# NG PLUS **4/4E**

A simple, user-friendly system offering guaranteed planting quality





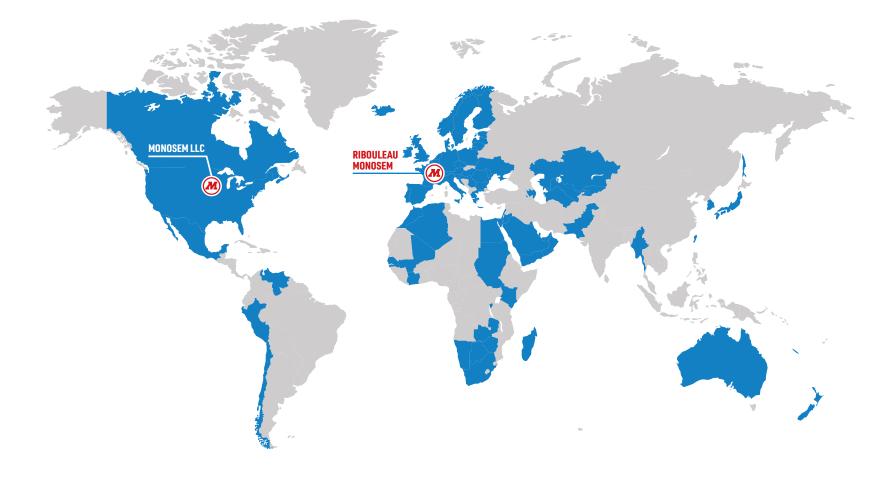
### MONOSEM FOUNDING PRINCIPLES

Seed planting is an investment and a crucial step in ensuring crops reach their full potential. Many farmers in over **80 countries** worldwide have chosen to rely on **Monosem** technology. **We can now boast over 75 years of shared history.** 

Built on reliability, durability and agronomic performance, this trust placed in our company is now further consolidated by technological innovations.

From planters to cultivators, intelligence is at the heart of all **Monosem** equipment.

Our goals rest on three pillars: innovation for agriculture, top-quality performance and intelligence-driven sustainability.



# NG PLUS 4/4E

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4 DATA SHEET
--------------

- 5 360° PRECISION
- 6 DISC PLANTING
- 7 | WHY CHOOSE THE NG PLUS 4/4E
- 8 METERING UNIT
- 10 DRIVE TYPES
- 12 METERING SYSTEM
- 13 ONE BOX FOR OVER 70 CROPS
- 14 MAIN EQUIPMENT ITEMS

- 15 | PLANTER PRO WHEEL
  - 16 | PLANTER COMPONENTS
  - 18 FRAMES
  - 23 EQUIPMENT MEETING EVERY NEED
  - 24 FERTILIZER APPLICATION
  - 26 MICROSEM
  - 27 SEED MONITORS
  - 28 ISOBUS SOLUTIONS
  - 30 MONOSEM VALUES





# DATA SHEET NG PLUS 4/4E

A simple, user-friendly system offering guaranteed planting quality

The reliable and heavy-duty NG Plus 4/4E unit can be used for traditional or low-till planting. It is easy to use and guick to adjust, providing you with a more user-friendly solution. The depth adjustment mechanism is intuitive and precise. It gives you high-precision control over planting depth even at low depths and with small seeds.





TILLAGE Traditional, low-till



PRESS WHEEL PRO wheel (295mm diameter)



4 to 18 rows

**52L** 

HOPPER

52L seed hopper

(16L available)



**INTER-ROW SPACING** 37.5 to 80cm

Mobile app:

EasyAdjust



**CROP TYPES** Maize, Sugarbeet, Sunflower, Rapeseed, Beans, Soya Beans, Cereals, Vegetables, etc.



Mechanical

or electric

**PRESSURE SYSTEM** Double springs + Additional pressure spring (optional)



DATA FEEDBACK



ISOBUS **ISOBUS-certified** (electric model)



SAVINGS ON INPUTS TC-SC: GPS-guided individual row cut-off system TC-GEO: Variable rate control across the entire planter width (if ISOBUS)



FERTILIZER/MICROGRANULES Fertilizer/Microsem



ASSISTED ADJUSTMENT SYSTEM ASSISTED PLANTING SYSTEM



S8000E software

(for the electric version only)

FRAME 5-inch frame



4











# DISC Planting

Since 1989, **Monosem** has applied the concept of planting with the planter resting on the ground directly in line with the seed drop. This tried-and-tested planting method is versatile and accurate, and moreover cuts down on maintenance. This unit combines quality metering with disc planting, resulting in optimal use of the planter over very large areas reducing its operating costs.



### A game-changing concept

Inconsistent depth can result in up to 9% lower yield. *Avoid this risk by choosing the Monosem planting system.* 

- $\rightarrow$  Rests on the ground directly in line with the seed drop
- $\rightarrow$  Perfect contour following
- → Outstanding performance in all conditions

This planting concept offers significant operating versatility encompassing all soil and tillage types. Whether you apply traditional or low-till techniques, double-disc planting is the perfect solution.



**CLOD REMOVER** OR TRASH WHEELS

Clod removers and trash wheels clear the way for the seed line, removing any clods, stones or plant debris.



**OPENER DISCS** 

wheels.

These discs open the furrow to

a depth defined by the gauge



V-SHAPED **TIP** 

This finishes the furrow bottom for optimal seed placement.



CURVED DROP TUBE

The shape of the tube is specially designed to guide the seeds gently to the ground at perfectly consistent intervals.



