

TPS
WeldTech



POWERTEC® i COMPACT RANGE

i250C · i320C STANDARD
i250C · i320C · i380C · i450C ADVANCED

LINCOLN
ELECTRIC

POWERTEC® i COMPACT RANGE

The **POWERTEC® i COMPACTS RANGE** is built on the latest Lincoln inverter platform, ensuring optimal **MIG/MAG** and **MMA** welding performance with excellent power and cost efficiency.

The range consists of: 250A, 320A, 380A and 450A power sources with a choice of either the **STANDARD** panel (i250C & i320C) or the **ADVANCED** panel (i250C, i320C, i380C & i450C), that meet most customers' needs and covers a wide range of welding applications.

The Plug & Play water cooler **COOLARC® 26** is available for **POWERTEC® i380C & i450C ADVANCED**.

NEW

From now on all newly manufactured Powertec-I Compact machines are equipped with Lincoln Electric **Premium MIG guns LINCUN® PROMIG™** and offered as **READY-PACKS**.

Water Cooled version available – **PACK** includes **cooler** installed and **coolant**!

CHOOSE LINCOLN FOR EXCELLENT AND EFFICIENT MIG/MAG AND MMA WELDING



POWERTEC® i COMPACT AVAILABLE NOW IN THE PACKS

ADVANCED
ADVANCED PANEL 7" TFT COLOR SCREEN

POWERTEC® i250C & i320C ADV



POWERTEC® i250C
+
LINCUN®
PROMIG™ 270 4m

POWERTEC® i320C
+
LINCUN®
PROMIG™ 300 4m

POWERTEC® i380C, i450C ADV AIR



POWERTEC® i380C
+
LINCUN®
PROMIG™ 300 4m

POWERTEC® i450C
+
LINCUN®
PROMIG™ 400 4m

POWERTEC® i380C, i450C ADV WATER



POWERTEC® i380C
+
LINCUN®
PROMIG™ 330W 4m
COOLARC®-26
FREEZCOOL

POWERTEC® i450C
+
LINCUN®
PROMIG™ 400W 4m
COOLARC®-26
FREEZCOOL

STANDARD
STANDARD PANEL SIMPLE USER INTERFACE

POWERTEC® i250C & i320C STD



POWERTEC® i250C
+
LINCUN®
PROMIG™ 270 4m

POWERTEC® i320C
+
LINCUN®
PROMIG™ 300 4m

UNIT INCLUDES: LincGun® Promig™ 4m (all versions), Coolarc®-26 and Freezcool (only i380C, i450C Water Pack version), Input cable (5 m), Ground cable (3 m), Gas hose (2 m), Rolls 1.0 / 1.2 for solid wire, USB with Operator's Manual, Control panel cover (i380C, i450C)

ADVANCED

Product	Reference	Input (V)	Fuse Type rG or Circuit Breaker Type Z	Rated Output	Output Range (A)	Wire Feed Type / Speed Range (m/min)	Weight (kg)	Dimensions H x W x D (mm)	Protection Class	Pack includes:
Powertec® i250C Adv Pack	K14285-2	400V 3Ph ±15% 50/60 Hz	16A	250A@60%	10-250	4R / 1-20	70	560 x 935 x 878	IP23	LincGun® Promig™ 270 4m (W000345061-2)
Powertec® i320C Adv Pack	K14287-2		20A	320A@40%	10-320					LincGun® Promig™ 300 4m (W000345067-2)
Powertec® i380C Air Pack	K14288-2		25A	380A@40%	10-380					LincGun® Promig™ 300 4m (W000345067-2)
Powertec® i450C Air Pack	K14289-2		32A	400A@80%	10-450		82			LincGun® Promig™ 400 4m (W000345073-2)
Powertec® i380C Water Pack	K14288-3		25A	380A@40%	10-380		70			LincGun® Promig™ 330W 4m (W000345064-2), Coolarc®-26 (K14182-1), Freezcool (W000010167)
Powertec® i450C Water Pack	K14289-3		32A	400A@80%	10-450		82			LincGun® Promig™ 400W 4m (W000345070-2), Coolarc®-26 (K14182-1), Freezcool (W000010167)

