

ELIOS
238 220 213

CLAAS

Agile in the field.



Nicely on the move.





The compact sub-100 hp market extends into many industries, including livestock-based farming, indoor and outdoor vegetable production, and of course non-agricultural applications as well. If compact dimensions and manoeuvrability are your priorities when purchasing a tractor in this class, the high-performance and versatile ELIOS from CLAAS will be sure to meet your expectations. Whether you're looking for a simple, basic-specification tractor, or seeking greater hydraulic output or more comfortable and flexible transmissions together with a wide range of equipment extras, you can tailor the ELIOS to your exact requirements.

Agile in the field.
the ELIOS.





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The ELIOS series comprises three models developing 72, 78 and 88 hp. Economic yet powerful four-cylinder engines deliver smooth running and high torque.

With a minimum overall height of 2.40 metres with cab (just 1.89 metres with platform and retracted roll bar) and a turning radius of just 3.77 metres, the ELIOS is ideal for applications in low farm buildings or greenhouse environments.

The REVERSHIFT reversing function combined with the ELECTROPILOT electronic joystick for dual spool valve operation is perfect for front loader operations.



In the top specification format, the ELIOS features a 24/12 transmission with electrohydraulic REVERSHIFT reversing function and TWINSHIFT two-stage powershift transmission.

Endless possibilities.



The highest-specification hydraulic equipment package for the ELIOS delivers 85 l/min for the rear linkage and four additional electronic spool valves. Operation is via a joystick and two rocker switches.



The ELIOS can be equipped with a front linkage with integrated front PTO shaft ex factory. Coupled with a low centre of gravity, the machine is perfectly suited to challenging operations in difficult terrain.



With a powerful rear and front linkage, the ELIOS caters to a huge range of potential applications.

Available with a permissible total weight of less than 3.5 tonnes and a wide selection of tyres ex factory, the ELIOS is equally at home in urban areas.



Range of applications

Setting the standard for flexibility.



Highly manoeuvrable.

A wide steering lock of 55° with a wheelbase of 2,098 mm facilitates a turning radius of 3.77 metres, delivering maximum productivity in any area of application, whether around the farm or when using the front loader.



Small in stature.

Thanks to its low overall height of just 2.40 metres (platform version: 1.89 metres with retracted roll bar), the ELIOS can be used just about anywhere, including farm buildings with low entrances or in greenhouse environments.

The roll bar can be retracted in just seconds.





Stable while under way.

Even over difficult terrain, such as when operating on slopes, a low centre of gravity gives the ELIOS excellent stability. Together with balanced weight distribution, this ensures exceptional safety and efficiency.

With corresponding tyres, the ELIOS boasts an overall width of 1.70 metres, enabling it to be driven between widely spaced vineyard rows without any problems.

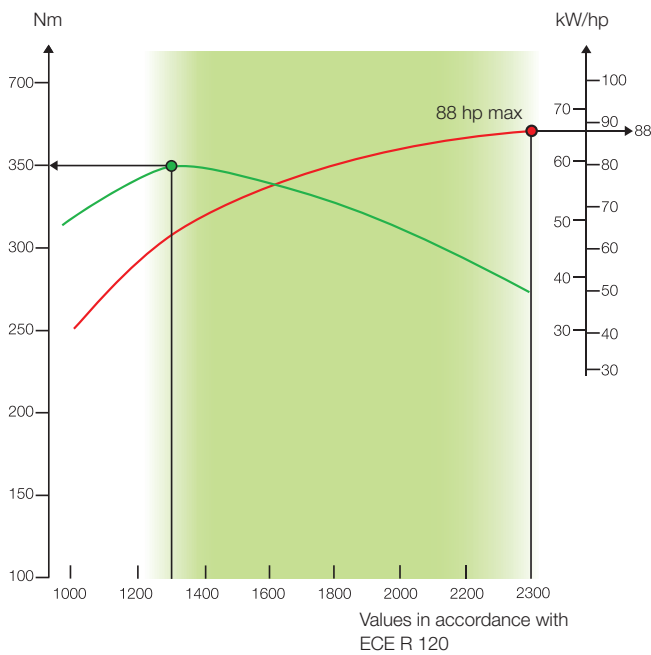
Sufficient ground clearance is yet another requirement for operational machines, whether for passing over swaths during haymaking or when negotiating beds or embankments in vegetable cultivation – here, too, the ELIOS is a winner.



