LN-9 and LN-9 GMA

Semiautomatic, Constant Speed Wire Feeders

The LN-9 and LN-9 GMA are semiautomatic constant speed wire feeders that provide dependable performance and reliable operation, making them ideal for shop or field operations. The LN-9 is designed for flux-cored wire without gas (Innershield®) and submerged arc welding, while the LN-9 GMA is designed for MIG and flux-cored wire with gas (Outershield®). For precise wire feeding and quality welds, the LN-9 features controlled wire feed speed and voltage during starting for clean, positive starts and reduced stubbing, skipping and spatter. Solid state control compensates for wire drag and input line variations to maintain accurate wire feed speed.

Advantage Lincoln

- LN-9 feeds up to 3/32" (2.4mm) solid and .120" (3.0mm) flux-cored wires, at 50-600 inches per minute (1.3-15.3 m/min) wire feed speed.
- LN-9 GMA feeds up to 1/16" (1.6mm) solid and 5/64" (2.0mm) flux-cored wires at 80-980 inches per minute (2.0-24.9 m/min) wire feed speed.
- Unique drive roll design provides positive feeding and quick reloading by simply starting wire into the guide tube. The drive rolls and guide tubes are designed for long life and precise wire feeding.
- Four-roll wire drive system available for additional wire feeding force and easier feeding of softer wires (LN-9 GMA model only).
- Completely enclosed case protects the heavy duty wire drive mechanism from damage, but allows easy access to drive rolls.
- Standard digital meter can be set to read volts, inches or meters/minute.
- Control circuit features "cold electrode" when the gun trigger is released for added safety.
- Dynamic braking system stops wire feed motor quickly to minimize crater sticking problems.
- Three-year warranty on parts and labor.

Description

Required Options

Gun and Cable Assembly, Drive Roll Kit, Control Cable, Weld Power Cable

Recommended General Options

Universal Wire Reel Stand, Insulated Lift Bail, Light Duty Caster Kit, Swivel Platform, Readie-Reg® Adapter, Coll Adapter, Spool Adapter, Plastic Wire Cover, Gas Solenoid Kit, GMA Timer Kit, Burnback Kit, Dual Procedure Kit, Magnetic Flux Screen Separator, Flux Screen, Wire Reel and Flux Tank Assembly, Continuous Flux Feeding Tank Assembly, Undercarriage, Squirtmobile®, Mechanized Hand Travel Unit, Power Pack, Portable Digital Wire Feed Speed Meter

Recommended Power Source Options

CV-400, CV500-I, CV-655, DC-400, DC-600, DC-655, DC-1000

Order

K357-1 LN-9 Wire Feeder (2 Roll)
K424-1 LN-9 GMA (2 Roll) with gas solenoid valve
K568-2 LN-9 GMA (4 Roll) with gas solenoid valve

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Number</th>
<th>Input Power</th>
<th>Output Capacity</th>
<th>Wire Feed Speed Range</th>
<th>Wire Size Range</th>
<th>Dimensions H x W x D</th>
<th>Net Weight lbs. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LN-9 (2 Roll)</td>
<td>K357-1</td>
<td>115 VAC</td>
<td>600A / 60%</td>
<td>50-600 (1.3-15.3)</td>
<td>---</td>
<td>11.5 x 11.3 x 11.5</td>
<td>42 (19)</td>
</tr>
<tr>
<td>LN-9 GMA (2 Roll)</td>
<td>K424-1</td>
<td>80-980 (2.0-24.9)</td>
<td>.035-1/16 (0.9-1.6)</td>
<td>.023-1/16 (0.6-1.6)</td>
<td>.035-5/64 (0.9-2.0)</td>
<td>11.5 x 11.3 x 11.5</td>
<td>30 (13.6)</td>
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<tr>
<td>LN-9 GMA (4 Roll)</td>
<td>K568-2</td>
<td>80-980 (2.0-24.9)</td>
<td>.035-1/16 (0.9-1.6)</td>
<td>.023-1/16 (0.6-1.6)</td>
<td>.035-5/64 (0.9-2.0)</td>
<td>11.5 x 11.3 x 11.5</td>
<td>45 (20.4)</td>
</tr>
</tbody>
</table>

(1) LN-9 model only.