STANDARD

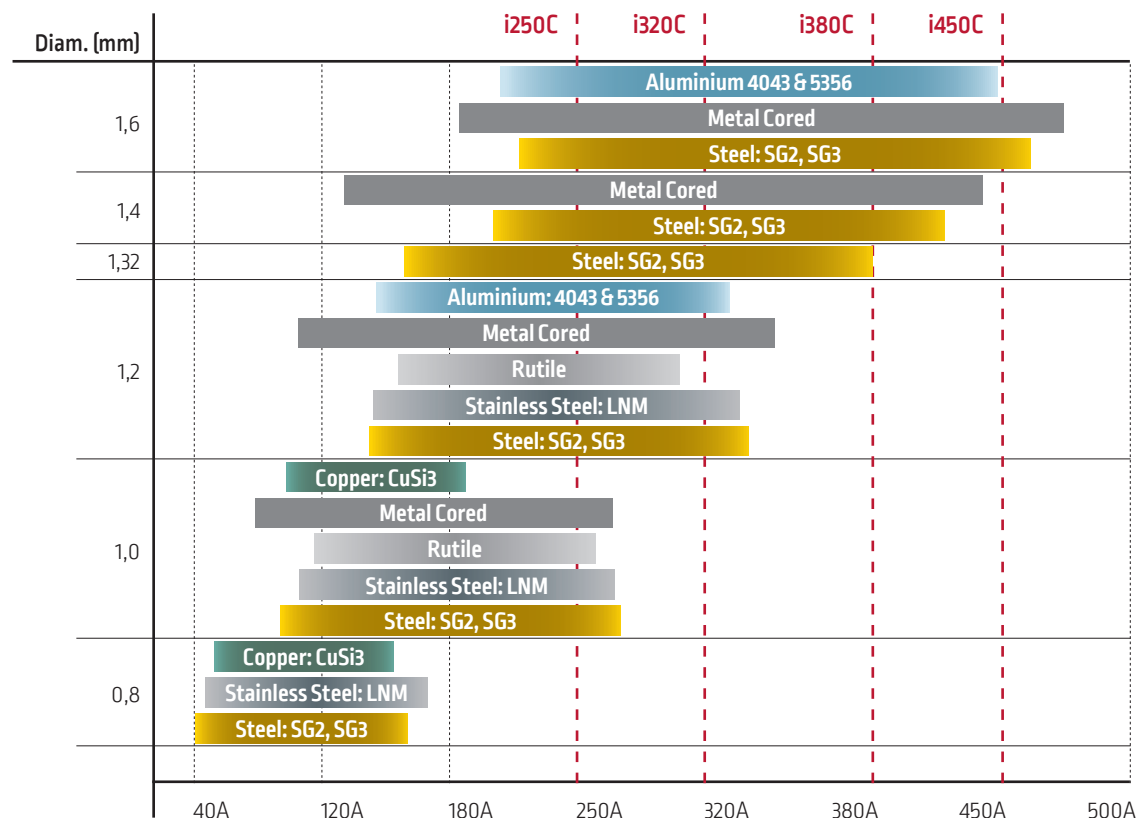
Powertec® i250C STD Pack	K14284-2	400V 3Ph ±15% 50/60 Hz	16A	250A@60%	10-250	4R / 1-20	69	878 x 560 x 935	IP23	LincGun® Promig™ 270 4m (W000345061-2)
Powertec® i320C STD Pack	K14286-2		20A	320A@40%	10-320					LincGun® Promig™ 300 4m (W000345067-2)

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



Stick Electrodes



Gouging Electrodes



Processes

- GMAW
- FCAW-G
- FCAW-S
- SMAW
- CAG (only i450C)

Materials

- Steel
- Stainless steel
- Low alloy steel
- Aluminium
- MIG brazing

Applications

- General fabrication
- Construction site
- Maintenance and repair
- Light industrial

NEW! FEATURES

NEW ERGONOMIC HANDLE for safe movement of the machine and an effortless grip, even when wearing gloves

CABLE MANAGEMENT SYSTEM

[option]
For easy transportation of the whole welding system, (cables, guns, etc.)