### OPEN CLOSING WHEEL UNIT

This wheel unit composed of 2 tilted wheels closes the furrow around the seed to ensure optimal seed germination. \* Equipment may vary by country



# WHY CHOOSE THE NG PLUS 4/4E PLANTER?

Very convenient to use Easy to adjust and maintain

Unprecedented versatility Metering system compatible with over 70 seed types



Laser-like precision All the benefits of Monosem's patented planting system with its PRO wheel



# METERING UNIT NG PLUS 4/4E

#### Parallel linkage

The heavy-duty parallel linkage with high clearance is mounted on replaceable bushings. Two springs stabilize the unit.



### Safety clutch

An audible safety clutch system with automatic clutching for optimal protection of the metering system.



The metering unit is the **centerpiece** of all Monosem planters. With this metering unit, **Monosem** has kept all the best features of NG Plus units and **further enhanced their ease of use**.

Adjustment mechanisms have been simplified so that your planter always has the right settings, ensuring **optimal planting conditions**.

#### Clod remover bracket

The clod remover can be adjusted quickly and precisely with a choice of 12 positions. To adjust to different planting conditions, the clod remover can be quickly swapped for trash wheels with no tools required.



Double opener discs The planting system consists of two largediameter discs (380mm) mounted on sealed ball bearings.

#### Gauge wheels These wide wheels (110mm) with very high load-bearing capacity allow optimal control of working depth. The positioning of the wheels in

consistency.

line with the seed drop ensures exceptional depth



#### Hopper

The durable translucent plastic hopper has a 52L capacity. The cover locks to secure the contents.



#### Depth adjustment

Depth is easy to adjust using a hand wheel. This type of adjustment mechanism provides highprecision control of planting depth. It is easy to spot at the rear of the unit and is both wash and weather-proof



#### Rear closing wheel unit

The furrow is closed by two tilted wheels. An optional adjustment mechanism is available enabling rapid adjustment of closing wheel unit pressure and angle.





#### Gauge wheel arms

The gauge wheel bracket arms are mounted on replaceable bushes and have spiral grooves for even grease distribution. Scrapers are fitted as standard on the gauge wheels.



**PRO wheel (optional)** The aluminium PRO wheel is fitted with a stainlesssteel tire and a plastic scraper. With its large diameter (295mm), the PRO wheel offers highquality pressing and excellent seed placement.

# DRIVE TYPES FOR THE NG PLUS 4/4E

### **MECHANICAL DRIVE**

### > PRICE & OPERATION

- $\rightarrow$  Competitive price
- $\rightarrow$  Quick to start up
- $\rightarrow$  Tried-and-tested operation
- $\rightarrow$  Intuitive handling
- $\rightarrow$  Easy to start up



### **ELECTRIC DRIVE**

### $\rightarrow$ EASE-OF-USE & PRECISION

- $\rightarrow$  Settings adjusted in cab
- $\rightarrow$  Easy to maintain
- $\rightarrow$  Easy to operate at field ends
- $\rightarrow$  Non-stop control
- $\rightarrow$  Non-slip
- → AEF-certified ISOBUS compatibility
- $\rightarrow$  Savings on seeds
  - (GPS-guided row cut-off system)
- → Optimized planting due to GPS-guided variable rate control
- $\rightarrow$  Precision settings



### $\rightarrow$ metering units with electric drive

1 ELECTRIC MOTOR

One motor per metering unit

### 2 TIMING BELT DRIVE

Maintenance-free Compact (enabling all inter-row spacing options) Electric motor protected and positioned away from the planting components

### **3 PHOTOELECTRIC CELL**

Controls seed drop and spacing

### THESE PLANTERS ARE AVAILABLE WITH AN ELECTRIC DRIVE:



 $\rightarrow$ 





Monoshox NG Plus ME







Meca V4E



# **METERING SYSTEM**

A good metering system is essential for ensuring planting quality

That's why Monosem has harnessed all its expertise to offer you an accurate, simple and highly reliable metering system. The Monosem metering system exhibits manufacturing quality that has earned it a **global reputation.** 

Its vacuum system allows an unrivalled range of seeds to be metered. The metering components **undergo dynamic checks in addition to systematic checks of the metering system.** 



CAST-ALUMINIUM METERING BOX

The metering box is made of cast aluminium. This means it will lose none of its accuracy over the years regardless of temperature variations.



WEAR GASKET

The wear gasket is in permanent contact with the disc. It makes the metering box leak-proof and can be replaced.

INSPECTION WINDOW

The metering system is highly accessible,

both for adjustments and monitoring. A

wide transparent window can be used for

monitoring metering after the singulator.



### STAINLESS-STEEL DISCS

These 1.5mm thick discs are made of stainless steel. The agitator fixed to the disc strengthens the unit. Discs are easy to change tool-free. A full range of discs is available meeting all singleseed planting requirements.



TOTAL EMPTYING

The emptying hatch is extremely convenient to operate. When you open the hatch, it stays open making it even easier to fully empty the unit using the emptying chute supplied as standard.



SINGULATOR

The bronze singulator prevents any seed multiples. A spring on the metering box cover holds the singulator perfectly in place against the disc for optimal singulation, even with small seeds.



#### VACUUM AND SINGULATION ADJUSTMENT

The unique vacuum and singulation adjustment system is patented by Monosem. It allows the singulator position and vacuum pressure to be adjusted according to seed size.



COVER

The cast-iron cover is specially designed for planting with minimal seed reserves. An optional lever-operated hatch is also available.

