LN-15 Wire Feeder

Portable, Semiautomatic Wire Feeder

The LN-15 is one of the smallest and most maneuverable wire feeders for the construction, shipbuilding and pipeline industries. It uses a high temperature, abrasion resistant plastic case, aluminum alloy roll cage and fully encapsulated PC boards.

The LN-15 is available in both Across-The-Arc and Control Cable versions. Both offer outstanding welding performance on a wide variety of steel, stainless steel, aluminum and alloy materials.

Advantage Lincoln

Performance:
• Both models are designed for MIG, Pulsed MIG, Flux-Cored and Metal-Cored welding processes using lightweight 8" (203 mm) diameter spools. The Control Cable version is also designed for the STT® (Surface Tension Transfer®) process.
• Maxtrac® wire drive system easily feeds .023"-.052" (0.6 - 1.3 mm) solid and .035"-5/64" (0.9 - 2.0 mm) cored wires.
• Compact unit fits easily through 14" (356 mm) diameter manhole/manway.
• Manufactured under a quality system certified to ISO 9001 requirements.
• Three-year warranty on parts and labor.

Simple Controls:
• Bright LED digital meters are easy to read in adverse lighting conditions.

Professional Features:
• Adjustable carrying strap makes it easy to carry and hang.
• Fully enclosed molded case is heat, spatter and impact resistant.
• Double latch case seals tight to protect drive system and wire from dirt, dust and rain.
• Full body aluminum roll cage provides sturdy impact protection and all-around handles for easy portability.

Base Unit Includes:
• K1500-2 Gun Receiver Bushing.
• Carrying Strap.
• Spindle Adapter for 8″ O.D. Spools.
• Standard contactor with Across-The-Arc model.

Required Options:
• Magnum® Gun and Cable Assembly
• Drive Roll Kit
• Separate Control Cable -10 ft. (Control Cable Model only)

Technical Specifications

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Number</th>
<th>Input Power</th>
<th>Rated Output Current/Voltage/Duty Cycle</th>
<th>Wire Feed Speed Range (ipm / m/min.)</th>
<th>Wire Size Range (Solid / Cored)</th>
<th>Dimensions (H x W x D inches (mm))</th>
<th>Net Weight (lbs.(kg))</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN-15 Across-The-Arc</td>
<td>K1870-1</td>
<td>10-110 VDC</td>
<td>350A/80%</td>
<td>50-700 (1.3-17.8)</td>
<td>.023-.052 (0.6-1.3) / .035-5/64 (0.9-2.0)</td>
<td>12.7 x 8.7 x 23 (356 x 188 x 533)</td>
<td>30 (15.4)</td>
</tr>
<tr>
<td>LN-15 Control Cable</td>
<td>K1871-1</td>
<td>42 VAC</td>
<td>500A/80%</td>
<td></td>
<td></td>
<td>5.7 x 5.7 x 11.8 (145 x 145 x 299)</td>
<td>28 (12.7)</td>
</tr>
</tbody>
</table>

Control Cable Model Only.
PERFORMANCE

**Patented Dual Spring Pressure Arm**
- Easy turn numeric tension handle and pressure indicator.
- Set heavy tension for steel and stainless.
- Set moderate tension for cored wires.
- Set soft tension for aluminum.
- Wide idler arm hinge delivers improved drive roll clamping pressure.

**New Patent-Pending Drive Rolls**
- For steel - new design delivers 20% more feeding force.
- For aluminum - chrome plated to resist build-up.

**Patented Split Wire Guides**
- Full support for wire throughout the drive path.
- Removable outer wire guide for easy access.
- No tools required.
- No birdnesting.

**Brass to Brass Interchangeable Gun Bushings**
- More reliable electrical conductivity – no oxide build-up.
- More efficient energy transfer – lower voltage drops.
- Easily adapt any number of Lincoln Magnum® or competitive guns.

**Rigid Cast Aluminum Frame**
- Enhances precise drive roll alignment.

**Twist-Lock Drive Roll Hubs**
- Fast, tool-less changeovers.

**Built-in Flowmeter**

**Cold Feed / Gas Purge Switch**

**Two-Step Trigger Interlock**
- Separate Drive Gear (not shown)
- Reduces pressure on motor for extended service life.

* Drive rolls and wire guide not included.
A CLOSER LOOK

QUALITY AND RELIABILITY

Strong
• Sturdy aluminum roll cage protects feeder from damage.

Durable
• Fully enclosed molded case is heat, spatter, and impact resistant.

Protected
• Fully encapsulated “potted and trayed” PC Boards protect internal systems from heat and humidity.


Control Cable Model (K1871-1)
• Connect a Control Cable (K1819-10) and the electrode welding cable between the power source and the feeder. Features wire feed speed and voltage control on the front of the unit.

Across-The-Arc Model (K1870-1)
• Operates across the arc with a DC power source supplying between 15 VDC and 110 VDC. Simply connect the voltage sense lead to the work, then connect the LN-15 to the electrode cable.

