

COMPLETE SOLUTION FOR INDUSTRY

POWERTEC®-iSRANGE

Reliable workhorses are coming. They are as solid as always, more convenient than ever, and superbly productive. These products will help you get more things done. Based on modern inverter technology, they continue the well-established **POWERTEC®-i series**, which now offers separate wire feeders. This is another, decisive step into the future of professional welding. With a specially designed, rugged construction, which is subjected to a large variety of tests (Lincoln Electric TRUE HD), they are ready to work in even the most demanding environmental and production conditions. The devices are dedicated especially for heavy-fabrication, structural, transportation, shipbuilding and off-shore industries.

The design of **POWERTEC®-i S RANGE** series is the one that truly stands out. It is ergonomic and efficient in every detail. Various configuration systems, separated wire-feeding units, intuitive display interface (7 color TFT), dedicated accessories, and many other features will meet all your industrial welding needs while enhancing your capabilities.

















POWERTEC®-iSRANGE



POWERTEC®-iSRANGE is a brand new range of Lincoln Electric products based on the latest inverter platform, combining modularity, ease of use and optimal MIG/MAG or MMA welding performance with excellent power cost efficiency.

Three power sources: **i350S**, **i420S** and **i500S** with a choice of separate wire feeders, standard LF 52D for basic use, or the advanced LF 56D for more demanding applications, helps customer to fulfill every possible welding needs.

All **POWERTEC®-iS** have the option of water cooling by simply adding the new **COOLARC® 26**





CHOOSE LINCOLN ELECTRIC FOR COMPLETE SOLUTION FOR INDUSTRIAL USERS WITH **NEW HEAVY DUTY DESIGN**













SYNERGIC SETTINGS \bigcirc

Output

Input

Output

CC DC

COOLARC® 26

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NEW ERGONOMIC DESIGN



Simple navigation also when using welding gloves

Practical handle for effortless gripping even with gloves and safe movement of the machine



Cable Management System (option) For easy transportation of the whole welding system even with very long connection cable

Heavy duty undercarriage

- Extremely reliable and stable, passed incline stability tests on 15°
- Low gas cylinder entree makes loading very easy
- Quick and easy securing of the shielding gas cylinder



LINCOLN RELIABILITY





Cable connections on front (in standard) and **back rear side** (in option) All cable connections can easily be made without tools





Practical, big storage locker inside the power source with key lock, internal lights, for accessories like gun, gloves, rolls, contact tips, etc.



Intermediate hose packages

Heavy-duty protective hose and military-quality plugs Strain reliefs on both ends to keep connections well protected A wide range of lengths to choose (up to 30m), water or air **Large wheels** for easily effortlessly overcome obstacles such as cables or thresholds

Very solid, stable, metal made construction

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RELIABLE WORKHORSES

High duty cycle 420A/100% (i420S & i500S)

- High production efficiency
- Digital welding current control
- True HD tested made for the harsh environmental conditions

Inverter engine technology – ECO Friendly

- Lower power consumption thanks to high efficiency – energy cost saving
- Automatic power-saving modes (standby/shutdown function)
- Generator ready

Lincoln Electric Industrial design

- ready to use anywhere
- Safety class IP23, potted PCBs and no structural plastics
- 3 Year full parts and labor warranty









Easy maintenance and servicing

Easy access to all components inside Software update via laptop or USB (LF 56D)

Intelligent F.A.N. (Fan As Needed) in the inverter

Variable speed controlled fan (energy-saving) Low pollution and quiet fan noise



Cooling tunnel design

components arranged to protect against dust and dirt

OPTIMIZED ERGONOMICS



Gun Holder: always at hand, ready to work

Lifting eye – crane suspensionFor vertical and suspension operation
For safe and easy transportation



Front UI protection cover keep your UI safe



Professional wire feeding system

Four driven wire feed rolls
Excellent wire feeding on every material
Permanent internal lights
Wire inching gas test toggle switch





Flowmeter for shielding gas flow setting (option) Precise adjustment directly on site Practical especially with long hose packages



Inspection window indicates level of wire spool Simple and comfortable spool change New locking system – spool cover stays always closed