# ONE BOX For over 70 crops

*Just change the disc!* 



# MAIN EQUIPMENT ITEMS

*Monosem supplies a wide variety of equipment that adapts perfectly to your planting conditions. Based on our experience, we can help you choose the equipment you need.* 



ADDITIONAL PRESSURE SPRING

An additional adjustable pressure spring can be added for planting in hard or trashy soils (assembly varies depending on the frame).



NARROW HOPPER

Specially designed for crops requiring smaller inter-row spacing (sugarbeet, rapeseed, beans, etc.).



NARROW TRASH WHEELS

Narrow retractable trash wheels are available for planting with lower inter-row spacing.



### CIRCULAR COULTER

Smooth or rippled, the circular coulter improves furrow opening and produces fine soil for low-till planting and/or in trashy soils.



### SHOE WITH LONG TIP AND SHORT WINGS

The special shoe with a long tip and short wings is specially designed for planting in dry soils and for small seeds.



METAL CLOSING WHEELS

Our metal closing wheels with notched discs are recommended for highly caked soils or to improve furrow closure in no or low-till conditions.



### TRASH WHEELS

Trash wheels can be fitted instead of a clod remover when planting in trashy soils.



### CLOD REMOVER WITH FLEXIBLE BRACKET

A clod remover on a flexible bracket is recommended for planting in stony soils.



### NARROW-GAUGE WHEELS

5cm narrow-gauge wheels are available for planting with low inter-row spacing.



### NARROW PRESS WHEELS

Optional 1-inch (instead of 2-inch) wheels are available for improved pressing on hard ground and/or in low-till conditions.



# **PLANTER PRO WHEEL** NG PLUS 4/4E

### The professional touch

Press wheels have been used on vegetable and sugarbeet planters for many years. MONOSEM has tweaked this concept for multipurpose single-seed planters with the large-diameter PRO wheel.

- $\rightarrow$  Consistent pressing
- $\rightarrow$  Improved shoot emergence
- $\rightarrow$  Optimal germination
- $\rightarrow$  Improved seed placement



### LARGE-DIAMETER WHEEL

The aluminium PRO wheel includes a stainless-steel tire and a scraper. It is wide with a large diameter (295mm) and keeps its shape whatever the conditions, offering quality pressing and unrivalled seed placement. By improving seed-to-soil contact, it ensures faster and more even emergence.



### **COMBINED ADJUSTMENT**

The PRO wheel's packing-down pressure can be adjusted. This is combined with the pressure adjustment system for the rear closing wheel unit (a).



### INTEGRATED RETRACTION SYSTEM

If conditions are not suitable for using the PRO wheel, it can be retracted quickly. Just raise the PRO wheel with one hand and lower the locking tab with the other. This removes the wheel from the ground.





### INDEPENDENT WHEEL

The PRO wheel operates independently from the planting system and rear closing wheel unit, following the ground contours perfectly to ensure even pressing.







# PLANTER COMPONENTS NG PLUS 4/4E



### > EASYADJUST

Download the free Monosem "EasyAdjust" app from Google Play or App Store to help you adjust your seed populations.







Google Play

App Store

### 1 DRIVE WHEEL UNITS

On Monosem planters, all the wheels drive the seed discs. This ensures that the drive system operates smoothly, thus increasing planting consistency. All wheel units are equipped with a slip clutch reducing stress on the seed discs on bends.

Frames that are compatible with a "high-capacity" fertilizer unit are fitted with reinforced wheel units. This means that if a fertilizer unit is added, the wheel units will fully support this extra equipment.

Front wheel units are available for planting with reduced inter-row

spacings (up to 37.5cm) or when planting in stony soil.

Wheel units are available with 3 different wheel models:

- Narrow (500 x 15) for reduced interrow spacings (sugarbeet)
- Standard (6.5 x 80 x 15)
- Wide (26 x 12) for inter-row spacings of at least 70cm with rear wheel units



Standard wheel unit





Reinforced wheel unit



Front wheel unit

Drive wheel unit

16

#### 2 SEED SPACING GEARBOX



#### "Standard" gearbox

With the standard 18-ratio gearbox, the seed population can be adjusted quickly and accurately. A single lever releases the chain. Then just place the required sprockets opposite each other and release the lever to retighten the chain. Supplied as standard or optional depending on the model.



#### EasyGear gearbox with levers

The EasyGear seed spacing gearbox with levers allows you to change planting density quickly. It has 3 levers offering 18 perfectly spaced ratios and requires no maintenance. Supplied as optional depending on the model.

#### TURBOFAN 3

Monosem offers a wide range of turbofans to suit all planter configurations (number of units, seed type, pneumatic fertilizer supply, etc.) and guarantee optimal vacuum pressure. Monosem turbofans are reliable, efficient and ensure consistent vacuum pressure for optimal metering. Our turbofans are equipped as standard with 12 outlets, a rain flap (work monitor)

and are driven by a PTO shaft operating at 540 rpm. Drives with PTO shafts operating at 450 rpm and 1,000 rpm and a hydraulic motor drive are also available as optional equipment. An optional universal joint is also available.



Standard turbofan

High-output turbofan Very high-output turbofan Dual function turbofan



In line with current regulations, Monosem can equip its planters with anti drift of dust kits. These kits are approved by the BBA in Germany and ensure that Monosem planters perform optimally.



# RIGID FRAMES

The NG Plus 4/4E planter is also a perfect fit for our rigid frames, which are both simple and durable.

Their stability ensures unfailing planting precision, regardless of the terrain. These frames limit vibration and wear to guarantee optimal efficiency. Embrace the future of farming with these rigid frames that embody precision, durability and outstanding performance.