1. Digital Wire Feed Speed Meter
2. Wire Speed Control Knob
3. 5-pin Trigger Connection
4. Gun Connection
5. Voltage Control Knob (Control Cable Model Only)
6. Digital Voltage Meter
7. Sensing Lead (Across-The-Arc Model Only)
8. Power On/Off Switch
Across-The-Arc Set-Up

Typically used for general fabrication, maintenance and repair jobs because it's easy to set up and operate. Requires only one electrical cable to the feeder – less to carry. Internal contactor standard on Across-The-Arc model.

**NOTE:**
A constant voltage (CV) power source is recommended for flux-cored arc welding (FCAW) and gas metal arc welding (GMAW) to obtain code quality results. The LN-15 may be used with a constant current (CC) power source for non-critical applications where weld quality and deposition properties are not critical.
Control Cable Set-up

Typically used for work on ships, buildings, bridges and pipelines where precision and quality are critical. Wire feed and voltage adjustment are done at the feeder for convenience at the job site.

NOTE:
For applications requiring cable lengths greater than 10 ft., use control cable extension K1797-10, K1797-25 or K1797-50.
A CLOSER LOOK

FEED PLATE GUN RECEIVER BUSHINGS

<table>
<thead>
<tr>
<th>K1500-1 Gun Receiver Bushing (Optional)</th>
<th>K1500-2 Gun Receiver Bushing (Standard)</th>
<th>K1500-3 Gun Receiver Bushing (Optional)</th>
<th>K489-7 Fast Mate™ Gun Receiver Bushing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Magnum® 200, 300 and 400 gun and cable assemblies with K466-1 connector kit.</td>
<td>• Magnum® 200 and 400 fully assembled guns (K497-2x and K471-2x), see below.</td>
<td>• Magnum® 550 gun and cable assembly with K613-7 connector.</td>
<td>• Magnum® gun and cable assemblies with Fast Mate connections.</td>
</tr>
<tr>
<td>• Lincoln Innershield® gun and cable assembly</td>
<td>• Magnum® 200, 300 and 400 gun and cable assemblies with K466-10 connector kit.</td>
<td>• Guns with Tweco® #2, #3, and #4 connectors.</td>
<td>• Handles both single and dual procedure guns.</td>
</tr>
<tr>
<td>• Fast-Mate™ gun and cable assembly with K489-2 Fast-Mate™ adapter kit.</td>
<td>• Guns with Tweco® #2, #3, and #4 connectors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Magnum® 550 gun and cable assembly with K613-1 connector kit.</td>
<td></td>
<td></td>
<td></td>
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</table>

DRIVE ROLL & WIRE GUIDE KITS

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Wire Sizes (includes stainless steel):</td>
<td></td>
</tr>
<tr>
<td>.023-.030” (0.6-0.8 mm)</td>
<td>KP1696-030S</td>
</tr>
<tr>
<td>.035” (0.9 mm)</td>
<td>KP1696-035S</td>
</tr>
<tr>
<td>.040” (1.0 mm)</td>
<td>KP1696-040S</td>
</tr>
<tr>
<td>.045” (1.2 mm)</td>
<td>KP1696-045S</td>
</tr>
<tr>
<td>.052” (1.4 mm)</td>
<td>KP1696-052S</td>
</tr>
<tr>
<td>Cored Wire Sizes:</td>
<td></td>
</tr>
<tr>
<td>.030-.035” (0.8-0.9 mm)</td>
<td>KP1697-035C</td>
</tr>
<tr>
<td>.040-.045” (1.0-1.2 mm)</td>
<td>KP1697-045C</td>
</tr>
<tr>
<td>.052” (1.4 mm)</td>
<td>KP1697-052C</td>
</tr>
<tr>
<td>1/16” (1.6 mm)</td>
<td>KP1697-1/16C</td>
</tr>
<tr>
<td>Solid Steel or Cored Wire Sizes:</td>
<td></td>
</tr>
<tr>
<td>.068”-.072” (1.7 mm - 1.9 mm)</td>
<td>KP1697-068</td>
</tr>
<tr>
<td>5/64” (2.0 mm)</td>
<td>KP1697-5/64</td>
</tr>
<tr>
<td>Aluminum Wire Sizes:</td>
<td></td>
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<tr>
<td>.035” (0.9 mm)</td>
<td>KP1695-035A</td>
</tr>
<tr>
<td>.040” (1.0 mm)</td>
<td>KP1695-040A</td>
</tr>
<tr>
<td>3/64” (1.2 mm)</td>
<td>KP1695-3/64A</td>
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</table>