Full access for wire spool installation

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STATE OF THE ART TECHNOLOGY IN WIRE FEEDING

Professional wire feeding system – robust and precise

- 4 individually driven rolls for extremely stable wire feeding for various wire types
- Aluminum housing for a long service life
- Big roll diameter (37mm) for optimal wire feeding
- Simple, tool-free roll change
- Factory-fitted with rolls for 1,0 mm and 1,2 mm steel and stainless steel

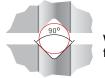


Connection for drum feed (optional adapter). Less need to change wire spools saves time

Steel Stainless steel Braze

Steel	
21661	
Stainless steel	3 ÷ 5
Braze	
Flux cored	2,5 ÷ 3,5
Aluminium	1,5 ÷ 2,5

Individually adjustable contact pressure for the front and rear roll pair Differently set-up for aluminium, steel, stainless steel, braze, flux cored wire



V-groove for stainless steel, steel



U-groove for aluminium

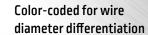


V-groove, knurled for flux cored wire



New locking system, quick exchange of roll and wire guides Simple, tool-free roll change just few steps

- Unlock the roll fastener
- Unlock pressure arm
- Exchange the roll





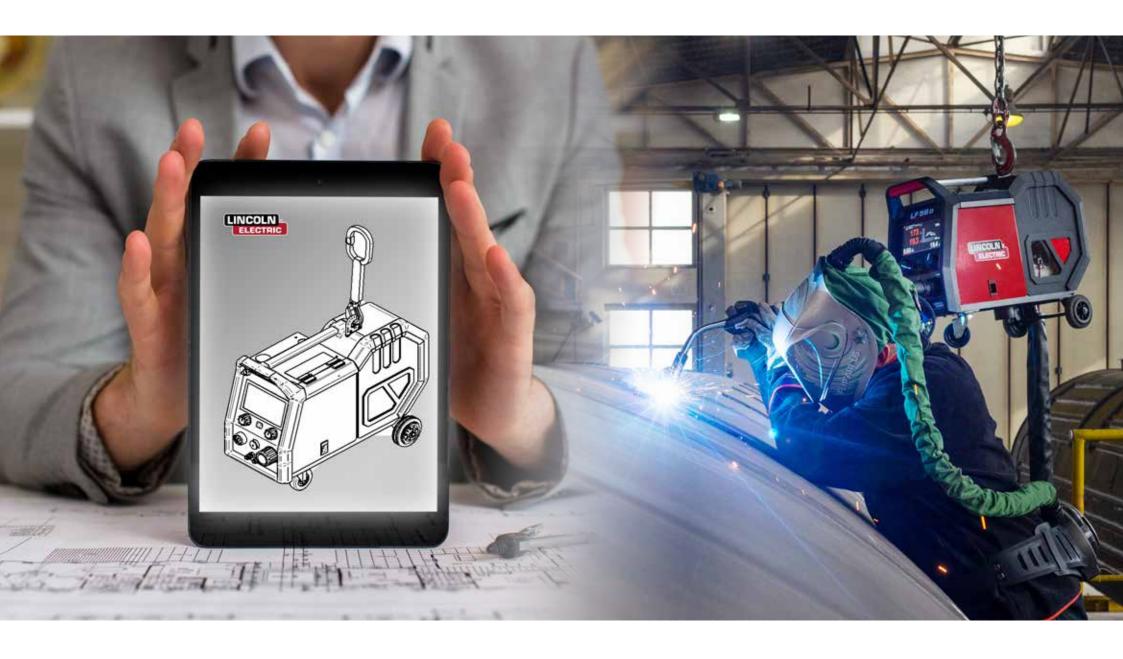






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DESIGNED TO ENHANCE YOUR WELDING CAPABILITY



INNOVATIVE INTUITIVE INTERFACE

- Two controls, one button for easy navigation
- Icon language for key commands
- Easy process and settings selection
- ARCFX[™] joint visualization
- Work point in material thickness (mm) / WFS / A
- Locking function / Limits / Memories / Jobs

• Interface available in languages: English, German, French, Polish, Finnish, Spanish, Italian, Russian, Dutch, Romanian, Slovakian, Hungarian, Czech, Turkish, Portuguese



AUTO-SETTINGS

Preset parameters to increase productivity



USB CONNECTIVITY

Easy software update & diagnostics, weld log for quality monitoring

MORE FUNCTIONS & FEATURES



SPEAKER

Product operation (adjusting the encoders or pressing the button) and errors signaled by a sound.