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www.lincolnelectric.com
A CLOSER LOOK

PERFORMANCE
• Easy wire feeding with 2-roll or 4-roll wire drive system.
• Unique drive roll design provides positive feeding and quick reloading by simply starting wire into guide tube. The drive rolls and guide tubes are designed for long life and precise wire feeding.
• Dynamic braking system stops wire feed motor quickly to minimize crater sticking problems.
• Solid state control compensates for wire drag and input line variations to maintain accurate wire feed speed.

FEATURES
• Completely enclosed case protects the heavy duty wire drive mechanism from dirt, dust and damage, but allows easy access to drive rolls.
• Trigger interlock permits continued welding without holding the gun trigger.
• Tool-less quick release wire drive tension system and gun cable connections for easy wire or gun changes.
• Can be boom mounted or add optional Universal Wire Reel Stand, Casters, and/or Swivel Platform and mount on power source for extra versatility.
• Digital display is easy to read in bright sunlight or dark working conditions.
• Presettable voltage and wire feed speed controls behind locking security door.

QUALITY AND RELIABILITY
• Three-year warranty on parts and labor.
• Manufactured under a quality system certified to ISO 9001 requirements.
• Rugged and durable design recognized throughout the industry for its long life and years of trouble-free wire feeding.
• Completely enclosed case protects the heavy duty wire drive mechanism from damage, yet allows easy access to rolls.
• Control circuit features "cold electrode" when the gun trigger is released for added safety.
CONTROL AND WELD POWER CABLES SELECTION GUIDE

Connections are for current equipment design. Subject to change without notice.

Control Cables
K1820-10  Wire Feeder Control Cable - 10 ft.

Extensions
K1797-25  14-pin Extension Control Cable - 25 ft
K1797-50  14-pin Extension Control Cable - 50 ft.

Weld Power Cables
K1840-10  Twist-Mate to Lug, 1/0, 350A, 60% Duty Cycle - 10 ft.

Control Cables
K1820-10  Wire Feeder Control Cable - 10 ft.

Extensions
K1797-25  14-pin Extension Control Cable - 25 ft
K1797-50  14-pin Extension Control Cable - 50 ft.

Weld Power Cables
K1842-10  Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 10 ft.
K1842-35  Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 35 ft.
K1842-60  Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 60 ft.
K1842-110 Lug to Lug, 4/0, 600A, 60% Duty Cycle - Weld Power Cable - 110 ft.
A CLOSER LOOK

CONTROL AND WELD POWER CABLES SELECTION GUIDE CONT.
Connections are for current equipment design. Subject to change without notice.

Control Cables
- K1820-10 Wire Feeder Control Cable - 10 ft.
- K1798 Adapter Cable - 14-pin to Terminal Strip

Extensions
- K1797-25 14-pin Extension Control Cable - 25 ft.
- K1797-50 14-pin Extension Control Cable - 50 ft.

Weld Power Cables
- K1842-10 Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 10 ft.
- K1842-35 Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 35 ft.
- K1842-60 Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 60 ft.
- K1842-110 Lug to Lug, 4/0, 600A, 60% Duty Cycle - Weld Power Cable - 110 ft.
**RECOMMENDED OPTIONS**

