100%</strong></td>
<td>4.000</td>
<td>4.250</td>
<td>4.250</td>
<td>4.250</td>
<td>5.400</td>
<td>5.400</td>
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<tr>
<td><strong>Secondary voltage</strong></td>
<td>2.8</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Supply voltage 60 Hz</strong></td>
<td>440</td>
<td>440</td>
<td>440</td>
<td>440</td>
<td>440</td>
<td>440</td>
</tr>
<tr>
<td><strong>Cable section up to 30 m</strong></td>
<td>10</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>Max electrode force (8 bar)</strong></td>
<td>629 (286)</td>
<td>744 (338)</td>
<td>660 (300)</td>
<td>590 (268)</td>
<td>1529 (695)</td>
<td>1529 (695)</td>
</tr>
<tr>
<td><strong>Working stroke</strong></td>
<td>0.2-1.0 (6-25)</td>
<td>0.2-0.8 (5-20)</td>
<td>0.2-0.8 (5-20)</td>
<td>0.2-1.0 (6-25)</td>
<td>0.4-1.0 (10-26)</td>
<td>0.4-1.0 (10-26)</td>
</tr>
<tr>
<td><strong>Max stroke</strong></td>
<td>1.2-1.9 (30-48)</td>
<td>1.1-1.6 (28-40)</td>
<td>1.4-2.0 (35-50)</td>
<td>1.4-2.0 (35-50)</td>
<td>1.8-2.4 (45-60)</td>
<td>1.8-2.4 (45-60)</td>
</tr>
<tr>
<td><strong>Max electrode force (9 bar)</strong></td>
<td>209 (95)</td>
<td>205 (93)</td>
<td>–</td>
<td>249 (113)</td>
<td>343 (156)</td>
<td>431 (196)</td>
</tr>
<tr>
<td><strong>Working stroke</strong></td>
<td>0.7-2.8 (18-72)</td>
<td>0.7-2.9 (18-73)</td>
<td>–</td>
<td>0.6-2.4 (15-60)</td>
<td>1.6-3.9 (40-100)</td>
<td>1.2-3.0 (30-75)</td>
</tr>
<tr>
<td><strong>Max stroke</strong></td>
<td>3.5-5.5 (90-140)</td>
<td>4.0-5.7 (102-146)</td>
<td>–</td>
<td>3.3-4.7 (84-120)</td>
<td>6.5-8.9 (165-225)</td>
<td>5.1-6.9 (130-175)</td>
</tr>
<tr>
<td><strong>Compressed air supply</strong></td>
<td>94 (6.5)</td>
<td>94 (6.5)</td>
<td>94 (6.5)</td>
<td>94 (6.5)</td>
<td>94 (6.5)</td>
<td>94 (6.5)</td>
</tr>
<tr>
<td><strong>Air per 1000 spots at kP (6 bar)</strong></td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
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<tr>
<td><strong>Hose inside Ø</strong></td>
<td>1.85 (7)</td>
<td>1.85 (7)</td>
<td>2.1 (8)</td>
<td>1.85 (7)</td>
<td>2.1 (8)</td>
<td>2.1 (8)</td>
</tr>
<tr>
<td><strong>Water cooling at 250 kP (2.5 bar)</strong></td>
<td>0.1 + 0.1 (3 + 3)</td>
<td>0.2 + 0.2 (4 + 4)</td>
<td>0.2 + 0.2 (4 + 4)</td>
<td>0.1 + 0.1 (3.5 + 3.5)</td>
<td>0.2 + 0.2 (5 + 5)</td>
<td>0.2 + 0.2 (5 + 5)</td>
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<tr>
