

# **COMPLETE SOLUTION FOR INDUSTRY**

### **DIGISTEEL -S RANGE**

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, now which 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, 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 **DIGISTEEL** 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.







# **DIGISTEEL -S RANGE**





**COOLARC® 26** 

**DIGISTEEL -S RANGE** is a brand new range of SAF-FRO 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: **355S, 425S** and **505S** with a choice of separate wire feeders, standard WF 52D for basic use, or the advanced WF 56D for more demanding applications, helps customer to fulfill every possible welding needs.

All **DIGISTEEL -S** have the option of water cooling by simply adding the new COOLARC® 26.





**CHOOSE SAF-FRO** FOR COMPLETE SOLUTION FOR INDUSTRIAL USERS WITH NEW HEAVY DUTY **DESIGN** 



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OUTPUT

S300

# **NEW ERGONOMIC DESIGN**



the machine

Simple navigation also when using welding gloves

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



Rotatable wire feeder Swivel on the power source enabling rotation of the wire feeder and setting it in any position



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



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Rubber bumpers protecting feet and 4 lifting eyes for easy hook-in

and safe transportation

Power Source water cooled ready (cooler COOLARC® 26

as option)

DIGISTEEL S RANGE

# TRUE RELIABILITY



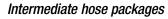
Cable connections on front (in standard) and back rear side (in option)
All cable connections can easily be made without tools



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

**Large wheels** for easily effortlessly overcome obstacles such as cables or thresholds

Very solid, stable, metal made construction



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 30 m), water or air

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# **RELIABLE WORKHORSES**

#### High duty cycle 420A/100% (425S & 505S)

- 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

# SAF-FRO 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 (WF 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

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## **OPTIMIZED ERGONOMICS**



**Gun Holder**: always at hand, ready to work

Lifting eye – crane suspension
For 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



Big wheels as standard for mobility



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



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 (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



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

Steel Stainless steel Braze

Steel	
Stainless steel	3 ÷ 5
Braze	
Flux cored	$2.5 \div 3.5$
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