Dimensions



ELIOS 230



High torque.

Thanks to internal exhaust gas recirculation, the 72, 78 or 88 hp FPT four-cylinder engine meets the Stage IIIa (Tier 3) exhaust emissions standard. The turbocharged 3.2 litre engine features charge-air cooling (except for the ELIOS 210) and mechanical fuel injection. Its high torque at low rpm enables a range of operations to be performed at reduced engine speeds, saving fuel. The engine also exhibits lively response characteristics across the entire output range, eliminating the need for frequent gear changes.

Performance and comfort combined.

Smooth running, low fuel consumption.

The modified engine displacement of 3.2 litres ensures low fuel consumption which, in combination with a finely tuned four-cylinder engine, guarantees an extremely smooth ride, together with low engine noise and a long service life.

The ELIOS can also be equipped with an optional cold-start aid to guarantee a gentle and reliable engine start in cold weather.



Engine

A powerful combination – transmission and PTO.

Power take-off.

The ELIOS delivers the following PTO shaft speeds: 540, 540/1,000 or 540/540 ECO. The unit enables even light PTO operations to be completed efficiently and quietly at low engine speeds. An auxiliary rear PTO shaft is also available. PTO engagement is hydraulically supported as standard, and the shaft is electrohydraulically engaged and disengaged in conjunction with the REVERSHIFT transmission unit.

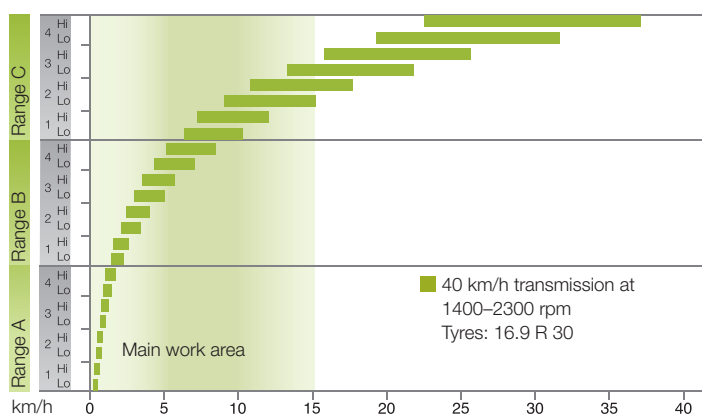
Four transmission variants.

With four available transmission variants, the ELIOS offers the perfect solution for every user:

- 12F/12R with mechanical reverser
- 24F/24R with mechanical reverser and splitter
- 24F/24R with mechanical reverser and TWINSHIFT two-stage powershift
- 24F/12R with REVERSHIFT hydraulic reverser and TWINSHIFT two-stage powershift

The 24 gears deliver the ideal speed for all types of operation. At rated engine speed, for instance, a minimal speed of 470 m/h is possible. The TWINSHIFT power transmission can be activated with ease via a push button on the gear knob. All ELIOS transmission models have been developed to ensure low power losses.

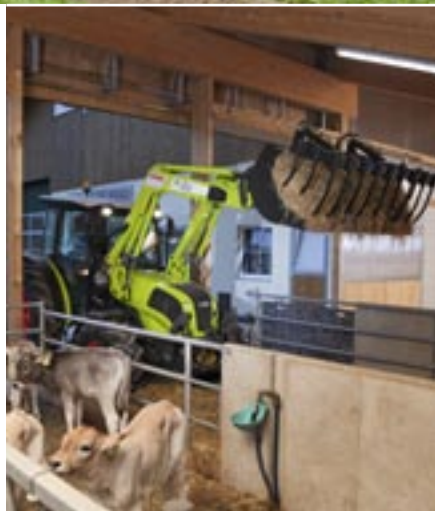
All-wheel drive is push-button-activated. To eliminate unnecessary tyre wear, all-wheel drive is automatically engaged or disengaged at 14 km/h.





With REVERSHIFT, you can forget about the clutch pedal.