NEW ENCODERS

for more precise adjustment



CLOCK & CALENDAR

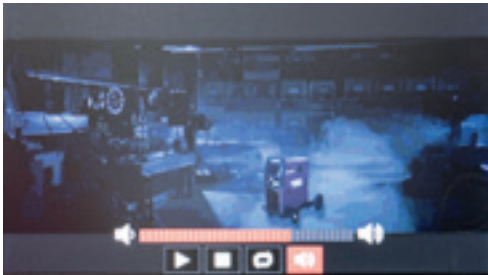
Weld quality data can also be monitored, logged and recorded using a USB

Start Time	Average WFS [mm/min]	Average current [A]	Average voltage [V]	Arc Time [s]	Mode	Job	Job [Name]
26.08.2020 21:23	1.40	144	21.13	35	3	-	-
27.08.2020 19:53	1.40	145	21.23	23	3	-	-
27.08.2020 19:05	1.40	143	21.35	16	3	-	-
27.08.2020 19:39	1.40	142	21.16	32	3	-	-
27.10.2020 10:53	6.80	215	23.4	32	12	3	Welder 1
27.10.2020 10:59	6.80	216	23.55	33	12	3	Welder 1
27.10.2020 10:58	6.80	220	23.45	31	12	3	Welder 1
27.10.2020 11:02	6.80	214	23.56	32	12	3	Welder 1
27.10.2020 11:08	6.80	219	23.3	35	12	3	Welder 1
27.10.2020 11:12	4.31	140	20.4	33	12	-	-
27.10.2020 16:15	4.31	140	20.3	15	12	-	-
27.10.2020 16:18	4.31	140	20.3	14	12	-	-
27.10.2020 16:21	4.31	140	20.35	12	12	-	-
27.10.2020 16:25	4.31	140	20.3	14	12	-	-



SPEAKER

Additional audio signals when adjusting the encoders and when any improper operation is selected. Training, advertising and other video displays now also include sound



FUNCTIONALITIES & ERGONOMICS

Ergonomic design

- Tilting gas bottle tray for ease of loading
- Ideal height for easy-to-view settings
- Easy maneuverability and small footprint
- Convenient top-mounted expendable parts compartment



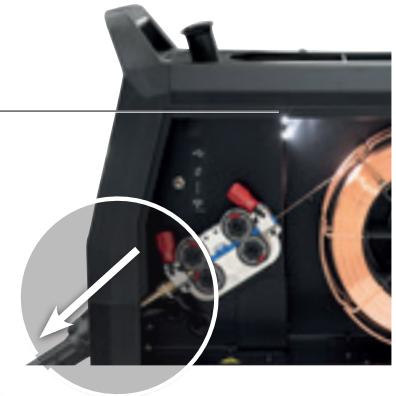
STATE OF THE ART TECHNOLOGY IN WIRE FEEDING

Professional wire feeding system – robust and precise

- 4 individually driven rolls for extremely stable wire feeding of various wire types
- Aluminum housing for a long service life
- Big roll diameter (37 mm) 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

LED lights:
better visibility

Optimized wire positioning:
improved arc stability & reduced gun vibration



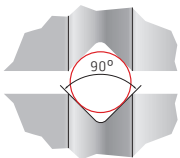
Steel	3-5
Stainless steel	
Braze	
Flux cored	2,5-3,5
Aluminium	1,5-2,5

Wire feeder pressure set-up

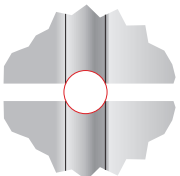
3-5	Steel
	Stainless steel
	Braze
2,5-3,5	Flux cored
1,5-2,5	Aluminium

Individually adjustable contact pressure for the front and rear roll pair

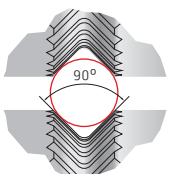
Adjustable set-up for aluminium, steel, stainless steel, braze, flux cored wire