Color-coded for wire diameter differentiation



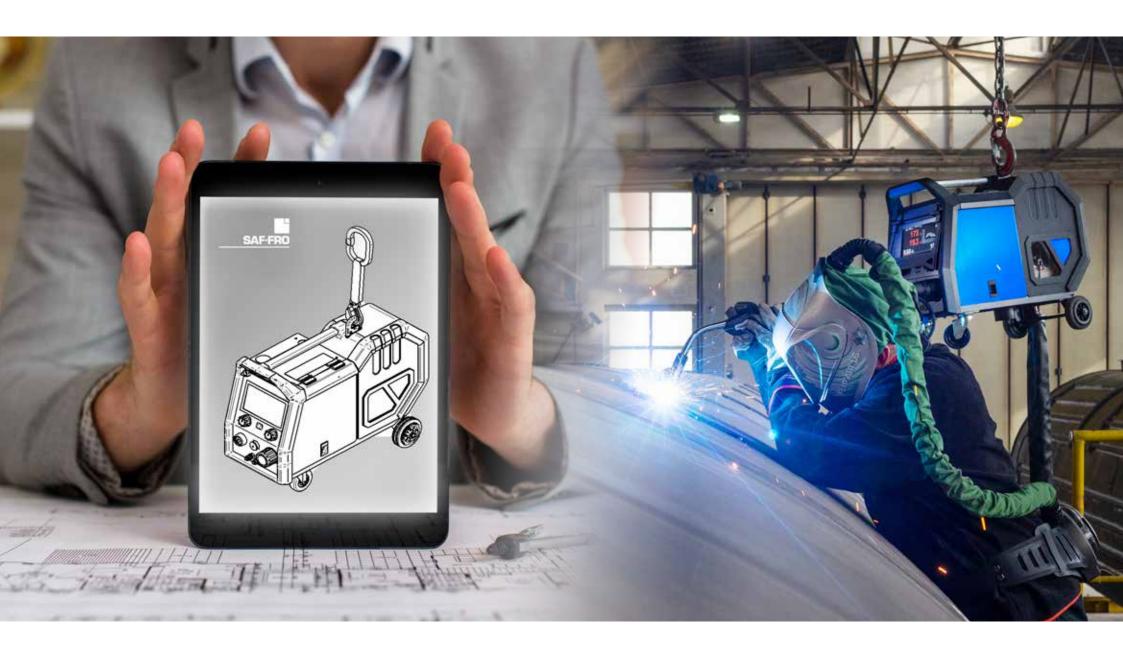






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# **DESIGNED TO ENHANCED YOUR WELDING CAPABILITY**



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### INNOVATIVE INTUITIVE INTERFACE

- Two controls, one button for easy navigation
- Icon language for key commands
- Easy process and settings selection
- ARCFX<sup>TM</sup> 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!



#### **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 signalled by a sound.



#### **NEW ENCODERS**

for more precise adjustment



#### **CLOCK & CALENDAR**

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



Simple navigation also when using welding aloves

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# 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

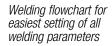
# BASIC SETTINGS SIMPLE IN USE

# 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
WF 56D	✓	✓	✓	✓
WF 52D	✓	✓	✓	✓

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

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# **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







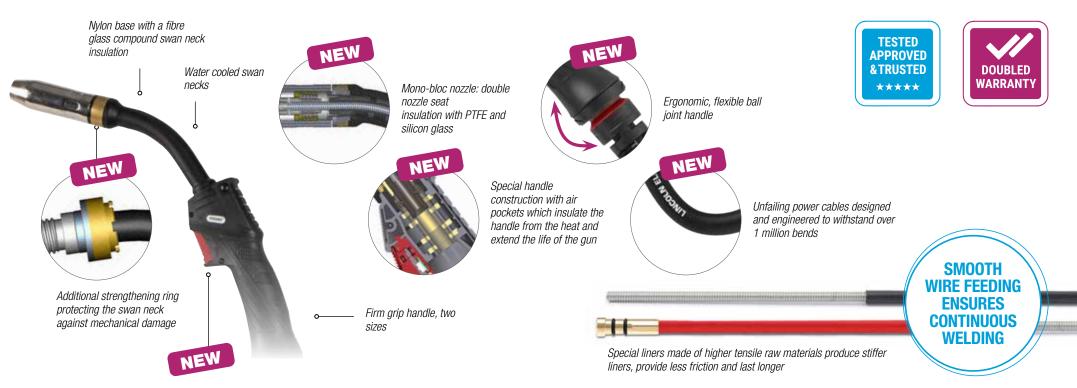
#### Filling Procedure

step by step detail filling instruction





# PREMIUM MIG WELDING GUNS - LINCGUN® PROMIG™



Reliable trigger tested in harsh conditions



# **AIR-COOLED MODELS**



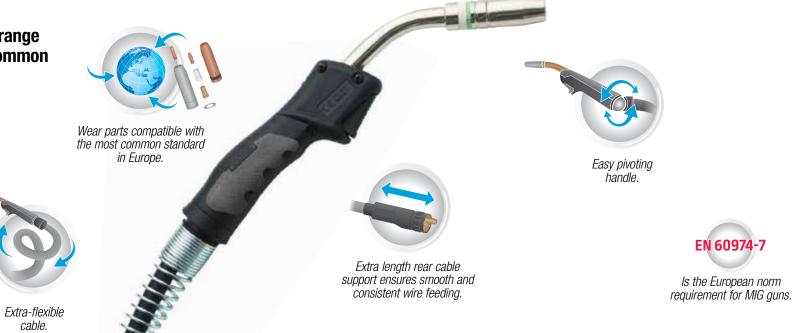
# **WATER-COOLED MODELS**

		LG PROMIG 300	LG PROMIG 400	LG PROMIG 330W	LG PROMIG 400W	LG PROMIG 500W
Duty avala	CO <sub>2</sub>	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	·			
	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