NEW ENCODERS

for more precise adjustment



CLOCK & CALENDAR

Simple welding quality monitoring as weld log data recording on USB.



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Simple navigation also when using welding gloves





STANDARD USER INTERFACE

User memory programs & welding process change:

- Simple and quick selection by pressing the button of 4 welding programs stored in user memory or 3 welding processes (GMAW, FCAW, SMAW)
- LEDs showing the selected process

NEW LF 52 p **SYNERGIC** Capability 9011 252°V www.lincolnelectric.eu

Quick and easy access to the most commonly used welding parameters:

- **Arc Controls** (depend on the welding program)
- Torch trigger mode 2-step/4-step
- Wire Feed Speed **Run-in** function
- Burn-back time







LF 56D vs LF52 D

Different feeders for different needs



WELDING PROCESSES

	GMAW/FCAW	SYNERGIC	SMAW	CAG
LF 56D	✓	✓	✓	✓
LF 52D	✓	✓	✓	✓

LF 56D	Functions and features	LF 52D
7" Color TFT	UI type	LED's
✓	Speaker	_
✓	Clock and calendar	_
✓	ARC™FX (work point in A/mm)	_
✓	Display view configuration	_
✓	Auto settings	_
49	Memory / Jobs	[3+4]
√	Limits	_
✓	Locking function	_
✓	Languages selection	_
✓	USB connectivity	_
✓	Media files (Support)	_
✓	Weld logs / History	_
✓	Cross-switch gun	_
✓	Push-Pull gun	_
✓	A/B procedure	_
✓	Quick triger	_
✓	Software version	√
✓	Factory reset	√
✓	Arc Control	✓
√	2T/4T Gun mode	✓
✓	Spot welding	✓
✓	Gas purge test	√
✓	Cold Inch test	√
✓	Preflow /Postflow time	√
✓	Run-in WFS	✓
✓	Start procedure	_
✓	Crater procedure	✓
✓	Burnback time	√
✓	Hot Start (SMAW)	✓
✓	Arc Force (SMAW)	✓

COOLARC® 26

More functions and features



New **COOLARC® 26** cooler fully controlled by power source



Cooler Menu is available when cooler is connected

Settings: 3 Modes of operation available:





1. AUTO

2. OFF

3. ON







Filling Procedure

step by step detail filling instruction





PREMIUM MIG WELDING GUNS - LINCGUN® PROMIG™

AIR-

harsh conditions



-COOLED MODELS	(Carried N	WATER-COOLED MODELS

		LG PROMIG 300	LG PROMIG 400	LG PROMIG 330W	LG PROMIG 400W	LG PROMIG 500W
Duty sysle	CO ₂	300 A @ 60%	400 A @ 60%	330 A @ 100%	400 A @ 100%	500 A @ 100%
Duty cycle	M21	270 A @ 60%	370 A @ 60%	300 A @ 100%	370 A @ 100%	450 A @ 100%
Wire diameter options		1.0-1.2 mm	1.0-1.6 mm	0.8-1.0 mm	1.0-1.2 mm	1.0-1.6 mm
Original aguinment	Contact tip	1.2 mm steel	1.2 mm steel	1.0 mm steel	1.2 mm steel	1.2 mm steel
Original equipment	Nozzle	Ø 16 mm	Ø16 mm	Ø 14 mm	Ø 16 mm	Ø 16 mm
Handle size, other feature		Large	Large	Small	Small	Large
Typical application		Vessel, manufacture, steel structures, boiler making, structural steelwork	Thick plates, heavy duty welding when water cooling is not possible	Precision and high-intensity applications	Intensive applications such as boiler making, structural steelwork, mechanical welding	Thick plates, heavy duty welding
		Reference			<u> </u>	
	3 m	W000345066-2	W000345072-2	W000345063-2	W000345069-2	W000345075-2
	4 m	W000345067-2	W000345073-2	W000345064-2	W000345070-2	W000345076-2
	5 m	W000345068-2	W000345074-2	W000345065-2	W000345071-2	W000345077-2

LGS2 MIG GUNS

Simple and reliable, this range is adapted to the most common applications.



