Maestro DV





PRECISE SINGLE GRAIN SEEDING TECHNOLOGY



Maestro DV

PRECISE – VERSATILE – COMPACT

- Versatile single grain seed drill for: maize, sunflowers, sugarbeet, soybeans, rapeseed
- Rugged and reliable technology heavy parallelogram and row unit for highest demands
- High work rate due to high range for fertiliser and seed
- Coulter pressures up to 300 kg for safe sowing even in difficult conditions or, as an option, automatic, soildependent coulter pressure adjustment AutoForce with coulter pressures up to 350 kg per row
- Compact unit with low demands on the tractor



The very compact Maestro DV unit that consists of a high-capacity seed wagon and a seed bar with a working width of up to 6 m with a 8 or 12-row coulter attachment provides high efficiency whereas the demands on the tractor are comparatively low. By connecting the seed bar via a 4-point linkage, you can also mount a NT or TD CoulterBar with a working width of 4, 5 or 6 m for broadcast seeding. Thus, the seed wagon of the Maestro DV can be used all year long for seeding all crops.

To optimally meet all customer requirements, two configurations of the Maestro DV seed wagon are available: single hopper for fertiliser – pressurised double hopper for two components.

The hopper of both versions is equipped with the well-proven HORSCH metering technology and can reliably and precisely feed the underground fertilisation system or the seed bar of the Maestro.

The row body of the Maestro DV is equipped with a wide, solid parallelogram and a spring to generate coulter pressure as standard. Coulter pressures up to 300 kg per row can thus be generated mechanically. Optionally, the machine can be equipped with hydraulic cylinders to generate coulter pressure. Thus, with the innovative coulter pressure regulation system AutoForce, the coulter pressure adjustment is carried out up to max. 350 kg per row. The weight of the seed wagon is used to generate the coulter pressure over the whole width of the machine and lifts the seed wagon wheels while sowing.

Due to the varied equipment options, the Maestro DV can be adapted to the farm-specific requirements. Thus, a filling auger for fertiliser is available, the work lighting system WorkLight Pro for optimum visibility at night or a central microgranular unit with a capacity of 300 I to be able to apply another component besides fertiliser and seed.







Single disc fertiliser coulter, spokes depth control wheel and finger wheel ideal for black earth soil soils

Row unit hoppers



Row unit hopper with a capacity of 70 I

The row tank of the Maestro has a capacity of 70 l for seed and is air- and watertight. The working height of the large feed opening is easily accessible and the high snap-in position of the cover allows for an easy and quick filling of the tank.

- Capacity of 70 I per row
- Rubber cover seal for pressure and water tightness
- Handle with push-button for opening/closing
- High latching position of the cover and large filling opening for easy filling



Lock row unit hopper



Cover seal row unit hopper

Large feed opening

Row unit

DURABLE - RELIABLE - SOLID



Robust Maestro row unit

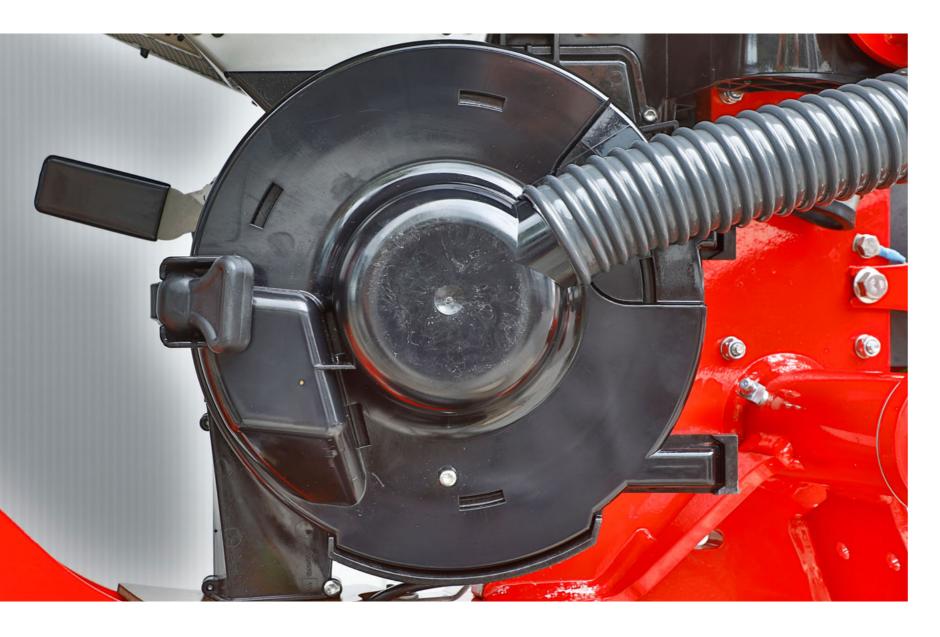
The Maestro row units mainly excel due to a long service life and a very stable design. With 35 cm the parallelogram is very wide so that especially laterally acting forces can be absorbed better. The maintenance-free bushes in the parallelogram are very large to guarantee a long service life. The row units can move by just under 40 cm to compensate for unevenness in the field. They are either clamped to the frame of the Maestros with a clamping device or for larger machine models are fixed. The coulter pressure is generated in the parallelogram of the row unit with a hydraulic cylinder. Coulter pressures up to 350 kg per row can be selected. The empty weight of the machine is used and transferred to the row unit.