4-12 45-80cm

3-6.1m

3-6.1m

metering units

Fram			Monoba	r			Monoblock								Double-bar			
Width	3 ו	n	3.5m	4.5	īm		3 m			4.5	5m	4.5m	6.1	6.1m				
Number of metering	4	6	6	6	8	4	5	6	6	7	9	11	6	8	12			
Inter-row spacing (	70/75/80	45	45/50	70/75/80	50/55	70/75/80	60	50	70/75/80	60/65	45/50	37.5	70/75/80	70/75/80	45/50			
Number of "drive" v	Number of "drive" wheel units		2					2			2 4				4	ł		
Seed spacing	Standard		• 1					• 1			• 1		• 2	• 1	• 2			
gearbox	EasyGear				o <b>1</b>			o <b>1</b>		o 2	o 1 o 2		2					
Transport width		3 ו	n	3.5m	4.5	īm	3 m			4.5m				4.5m	6.1	m		



### **RIGID MONOBAR FRAME**

The rigid Monobar frame can accommodate a bar measuring 3m to 4.5m. This simple and economical frame can be fitted with a pin coupling or semi-automatic hitch. It can be hitched to lightweight tractors due to its reduced overhang and weight. This frame is suitable for 4 to 6-row "maize" planters or 6-row "sugarbeet" planters.



### **RIGID MONOBLOCK FRAME**

The rigid Monoblock frame is a welded assembly consisting of two bars, one supporting the hitch and turbofan and the other supporting the metering units and wheel units. Its design is particularly well suited to planting with an odd number of rows. It can be fitted with a 3m to 4.50m bar.

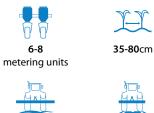


### **RIGID DOUBLE-BAR FRAME**

The rigid Double-bar frame is designed to offer durability and versatility. A bar length of 6.10m is possible due to the double-bar configuration, even with a fertilizer unit. It is suitable for an odd number of rows. Its optional, lengthwise-configured transport carriage enables safe road transport.

# **TELESCOPIC FRAMES**

Are you looking for a versatile solution for your planter? Our telescopic frames offer a convenient working width and are also perfectly suited to road transport.



2.8-4.5m



<u>Y-Y</u>

	S	ingle telesco	Double telescopic			
Frame	Mor	noblock 125 c	Monoblock 260			
Width		4.2m	4.2m			
Number of metering units	6	7	8	6		
Inter-row spacing (cm)	75/80	55/60	45/49	75/80		
Number of "drive" wheel units		2	2			
Transport width		3.5m	3m			



### MONOBLOCK SINGLE TELESCOPIC FRAME

The bar of the Monoblock 260 single telescopic frame is 4.2m when working. When transported, the 1st and 6th rows retract to a transport width of 3.5m. This frame is also suitable for an odd number of rows. The Monoblock 260 frame is compatible with "highcapacity" fertilizer units.

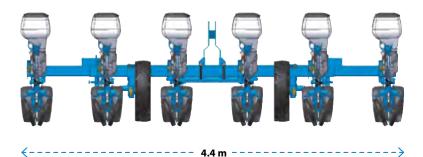


### MONOBLOCK DOUBLE TELESCOPIC FRAME

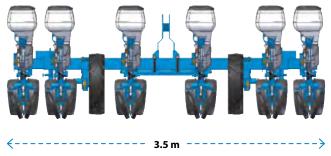
The bar of the Monoblock 260 double telescopic frame is 4.2m when working. When transported, the 1st and 2nd and 5th and 6th rows retract to a transport width of 3m.

The Monoblock 260 frame is compatible with "highcapacity" fertilizer units.

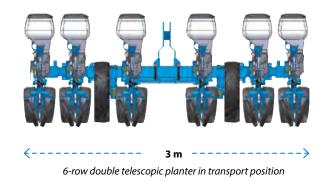
**BENEFITS OF A TELESCOPIC FRAME** 



6-row single or double telescopic planter when working



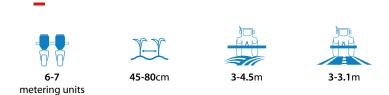
6-row single telescopic planter in transport position





# EXTEND FRAMES

A frame with intuitive inter-row spacing adjustment by hydraulic variation.



Frame	Extend 6 rows	Extend Mixte 6/7 rows
Width	4.15m	4.15m
Number of metering units	6	7
Inter-row spacing (cm)	45 to 80cm in 5cm steps	55 and 60cm (7 rows) 75 and 80cm (6 rows)
Number of drive wheel units	2	2
Transport width	3m	3.1m



#### **EXTEND FRAME**

With the Extend frame, inter-row spacing can be adjusted quickly from the tractor cab by hydraulic control. This frame consists of two hydraulic telescopic bars that move the metering units sideways to adjust interrow spacing. It is equipped as standard with a set of wide wheels driving the metering units at a consistent rate. It's quick to adjust the wheel unit width and therefore easy to adapt to the tractor tread.

### > BENEFITS OF THE EXTEND PLANTER



#### **TELESCOPIC BARS**

The hydraulic telescopic beams move the metering units sideways to adjust inter-row spacing. To limit friction and increase service life, the bars are equipped with guiding bearings mounted on bushings.





### INTER-ROW SPACING ADJUSTMENT

It is very simple to adjust the inter-row spacing on the Extend planter. Just position the stop parts on the adjustment bars at the required intervals and then lengthen or shorten the hydraulic cylinders on the telescopic bars to achieve the desired spacing.

### SIDE SEED SPACING GEARBOX

The metering units are driven by a reinforced gearbox. This is positioned on the side of the planter to allow easy access and enable fast sprocket changes. Its 20 settings with interchangeable sprockets offer a wide range of seed population settings.