V-groove for stainless steel, steel

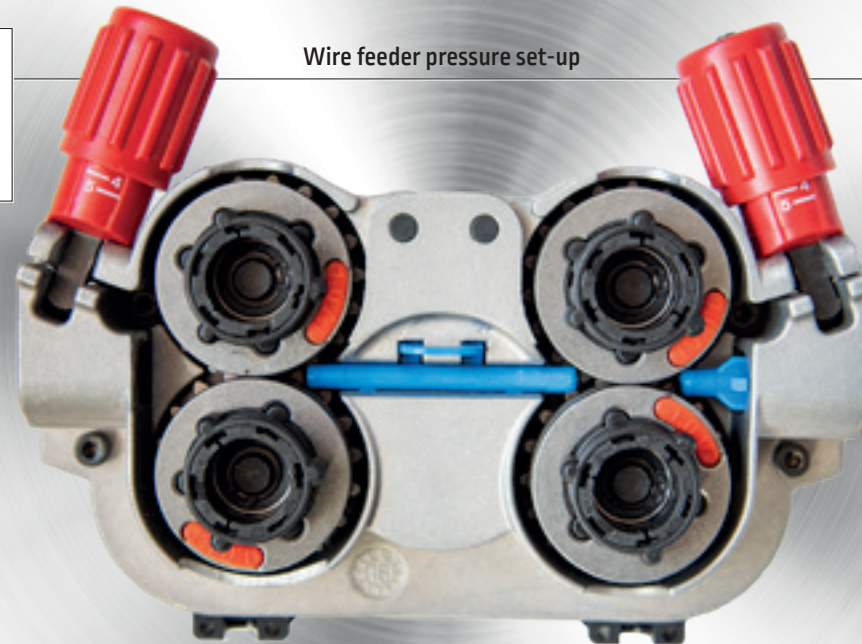


U-groove for aluminium



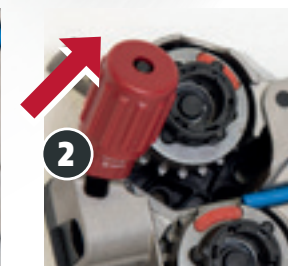
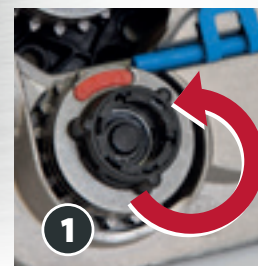
V-groove, knurled for flux cored wire

Color-coded for wire diameter differentiation



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

- 1 Unlock the roll fastener
- 2 Unlock pressure arm
- 3 Exchange the roll



BUILT FOR DEMANDING INDUSTRIAL CONDITIONS

High duty cycle 420A/100% (i450C)

- High production efficiency
- Digital arc control
- True HEAVY DUTY

Inverter engine technology – ECO Friendly

- Lower energy consumption
- 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 labour warranty



Easy maintenance and servicing

Easy access to internal components
Software update via laptop or USB
(Advanced version)

Intelligent F.A.N. (Fan As Needed)



Cooling
tunnel design

INNOVATIVE, INTUITIVE USER INTERFACE – REDUCED TIME FOR TRAINING

Simple navigation also when using welding gloves

Innovative and easy communication

- 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

7" COLOR
DISPLAY!

More functions & features

Auto

AUTO-SETTINGS

Preset parameters to increase productivity.



USB CONNECTIVITY

Easy software update & diagnostics, weld log for quality monitoring.

NEW



SPEAKER

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

NEW



CLOCK & CALENDAR

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



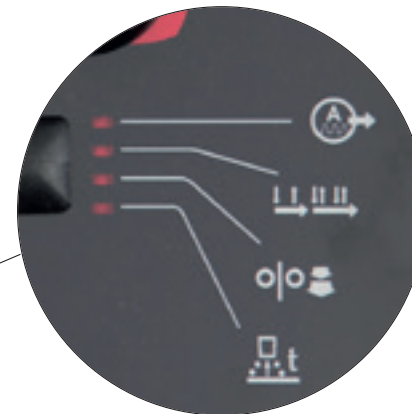
STANDARD USER INTERFACE – BASIC SETTINGS

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

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



Sticker with description of all welding program numbers available.