<td><strong>Max thickness mild steel sheet</strong></td>
<td>0.07 + 0.07 (1.8 + 1.8)</td>
<td>0.1 + 0.1 (3 + 3)</td>
<td>–</td>
<td>0.1 + 0.1 (3 + 3)</td>
<td>0.1 + 0.1 (3.5 + 3.5)</td>
<td>0.1 + 0.1 (3.5 + 3.5)</td>
</tr>
<tr>
<td><strong>with arms max length</strong></td>
<td>0.05 + 0.05 (1.2 + 1.2)</td>
<td>0.08 + 0.08 (2 + 2)</td>
<td>–</td>
<td>0.08 + 0.08 (2 + 2)</td>
<td>0.08 + 0.08 (2 + 2)</td>
<td>0.1 + 0.1 (2.5 + 2.5)</td>
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<tr>
<td><strong>cross wire Ø max</strong></td>
<td>0.4 + 0.4 (10 + 10)</td>
<td>0.6 + 0.6 (14 + 14)</td>
<td>0.6 + 0.6 (14 + 14)</td>
<td>0.5 + 0.5 (12 + 12)</td>
<td>0.6 + 0.6 (16 + 16)</td>
<td>0.6 + 0.6 (16 + 16)</td>
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<tr>
<td><strong>Welding rate per minute</strong></td>
<td>0.04 + 0.04 in (1 + 1 mm) class A</td>
<td>66</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td><strong>0.06 + 0.06 in (1.5 + 1.5 mm) class A</strong></td>
<td>–</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td><strong>0.08 + 0.08 in (2 + 2 mm) class A</strong></td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>0.1 + 0.1 in (2.5 + 2.5 mm) class A</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td><strong>0.1 + 0.1 in (3 + 3 mm) class B</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>Net weight</strong></td>
<td>101 (46)</td>
<td>115 (52)</td>
<td>117 (53)</td>
<td>121 (55)</td>
<td>168 (76)</td>
<td>172 (78)</td>
</tr>
<tr>
<td>(with cables, hoses, suspension and shortest arms)</td>
<td>lbs (kg)</td>
<td>lbs (kg)</td>
<td>lbs (kg)</td>
<td>lbs (kg)</td>
<td>lbs (kg)</td>
<td>lbs (kg)</td>
</tr>
<tr>
<td><strong>Packaging dimensions</strong></td>
<td>15 x 33.5 x 21.7 (380 x 850 x 550)</td>
<td>15 x 33.5 x 21.7 (380 x 850 x 550)</td>
<td>13 x 44.1 x 24.8 (330 x 120 x 630)</td>
<td>13 x 44.1 x 24.8 (330 x 120 x 630)</td>
<td>28.9 x 41 x 197 (760 x 1050 x 500)</td>
<td>28.9 x 41 x 197 (760 x 1050 x 500)</td>
</tr>
<tr>
<td><strong>Spring balancer</strong></td>
<td>99-121 (45-55)</td>
<td>121-143 (55-65)</td>
<td>121-143 (55-65)</td>
<td>121-143 (55-65)</td>
<td>165-198 (75-90)</td>
<td>165-198 (75-90)</td>
</tr>
<tr>
<td><strong>short arms capacity required</strong></td>
<td>121-143 (55-65)</td>
<td>143-165 (65-75)</td>
<td>–</td>
<td>143-165 (65-75)</td>
<td>198-231 (90-100)</td>
<td>198-231 (90-105)</td>
</tr>
</tbody>
</table>