Choose your gun

Rating calculated using CO₂

Air cooled
Water cooled
Dedicated guns

Series	Size	Rate	200A	230A	250A	270A	330A	350A	420A	500A
	250G	60%								
LGS2	240G									
LUSZ	360G									
	505W	100%								

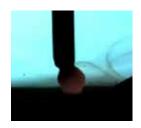
TO ORDER		
3 m	4 m	5 m
W10429-25-3M	W10429-25-4M	W10429-25-5M
W10429-24-3M	W10429-24-4M	W10429-24-5M
W10429-36-3M	W10429-36-4M	W10429-36-5M
W10429-505-3M	W10429-505-4M	W10429-505-5M

MODEL			WATER COOLING		
MODEL		LGS2-250G	LGS2-240G	LGS2-360G	LGS2-505W
Duty cycle (CO ₂ s	shielding gas)	230 A @ 60%	250 A @ 60%	330 A @ 60%	500 A @ 100%
Applications		Thin plates, light fabrication	Thin plates, light fabrication	Vessel manufacture, steel structures	Heavy duty, high production
Wire diameter		Up to 1,2 mm	Up to 1,2 mm	Up to 1,6 mm	Up to 2,4 mm
Original	Contact tip	1,0 mm	1,0 mm	1,2 mm	1,2 mm
equipment	Conical nozzle	15 mm	12,5 mm	16 mm	16 mm

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PREMIUM ARC PERFORMANCE

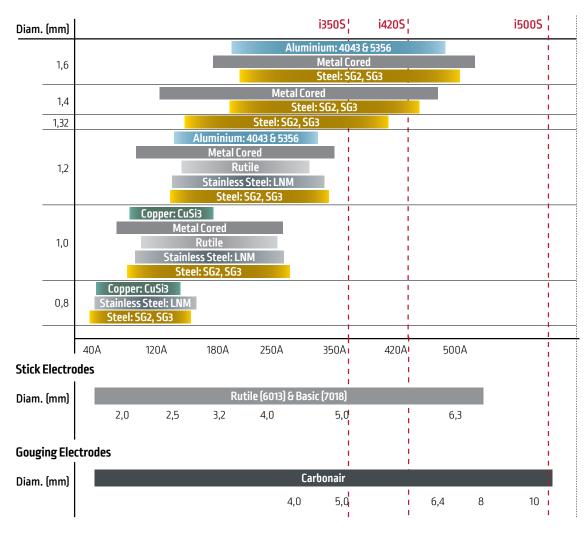
- **ARC INITIATION** Repeatable arc ignition with outstanding arc characteristics.
- **ARC STABILITY** Excellent arc stability, ensuring a smooth droplet transfer, with reduced spatter.
- ARC DYNAMICS Rapid parameter adjustment allowing variability under welding conditions.







MIG/MAG Wire



Processes

GMAW

FCAW-G

FCAW-S

SMAW

CAG

Welding of:

Steel
Stainless Steel
Low Alloy Steel
Aluminium
MIG Brazing

CONNECTIONS CONFIGURATION

STANDARD

Connection of the intermediate hose package in **front** of the power source



OPTIONAL

Connection of the intermediate hose package on the **back** of the power source



	Item type	Item desrciption	Item # (Air)	Item # (Water)	
		POWERTEC® i350S	K141	83-1	
1	Machine	POWERTEC® i420S	K141	K14184-1	
		POWERTEC® i500S	K141	85-1	
		Air 1 m	K14198-PG ⁽¹⁾	_	
		Air 3 m	K14198-PG-3M	_	
		Air 5 m	K14198-PG-5M	_	
		Air 10 m	K14198-PG-10M	_	
		Air 15 m	K14198-PG-15M	_	
		Air 20 m	K14198-PG-20M	_	
		Air 25 m	K14198-PG-25M	_	
2	Hose	Air 30 m	K14198-PG-30M	_	
ر ع	package	Water 1 m	_	K14199-PGW ⁽¹⁾	
		Water 3 m	_	K14199-PGW-3M	
		Water 5 m	_	K14199-PGW-5N	
		Water 10 m	_	K14199-PGW-10N	
		Water 15 m	_	K14199-PGW-15N	
		Water 20 m	_	K14199-PGW-201	
		Water 25 m	_	K14199-PGW-25N	
		Water 30 m	_	K14199-PGW-301	
3	Feeder	LF 52D	K14335-1		
9	reeder	LF 56D	K143	36-1	
4	Cooler	Coolarc® 26	_	K14182-1	
5	MIC gup	LG PROMIG	500 2556	occariace	
_	MIG gun	LGS2	See acce	ssoriess	
6	Option	Cable Management KIT	K142	201-1	
7	Option	Gas flow meter KIT	K14175-1		
8		Output connection KIT (i350S)	K141	96-1	
	Option	Output connection KIT (i420S / i500S)	K14202-1		
9	Option	Water connection KIT	_	K14208-1 ^[2]	