STANDARD VS ADVANCED – COMPARISON OF FUNCTIONS AND FEATURES



ADVANCED		STANDARD
7" Color TFT	UI type	LED's
✓	Speakers	–
✓	Clock and calendar	–
✓	Display view configuration	–
✓	Auto settings	–
✓ [50]	Memory Jobs	✓ [3+4]
✓	Limits	–
✓	Locking function	–
✓	Languages	–
✓	USB connectivity	–
✓	Media files (Support)	–
✓	Weld Logs / History	–
✓	Quick Triger	–
✓	Push-Pull gun	–
✓	Cross-switch gun	–
✓	A/B procedure	–
✓	Software version	✓
✓	Factory Reset	✓
✓	Inductance	✓
✓	2T/4T Gun mode	✓
✓	Spot welding	✓
✓	Gas purge test	✓
✓	Cold Inch test	✓
✓	Preflow time	✓
✓	Run-in WFS	✓
✓	Start procedure	–
✓	Crater procedure	✓
✓	Burnback time	✓
✓	Postflow time	✓
✓	Hot Start (SMAW)	✓
✓	Arc Force (SMAW)	✓
ADVANCED	Welding Processes	STANDARD
✓	GMAW / FCAW	✓
✓	Stick mode	✓
✓	Synergic	✓
✓ [i450C]	CAG	–



Product	Model	Welding parameters	Setting	Synergic Modes	Support on screen ⁽¹⁾	ARCFX™	Memories / JOBS / Limits	Locking function	USB	Languages selection	Cooler connection	Others
Powertec i450C	Advanced	7 TFT colour screen with ARCFX™	Auto / Manual	33	●	Joint visualization Work point in A/mm	● [49]	●	● Software update Welding Data Collection	●	●	Procedure A/B Quick Trigger Push-Pull Gun
Powertec i380C				28								
Powertec i320C				25								
Powertec i250C												
Powertec i320C	Standard	LEDs meters			—	—	● [3+4]	—	—	—	—	
Powertec i250C												

COOL ARC® 26

More functions and features



[Back side view]

Built-in handle for easy transportation

Cooler fully controlled by power source:

AUTO/ON/OFF for better energy savings and extended service life



Coolant filter
keeps coolant clean

LED lights inside reservoir
for clearer visibility of the coolant level

Flow sensor inside
for gun protection



Simple Connection and Easy Installation

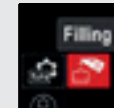
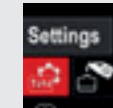


New **COOL ARC® 26** cooler fully controlled by power source

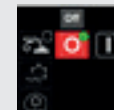


Cooler Menu is available when cooler is connected

Settings: 3 Modes of operation available:

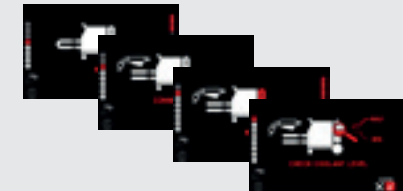


1. AUTO
2. OFF
3. ON

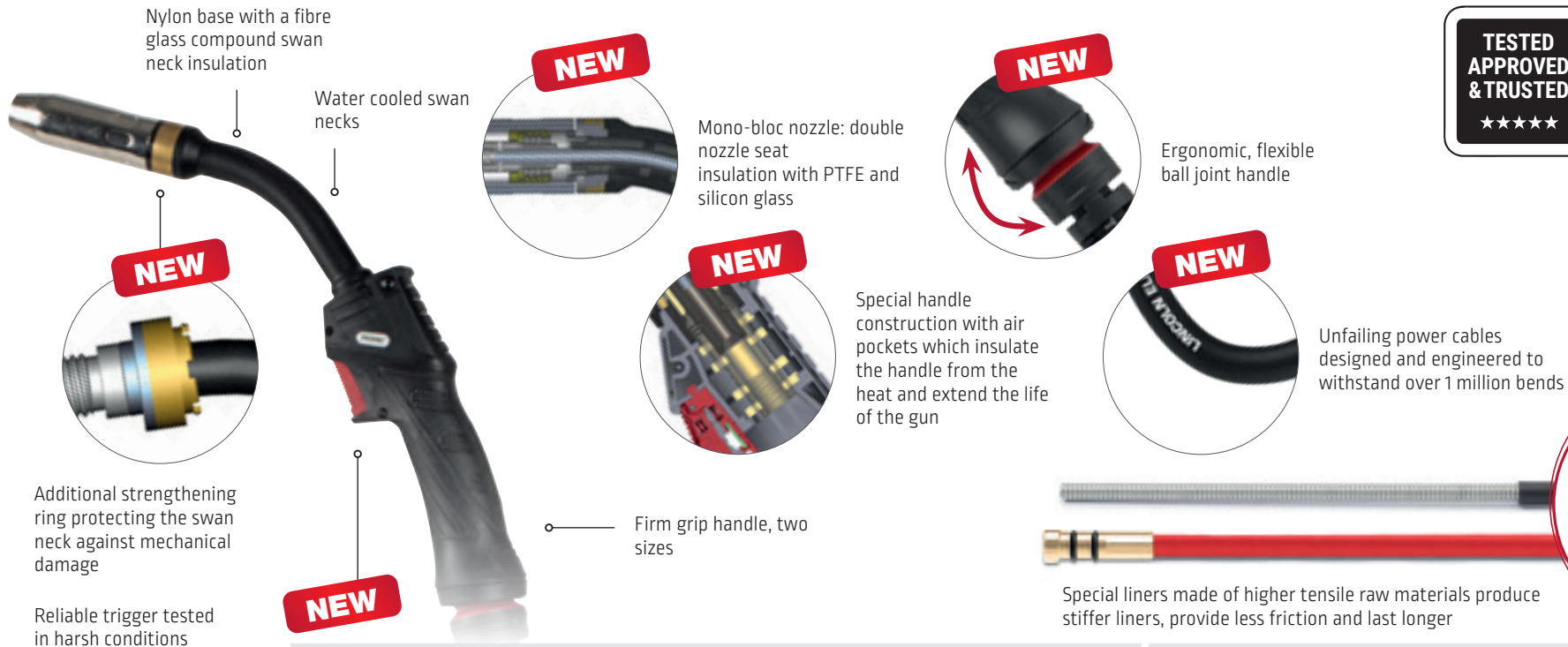


Filling Procedure

step by step detail filling instruction



PREMIUM MIG WELDING GUNS – LINGUN® PROMIG™



AIR-COOLED MODELS

WATER-COOLED MODELS

		LG PROMIG 230T	LG PROMIG 270	LG PROMIG 300	LG PROMIG 400	LG PROMIG 330W	LG PROMIG 400W	LG PROMIG 500W
Duty cycle	CO ₂	230 A @ 60%	270 A @ 60%	300 A @ 60%	400 A @ 60%	330 A @ 100%	400 A @ 100%	500 A @ 100%
	M21	200 A @ 60%	240 A @ 60%	270 A @ 60%	370 A @ 60%	300 A @ 100%	370 A @ 100%	450 A @ 100%
Wire diameter options		0.8-1.0 mm	0.8-1.0 mm	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 equipment	Contact tip	0.8 mm steel	1.0 mm steel	1.2 mm steel	1.2 mm steel	1.0 mm steel	1.2 mm steel	1.2 mm steel
	Nozzle	Ø 12 mm	Ø 14 mm	Ø 16 mm	Ø 16 mm	Ø 14 mm	Ø 16 mm	Ø 16 mm
Handle size, other feature		Small, rotatable swan neck for comfortable welding in hard-to-reach places	Small	Large	Large	Small	Small	Large
Typical application		Thin plates, automotive industry, out of position welding	Thin plates, light, fabrication, locksmithing	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						
3 m		W000275408-2	W000345060-2	W000345066-2	W000345072-2	W000345063-2	W000345069-2	W000345075-2
4 m		W000275419-2	W000345061-2	W000345067-2	W000345073-2	W000345064-2	W000345070-2	W000345076-2
5 m		W000275420-2	W000345062-2	W000345068-2	W000345074-2	W000345065-2	W000345071-2	W000345077-2

LINGGUN® PROMIG™ UD – PARAMETER CONTROL

We are excited to present new products
in our premium LINGGUN® PROMIG™ family!