* 220V also available, other voltage/frequency combinations available

Specifications subject to change without notice.
<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>LTG-3020</th>
<th>LTG-3024</th>
<th>LTG-3032</th>
<th>LTG-3040</th>
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<tbody>
<tr>
<td>Gun type</td>
<td>C</td>
<td>C</td>
<td>CG</td>
<td>CG</td>
</tr>
<tr>
<td>Power at 50% kVA</td>
<td>32</td>
<td>36</td>
<td>53</td>
<td>60</td>
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<tr>
<td>Max power kVA</td>
<td>90</td>
<td>115</td>
<td>150</td>
<td>192</td>
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<tr>
<td>Short circuit current kA</td>
<td>20</td>
<td>22.8</td>
<td>26.5</td>
<td>30</td>
</tr>
<tr>
<td>Thermal current at 100% kA</td>
<td>4</td>
<td>4</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Secondary voltage V</td>
<td>5.6</td>
<td>6.3</td>
<td>7.1</td>
<td>8</td>
</tr>
<tr>
<td>Supply voltage 60 Hz * V</td>
<td>440</td>
<td>440</td>
<td>440</td>
<td>440</td>
</tr>
<tr>
<td>Cable section up to 30 m mm²</td>
<td>16</td>
<td>16</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Delayed fuses @ 440 vac A</td>
<td>63</td>
<td>63</td>
<td>100</td>
<td>125</td>
</tr>
<tr>
<td>Arms centerline distance in (mm)</td>
<td>5.6 (140)</td>
<td>5.5 (140)</td>
<td>5.8 (148)</td>
<td>5.8 (148)</td>
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<tr>
<td>Insulated arms connection Ø in (mm)</td>
<td>1.7 (42)</td>
<td>1.7 (42)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
</tr>
<tr>
<td>Non insulated arms connection Ø in (mm)</td>
<td>1.7 (44)</td>
<td>1.7 (44)</td>
<td>1.9 (49)</td>
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<tr>
<td>Ø gyro suspension in (mm)</td>
<td>9.6 (244)</td>
<td>9.6 (244)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
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<tr>
<td>Arms min. length in (mm)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Max electrode force (8 bar) lbs (daN)</td>
<td>1100 (500)</td>
<td>1100 (500)</td>
<td>1364 (620)</td>
<td>1364 (620)</td>
</tr>
<tr>
<td>Working stroke in (mm)</td>
<td>0.2-1.2 (5-30)</td>
<td>0.2-1.2 (5-30)</td>
<td>0.2-1.2 (5-30)</td>
<td>0.2-1.2 (5-30)</td>
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<tr>
<td>Max stroke in (mm)</td>
<td>3.0-3.9 (75-100)</td>
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<tr>
<td>Arms max length in (mm)</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Max electrode force (8 bar) daN</td>
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<tr>
<td>Working stroke in (mm)</td>
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<tr>
<td>Max stroke in (mm)</td>
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<td>–</td>
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<tr>
<td>Compressed air supply psi (bar)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
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<tr>
<td>Air per 1000 spots</td>
<td>Nm/1/B bar</td>
<td>Nm/1/B bar</td>
<td>Nm/1/B bar</td>
<td>Nm/1/B bar</td>
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<tr>
<td>Short stroke</td>
<td>4</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Long stroke</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>15</td>
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<tr>
<td>Ø supply hose in (mm)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
<td>0.4 (10)</td>
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<tr>
<td>Water cooling gpm (lpm)</td>
<td>1.7 (6)</td>
<td>1.7 (6)</td>
<td>1.7 (6)</td>
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<tr>
<td>Max thickness mild steel sheet with arms min length in/class</td>
<td>0.1 + 0.1/B (3 + 3/B)</td>
<td>0.1 + 0.1/B (3 + 3/B)</td>
<td>0.2 + 0.2/B (4 + 4/B)</td>
<td>0.1 + 0.1/B (4 + 4/B)</td>
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<tr>
<td>with arms L = 20 in (508 mm) in/class</td>
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<tr>
<td>with arms max length in/mm/class</td>
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<td>–</td>
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<tr>
<td>cross wire max Ø in (mm)</td>
<td>0.5 (14)</td>
<td>0.6 (16)</td>
<td>0.7 (18)</td>
<td>0.8 (20)</td>
</tr>
<tr>
<td>Welding rate per 1/Welding class N/mm²/class</td>
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<td>70/A</td>
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<tr>
<td>0.04 + 0.04 in (1 + 1 mm)</td>
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<td>30/A</td>
<td>50/A</td>
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<tr>
<td>0.06 + 0.06 in (1.5 + 1.5 mm)</td>
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<td>25/B</td>
<td>25/B</td>
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<td>0.08 + 0.08 in (2 + 2 mm)</td>
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<td>17/B</td>
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<tr>
<td>0.1 + 0.1 in (2.5 + 2.5 mm)</td>
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<td>10/B</td>
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<td>0.1 + 0.1 in (3 + 3 mm)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Net weight lbs (kg)</td>
<td>112 (51)</td>
<td>117 (53)</td>
<td>157 (71)</td>
<td>165 (75)</td>
</tr>
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<td>Balancer: short arms part #</td>
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<td>9413</td>
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</table>

* Other voltage/frequency combinations are available

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**Heavy Duty**

**LTG-3024**

**ARMS FOR LTG-3020, LTG-3024, LTG-3032, LTG-3040**

- LTG-3032, 3040
  - Part # B 4411

Custom arm configurations available
SPECIFICATIONS LTG- 3154 3160 3166 3156 3162 3168