 $^{^{\}tiny (1)}$ only for connection on the back and requires the installation of the option 8 $^{\tiny (2)}$ option requires only for water hose package longer than 1 m

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ACCESSORIES

Dave	routoc®
PUN	/ertec®

TCCESSOTTES			i420S	i500S
		K14183-1	K14184-1	K14185-1
LF 52D	K14335-1	•	•	•
LF 56D	K14336-1	•	•	•
Coolarc® 26	K14182-1	•	•	•
Freezcool 9,6l	W000010167	•	•	•
Output socket connection kit (PT i350S)	K14196-1	•	_	_
Output socket connection kit (PT i420S / i500S)	K14202-1	_	•	•
Cable management kit	K14201-1	•	•	•
Gas supply heater kit (Powertec-i)	K14176-1	•	•	•
Ground cable 400A - 70 mm ² - 5 / 10 / 15 m	GRD-400A-70-xM*	•	_	_
Ground cable 600A – 95 mm² – 5/10 m	GRD-600A-95-xM*	•	•	•
Remote control RC-7 Advanced	K14203-1	•	•	•
Intermediate hose package AIR				
Cable pack 5-pin G – 70 mm² – 1 m	K14198-PG	•	•	•
Cable pack 5-pin G - 70 mm ² - 3 / 5 / 10 m	K14198-PG-xM*	•	•	•
Cable pack 5-pin G – 95 mm ² 15 / 20 / 25 / 30 m	K14198-PG-xM*	•	•	•
Intermediate hose package WATER				
Cable pack 5-pin W - 95 mm ² - 1 m	K14199-PGW ⁽¹⁾	•	•	•
Cable pack 5-pin W - 95 mm ² - 3 / 5 / 10 / 15 / 20 / 25 / 30 m	K14199-PGW-xM*	•	•	•
Water connection kit	K14208-1 ^[2]	•	•	•

 $^{^{\}tiny [1]}$ only for connection on the back and requires the installation of the K14196-1 or K14202-1 $^{\tiny [2]}$ option requires only for water hose package longer than 1 m

Linc	Feed

		STANDARD	ADVANCED
LINECTING		LF 52D K14335-1	LF 56D K14336-1
LINCGUN®		1/14333	1714330 1
LG PROMIG 300 – MIG gun air cooled – 3 / 4 / 5 m	W000345066-2/W000345067-2/W000345068-2	•	•
LG PROMIG 400 – MIG gun air cooled – 3 / 4 / 5 m	W000345072-2 / W000345073-2 / W000345074-2	•	•
LG PROMIG 330W – MIG gun water cooled – 3 / 4 / 5 m	W000345063-2/W000345064-2/W000345065-2	•	•
LG PROMIG 400W – MIG gun water cooled – 3 / 4 / 5 m	W000345069-2 / W000345070-2 / W000345071-2	•	•
LG PROMIG 500W – MIG gun water cooled – 3 / 4 / 5 m	W000345075-2 / W000345076-2 / W000345077-2	•	•
LGS2 360 G - MIG gun air cooled - 3 / 4 / 5 m	W10429-36-xM*	•	•
LGS2 505 W - MIG gun water cooled - 3 / 4 / 5 m	W10429-505-xM*	•	•
Options			
Gas flow meter kit (Powertec-i)	K14175-1	•	•
Wire feeder DRUM quick adapter	K14204-1	•	•
Cart HD for feeders	K14350-1	•	•
Remote control RC-7 Advanced	K14203-1	•	•
Sling with hook	K14378-1	•	•

^{*}x = length (m)



COOLARC® 26 K14182-1

REMOTE CONTROL RC-7 ADVANCED K14203-1





CABLE MANAGEMENT KIT K14201-1

WATER CONNECTION KIT K14208-1^[2]



AIR K14198-PG (1 m) K14198-PG-xM*

WATER K14199-PGW (1m) K14199-PGW-xM*



ACCESSORIES

Wire Guides	
Wire Guide Set Blue 0,6-1,6	0744-000-318R
Wire Guide Set Red 1,8-2,8	0744-000-319R
Euro Wire Guide 0,6-1,6	D-1829-066-4R
Euro Wire Guide 1,8-2,8	D-1829-066-5R