Spacings of 45, 50, 55, 60, 65, 70, 75 and 80 cm are possible with the 6-row Extend planter.

# FOLDING FRAMES



6-7m 3-3.5m

8-12 metering units

Frame	Double-bar										
Width	6	m	7m	6m							
Number of metering units	8	9	11	12							
Inter-row spacing (cm)	75/80	60	60	45/50							
Number of drive wheel units		4									
Transport width	3m	3m	3.5m	3m							



### FLOATING DOUBLE-BAR FOLDING FRAME

The floating double-bar frame can accommodate 8 rows in its "maize" configuration and up to 12 rows in its "sugarbeet" configuration. It folds to a width of 3m for safe road transport.

Its design is compatible with an odd number of rows (9 or 11 rows). The floating wings allow the planter to follow the ground contours seamlessly.

# WIDE FRAMES

Frame	Coupled					
Width	8.7m					
Number of metering units	12	18				
Inter-row spacing (cm)	70/75/80	45/50				
Number of "drive" wheel units	8					
Transport width (with carriage)	3m					



### **COUPLED FRAME**

A coupled frame consists of 2 coupled standard monobar frames. The 2 frames are supported by a double square bar of 180mm in width and 8.7m to 12.5m in length. This type of frame is suitable for 12 to 16-row "maize" planters or 18-row "sugarbeet" planters.



# TABLE OF FRAMES AND KEY FEATURES

Technical features of the NG Plus 4

Frame								Diaid		Single telescopic Double telescopic Extend Folding									ding		6	mlad		
	I	Frame						Rigid					Monob	ar - Mon	oblock	Monoblock	6	6/7		Doub	le-bar		COL	upled
w	idth				3m			4.	5m		6.	1m		4.5m		4.5m	3m/ 4.5m	3.1m/4.5m	6	im	7m	6m	8.	3.7m
Transport width (with transport carriage)				3m			4.5m			6.1m (3m)		3.5m			3m	3m	3.1m	3	m	3.5m	3m	(3	'3m)	
Number of metering units				4	5	6	6	8	9	11	8	12	6	7	8	6	6	7	8	9	11	12	12	18
Inter-row spacing (cm)			70 75 80	60	45/50	70 75 80	50/55	45/50	37.5	70 75 80	45/50	75/80	55/60	45/49	75/80	45/50 55/60 65/70 75/80	75/80 (6 rows) 55/60 (7 rows)	75/80	55/60	55/60	45/50	70 75 80	45/50	
Tu	rbofan				Power take-off drive - 540 rpm as standard, 450 or 1,000 rpm optional - Hydraulic drive optional, Universal joint optional																			
Ti	es			2 x	(6.5 x 80 x	( 15)	2 x (6.5 x 80 x 15) 4				4 x (6.5 x 80 x 15)		2 x (6.5 x 80 x 15)		15)	2 x (6.5x80 x15)	2 x (26 x 12)	2 x (26 x 12)		4 x (6.5 x	x 80 x 15)		8 x (6.5 x 80 x 15)	(6.5 x 80 x 15)
			Standard (18 speeds)		•1			•	1		•	1		•1		•1	•3			• 2	• 2			
e	Mechanical	ical Seed spacing gearbox EasuGear						-	•1	•1	-					-								
Drive					c	01	01			0 <sup>1</sup>			03				02	02						
	Electric				0		0			(	)	о			0	0	0	0				0	-	
Ну	draulic row man	rkers			•				•			•		•		٠	•	•	•			•	•	
	Standard			(	) 2 x 175	L.	0 2 x 270L.		-		O4x	: 175L.	2 x 270L.			0 2 x 270L.	-	-			-		0 4 x 270L.	O 5 x 175L. + 1 x 270L.
Fertilizer unit	"High Capacity"			0 740 or 980L.		-	) 980 or 2 x 700L.		-		O 2x 1,000L.		O 980L			0 980L.	0 1020L.	-			-		-	-
	Front Standa	ard	d O O					(	С	0			0	0	0		(	С		-	-			
	Front DUO										<b>)</b>	-			-	-	-	0			-	-	-	
Microsem	Insecticide				0				2			)	0			0	0	0	0			0	0	
-	Molluscicide				0				о -			) 		0		0	0	0	0				0	0
-	ectare counter				0 0				2 2					0 0		0	0 0	0 0	0			0 0	0 0	
	Seed monitors Row cut-off				0		0			0 0		0			0	0	0	0				0	0	
-	hting kit				0	-			2 D			 >		0		0	0	0			0		0	0
	eight of planter	alone		800kg	900kg	1000kg	1100kg	1300kg	1400kg	1600kg	1650kg	2050kg	1300kg	1400kg	1500kg	1300kg	1650kg	1800kg	2200kg	2300kg	2600kg	2600kg	3250kg	4250kg

● : Standard ⊃: Optional -: Not available \*: Some models 🛛 🖳 : Contact us

For other models, configurations or drive types:

ible \*: Some models



# EQUIPMENT **MEETING EVERY NEED**

### *.*....

### Microsem

For flawless application of your microgranules



**Fertilizer units** We have the solution to apply precisely the required rate



### **ISOBUS** solutions

AEF certification guarantees full compatibility between your tractor and our equipment through a powerful ISOBUS connection.



# FERTILIZER UNITS 🔀

### Front-mounted hoppers

With our full range of standard, highcapacity and front-mounted fertilizers, we can offer a sturdy fertilizer system that suits your planting conditions perfectly.

Fertilizer is evenly distributed using a system combining auger-based metering and agitators. Stainless-steel augers with different pitches are available, ensuring that exactly the required quantity is metered. Hoppers may vary depending on the frame configuration.