The basic body of the row unit is heavy duty. The depth control system is equipped with large wear points to avoid having to comprise. The seed discs of the double disc coulter are equipped with reliable 2-row angular ball bearings. Depth control is carried out via a pin and 14 available positions. You can sow at depth from 1.5 to 9 cm. A catching roller to catch and press the grains is mounted as standard. The seed furrow is closed and consolidated by a V-shaped pair of closing wheels. In front of the disc blades, different front tools can be mounted on a standardised flange plate, e.g. trash wheels stars or a cutting disc.

- Hydraulic coulter pressure up to 350 kg
- Various front tools
- Closing wheel options for all soils
- Durable and low-wear design

AirVac

WITH AIRVAC SYSTEM - PRECISE - VERSATILE



The AirVac metering device can be used universally for a precise grain singulation. Due to different metering discs, maize, sunflowers, sugar beet, soybeans and rape can be singulated reliably.

The AirSpeed system works according to the overpressure principle where the grains are pressed to the perforated disc. During the metering process, the grains pass through a scraper that sees to it that doubles are removed. The special feature of the AirVac scraper is that the user does not have to carry out any adjustments. The contour of the scraper has been optimised in such a way that a reliable singulation for all crops is ensured.

Via a drop tube, the AirVac metering device leads the seed to the bottom of the furrow. A grain sensor is integrated in the drop tube to ensure an optimum monitoring of the seeding success. The measuring technology of the sensor is able to count the grains, to determine the spacings between the grains and thus to transmit an information to the driver with regard to double spots or gaps.

The transferred values of the singulation accuracy are clearly displayed at the terminal of the machine and additionally increase safety for sowing.

The AirVac singulator is driven electrically as standard and each row can be controlled individually. This technology allows for the well-known functions individual row switch-off, SectionControl, VariableRate and tramline control.

For VariableRate, the AirVac system has been designed in such a way that the seed rate can be modified for every single row. With regard to the tramline control the sowing density can be adapted individually in the rows at the left and at the right side of the tramline. With these advanced functions, all measures to increase precision while seeding can be used to full capacity.

- AirVac the new generation of vacuum singulation
- Can be used universally for different crops
- High precision for seeding speeds up to 12 km/h
- Easy to use: no adjustment of the scraper required
- Electric drive as a basis for
 - SectionControl
 - VariableRate
 - Tramline system



Easily accessible metering units with different metering discs depending on the type of crop



Easy operation, only a few adjustments are required



SectionControl allows for switching the rows off and on automatically via GPS

Press wheels

FOR A BETTER EMBEDDING OF THE GRAINS



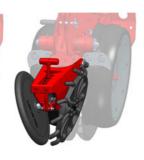




V-press wheels wide, profiled: for light soils and fine seeds (beet and rapeseed)



V-press wheels narrow: for normal conditions



Finger wheel: for medium and heavy soils

The closing of the seed furrow is the last time when you can influence emergence. Depending on the type of soil, the sowing method, sowing depth and the crop, the requirements differ. Therefore, the Maestros can be equipped with different press wheels and press wheel combinations to be able to achieve an optimum work result for all crops in all conditions.