<table>
<thead>
<tr>
<th>Gun type</th>
<th>LTG-3154</th>
<th>LTG-3160</th>
<th>LTG-3166</th>
<th>LTG-3156</th>
<th>LTG-3162</th>
<th>LTG-3168</th>
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<tbody>
<tr>
<td>Power at 50% kVA</td>
<td>53</td>
<td>60</td>
<td>75</td>
<td>53</td>
<td>60</td>
<td>75</td>
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<td>Maximum power kVA</td>
<td>147</td>
<td>192</td>
<td>90</td>
<td>110</td>
<td>90</td>
<td>256</td>
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<td>Short circuit current kA</td>
<td>26</td>
<td>30</td>
<td>20</td>
<td>22</td>
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<td>32</td>
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<td>Thermal current at 100% kA</td>
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<td>5.3</td>
<td>5.3</td>
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<tr>
<td>Secondary voltage V</td>
<td>7.1</td>
<td>8</td>
<td>5.6</td>
<td>6.3</td>
<td>5.6</td>
<td>10</td>
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<tr>
<td>Supply voltage 60 Hz V</td>
<td>440</td>
<td>440</td>
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<td>440</td>
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<tr>
<td>Cable section up to 30 m mm²</td>
<td>25</td>
<td>25</td>
<td>35</td>
<td>25</td>
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<td>35</td>
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<td>Delayed fuses @ 440 vac A</td>
<td>100</td>
<td>125</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>150</td>
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<tr>
<td>Arms spacing in (mm)</td>
<td>8.6 (219)</td>
<td>8.6 (219)</td>
<td>8.6 (219)</td>
<td>12.3 (312)</td>
<td>12.3 (312)</td>
<td>12.3 (312)</td>
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<tr>
<td>Insulated arms connection Ø in (mm)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
<td>1.9 (47)</td>
</tr>
<tr>
<td>Non insulated arms connection Ø in (mm)</td>
<td>1.9 (49)</td>
<td>1.9 (49)</td>
<td>1.9 (49)</td>
<td>1.9 (49)</td>
<td>1.9 (49)</td>
<td>1.9 (49)</td>
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<tr>
<td>Ø gyro suspension in (mm)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
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<tr>
<td>Arms min. length in (mm)</td>
<td>10.0 (255)</td>
<td>10.0 (255)</td>
<td>10.0 (255)</td>
<td>10.0 (255)</td>
<td>10.0 (255)</td>
<td>10.0 (255)</td>
</tr>
<tr>
<td>Max electrode force (8 bar) in (mm)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
</tr>
<tr>
<td>Max stroke in (mm)</td>
<td>2.0-2.8 (50-70)</td>
<td>2.0-2.8 (50-70)</td>
<td>2.0-2.8 (50-70)</td>
<td>2.0-2.8 (50-70)</td>
<td>2.0-2.8 (50-70)</td>
<td>2.0-2.8 (50-70)</td>
</tr>
<tr>
<td>Max stroke in (mm)</td>
<td>0.2-2.8 (5-60)</td>
<td>0.2-2.8 (5-60)</td>
<td>0.2-2.8 (5-60)</td>
<td>0.2-2.8 (5-60)</td>
<td>0.2-2.8 (5-60)</td>
<td>0.2-2.8 (5-60)</td>
</tr>
<tr>