### **STANDARD MOUNTED** HOPPERS

Hoppers are available in various capacities and can be mounted on rigid, telescopic frames. Electrically or mechanically driven versions are available, supporting you throughout planting and ensuring unrivalled precision.

HIGH-CAPACITY **MOUNTED HOPPERS** 

Just choose the capacity you need! Our high-capacity hoppers have a wide opening and offer reliable metering in all conditions.

FERTILIZER ADJUSTMENT



A 12-ratio gearbox is used to



adjust the quantity of fertilizer applied to seeds. - Using the chart



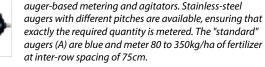
FERTILIZING UNITS WITH TINES OR DISCS

With tines: replaceable tip



With double discs (or reinforced double discs): Versatile and more suitable for lowtill conditions

# Fertilizer is evenly distributed using a system combining



look at our front fertilizers and the Monosem CART.

AUGER-BASED

METERING

**ELECTRIC** 

Electrically driven fertilizer units are available for the NG Plus 4E.



A mechanical version is also available for the NG Plus 4, with a variable speed drive The variable speed drive provides a quick and easy way of adjusting the fertilizer rate.

The "high-output" augers (B) are red and meter 160 to 700kg/ha of fertilizer at inter-row spacing of 75cm. If our mounted hoppers do not meet your requirements, take a DRIVE

24

### Front-mounted hoppers

Monosem's front-mounted hoppers have been specially designed for fertilizer application. The heavy-duty frame with integrated cradle and 100% stainless-steel distribution unit stand testament to **quality manufacturing**.

The turbofan can be driven by PTO or hydraulic motor.



### DUO FRONT-MOUNTED HOPPER

1,500L and 2,100L DUO front hoppers are available. The assembly can be fitted to planters with up to 16 rows. This fertilizer is equipped with a stainless-steel twin distribution unit and an electric drive allowing rapid adjustments to the quantity of fertilizer applied.

### **STANDARD** FRONT HOPPER

1,000L and 1,600L standard front hoppers are available. The assembly can be fitted to planters with up to 12 rows. This fertilizer is equipped with a stainless-steel distribution unit and a mechanical or electric drive allowing rapid adjustments to the quantity of fertilizer applied.

### CYCLONES



Cyclones are fitted opposite each metering unit allowing the fertilizer to drop by gravity thus limiting dust formation caused by pumped air.

### **STAINLESS-STEEL** DISTRIBUTION UNIT



The 100% stainless-steel metering system on the front-mounted fertilizer has two closing hatches and can be quickly removed.

### **ELECTRIC DRIVE** FOR THE DISTRIBUTION UNIT





With electrically driven versions of the Standard and DUO front hoppers, fertilizer quantities are managed in-cab using the F800E ECU and the ISOBUS touch terminal (TOUCH or TOUCH Mini). Electrically driven front fertilizers are equipped with a metering cylinder that can be removed quickly without tools and also include a metering anticipation function.



# MICROSEM

### Microsem's primary objectives are to nurture and protect seeds.

Distributing microgranules requires just as much care and precision as planting. Our auger-based Microsem system ensures consistent distribution of insecticides. molluscicides and even fertilizers.

8

Microgranules are positioned very close to seeds, protecting them from pests and providing them with all the nutrients they require for uniform shoot emergence.

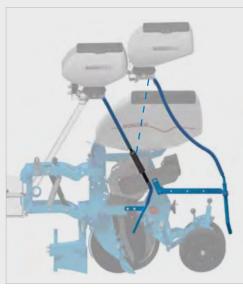


**COMBINED AND INDEPENDENT** COMBINED MICROSEM UNITS

Insecticide and molluscicide Microsem units can be combined for simultaneous supply of both products. Independent combined Microsem units are also available offering greater operational scope.



**MICROSEM** ELECTRIC DRIVE Electrically driven Microsem units are quick and easy to calibrate. The required rate can be input in the cab. An automatic section cut-off system is also available and microgranulators can be managed manually or by GPS.



**ALWAYS ON THE RIGHT LINES** 

Our microgranulator is equipped with two drop lines metering different products. One distributes products in the seed line and the other either in front of or behind the closing wheels.

### MICROSEM ADJUSTMENT

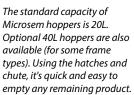


An 18-ratio gearbox is used to adjust the quantity of microgranules applied to seeds. Using the chart



The EasyAdjust mobile app available from Google Play and App Store can also be used.

### EMPTYING HOPPERS







The microgranules contained in the hopper are taken up by 2 augers. Agitators ensure an even supply to these augers. A finger wheel then distributes the product consistently in the drop lines.

Insecticide: 3 to 25 kg/ha for inter-row spacing of 75cm Molluscicide: 3 to 10kg/ha for inter-row spacing of 75cm.



Electrically driven Microsem units are available for the NG Plus 4E.



A mechanical version of the Microsem units is also available for the NG Plus 4. with a variable speed drive. The variable speed drive provides a quick and easy way of adjusting the fertilizer rate.

# SEED **MONITORS**

Precision planter specialist Monosem supplies seed monitors that offer a wide range of functions, from simply checking the seed drop to counting the seeds and indicating the distance between them. Monosem also supplies ISOBUS solutions enabling seed population management and GPS-guided automatic row cut-offs.