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# **LGS2 MIG GUNS**

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



#### Choose your gun

Rating calculated using CO<sub>2</sub>

Air cooled
Water cooled
Dedicated guns

Series	Size	Rate	200A	230A	250A	270A	330A	350A	420A	500A
	250G									
LGS2	240G	60%								
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 <sub>2</sub> s	hielding 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

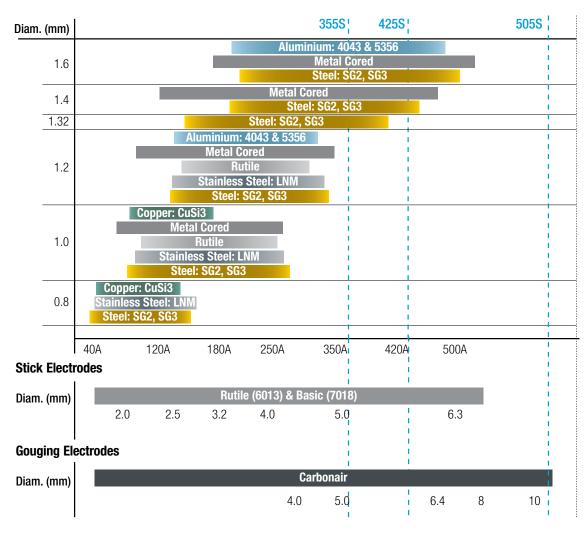
- ARC INITIATION Repeatable arc ignition with outstanding arc characteristics.
- ARC STABILITY Excellent arc stability, ensuring a smooth droplet transfer, with reduced spatter.
- ARC DYNAMICS Rapid parameter adjustment allowing variability under welding conditions.







#### 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  ${\bf back}$  of the power source



	Item type	Item desrciption	Item # (Air)	Item # (Water)
		CITOSTEEL 355S	W0004	404457
1	Machine	CITOSTEEL 425S	W0004	404458
		CITOSTEEL 505S	W0004	404459
		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	_
4	package	Water 1 m	_	K14199-PGW (1)
		Water 3 m	_	K14199-PGW-3M
		Water 5 m	_	K14199-PGW-5M
		Water 10 m	_	K14199-PGW-10M
		Water 15 m	_	K14199-PGW-15M
		Water 20 m	_	K14199-PGW-20M
		Water 25 m	_	K14199-PGW-25M
		Water 30 m	_	K14199-PGW-30M
3	Feeder	WF 52D	W100000176	
•	reedei	WF 56D	W1000	000177
4	Cooler	Coolarc® 26	_	K14182-1
<u> </u>	NAIC	LG PROMIG		
5	MIG gun	LGS2	see acc	essoriess
6	Option	Cable Management KIT	K14201-1	
		Gas flow meter KIT	K14175-1	
7	Option	Output connection KIT (355S)	K14196-1	
8	Option	Output connection KIT (425S / 505S)	K142	202-1
9	Option	Water connection KIT	_	K14208-1 (2)

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

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# **ACCESSORIES**

#### DIGISTEEL

**Wire Feeder** 

		355S	425S	505S
		W000404454	W000404455	W000404456
WF 52D	W100000176	•	•	•
WF 56D	W100000177	•	•	•
Coolarc® 26	K14182-1	•	•	•
Freezcool 9.6l	W000010167	•	•	•
Output socket connection kit (355S)	K14196-1	•	_	_
Output socket connection kit (425S / 505S)	K14202-1	_	•	•
Cable management kit	K14201-1	•	•	•
Gas supply heater kit	K14176-1	•	•	•
Ground cable 400A – 70 mm² – 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 mm <sup>2</sup> - 1 m	K14198-PG	•	•	•
Cable pack 5-pin G - 70 mm <sup>2</sup> - 3 / 5 / 10 m	K14198-PG-xM*	•	•	•
Cable pack 5-pin G - 95 mm <sup>2</sup> 15 / 20 / 25 / 30 m	K14198-PG-xM*	•	•	•
Intermediate hose package WATER	·	·		
Cable pack 5-pin W - 95 mm <sup>2</sup> - 1 m	K14199-PGW (1)	•	•	•
Cable pack 5-pin W - 95 mm <sup>2</sup> - 3 / 5 / 10 / 15 / 20 / 25 / 30 m	K14199-PGW-xM*	•	•	•
Water connection kit	K14208-1 (2)	•	•	•