Which press wheel is suitable for which application?

Rubber and profiled press wheel

- Rubber closing wheels for light sandy conditions
- The profiled wheels are recommended for fine seeds.
- The profile additionally creates fine earth and can better prevent silting.

Finger and spike press wheel:

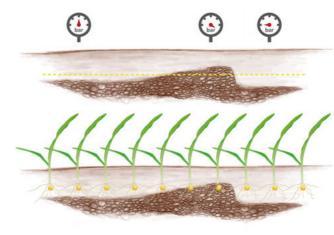
- The finger press wheel is ideal for heavy and medium soils
- Spike press wheel for medium to light sites

Spike wheel: for medium

- Per row there is one finger/spike press wheel and one standard wheel to control the depth and to prevent the grains from moving.
- However, the wheels are not suitable for shallow sowing.
- If the furrow wall gets compacted because of the DoubleDisc seed coulters, it is broken by the finger / spike wheel – the furrow is removed.
- Seed furrow is not opened after seeding in dry conditions, especially especially on heavy clayey sites.
- Development of the maize root is encouraged

AutoForce

OPTIMUM EMBEDDING DESPITE CHANGING SOIL CONDITIONS



With AutoForce: optimum pressure – optimum seed depth

Without AutoForce: constant pressure – uneven placement

What do you need an automatic coulter pressure control for?

- Stony soils require more coulter pressure to place the seed at a consistent depth. If the coulter pressure is too low the coulter body would not move smoothly and the seed would germinate irregularly and with different speed.
- Light conditions or pressure-sensitive soils need less coulter pressure so that the soil is not compacted.
 Too much coulter pressure compacts the soil and slows down the development of the roots although all seed was placed at the same depth.
- There rarely are fields that are completely even. In every part of the field the coulter pressure has to be adapted.
- This is why AutoForce has been available for the Maestro line since 2016.

AutoForce guarantees an always consistent embedding of the grains in changing conditions. Thus, more regular emergence and populations are achieved. The contact pressure of the row unit is measured with a sensor at the two support wheels. This pressure (= nominal value) is previously set in the terminal. Three pressure levels are available: 25 kg, 50 kg and 80 kg (the values can also be adapted individually). With changing soil conditions, the row needs more or less power to be able to keep up the set placement depth. The contact pressure would change. The sensor detects this, and the system regulates the contact pressure in such a way that it always corresponds to the nominal value that has been set. This is possible due to the design of the machine which allows for transferring weight to the seed bar. The coulter pressure then varies automatically between 150 kg to 350 kg. The grain embedding is always carried out at the same level. Too shallow placement as well as soil compactions can be avoided.



V-pressure wheels wide

Spike wheel



Finger wheel



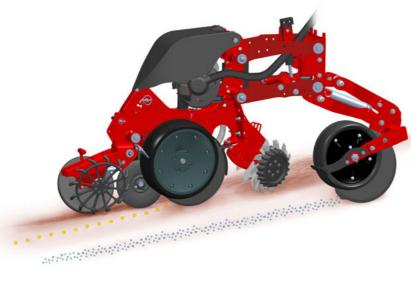
The Piezo sensor in detail



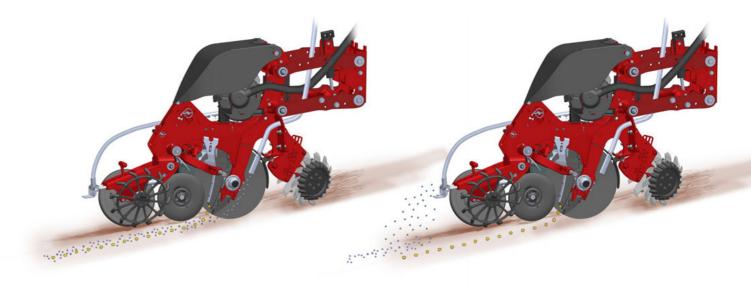
Hydraulic coulter pressure cylinder

FERTILISER AND MICRO-GRANULAR COMPOUND APPLICATIONS

In addition to a precise placement of the grains the exact positioning of fertilisers or plant protection agents is very important for single grain sowing. The rows of the Maestros, thus, can be equipped with different components to provide an optimum solution for all requirements and demands.