<td>Working stroke in (mm)</td>
<td>0.1 + 0.1/B</td>
<td>0.1 + 0.1/B</td>
<td>0.1 + 0.1/B</td>
<td>0.1 + 0.1/B</td>
<td>0.1 + 0.1/B</td>
<td>0.1 + 0.1/B</td>
</tr>
<tr>
<td>Working stroke in (mm)</td>
<td>0.2-0.8/B</td>
<td>0.2-0.8/B</td>
<td>0.2-0.8/B</td>
<td>0.2-0.8/B</td>
<td>0.2-0.8/B</td>
<td>0.2-0.8/B</td>
</tr>
<tr>
<td>Compressed air supply psi (bar)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
<td>116 (8)</td>
</tr>
<tr>
<td>Air per 1000 spots short stroke Nm³/Y bar</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Air supply hose in (mm)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
<td>0.5 (13)</td>
</tr>
<tr>
<td>Water cooling gpm (lpm)</td>
<td>2.2 (8)</td>
<td>2.2 (8)</td>
<td>2.2 (8)</td>
<td>2.2 (8)</td>
<td>2.2 (8)</td>
<td>2.2 (8)</td>
</tr>
<tr>
<td>Max thickness mild steel sheet in/mm class</td>
<td>0.1 + 0.1/B (4.4 + 4.8/B)</td>
<td>0.1 + 0.1/B (4.4 + 4.8/B)</td>
<td>0.2 + 0.2/B (8.4 + 8.8/B)</td>
<td>0.2 + 0.2/B (8.4 + 8.8/B)</td>
<td>0.2 + 0.2/B (8.4 + 8.8/B)</td>
<td>0.2 + 0.2/B (8.4 + 8.8/B)</td>
</tr>
<tr>
<td>with arms L = 20 in (508 mm) in/mm class</td>
<td>0.1 + 0.1/B (2.8 + 2.8/B)</td>
<td>0.1 + 0.1/B (2.8 + 2.8/B)</td>
<td>0.2 + 0.2/B (5.6 + 5.6/B)</td>
<td>0.2 + 0.2/B (5.6 + 5.6/B)</td>
<td>0.2 + 0.2/B (5.6 + 5.6/B)</td>
<td>0.2 + 0.2/B (5.6 + 5.6/B)</td>
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<tr>
<td>with arms max length in/mm class</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
<td>0.1 + 0.1/C (3 + 3/C)</td>
</tr>
<tr>
<td>cross wire max Ø in (mm)</td>
<td>0.7 (18)</td>
<td>0.7 (18)</td>
<td>0.8 (20)</td>
<td>0.8 (20)</td>
<td>0.8 (20)</td>
<td>0.8 (20)</td>
</tr>
<tr>
<td>Welding rate per 1/Welding class D0.4 + 0.04 in (1 + 1 mm) N/class</td>
<td>125/A</td>
<td>125/A</td>
<td>125/A</td>
<td>125/A</td>
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<tr>
<td>D0.6 + 0.06 in (1.5 + 1.5 mm) N/class</td>
<td>50/A</td>
<td>50/A</td>
<td>50/A</td>
<td>50/A</td>
<td>50/A</td>
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<tr>
<td>D0.8 + 0.08 in (2 + 2 mm) N/class</td>
<td>25/B</td>
<td>25/B</td>
<td>25/B</td>
<td>25/B</td>
<td>25/B</td>
<td>25/B</td>
</tr>
<tr>
<td>D0.1 + 0.1 in (2.5 + 2.5 mm) N/class</td>
<td>17/A</td>
<td>17/A</td>
<td>17/A</td>
<td>17/A</td>
<td>17/A</td>
<td>17/A</td>
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<tr>
<td>D0.1 + 0.1 in (3 + 3 mm) N/class</td>
<td>10/A</td>
<td>10/A</td>
<td>10/A</td>
<td>10/A</td>
<td>10/A</td>
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<tr>
<td>Net weight lbs (kg)</td>
<td>172 (78)</td>
<td>181 (82)</td>
<td>192 (87)</td>
<td>174 (79)</td>
<td>183 (83)</td>
<td>183 (83)</td>
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<tr>
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<td>9422</td>
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<td>9414</td>
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* Other voltage/frequency combinations are available

