

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.



Shown with options

Processes

MIG Flux-Cored Submerged Arc⁽¹⁾

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

Output  Input  115 VAC

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, Readi-Reel® Adapter, Coil 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

Product Name	Product Number	Input Power	Output Capacity Current/Duty Cycle	Wire Feed Speed Range ipm (m/min)	Wire Size Range in. (mm)				Dimensions H x W x D in. (mm)	Net Weight lbs. (kg)
					Aluminum	Solid	Cored	Hardfacing		
LN-9 (2 Roll)	K357-1	115 VAC 50/60 Hz 2.5 Amps	600A / 60%	50-600 (1.3-15.3)	---	.030-3/32 (0.8-2.4)	.035-.120 (0.9-3.0)	7/64 (2.8)	11.5 x 11.3 x 11.5 (292 x 287 x 292)	42 (19)
LN-9 GMA (2 Roll)	K424-1			80-980 (2.0-24.9)	.035-1/16 (0.9-1.6)	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	---	11.5 x 11.3 x 11.5 (292 x 287 x 292)	30 (13.6)
LN-9 GMA (4 Roll)	K568-2			80-980 (2.0-24.9)	.035-1/16 (0.9-1.6)	.023-1/16 (0.6-1.6)	.035-5/64 (0.9-2.0)	---	11.5 x 11.3 x 11.5 (292 x 287 x 292)	45 (20.4)

(1) LN-9 model only.

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.



Optional time controls for pre-flow and post-flow gas, and burnback, as well as cold inch and gas purge control.

QUALITY AND RELIABILITY

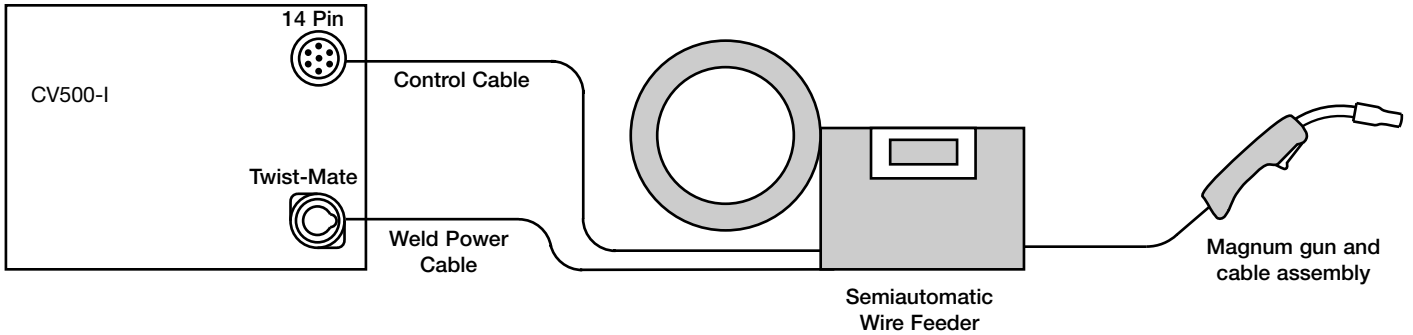
- Three-year warranty on parts and labor.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Rugged and durable design recognized throughout the industry for its long life and years of trouble-free wire feeding.

- 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.

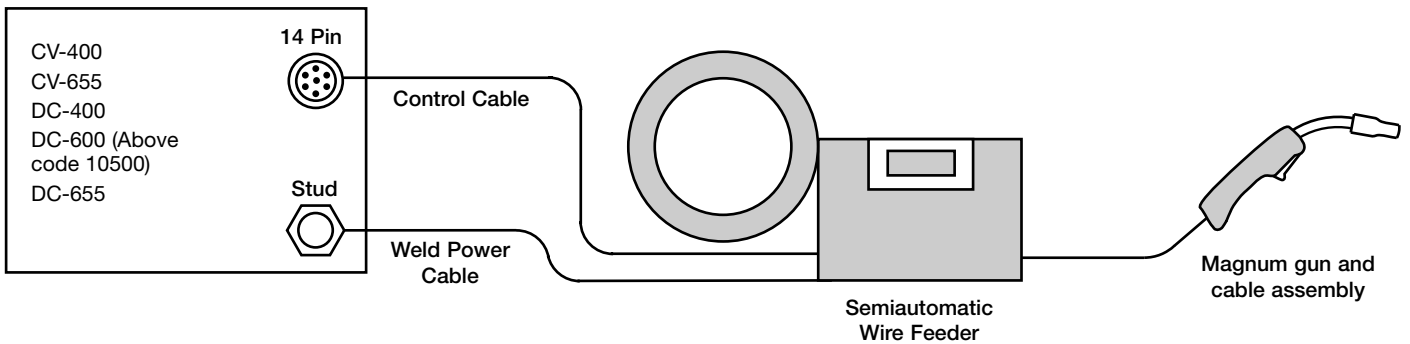
Extensions

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.