WELD POWER CABLES

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
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</thead>
<tbody>
<tr>
<td>Twist-Mate™ to Lug:</td>
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</tr>
<tr>
<td>1/0, 350A, 60% duty cycle, 10 ft.</td>
<td>K1840-10</td>
</tr>
<tr>
<td>Twist-Mate™ to Twist-Mate:</td>
<td></td>
</tr>
<tr>
<td>1/0, 350A, 60% duty cycle, 25 ft.</td>
<td>K1841-25</td>
</tr>
<tr>
<td>2/0, 350A, 60% duty cycle, 50 ft.</td>
<td>K1841-50</td>
</tr>
<tr>
<td>Lug to Lug:</td>
<td></td>
</tr>
<tr>
<td>3/0, 600A, 60% duty cycle, 10 ft.</td>
<td>K1842-10</td>
</tr>
<tr>
<td>3/0, 600A, 60% duty cycle, 35 ft.</td>
<td>K1842-35</td>
</tr>
<tr>
<td>3/0, 600A, 60% duty cycle, 60 ft.</td>
<td>K1842-60</td>
</tr>
<tr>
<td>4/0, 600A, 60% duty cycle, 110 ft.</td>
<td>K1842-110</td>
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</table>

COAXIAL WELD POWER CABLES

<table>
<thead>
<tr>
<th>Length ft. (m)</th>
<th>Amperage</th>
<th>Duty Cycle</th>
<th>AWG</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 (7.6)</td>
<td>250</td>
<td>100%</td>
<td>#1</td>
<td>K2593-25</td>
</tr>
<tr>
<td>300</td>
<td>250</td>
<td>100%</td>
<td>#1</td>
<td>K2593-25</td>
</tr>
<tr>
<td>350</td>
<td>350</td>
<td>60%</td>
<td>1/0</td>
<td>K1796-25</td>
</tr>
<tr>
<td>50 (15.2)</td>
<td>250</td>
<td>100%</td>
<td>#1</td>
<td>K2593-50</td>
</tr>
<tr>
<td>300</td>
<td>250</td>
<td>100%</td>
<td>#1</td>
<td>K2593-50</td>
</tr>
<tr>
<td>350</td>
<td>350</td>
<td>60%</td>
<td>1/0</td>
<td>K1796-50</td>
</tr>
<tr>
<td>75 (22.8)</td>
<td>350</td>
<td>60%</td>
<td>1/0</td>
<td>K1796-75</td>
</tr>
<tr>
<td>100 (30.4)</td>
<td>300</td>
<td>60%</td>
<td>1/0</td>
<td>K1796-100</td>
</tr>
</tbody>
</table>

(1) Recommended for STT® and pulse welding when using long distances between feeder and power source.

Tweco is a registered trademark of Thermadyne.
**RECOMMENDED OPTIONS**

**GENERAL OPTIONS**

Magnum® Gas-Shielded Gun & Cable Assemblies
Available 200-550 amps, air-cooled, gas-shielded welding guns. Dual procedure capability with gun trigger lock available on 400 amp gun.
See Publication E12.10

Magnum® Self-Shielded Gun & Cable Assemblies
Available 250-600 amps.
See Publication E12.110

Control Cable
8-pin female to 14-pin male, 10 ft. (3.0 m) long, control cable. (Required For Control Cable Model Only).
Order K1819-10

Spindle Adapter for 8" O.D. Spools
Included with unit. For small spools. Permits 8" (200 mm) O.D. spools to be mounted on 2" (50 mm) O.D. spindles.
Order K468

Terminal Strip Adapter Cable
Adapter cable for 14-pin control cable to terminal power sources.
Order K1798

Micro Wire Straightener
Straightens .035"-1/16" (0.9-1.6 mm) wire for use with portable feeders.
Order K1798

The rugged, lightweight LN-15 wire feeder is especially suited for the shipbuilding and construction industries.
# LN-15 WIRE FEEDER ORDER FORM

<table>
<thead>
<tr>
<th>PRODUCT DESCRIPTION</th>
<th>ORDER NUMBER</th>
<th>QUANTITY</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN-15 – Across-The-Arc</td>
<td>K1870-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN-15 – Control Cable</td>
<td>K1871-1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Required Options**

- Magnum® Gas-Shielded Gun and Cable Assemblies: See publication E12.10
- Magnum® Self-Shielded Gun and Cable Assemblies: See publication E12.100
- Drive Roll & Wire Guide Kits: See page 6
- Control Cable - 10 ft. (Control Cable Model Only): K1819-10

**Recommended Options**

- Gun Receiver Bushing: See page 6
- Spindle Adapter for 8" O.D. Spools: K468
- Terminal Strip Adapter Cable: K1798
- Weld Power Cable: See page 6

**Recommended Power Sources**

- Ranger® 10,000: See publication E6.92
- Ranger® 250: See publication E6.103
- Ranger® 305G: See publication E6.117
- Ranger® GXT: See publication E6.96
- Vantage® 300: See publication E6.206
- Vantage® 500: See publication E6.216
- Ranger® 305D: See publication E6.118
- CV-400: See publication E4.30
- CV-655: See publication E4.40
- Invertec® STT® II: See publication E4.52
- DC-400: See publication E5.20
- DC-600: See publication E5.40
- DC-695: See publication E5.46
- Invertec® V350-PRO: See publication E5.91
- Invertec® V450-Pro: See publication E5.94
- Multi-Weld™ 350: See publication E5.300

**TOTAL:**

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