**DRIVE ROLL AND GUIDE TUBE KITS**

<table>
<thead>
<tr>
<th>Steel Wire Sizes</th>
<th>LN-9 GMA</th>
<th>2 Roll</th>
<th>4 Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid Wire:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.023 - .025&quot; (0.6 mm)</td>
<td>KP653-025S</td>
<td>KP655-025S</td>
<td></td>
</tr>
<tr>
<td>.030 (0.8 mm)</td>
<td>KP653-030S</td>
<td>KP655-030S</td>
<td></td>
</tr>
<tr>
<td>.035-.040 (0.9 - 1.0 mm)</td>
<td>KP653-035S</td>
<td>KP655-035S</td>
<td></td>
</tr>
<tr>
<td>.045-.052 (1.2 - 1.4 mm)</td>
<td>KP653-052S</td>
<td>KP655-052S</td>
<td></td>
</tr>
<tr>
<td><strong>Cored Wire:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.035&quot; (0.9 mm)</td>
<td>KP653-035C</td>
<td>KP655-035C</td>
<td></td>
</tr>
<tr>
<td>.045-.052 (1.2 - 1.4 mm)</td>
<td>KP653-052C</td>
<td>KP655-052C</td>
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</tr>
<tr>
<td><strong>Solid or Cored Wire:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/16&quot; (1.6 mm)</td>
<td>KP653-1/16</td>
<td>KP655-1/16</td>
<td></td>
</tr>
<tr>
<td>.068 - 3/32&quot; (1.7 - 2.4 mm)</td>
<td>KP653-3/32</td>
<td>KP655-3/32</td>
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</tr>
<tr>
<td><strong>Aluminum Wire:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.035&quot; (0.9 mm)</td>
<td>KP654-035A</td>
<td>KP656-035A</td>
<td></td>
</tr>
<tr>
<td>3/64&quot; (1.2 mm)</td>
<td>KP654-3/64A</td>
<td>KP656-3/64A</td>
<td></td>
</tr>
<tr>
<td>1/16&quot; (1.6 mm)</td>
<td>KP654-1/16A</td>
<td>KP656-1/16A</td>
<td></td>
</tr>
<tr>
<td><strong>Clutched Aluminum Wire:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.035&quot; (0.9 mm)</td>
<td>KP1682-035A</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>3/64&quot; (1.2 mm)</td>
<td>KP1682-3/64A</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1/16&quot; (1.6 mm)</td>
<td>KP1682-1/16A</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1.0 mm</td>
<td>KP1682-1.0A</td>
<td>--</td>
<td>--</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Steel Wire Sizes</th>
<th>LN-9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid Wire:</strong></td>
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</tr>
<tr>
<td>.030 - .035 (0.8 - 0.9 mm)</td>
<td>KP502-035</td>
</tr>
<tr>
<td>.040 .045-.052 (1.0 - 1.4 mm)</td>
<td>KP502-052</td>
</tr>
<tr>
<td>1/16 (1.6 mm)</td>
<td>KP502-1/16</td>
</tr>
<tr>
<td><strong>Cored Wire:</strong></td>
<td></td>
</tr>
<tr>
<td>.045-.052 (1.0 - 1.4 mm)</td>
<td>KP502-052C</td>
</tr>
<tr>
<td>1/16 - .062 (1.6 mm)</td>
<td>KP502-1/16C</td>
</tr>
<tr>
<td>7/64 - .120 (2.8 - 3.0 mm)</td>
<td>KP502-120</td>
</tr>
<tr>
<td><strong>Solid or Cored Wire:</strong></td>
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</tr>
<tr>
<td>.068 - 3/32&quot; (1.7 - 2.4 mm)</td>
<td>KP502-3/32</td>
</tr>
<tr>
<td><strong>Hardfacing:</strong></td>
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<tr>
<td>7/64&quot; (2.8 mm)</td>
<td>KP502-7/64H</td>
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</table>

**CONTROL CABLES**

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Wire Feeder Control Cable</td>
<td>Male 9 pin to female 14 pin</td>
</tr>
<tr>
<td>Wire Feeder Control Cable Extensions</td>
<td>Male 14 pin to female 14 pin</td>
</tr>
<tr>
<td>Adapter Cable for Control Cable to Terminal Strip Power Sources K1798</td>
<td>14 pin control cable to Terminal Strip</td>
</tr>
</tbody>
</table>

**WELD POWER CABLES**

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K1840-10</td>
<td>Twist-Mate to Lug, 1/0, 350A, 60% duty cycle, 10 ft.</td>
</tr>
<tr>
<td>K1842-10</td>
<td>Lug to Lug, 3/0, 600A, 60% duty cycle, 10 ft.</td>
</tr>
<tr>
<td>K1842-35</td>
<td>Lug to Lug, 3/0, 600A, 60% duty cycle, 35 ft.</td>
</tr>
<tr>
<td>K1842-60</td>
<td>Lug to Lug, 3/0, 600A, 60% duty cycle, 60 ft.</td>
</tr>
<tr>
<td>K1842-110</td>
<td>Lug to Lug, 4/0, 600A, 60% duty cycle, 110 ft.</td>
</tr>
</tbody>
</table>