NEW

Two new models with parameter adjustment:



Air Cooled
**LINGGUN PROMIG
300 UD 4M**
W100000297



Water Cooled
**LINGGUN PROMIG
500W UD 4M**
W100000298

Supplied with a **2-button module (Up/Down)** already installed
and a **Cross-Switch module**, easy to change by yourself, just
unscrew one screw.



Up/Down module to adjust the Wire Feeding Speed
(WFS). Pressing the upper button will increase the
speed, pressing the lower button will decrease it.



The **Cross Switch module** allows you to switch between
different welding modes and to adjust the WFS.

**Use the Cross Switch module to chose one
of the following options:**

1. Wire Feeding Speed and Arc Length / Trim
2. Wire Feeding Speed and Job
3. Wire Feeding Speed and Procedure A-B

This functionality is available to Lincoln Electric machines **with a 12 pin plug.**



Technical specifications

Product Name	Product Number	Cooling	Duty Cycle	Length
LINGGUN PROMIG 300 UD 4M	W100000297	Air	300 A CO2 / 270 A M21 @ 60%	4m
LINGGUN PROMIG 500W UD 4M	W100000298	Water	500A CO2 / 450A M21 @100%	

Both models are a part of the LINGGUN PROMIG family, which means:

- Highly resistant to mechanical damage and high temperatures
- Long-life, proprietary wear parts delivering up to 70% more welding wire per contact tip
- Dedicated high quality liners ensuring smooth wire feeding
- Simplified use and wear parts management to reduce downtime
- Extended warranty
- Delivered ready to weld: with a long-life contact tip and a liner
- Compliant with EN 60974-7 norm

ACCESSORIES

• Optional ✓ Included

		Powertec®							
		ADVANCED						STANDARD	
		Water PACK		Air PACK				Air PACK	
		i450C	i380C	i450C	i380C	i320C	i250C	i320C	i250C
		K14289-3	K14288-3	K14289-2	K14288-2	K14287-2	K14285-2	K14286-2	K14284-2
Control panel cover KIT	K14325-1		✓					•	
Bumpers KIT	K14328-1		✓					•	
Polarity change KIT	K14173-1		✓					•	
Cooler COOL ARC® 26	K14182-1	✓		•				–	
Coolant FREEZCOOL 9,6 l	W000010167	✓		•				–	
Cable Management KIT	K14201-1					•			
Gas flow meter KIT	K14175-1					•			
Gas heater harness KIT	K14176-1					•			
12PIN Remote Control KIT	K14290-1			•					–
6-PIN/12-PIN adapter	K2909-1			•					–
Remote control (iPOT, required K14290-1 and K2909-1 adapter KITs)	K10095-1-15M			•					–
Remote control MIG 7M (required K14290-1 KIT)	K14091-1			•					–
RC7 Advanced remote control (required K14290-1 KIT)	K14203-1			•					–
Cable with Electrode holder 400A/70 mm ² – 5 m	E/H-400A-70-5M					•			
Adapter for spool type S300 (300 mm)	K10158					•			
Adapter for spool type S300 (300 mm)	K10158-1					•			
Adapter for spool S200 (200 mm)	R-1019-125-1/08R					•			
Wire feeder drum quick connector	K14204-1					•			
FLAIR 600 Gouging torch with airflow regulated	W000010136	•	–	•			–		
LINGUN® PROMIG™ 270 - 4m air cooled	W000345061-2			•			✓	•	✓
LINGUN® PROMIG™ 300 - 4m air cooled	W000345067-2		•		✓	✓	•	✓	•
LINGUN® PROMIG™ 400 - 4m air cooled	W000345073-2	•		✓			•		
LINGUN® PROMIG™ 330W - 4m water cooled	W000345064-2	•	✓	•			–		
LINGUN® PROMIG™ 400W - 4m water cooled	W000345070-2	✓		•			–		
LINGUN® PROMIG™ 300 UD - 4m (required K14290-1 KIT)	W100000297	–				•			–
LINGUN® PROMIG™ 500W UD - 4m (required K14290-1 KIT)	W100000298	•		• [with CA26 inst.]			–		

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 FI37 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 FI37 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 FI37 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 FI37 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