### THE CS30 CLASSIC

### Upgradable seed monitor with color screen

- $\rightarrow$  Seed flow monitoring
- $\rightarrow$  Hectare counter (working area and speed)
- $\rightarrow$  Possible to upgrade to the Comfort version using an activation key

### THE CS30 COMFORT

### Upgradable seed monitor with color screen

 $\rightarrow$  Seed flow monitoring

THE CS10

 $\rightarrow$  LED display

of certain rows

- $\rightarrow$  Seed counter (seed population and spacing)
- $\rightarrow$  Hectare counter (working area and speed)





### THE CS30 PREMIUM

### Upgradable seed monitor with color screen

- $\rightarrow$  Seed flow monitoring
- $\rightarrow$  Seed counter (seed population and spacing)
- $\rightarrow$  Hectare counter (working area and speed)
- $\rightarrow$  Row cut-off management

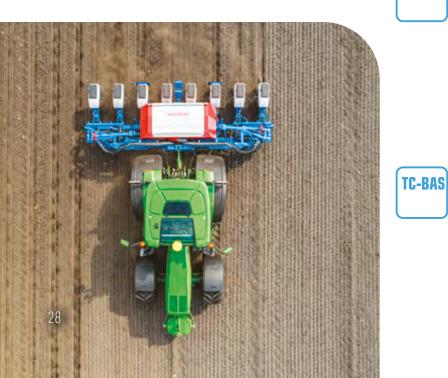


# ISOBUS **Solutions**

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Monosem supplies ISOBUS solutions providing users with a wide range of features including seed monitoring, seed population adjustment and GPS-guided automatic row cut-offs. Monosem was awarded Agricultural Industry Electronics Foundation (AEF) certification for the control units used with its electric planters (S8000E) and front fertilizers (F800E).

This certification guarantees maximum compatibility between ISOBUS-enabled tractors and Monosem tools. Our planters are certified for the following features: UT (Universal Terminal), TC-BAS (Task Controller Basic), TC-SC (Task Controller Section Control) and TC-GEO (Task Controller Geo-Based).





UT

TC-BAS

### UT UNIVERSAL TERMINAL

The terminal is the interface enabling users to control the planter. It is connected to the ECU by a cable with a standardized 9-pin connector. Users can either use an ISOBUS terminal supplied by Monosem (TOUCH Mini, TOUCH or TOUCH Pro) or the tractor ISOBUS terminal if this is compatible.

### TC-BAS TASK CONTROLLER BASIC

The TC-BAS feature allows users to automatically and continuously save all data related to work carried out.

### TC-SC TASK CONTROLLER SECTION CONTROL

The task controller section control system allows automated management of row cut-offs based on GPS position and the required degree of overlap. This system enables savings on seeds by avoiding unnecessary overlaps (requires a GPS antenna and an activated license). List of compatible terminals: -TOUCH - TOUCH Mini - TOUCH Pro - Other ISOBUS terminals with the TC-SC function (contact us). GPS-guided row cut-offs are also compatible with operating planters.

### TC-GEO TASK CONTROLLER GEO-BASED

The TC-GEO feature integrated in our electrically driven planters (S8000E) enables automatic adjustment of seed population based on the planter's position in the field. This means that seed population can be managed automatically using a prescription map and adjusted to maximize the field's potential.

### ightarrow isobus terminals

In its efforts to continually improve planting ergonomics, Monosem provides universal access to new technologies. Its ISOBUS terminals are equipped for GPS-guided row cut-off management, which further increases operating precision.

### TOUCH TERMINAL

- $\rightarrow$  12.1" color touch screen
- $\rightarrow$  ISOBUS terminal (ISO 11783)
- $\rightarrow$  USB port
- → Simultaneously displays several work screens
- $\rightarrow$  Camera (optional)
- → For S7000C-12, S7000H-12, S8000E-24 and F800E
- → Dimensions (LxHxD): 345 x 254 x 87mm

### TOUCH MINI TERMINAL

- $\rightarrow$  8" color touch screen
- $\rightarrow$  ISOBUS terminal (ISO 11783)
- $\rightarrow ~~\text{USB port}$
- $\ \ \, \rightarrow \ \ \, \text{Simple and intuitive to navigate} \\ \text{between the different work screens}$
- $\rightarrow$  Camera (optional)
- $\rightarrow~$  For S7000C-12, S7000H-12, S8000E-24 and F800E
- → Dimensions (LxHxD): 244 x 186 x 67 mm

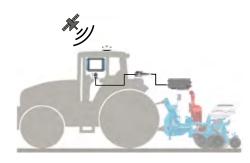
### TOUCH PRO TERMINAL

- $\rightarrow$  10" color touch screen
- → ISOBUS terminal (ISO 11783)
- $\rightarrow$  Variable rate control
- $\rightarrow ~~\text{USB ports}$
- → WiFi
- $\rightarrow$  Displays several work screens
- $\rightarrow$  Camera (optional)
- $\rightarrow$  For S8000E-24 and F800E
- → Dimensions (LxHxD): 268 x 212 x 55 mm
- $\ \ \, \rightarrow \ \, {\rm Simple \ and \ intuitive \ to \ navigate} \\ {\rm between \ the \ different \ work \ screens}$
- → The TOUCH Pro terminal is only compatible with John Deere antennas.

### ightarrow connection systems



In its efforts to continually improve planting ergonomics, Monosem provides universal access to new technologies. Its ISOBUS terminals are equipped for GPS-guided row cut-off management, which further increases operating precision.



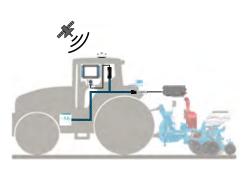
#### EXAMPLE 1: NON-ISOBUS TRACTOR + ISOBUS CONSOLE + ISOBUS PLANTER

To enable data exchange between the ISOBUS console and the ISOBUS planter, the rear ISOBUS wiring harness with the following reference number must be installed on the tractor: 10230352. A GPS antenna can be connected to the ISOBUS console in order to use the TC-SC (GPS-guided row cut-off system) and TC-GEO (variable rate control by prescription map) functions.