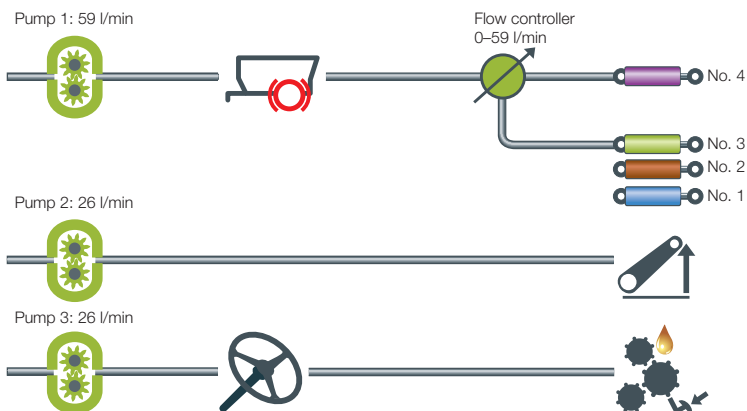
1 REVERSHIFT lever for quick turning manoeuvres, ideal during front loader operations or one-directional stopping, for example when baling.



2 Clutch button on the shift lever for convenient gear changing on the road.



Transmission and PTO



Hydraulic output on demand.

The ELIOS is equipped with two hydraulic pumps as standard, which together deliver a flow of 85 l/min. The steering system is supplied via one hydraulic circuit, while a second circuit supplies the rear linkage and spool valves. A third hydraulic pump configuration is optionally available for a maximum combined flow of 111 l/min, with the steering system, rear linkage and spool valves each supplied via a separate pump. This enables overlapping actions to be performed simultaneously or device combinations with extremely high hydraulic requirements to be operated as well. Additionally, valuable fuel savings can also be made by operating at low engine speeds while maintaining high hydraulic output.



Combined with the three-pump hydraulic circuit, the ELIOS is equipped with up to four electronic spool valves, two of which are operated via the ELECTROPILOT, with the other two operated via two rocker switches. The third and fourth ELECTROPILOT functions enable the unit to fully control the front loader.

Muscle power.



Greater lift capacity equals greater possibilities.

With a maximum lift capacity of 3.2 tonnes at the rear linkage's mounting points and up to 2.8 tonnes at the front linkage, the ELIOS is well equipped to face the challenges of day-to-day operations. The rear linkage in both the cab and platform versions of the ELIOS is also available with a mechanical or electronic TCE 6 operating unit.

The machine's front hydraulics systems and front PTO shaft are available ex factory for seamless integration in the tractor. When folded up, the front linkage is highly compact with a minimal overhang. The tractor rear offers a wide range of hitching options, including, for example, extended shift rails with drawbar or a pick-up hitch.

Expand your tractor's range of applications without compromising on manoeuvrability with the CLAAS FL 60 or FL 40 front loader – working together in perfect harmony.



Hydraulics

Comfort on the go.

Introducing the ELIOS cab.

The wide-opening door, comfortable handles and self-cleaning steps provide safe, easy cab access. The many potential configurations of seat and steering wheel ensure a comfortable driving position for any driver. The ELIOS can also be fitted with an air-sprung seat for even greater comfort. CLAAS provides a safety belt for both seat types to comply with all applicable safety requirements.

Large windows in the ELIOS cab provide for an outstanding all-round view. In particular, the convex panes at the rear of the cab offer an unrestricted view of even wide attachments or when operating in stables or around the farm. Four powerful work lights illuminate the working area at night or in poorly lit stable environments.



Convenient external control with mechanical or electronic rear linkage.



Fresh air.

The cab's front and rear windows can be opened wide for a natural flow of air. The air-conditioning system provides for a cool working environment in hot and dusty conditions. To protect the operator when crop spraying, an active carbon filter is available ex factory instead of a conventional cab filter.

In the design and development of the ELIOS, CLAAS engineers placed considerable emphasis on ergonomics – these have been kept simple and logical, so that any driver will be capable of operating the ELIOS intuitively. The instrument panel provides clear and concise information on the machine's operating status, such as vehicle speed, engine speed and rear PTO rpm.

The rear linkage can be operated using external controls for safe and secure attachment and detachment, and the mechanical linkage, too, can be operated in this way. Convenient extras to make your day-to-day work easier, such as rear window wipers and an interior mirror, are also available for the ELIOS.