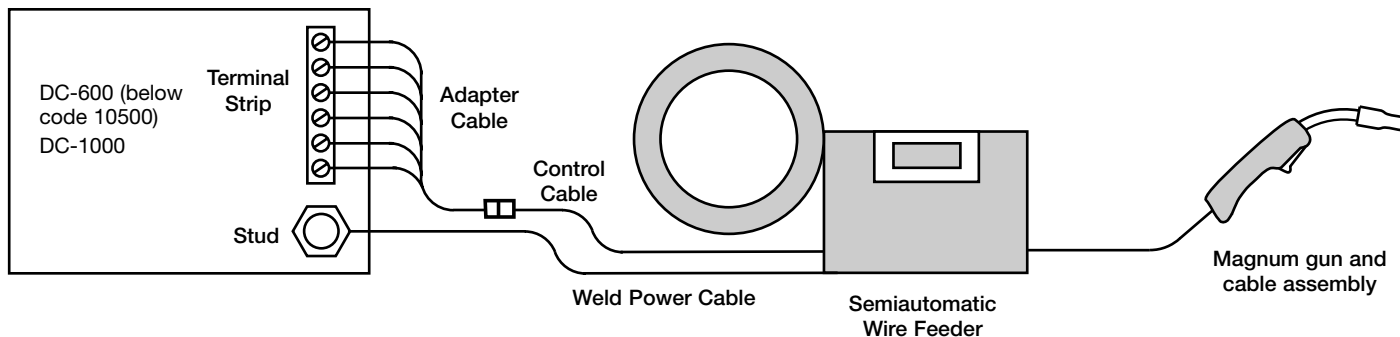
K1842-35 Lug to Lug, 3/0, 600A, 60% Duty Cycle - Weld Power Cable - 35 ft.

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.

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

REQUIRED OPTIONS

DRIVE ROLL AND GUIDE TUBE KITS		
Steel Wire Sizes	LN-9 GMA	
	2 Roll	4 Roll
Solid Wire: .023 - .025" (0.6 mm) .030 (0.8 mm) .035-.040 (0.9 - 1.0 mm) .045-.052 (1.2 - 1.4 mm)	KP653-025S KP653-030S KP653-035S KP653-052S	KP655-025S KP655-030S KP655-035S KP655-052S
Cored Wire: .035" (0.9 mm) .045-.052 (1.2 - 1.4 mm)	KP653-035C KP653-052C	KP655-035C KP655-052C
Solid or Cored Wire: 1/16" (1.6 mm) .068 - 3/32" (1.7 - 2.4 mm)	KP653-1/16 KP653-3/32	KP655-1/16 KP655-3/32
Aluminum Wire: .035" (0.9 mm) 3/64" (1.2 mm) 1/16" (1.6 mm)	KP654-035A KP654-3/64A KP654-1/16A	KP656-035A KP656-3/64A KP656-1/16A
Clutched Aluminum Wire: .035" (0.9 mm) 3/64" (1.2 mm) 1/16" (1.6 mm) 1.0 mm	KP1682-035A KP1682-3/64A KP1682-1/16A KP1682-1.0A	-- -- -- --
Steel Wire Sizes	LN-9 2 Roll	
Solid Wire: .030 - .035 (0.8 - 0.9 mm) .040, .045 - .052 (1.0 - 1.4 mm) 1/16 (1.6 mm)	KP502-035 KP502-052 KP502-1/16	
Cored Wire: .045 - .052 (1.0 - 1.4 mm) 1/16 - .062 (1.6 mm) 7/64 - .120" (2.8 - 3.0 mm)	KP502-052C KP502-1/16C KP502-120	
Solid or Cored Wire: .068 - 3/32" (1.7 - 2.4 mm)	KP502-3/32	
Hardfacing: 7/64" (2.8 mm)	KP502-7/64H	



Magnum 400 shown

Magnum Gas-Shielded Gun and Cable Assemblies

Available 200-550 amps, air-cooled, gas-shielded welding guns.

See publication E12.10



K126 Innershield Gun shown

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

CONTROL CABLES	
Cable Type	Description
Wire Feeder Control Cable K1820-10	Male 9 pin to female 14 pin
Wire Feeder Control Cable Extensions K1797-25 - 25 ft. K1797-50 - 50 ft.	Male 14 pin to female 14 pin
Adapter Cable for Control Cable to Terminal Strip Power Sources K1798	14 pin control cable to Terminal Strip

WELD POWER CABLES	
Order No.	Description
K1840-10	Twist-Mate to Lug, 1/0, 350A, 60% duty cycle, 10 ft.
K1842-10	Lug to Lug, 3/0, 600A, 60% duty cycle, 10 ft.
K1842-35	Lug to Lug, 3/0, 600A, 60% duty cycle, 35 ft.
K1842-60	Lug to Lug, 3/0, 600A, 60% duty cycle, 60 ft.
K1842-110	Lug to Lug, 4/0, 600A, 60% duty cycle, 110 ft.



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

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 burnback, 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

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
LN-9 WIRE FEEDER (2 Roll)	K357-1		
LN-9 GMA WIRE FEEDER (2 Roll)	K424-1		
LN-9 GMA WIRE FEEDER (4 Roll)	K568-2		
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. Innershield Coil Adapter	K435		
8" O.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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