**Magnum Submerged Arc Gun**
Rated 600 amps, 15 ft. (4.5m) cable, for 5/64" (2.0mm) electrode size.
Order K113-1

**Magnum Submerged Arc Gun**
Rated 600 amps, 15 ft. (4.5m) cable, for 3/32" (2.4mm) electrode size.
Order K113-2

**Mechanized SAW Gun**
Rated 600 amps, for 5/64 and 3/32" (2.0 and 2.4mm) solid electrode. Includes flux valve interlock switch and receptacle for Hand Travel Unit or Squirtmobile.
Order K114

**Flux Cone**
Fits K112 and K113 submerged arc guns for welding without the Continuous Flux Feed Tank Assembly
Order K119

Magnum Gas-Shielded Gun and Cable Assemblies
Available 200-550 amps, air-cooled, gas-shielded welding guns.
See publication E12.10

Magnum Self-Shielded Gun and Cable Assemblies
Available 250-600 amps.
See publication E12.110

Magnum Submerged Arc Gun
Rated 500 amps, 15 ft. (4.5m) cable, for 1/16" (1.6mm) electrode size.
Order K112
RECOMMENDED OPTIONS

GENERAL OPTIONS

Universal Wire Reel Stand
For use with Lincoln 10-60 lb. (4.5-27.2 kg) wire packages that use a 2” (51mm) spindle. Hole in stand fits over lift bail.
Order K1524-1

Insulated Lift Bail
Allows the entire wire feeder to be hung from a crane or hook. Use with K1524-1.
Order K1555-1

Light Duty Caster Kit
Mounts to the K1524-1 wire reel stand. Allows for easy movement of wire feeder.
Order K1556-1

Swivel Platform
Mounts to the lift bail on the power source and bottom of the K1524-1. Wire feeder may be lifted off if needed. Compatible with Light Duty Caster Kit. Includes “lazy susan” parts tray.
Order K1557-1

50-60 lb. Readi-Reel® Adapter
Adapts 50-60 lb. (22.6-27.2 kg) coils of Lincoln electrode to 2” (51mm) spindle.
Order K438

22-30 lb. Readi-Reel® Adapter
Adapts 22-30 lb. (10-14 kg) Lincoln Readi-Reels of electrode to 2” (51mm) spindle.
Order K363P

50-60 lb. Coil Adapter
Adapts 50-60 lb. (22.6-27.2 kg) coils of Lincoln electrode to 2” (51mm) spindle.
Order K1504-1

14 lb. Innershield® Coil Adapter
Permits 14 lb. (6 kg) Innershield electrode coils to be mounted on 2” (51 mm) O.D. spindles.
Order K435

GENERAL OPTIONS CONT.

8” O.D. Spool Adapter
For small spools. Permits 8” (200mm) O.D. spools to be mounted on 2” (51mm) O.D. spindles.
Order K468

Plastic Wire Cover
Plastic enclosure for wire packages.
Order K1634-1 for 30-44 lbs. (13.6-19.9 kg)
Order K1634-2 for up to 60 lbs. (27.2 kg)

Gas Solenoid Kit
Includes solenoid valve and mounting bracket. For LN-9 models only. Not required for LN-9 GMA models.
Order K437 (below code 9132)
Order K425 (above code 9131)

GMA Timer Kit
Provides delays for preflow and postflow gas, adjustable burn-back, and a purge/cold inch switch. For LN-9 GMA only.
Order K418

Burnback Kit — LN-9 GMA
Provides adjustable delay of power source output shut off to prevent electrode sticking in crater when using high wire feed speeds. Includes a cold inch switch.
Order K419 for LN-9 GMA
Order K202 for LN-9

Dual Procedure Kit
Allows the use of two welding procedures with one gun. Procedures can be changed by the flick of the switch — even while welding.
Order K319
**GENERAL OPTIONS CONT.**