Single disc fertiliser coulter controlled via its own parallelogram



Pneumatic application IN the row

Pneumatic application ON the row



Single disc fertiliser coulter

Single disc fertiliser coulter

- The SingleDisc fertiliser coulter is suspended independently of the seed row
- The placement depth can be set to 5 to 9 cm
- Quick adaption of the coulter pressure without tools from 40 to 140 kg
- Deactivation is possible without tools by lifting the unit out of work

Application of micro-granular compound

- Two application points are possible at the row unit
- Release position in the seed furrow for fertiliser granulate and crop care agents for good contact to the seedling
- Release option behind the row via baffles, for large, shallow distribution of underseed or slug pellets



Pneumatic application IN the row



Pneumatic application ON the row

INTELLIGENCE

Metering disc selection

- Maximum flexibility the use of different metering discs allows for sowing different crops with the HORSCH Maestro.
- The tool determines the appropriate metering disc for your application.
- Only enter the type of crop, operating speed, application rate and row spacing and off you go!



Rotor selection

- Facilitates the selection of the optimum rotor for any application
- Wide selection range from normal seeds to fine seeds to fertiliser and micro-granular compound
- Expert mode to carry out rotor configurations also for variable operating speeds and application rates



HorschConnect

Prepare today for tomorrow. Control different machine functions quite easily via the MobileControl app – your smartphone replaces the terminal! In addition, gain complete, transparent insight in all aspects of work performance and working quality with HorschConnect Telematics.



With HorschConnect telemetry solutions can be found in the sowing and plant protection sector – exactly where they make sense

eosT10 (Pro)

- High-resolution 10" terminal for controlling all ISOBUS devices according to ISO 11783
- Reliable and powerful: a high-performance hardware combined with an intuitive, user-friendly operation in daytime or night mode
- Straightforward transfer of application maps with the wireless Task Data Exchange
- Various layout options allow for a simultaneous display of several applications – for an optimum overview
- eosT10 and eosT10 Pro one hardware, completed by two licence kits. Precision is always standard for us.

AutoLine

- Automatic, GPS-based tramline control
- Optimised driving strategy near obstacles or on the headlands
- Track-to-track driving is no longer required
- Available in combination with the terminal eosT10 Pro

- Digital solutions exactly where they make sense
- Straightforward out-of-the-box solution with integrated SIM card, WLAN modem and other interfaces
- HorschConnect Telematics to document the performance of the machine
- HorschConnect Telematics for complete transparency of the working quality, e.g the application rate of all components, and exact documentation of the singulation quality
- Control of machine functions via the smartphone app MobileControl
- Control of machine functions via smartphone app MobileControl: e.g. Calibration of all metering units and control of the individual rows to check the singulation quality before starting to seed or in



By means of the MobileControl app a test of the most important parameters of the singulation quality can be carried out any time.



Always keep an eye on machine performance and daily performance with HorschConnect Telematics



Due to the flexible holder, the eosT10 can be perfectly integrated in every cabin



By displaying up to 3 widgets in addition to the main workin screen, the user can keep track of several applications at the same time.



Drill independent of the track rhythm with HORSCH AutoLine!



Success factor transparency: position-specific data of all relevant information like error messages, operational speed or singulation quality



Quick and easy calibration or testing the singulation quality of the machine via smartphone with the MobileControl app

4-point cut-off point at the seed waggon

FOR UNIVERSAL USE

With the integrated 4-point cut-off point at the Maestro DV, the seed wagon can be used universally for all seeding tasks. Thus, the machine can be used for all crops all year long. With the pressurised double hopper system of the

Maestro DV, two different products (e.g. seed and fertiliser) can be applied at the same time as Grain & Fertiliser System.