Comfort



Why settle for anything else?

Whether your application is general agriculture, horticulture, equestrian, vegetable production, viticulture or municipal work, the ELIOS is designed for you.

If required, the total permissible weight of the ELIOS can be limited to 3.5 tonnes to enable the tractor to be driven on public roads with a standard passenger car driver's licence.

CLAAS provides optional turf tyres ex factory (sizes: 23.1-26 rear and 560/45-22.5 front) to enable the ELIOS to be driven over sensitive grass cover or wet subsoil in parks and on sports fields without damaging the precious turf – all year round.

The ELIOS – for every task and driver.

The machine for everyone.

The intuitive configuration of operating controls in the ELIOS is designed so that even alternating drivers can begin working productively with the tractor from the outset, thanks to the arrangement and identification of the controls.

The optimal weight distribution for day-to-day operations with front loader, and also heavy front and rear attachments such as wood choppers or boom mowers, ensures safe and secure handling on the road.

The tractor's many strengths speak for themselves:

- Compact and manoeuvrable
- Minimal overall width of 1.70 m
- Fuel-efficient four-cylinder engine
- Impressive hydraulic flow volume of up to 111 l/min
- Front linkage with integrated front PTO available ex factory
- CLAAS front loader suitable for your ELIOS
- Perfect all-round view



Versatility

Short maintenance times, long intervals.

Ready in a flash.

Thanks to its one-piece bonnet, the entire engine compartment can be accessed with the flick of a catch. The air filter is directly accessible, from where it can be quickly checked and cleaned.

The air conditioning radiator slides out and the air filter can be removed in no time at all. When required, the surfaces of the cooler unit can be quickly and easily cleaned, keeping downtime to an absolute minimum.

Easily accessible from the outside, the cab air filter can be cleaned very quickly to ensure an ongoing supply of fresh air to the cab.

The ELIOS boasts particularly long maintenance intervals – the 500-hour engine oil change intervals reduce downtime and costs.





Ease of maintenance.

- All servicing points are easily accessible, even when a front loader is attached
- Easy changing of oil and diesel filters
- All cab surfaces are manufactured from dirt-repellent materials and be cleaned effortlessly where required
- Easily accessible diesel tank on the cab access side



The front loader's attachment controls do not interfere with servicing and maintenance work.



Maintenance



FIRST CLAAS SERVICE® around the clock.

Our many years of experience and enormous knowledge base have familiarised us like no one else with the working methods and individual requirements of every farming business. So we know exactly what it all comes down to, including the service aspects. Our FIRST CLAAS SERVICE® package is synonymous with absolute reliability and professionalism. Or, to put it simply: we're there for you right away when you need us. That goes for the ELIOS just as it does for all other CLAAS machines.

Rest assured.

We are dedicated to supplying the ORIGINAL CLAAS spare parts you require whenever you need them. Our service is extremely well organised and proven over many years around the globe. We endeavour to do our utmost to minimise potential downtime, because we know as well as you do that time is money.

Committed teams.

Our highly trained service teams thoroughly enjoy their work and understand the issues perfectly, since expert knowledge and commitment are essential to successful teamwork. You will therefore always remain the kind of customer we're glad to have – completely satisfied.

Good partners never leave you in the lurch.



Cost-conscious investment in efficiency is a recipe for success.

The individual CLAAS MAXI CARE® service packages offer the highest level of safety for all CLAAS products.

Attention to proper service means increased reliability. We provide a flexible selection of modules such as extended warranty to keep costs on track and transparent.

There are customised options and combinations for your CLAAS machine:

- Service contract maintenance services at a fixed price in accordance with the operator's manual
- MAXI CARE® warranty extension

Ask your authorised CLAAS dealer for more information.

FIRST CLAAS SERVICE®
MAXI CARE®





Every reason to choose the NEXOS.

Unrivalled convenience.

- Comfortable cab with air-conditioning system or natural ventilation through wide-opening front and rear windows
- Excellent all-round visibility, thanks to generously sized cab windows
- Active carbon filter for optimal driver protection during crop spraying
- Optional air-sprung driver's seat
- Rear linkage operation via external controls for safe and secure attachment and detachment (optional)
- Easily accessible maintenance points and especially long maintenance intervals
- FIRST CLAAS SERVICE®

Greater possibilities.