Roll Kit for solid wires	
Roll Kit 0,6 / 0,8VT Fl37 4 rolls (green/blue)	KP14150-V06/08
Roll Kit 0,8 / 1,0VT FI37 4 rolls (blue/red)	KP14150-V08/10
Roll Kit 1,2 / 1,6VT FI37 4 rolls (orange/yellow)	KP14150-V12/16
Roll Kit 1,6 / 2,4VT Fl37 4 rolls (yellow/grey)	KP14150-V16/24
Roll Kit 0,9 / 1,1VT FI37 4 rolls	KP14150-V09/11
Roll Kit 1,4 / 2,0VT Fl37 4 rolls	KP14150-V14/20

Roll Kit for aluminium wires	
Roll Kit 0,6 / 0,8AT FI37 4 rolls (green/blue)	KP14150-U06/08A
Roll Kit 0,8 / 1,0AT Fl37 4 rolls (blue/red)	KP14150-U08/10A
Roll Kit 1,0 / 1,2AT FI37 4 rolls (red/orange)	KP14150-U10/12A
Roll Kit 1,2 / 1,6AT FI37 4 rolls (orange/yellow)	KP14150-U12/16A
Roll Kit 1,6 / 2,4AT FI37 4 rolls (yellow/grey)	KP14150-U16/24A

Roll Kit for cored wires	
Roll Kit 1,2 / 1,6RT FI37 4 rolls (orange/yellow)	KP14150-V12/16R
Roll Kit 1,4 / 2,0RT FI37 4 rolls	KP14150-V14/20R
Roll Kit 1,6 / 2,4RT FI37 4 rolls (yellow/grey)	KP14150-V16/24R
Roll Kit 0,9 / 1,1RT FI37 4 rolls	KP14150-V09/11R
Roll Kit 1,0 / 1,2RT FI37 4 rolls (– / orange)	KP14150-V10/12R



Each item # contains:

- metal wire guide for Euro socket
- 4 rolls
- plastic wire guide set

SPECIFICATIONS

Product	Item Number	Primary Voltage	Max Input Power (kVA)	Input I1max (A)	Fuse size (A)	Rated Output	Efficiency	ldle Power	Weight (kg)	Dimensions HxWxL (mm)	Protection Class	Item contains				
POWERTEC® i350S	K14183-1	40.01//201	15	21	25	350A@50% 300A@100% 420A@100% >	> 85% < 35W						68			USB with operator's manual Ground cable with clamp (3m)
POWERTEC® i420S	K14184-1	400V/3Ph 50/60Hz ± 15%	19	27	32			% < 35W 78 932 x 560	> 85% < 35W	932 x 560 x 925	IP23	Gas hose (2m) Chain (for gas cylinder protection) Slow-blow fuse 2A (2pcs)				
POWERTEC® i500S	K14185-1	± 1570	23	34	32	500A@60% 420A@100%			79			Slow-ulow ruse ZA (Zpcs)				

Product	Item Number	Rated Output	Feeding System	WFS Range (m/min)	Solid Wires (mm)	Aluminum Wires (mm)	Cored Wires (mm)	Weight (kg)	Dimensions HxWxD (mm)	Protection Class	Item contains
LF 52D (Standard)	K14335-1	500A@60%	4 Rolls	15.22	0.0 : 16	10.16	0.0.16	17	F16 y 202 y 6 42	IP23	USB with operator's manual
LF 56D (Advanced)	K14336-1	420A@100%	ø37mm	1,5 ÷ 22	0,8 ÷ 1,6	1,0 ÷ 1,6	0,9 ÷ 1,6	17,7	516 x 302 x 642		Rolls 1,0/1,2 for solid wire

Product	Item Number	Input (V)	Cooling power @1L/min (kW)	Reservoir capacity (l)	Maximum Pressure (MPa)	Weight (kg)	Dimensions WxLxD (mm)	Protection Class	Item contains
COOLARC® 26	K14182-1	230/400V ± 15% 50/60 Hz	0,84	4	0,47	18	260 x 150 x 680	IP23	USB with operator's manual Blue and Red water hoses Black hose for filling procedure

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 information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice, Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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