**Magnetic Flux Screen Separator**
For submerged arc welding. Removes foreign magnetic particles from reused flux.  
Order K58

**Flux Screen**
For submerged arc welding. Removes large particles from reused flux. Includes air-driven vibrator.  
Order K310

**Wire Reel and Flux Tank Assembly**
Includes flux tank, undercarriage, and reel and brake assembly in open shroud.  
Order K305

**Continuous Flux Feeding Tank Assembly**
For submerged arc welding. Includes air filter, pressure regulator, gauge, tank, 18 ft. (5.4m) flux hose, funnel and lift bail assembly to mount wire feeder.  
Order K320

**Undercarriage**
Includes mounting frame, front casters, rear wheels and handle for hand towing. For use with Wire Reel Stand.  
Order K163

**GENERAL OPTIONS CONT.**

**Squirtmobile**
Self-propelled trackless carriage carriers K114 Mechanized SAW Gun on long welds for automatic welder economy without high fixtures costs. Requires a K161 Power Pack to drive unit.  
Order K62

**Mechanized Hand Travel Unit**
Carries the K114 Mechanized SAW Gun along the joint at a preset travel speed to help the operator make better welds 10% to 25% faster than with manual travel. Speed range is 7-60 ipm (0.2-1.5 m/min). Requires a K161 Power Pack to drive unit.  
Order K110

**Power Pack**
Includes travel mag-amp circuit required when using either a Squirtmobile or Mechanized Hand Travel Unit with a K114 SAW gun. Mounts near power source. Connect to the power source for input power.  
Order K161-25 for 25 ft. (7.5m)  
Order K161-50 for 50 ft. (15m)

**Portable Digital Wire Feed Speed Meter**
When clamped on an exposed section of continuously fed electrode, unit reads wire feed speed in inches per minute.  
Order K283
## LN-9 AND LN-9 GMA 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-9 WIRE FEEDER (2 Roll)</td>
<td>K357-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN-9 GMA WIRE FEEDER (2 Roll)</td>
<td>K424-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN-9 GMA WIRE FEEDER (4 Roll)</td>
<td>K568-2</td>
<td></td>
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</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
- Submerged Arc Gun and Cable Assemblies: see page 5
- Drive Roll and Guide Tube Kits: see page 5
- Control Cable: see page 5
- Weld Power Cable: see page 5

### RECOMMENDED GENERAL OPTIONS

- Universal Wire Reel Stand K1524-1
- Insulated Lift Bail K1555-1
- Light Duty Caster Kit K1556-1
- Swivel Platform K1557-1
- 50-60 lb. Readi-Reel Adapter K438
- 20-30 lb. Readi-Reel Adapter K363P
- 50-60 lb. Coil Adapter K1504-1
- 14 lb. Insershield Coil Adapter K435
- 8" D.D. Spool Adapter K468
- Plastic Wire Cover (for 30-44 lb. wire packages) K1634-1
- Plastic Wire Cover (for up to 60 lb. wire packages) K1634-2
- Gas Solenoid Kit (for LN-9 models below code 9132) K437
- Gas Solenoid Kit (for LN-9 models above code 9131) K425
- GMA Timer Kit K418
- Burnback Kit (for LN-9 models) K202
- Burnback Kit (for LN-9 GMA models) K419
- Dual Procedure Kit K319
- Magnetic Flux Screen Separator K58
- Flux Screen K310
- Wire Reel and Flux Tank Assembly K305
- Continuous Flux Feeding Tank Assembly K320
- Undercarriage K163
- Squirtmobile K62
- Mechanized Hand Travel Unit K110
- Power Pack (Available in 25 ft. or 50 ft. lengths) K161-25,-50
- Portable Digital Wire Feed Speed Meter K283

### RECOMMENDED POWER SOURCE OPTIONS

- CV-400 see publication E4.30
- CV500-I see publication E4.30.1
- CV-655 see publication E4.40
- DC-400 see publication E5.20
- DC-600 see publication E5.40
- DC-655 see publication E5.46
- DC-1000 see publication E5.50

**TOTAL:**

### CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

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