- Minimal overall height of 1.89 m without cab (roll bar retracted) and 2.40 m with cab
- Minimal overall width of 1.70 m
- Small turning radius of 3.77 m
- Fuel-efficient four-cylinder engines
- Four transmission variants, some with electrohydraulic REVERSHIFT reverser and TWINSHIFT two-stage powershift transmission
- ELECTROPILOT joystick for operation of two spool valves (optional)
- Hydraulic capacity of up to 85 litres for the rear linkage and four electronic spool valves
- Front linkage with optional integrated front PTO shaft available ex factory
- CLAAS front loader
- Optional turf tyres available ex factory
- Low centre of gravity for outstanding vehicle stability

ELIOS

		238	220	213
Engine				
Manufacturer		FPT	FPT	FPT
Number of cylinders/intake		4/TI	4/TI	4/T
Cubic capacity	cm ³	3200	3200	3200
Nominal engine speed	rpm	2300	2300	2300
Output at nominal engine speed (ECE R 120) ¹	kW/hp	65/88	57/78	53/72
Engine speed at max. torque	rpm	1300	1250	1250
Max. torque	Nm	350	330	277
Torque rise	%	30	39	26
Visco fan		●	●	●
Max. fuel capacity	l	70	70	70
Oil change interval	h	500	500	500
Transmission				
Top speed	km/h	40/30	40/30	40/30
12F/12R with mechanical reverser		■	■	■
24F/24R with mechanical reverser and splitter		■	■	■
24F/24R with mechanical reverser and TWINSHIFT two-stage powershift		■	■	■
24F/12R with REVERSHIFT hydraulic reverser and TWINSHIFT two-stage powershift		■	■	■
Min. speed	km/h	0.47	0.47	0.47
Rear-wheel drive / all-wheel drive		■	■	■
PTO				
Clutch type depending on option		Hydraulically supported / electrohydraulic		
540		■	■	■
540/1000		■	■	■
540/540 ECO		■	■	■
PTO shaft		■	■	■
Road safety				
Braking system (multiple discs in oil bath and all-wheel auto activation)		●	●	●
Hydraulic trailer braking system		○	○	○
All-wheel-drive front axle				
Electrohydraulic operation		●	●	●
Self-locking differential front/rear (self-locking multidisc clutch at front / dog clutch at rear)		●	●	●
Max. steering angle	Degrees	55	55	55
Castor angle	Degrees	6	6	6
Angle of oscillation	Degrees	11	11	11
Turning radius	m	3.77	3.77	3.77

● Standard ○ Optional ■ Available – Not available

¹ Values correspond to permissible values in accordance with 97/68/EC, ISO TR 14396 or 2000/25/EC.

ELIOS

		238	220	213
Hydraulic system				
Hydraulic pump for steering and transmission		●	●	●
Hydraulic pump output	l/min	26	26	26
Max. operating pressure	bar	190	190	190
2-pump hydraulic circuit		●	●	●
Hydraulic pump output for rear linkage and spool valves	l/min	59	59	59
Max. operating pressure	bar	190	190	190
Number of mechanical spool valves (min/max)		2–3	2–3	2–3
3-pump hydraulic circuit (with electronic spool valves only)		○	○	○
Hydraulic system for rear linkage	l/min	26	26	26
Hydraulic pump output for spool valves	l/min	59	59	59
Max. operating pressure	bar	190	190	190
Four electronic spool valves, of which two joystick-controlled (with 3-pump hydraulic circuit only)		○	○	○
Flow control on electronic spool valves		●	●	●
Rear linkage				
Max. lifting power at ball ends	kg	3240	3240	3240
Continuous lifting power at 610 mm	kg	2330	2330	2330
TCE 6 electronic control		○	○	○
External operation for rear linkage		■	■	■
Front linkage				
Front linkage		○	○	○
Max. lifting power at ball ends	kg	2800	2800	2800
Front PTO shaft		○	○	○
Cab				
Cab/platform		■ / ■	■ / ■	■ / ■
Driver's seat, mechanically suspended		●	●	●
Driver's seat, air-suspended		○	○	○
Steering column, height and angle adjustable		○	○	○
Heating		●	●	●
Air conditioning		○	○	○
Opening rear window		●	●	●
Opening front screen		●	●	●
Rear window wipers		○	○	○
Max. number of work lights		2 front / 2 rear	2 front / 2 rear	2 front / 2 rear