Custom arm configurations available

Specifications subject to change without notice.
DIMENSIONS FOR LTG-3020, LTG-3024, LTG-3032, LTG-3040

<table>
<thead>
<tr>
<th>LTG</th>
<th>3020 in (mm)</th>
<th>3024 in (mm)</th>
<th>3032 in (mm)</th>
<th>3040 in (mm)</th>
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<tbody>
<tr>
<td>A</td>
<td>5.5 (140)</td>
<td>5.5 (140)</td>
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<td>5.8 (148)</td>
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<tr>
<td>B</td>
<td>8.7 (220)</td>
<td>8.7 (220)</td>
<td>9.1 (230)</td>
<td>9.1 (230)</td>
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<tr>
<td>C</td>
<td>24.8 (630)</td>
<td>24.8 (630)</td>
<td>25.2 (640)</td>
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<tr>
<td>D</td>
<td>34.6 (880)</td>
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<td>35.8 (910)</td>
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<tr>
<td>E</td>
<td>39.0 (990)</td>
<td>39.0 (990)</td>
<td>40.4 (1025)</td>
<td>40.4 (1025)</td>
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<tr>
<td>F</td>
<td>15.9 (405)</td>
<td>15.9 (405)</td>
<td>17.3 (440)</td>
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<td>G</td>
<td>16.3 (415)</td>
<td>16.3 (415)</td>
<td>18.5 (470)</td>
<td>18.5 (470)</td>
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<tr>
<td>H</td>
<td>38.2 (970)</td>
<td>38.2 (970)</td>
<td>39.2 (995)</td>
<td>39.2 (995)</td>
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<tr>
<td>I</td>
<td>33.4 (848)</td>
<td>33.4 (848)</td>
<td>33.4 (848)</td>
<td>33.4 (848)</td>
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<tr>
<td>L</td>
<td>9.6 (244)</td>
<td>9.6 (244)</td>
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<td>M</td>
<td>16.1 (410)</td>
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Custom arm configurations available

Specifications subject to change without notice.

DIMENSIONS FOR LTG-3154, LTG-3160, LTG-3166, LTG-3156, LTG-3162, LTG-3168

<table>
<thead>
<tr>
<th>LTG</th>
<th>3154 in (mm)</th>
<th>3160 in (mm)</th>
<th>3166 in (mm)</th>
<th>3156 in (mm)</th>
<th>3162 in (mm)</th>
<th>3168 in (mm)</th>
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<tr>
<td>A</td>
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<td>8.7 (220)</td>
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</tr>
<tr>
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<td>21.7 (552)</td>
<td>22.4 (570)</td>
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<tr>
<td>D</td>
<td>34.3 (870)</td>
<td>34.3 (870)</td>
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<td>E</td>
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<td>38.2 (970)</td>
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<td>F</td>
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<td>16.9 (430)</td>
<td>16.9 (430)</td>
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<tr>
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<td>19.7 (500)</td>
<td>19.7 (500)</td>
<td>19.7 (500)</td>
<td>19.7 (500)</td>
<td>23.4 (595)</td>
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<tr>
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<td>39.2 (995)</td>
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<td>I</td>
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<td>33.4 (848)</td>
<td>33.4 (848)</td>
<td>33.4 (848)</td>
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<tr>
<td>L</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
<td>11.6 (294)</td>
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</tr>
<tr>
<td>M</td>
<td>19.3 (490)</td>
<td>19.3 (490)</td>
<td>19.3 (490)</td>
<td>23.0 (585)</td>
<td>23.0 (585)</td>
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Custom arm configurations available

Specifications subject to change without notice.
### SPRING BALancers

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<tr>
<th>Part #</th>
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<th>weight lbs (kg)</th>
<th>packaging lbs (kg)</th>
<th>in (mm)</th>
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<tr>
<td>9412BR</td>
<td>154 - 176</td>
<td>61 (27.6)</td>
<td>68 (31)</td>
<td>23.6 x 12.6 x 13 (600 x 320 x 330)</td>
</tr>
<tr>
<td>9413BR</td>
<td>175 - 198</td>
<td>63 (28.8)</td>
<td>71 (32)</td>
<td>23.6 x 12.6 x 13 (600 x 320 x 330)</td>
</tr>
<tr>
<td>9422BR</td>
<td>220 - 265</td>
<td>85 (38.7)</td>
<td>94 (42.5)</td>
<td>23.6 x 12.6 x 13 (600 x 320 x 330)</td>
</tr>
</tbody>
</table>

Option “R”, lower swivel type hook.
Option “B”, lock control from the floor.