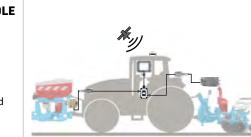
#### EXAMPLE 4: TRACTOR WITH FRONT AND REAR ISOBUS + ISOBUS CONSOLE + ISOBUS PLANTER + ISOBUS FRONT-MOUNTED HOPPER

To enable data exchange between the ISOBUS frontmounted hopper and the ISOBUS planter, the ISOBUS cables for these two equipment items must simply be connected to the tractor's front and rear ISOBUS connectors. In this case, both sets of ISOBUS software can be used on the same ISOBUS console. Planter position and speed data can be pooled to facilitate use of the front-mounted hopper.



#### EXAMPLE 2: ISOBUS-EQUIPPED TRACTOR + ISOBUS CONSOLE + ISOBUS PLANTER

To enable data exchange between the ISOBUS console and the ISOBUS planter, the in-cab wiring harness with the following reference number must be installed on the tractor: 10239036. A GPS antenna can be connected to the ISOBUS console in order to use the TC-SC (GPS-guided row cut-off system) and TC-GEO (variable rate control by prescription map) functions.



#### EXAMPLE 5: TRACTOR NOT EQUIPPED WITH FRONT OR REAR ISOBUS + ISOBUS CONSOLE + ISOBUS PLANTER + ISOBUS FRONT-MOUNTED HOPPER

To enable data exchange between the ISOBUS frontmounted hopper and ISOBUS planter on a tractor that is not equipped with ISOBUS, the following must be installed: - a front ISOBUS wiring harness with reference number: 10230354 - a rear ISOBUS wiring harness with reference number: 10230352 - a "Front/Rear" unit with reference number: 10230335. In this case, both sets of ISOBUS software can be used on the same ISOBUS console. Planter position and speed data can be pooled to facilitate use of the front-mounted hopper.

### EXAMPLE 6: TRACTOR EQUIPPED WITH REAR ISOBUS + ISOBUS CONSOLE + ISOBUS PLANTER + ISOBUS FRONT-MOUNTED HOPPER

In this specific instance, it is not possible to connect the Monosem front ISOBUS wiring harness to a tractor already equipped with a rear ISOBUS connector. To enable data exchange between the ISOBUS front-mounted hopper and ISOBUS planter on a tractor that is equipped with a rear ISOBUS connector, the following must be installed: - a front ISOBUS wiring harness with reference number: 10230354 - a rear ISOBUS wiring harness with reference number: 10230352 - a "Front/Rear" unit with reference number: 10230355.





#### EXAMPLE 3: ISOBUS-EQUIPPED TRACTOR + 2 ISOBUS CONSOLES + ISOBUS PLANTER

To enable data exchange between the ISOBUS console and the ISOBUS planter, the in-cab wiring harness with the following reference number must be installed on the tractor: 10239036. A GPS antenna can be connected to the ISOBUS console in order to use the TC-SC (GPS-guided row cut-off system) and TC-GEO (variable rate control by prescription map) functions.





## THE KEYS To success



# **EXPERTISE**



### CHOICE

Covering all requirements with the market's most comprehensive product range. This gives you a large choice of inter-row-spacings, frames and metering units for planting all seed types. For any specific enquiries, contact our MODE (Monosem On Demand Europe) department to custom-build a planter tailored precisely to your needs.



#### ADVICE

Provided by a team of experienced technical sales staff who are on hand at all stages of your machine's service life, from assessing your needs to starting up your planter and delivering after-sales service.



### **RESPONSE TIMES**

Minimized when sending your spare parts, as we are well aware of just how important it is to plant in optimal conditions.



### INNOVATION

A 75-year track record of supplying products tailored to new practices.

# QUALITY

### **~**

### TECHNOLOGIES

Tried and tested to enable simple and accurate use of machines:

• GPS-guided row cut-offs

In-cab seed population management
Electric drive



#### Carried out meticulously at each stage of manufacturing. The metering components undergo dynamic checks in addition to systematic checks of the metering boxes.



### COMPONENTS

Carefully selected to maximize the strength, precision and service life of our machines. Castaluminium, not plastic, is used to make our metering boxes.



### RESALE

At high prices reflecting the manufacturing quality, durability of equipment, and availability of spare parts.

# FOR **OPTIMAL PERFORMANCE**

### **PRECISION PLANTING**

A versatile metering system capable of planting multiple seed types with the same precision. A V-shaped furrow fixing seeds in position to retain the placement consistency managed by the metering system. Optimal planting due to equipment tailored to your planting conditions.

### CONSISTENT AND RAPID EMERGENCE

Quality pressing and flawless furrow closing in all conditions, ensuring optimal germination, rapid emergence and uniform plant development.

### OPTIMIZED YIELD

By choosing high-quality, appropriate equipment and using it correctly, you can ensure successful planting which leads to a successful harvest.







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Reference no.: 90100EN

www.monosem.com

All the information concerning the different types of equipment, including external appearance, weight and dimensions, was correct at the time of printing and may vary from country to country. The information may be modified by us without prior notice. This document may not be regarded as a binding in any way. Your Monosem dealer will certainly notify you of any changes. To illustrate this document, certain protective devices may have been removed from equipment. However, this remains exceptional. As indicated in the user instructions, these devices should never be removed.

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MonoGreen