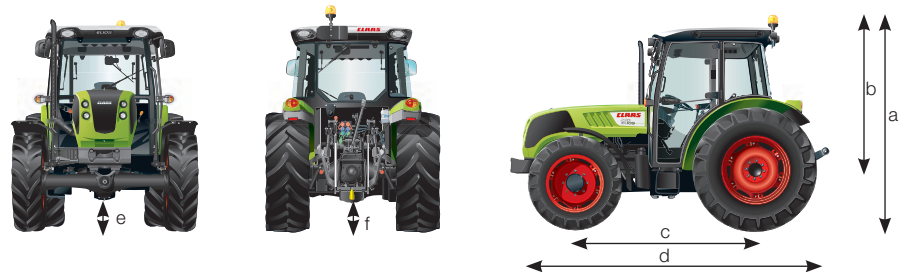
● Standard ○ Optional ■ Available – Not available

CLAAS continually develops its products to meet customer requirements. This means that all products are subject to change without notice. All descriptions and specifications in this brochure should be considered approximate and may include optional equipment that is not part of the standard specifications. This brochure is designed for worldwide use. Please refer to your nearest CLAAS dealer and their price list for local specification details. Some protective panels may have been removed for photographic purposes in order to present the function clearly. To avoid any risk of danger, never remove these protective panels yourself. In this respect, please refer to the relevant instructions in the operator's manual.

ELIOS

		238	220	213
Dimensions (standard tyres)				
Rear wheels		12.4 R 36	12.4 R 36	12.4 R 36
Front wheels		320/70 R 24	320/70 R 24	320/70 R 24
Height with cab (a)	mm	2397	2397	2397
Clearance between rear wheel centre point and roof (b)	mm	1722	1722	1722
Height with platform (roll bar extended/retracted) (a)	mm	2641/1893	2641/1893	2641/1893
Clearance between rear wheel centre point and roll bar (b)	mm	1966	1966	1966
Length				
Wheelbase (c)	mm	2098	2098	2098
Overall length (without additional front weights) (d)	mm	4019	4019	4019
Ground clearance with higher tyres				
Front axle with all-wheel drive (e)	mm	390	390	390
Rear axle (without swinging drawbar) (f)	mm	380	380	380
Weight (standard tyres, all-wheel drive version, without additional front ballast, with oil and fuel, without driver)				
Rear wheels		16.9 R 30	16.9 R 30	16.9 R 30
Front wheels		11.2 R 24	11.2 R 24	11.2 R 24
Weight without ballast (platform/cab)	kg	2965/3165	2965/3165	2965/3165
Max. additional front ballast without front lift linkage	kg	420	420	420
Weight distribution with cab and without ballast (front/rear)	%	59/41	59/41	59/41
Permissible total weight	kg	5100	5100	5100

		238	220	213
Tyres				
Rear tyres	Front tyres			
12.4 (320/85) R 36	7.50-16 ²	■	■	■
12.4 (320/85) R 36	11.2 (280/85) R 24	■	■	■
12.4 (320/85) R 36	320/70 R 24	■	■	■
14.9 (380/85) R 30	7.50-16 ²	■	■	■
14.9 (380/85) R 30	9.5 (250/85) R 24	■	■	■
16.9 (420/85) R 28	12.4 (320/85) R 20	■	■	■
16.9 (420/85) R 30	11.2 (280/85) R 24	■	■	■
16.9 (420/85) R 30	320/70 R 24	■	■	■
16.9 (420/85) R 30	14.9 (375/75) R 20	■	■	■
480/70 R 30	11.2 (280/85) R 24	■	■	■
480/70 R 30	320/70 R 24	■	■	■
540/65 R 30	420/65 R 20	■	■	■
23.1-26 ¹	560/45-22.5 ¹	■	■	■



● Standard ○ Optional ■ Available – Not available

¹ Turf tyres ² Tyres for rear-wheel drive model



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