### BALancers

<table>
<thead>
<tr>
<th>Part #</th>
<th>load range</th>
<th>weight lbs (kg)</th>
<th>packaging lbs (kg)</th>
<th>in (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9367BR</td>
<td>99 - 121</td>
<td>28 (12.5)</td>
<td>32 (14.5)</td>
<td>17.9 x 10.6 x 11 (455 x 270 x 280)</td>
</tr>
<tr>
<td>9368BR</td>
<td>121 - 143</td>
<td>30 (13.6)</td>
<td>34 (15.6)</td>
<td>17.9 x 10.6 x 11 (455 x 270 x 280)</td>
</tr>
<tr>
<td>9369BR</td>
<td>143 - 165</td>
<td>32 (14.5)</td>
<td>36 (16.5)</td>
<td>17.9 x 10.6 x 11 (455 x 270 x 280)</td>
</tr>
</tbody>
</table>

Option “R”, lower swivel type hook.
Option “B”, lock control from the floor.

<table>
<thead>
<tr>
<th>Part #</th>
<th>load range</th>
<th>weight lbs (kg)</th>
<th>packaging lbs (kg)</th>
<th>in (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9370BR</td>
<td>165 - 198</td>
<td>38 (17.3)</td>
<td>42 (19)</td>
<td>17.9 x 10.6 x 11 (455 x 270 x 280)</td>
</tr>
<tr>
<td>9371BR</td>
<td>198 - 232</td>
<td>40 (18)</td>
<td>44 (20)</td>
<td>17.9 x 10.6 x 11 (455 x 270 x 280)</td>
</tr>
</tbody>
</table>

Option “R”, lower swivel type hook.
Option “B”, lock control from the floor.
## CONTROL UNITS TE 300 & TE 450/470

<table>
<thead>
<tr>
<th>Available Parameters</th>
<th>TE 300</th>
<th>TE 450/470</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squeeze 1</td>
<td>00 - 99 ~</td>
<td>00 - 99 ~</td>
</tr>
<tr>
<td>Squeeze</td>
<td>01 - 99 ~</td>
<td>01 - 99 ~</td>
</tr>
<tr>
<td>Pre-weld</td>
<td>00 - 60 ~</td>
<td>00.0 - 99.0 ~</td>
</tr>
<tr>
<td>Pre-power</td>
<td>01 - 99%</td>
<td>05 - 99%</td>
</tr>
<tr>
<td>Cold 1</td>
<td>00 - 50 ~</td>
<td>00 - 50 ~</td>
</tr>
<tr>
<td>Slope up</td>
<td>00 - 29 ~</td>
<td>00 - 25 ~</td>
</tr>
<tr>
<td>Weld 1</td>
<td>01 - 60 ~</td>
<td>00.5 - 99.5 ~</td>
</tr>
<tr>
<td>Power 1</td>
<td>01 - 99%</td>
<td>05 - 99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.0 - 36.0 kA</td>
</tr>
<tr>
<td># of Impulses</td>
<td>01 - 09</td>
<td>01 - 09</td>
</tr>
<tr>
<td>Cold 2</td>
<td>--</td>
<td>00 - 50 ~</td>
</tr>
<tr>
<td>Slope down</td>
<td>--</td>
<td>00 - 25 ~</td>
</tr>
<tr>
<td>Cold 3</td>
<td>--</td>
<td>00 - 50 ~</td>
</tr>
<tr>
<td>Post-weld</td>
<td>--</td>
<td>00.0 - 99.0 ~</td>
</tr>
<tr>
<td>Post-power</td>
<td>--</td>
<td>05 - 99%</td>
</tr>
<tr>
<td>Hold time</td>
<td>01 - 99 ~</td>
<td>01 - 99 ~</td>
</tr>
<tr>
<td>Off time</td>
<td>00 - 98/99 ~</td>
<td>00 - 99 ~</td>
</tr>
<tr>
<td>Current min</td>
<td>--</td>
<td>1.0 - 36.00 kA</td>
</tr>
<tr>
<td>Angle min</td>
<td>--</td>
<td>005 - 180°</td>
</tr>
<tr>
<td>Current max</td>
<td>--</td>
<td>1.0 - 36.0 kA</td>
</tr>
<tr>
<td>Angle max</td>
<td>--</td>
<td>005 - 180°</td>
</tr>
<tr>
<td>Pressure</td>
<td>--</td>
<td>0.5 - 10.0 bar</td>
</tr>
</tbody>
</table>

*All times are given in cycles.*