 $<sup>^{(1)}</sup>$  only for connection on the back and requires the installation of the K14196-1 or K14202-1  $^{(2)}$  option requires only for water hose package longer than 1 m

		STANDARD	ADVANCED
		WF 52D	WF 56D
LINCGUN®		W100000176	W100000177
LG PROMIG 300 $-$ MIG gun air cooled $-$ 3 / 4 / 5 m $^{\rm }$	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	K14175-1	•	•
Wire feeder drum quick adapter	K14204-1	•	•
Remote control RC-7 advanced	K14203-1	•	•
Cart HD for feeders	K14350-1	•	•
Sling with hook	K14378-1	•	•

<sup>\*</sup> 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)



#### **INTERMEDIATE HOSE PACKAGE**

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

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



# **ACCESSORIES**

0744-000-318R
0744-000-319R
D-1829-066-4R
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 Fl37 4 rolls (blue/red)	KP14150-V08/10
Roll Kit 1.2 / 1.6VT Fl37 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 Fl37 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 Fl37 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 Fl37 4 rolls (red/orange)	KP14150-U10/12A
Roll Kit 1.2 / 1.6AT Fl37 4 rolls (orange/yellow)	KP14150-U12/16A
Roll Kit 1.6 / 2.4AT Fl37 4 rolls (yellow/grey)	KP14150-U16/24A

Roll Kit for cored wires	,
Roll Kit 1.2 / 1.6RT Fl37 4 rolls (orange/yellow)	KP14150-V12/16R
Roll Kit 1.4 / 2.0RT Fl37 4 rolls	KP14150-V14/20R
Roll Kit 1.6 / 2.4RT Fl37 4 rolls (yellow/grey)	KP14150-V16/24R
Roll Kit 0.9 / 1.1RT Fl37 4 rolls	KP14150-V09/11R
Roll Kit 1.0 / 1.2RT Fl37 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 1max (A)	Fuse size (A)	Rated Output	Efficiency	ldle Power	Weight (kg)	Dimensions H x W x D (mm)	Protection Class	Item contains			
Digisteel 355S	W000404454	400V/2Db	15	21	25	350A@50% 300A@100%	> 85%		68			USB with operator's manual Ground cable with clamp (3 m)			
Digisteel 425S	W000404455	400V/3Ph 50/60Hz ± 15%	19	27	32	420A@100%		> 85%	> 85%	> 85%	> 85%	< 35W	78	932 x 560 x 925	IP23
Digisteel 505S	W000404456	± 1370	23	34	32	500A@60% 420A@100%			79			Olow blow tube Zn (Zpes)			

Product	Item Number	Rated Output	Feeding System	WFS Range (m/min)	Solid Wires (mm)	Aluminum Wires (mm)	Cored Wires (mm)	Weight (kg)	Dimensions H x W x D (mm)	Protection Class	Item contains
WF 52D (Standard)	W100000176	500A@60% 420A@100%	4 Rolls	1.5-22	0.8-1.6	1.0-1.6	0.9-1.6	17	516 x 302 x 642	IP23	USB with operator's manual
WF 56D (Advanced)	W100000177		420A@100%	Ø37mm	1.5-22	0.0-1.0	1.0-1.0	0.9-1.0	17.7	310 X 3UZ X 04Z	IF23

Product	Item Number	Input (V)	Cooling power @1L/min (kW)	Reservoir capacity (I)	Maximum Pressure (MPa)	Weight (kg)	Dimensions H x W x D (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

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#### CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric 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 or fitness for any customers' particular purpose is specifically disclaimed.

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