- 4-point cut-off point between seed hopper and seed bar
- Quick-coupler for hydraulics
- Plug and cut-off points for electronics & pneumatics
- Simple conversion from Maestro seed bar to row seeding bars

can be applied at the same time as Grain a Fertiliser syste



Clear cut-off point for hydraulics and pneumatics



4-point cut-off point at the DV

Changealbe seed bar TD CoulterBar

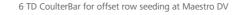
TO ENSURE MAXIMUM UTILISATION OF THE SEED WAGON WITH THE OFFSET SEEDING METHOD



The 4-point seed bar TD CoulterBar can be attached to all Maestro DV with pressurised double hopper. With the offset seeding method, it can be used for row seeding for all types of cereals. The front RollFlex packer ensures good consolidation and enough fine soil. The double hopper system of the Maestro DV allows for a Grain & Fertiliser application via the TurboDisc coulters.

- RollFlex packer with TurboDisc coulter bar (up to 120 kg coulter pressure)
- 6 m working width, hydraulically folded
- Optional: 4 track eradicator tines (spring-loaded)
- Fertiliser/seed flow control, tramline control possible







The seed bar can be equipped individually with tramline flaps

Changeable NT CoulterBar

FOR MAXIMUM UTILISATION OF THE SEED WAGON FOR MULCH OR DIRECT SEEDING



The different NT CoulterBars with a working width of 4, 5 or 6 m can be mounted on all Maestro DV with pressurised double hopper. The 4-point seed bars are equipped with different ondulated discs that prepare the seed furrow. Thus, they are ideal for offset mulch or direct seeding systems. With the seed bars, all types of cereals can be applied with row seeding in combination with the Maestro DV seed wagon. Due to the double hopper system of the Maestro DV, a Grain & Fertiliser application via the TurboDisc coulters is possible.

- Ondulated discs with TurboDisc coulter bar (up to 120 kg coulter pressure)
- 4 & 5 m version rigid, 6 m version, hydraulically folded
- Ondulated disc system to prepare the seed furrow (coulter pressure up to 200 kg)
- Ø 18" 13 x undulated ideal for light, sandy soils
- Ø 18" 25 x undulated suitable for medium, heavier soils
- Ripple Ø 17" Yetter discs
- Additional ballast is possible for more coulter pressure

Changeable seed bar Avatar SL

FOR MAXIMUM UTILISATION OF THE SEED WAGON FOR MULCH OR DIRECT SEEDING



The Avatar SL 4-point seed bar with a working width of 6 m can be mounted on all Maestro DV with pressurised double hopper. The well-proven SingleDisc seed coulter is ideal for heavy, stony and hard soils for mulch or direct seeding. Due to the double hopper system of the Maestro DV, a Grain & Fertiliser application via the SingleDisc coulters is possible.

- 4-point direct seed bar with the well-proven SingleDisc coulter
- Optimum embedding in direct seeding conditions
- Row width: 25 or 30 cm
- Coulter pressure up to 240 kg
- Optional front trash wheels
- 6 m working width, hydraulically folded



The NT CoulterBars are also ideal for direct seeding



Additional weights for the NT CoulterBar



Solidly built SingleDisc seed coulter for mulch and direct seeding



Optional trash wheels in front of the coulters

ADDITIONAL EQUIPMENT



The filling auger can be used for both fertiliser hoppers of the Maestro DV



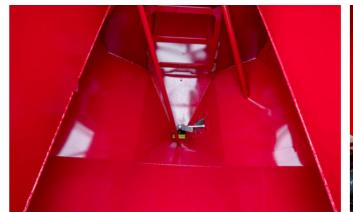
Spokes depth control wheel: better self-cleaning, thus ideal on black earth soils



Optional trash wheels, floating with depth control



Maestro DV in transport position







Agitator shaft fertiliser hopper outside

TECHNICAL DATA

Maestro DV	6 DV	8 DV	12 DV
Number of rows	6	8	12
Transport width with 2.45 m track (m)	3.00	3.00	3.00
Transport width with 2.80 m track (m)	3.35	3.35	3.35
Transport width with 3.00 m track (m)	3.55	3.55	3.55
Transport height (m)	3.10	3.90	3.90
Transport length (m)	7.50	7.50	7.50
Weight (kg)	3400	3750	4650
Hopper capacity seed wagon single hopper version (l)	2800	2800 2800	
Hopper capacity seed wagon double hopper version (I)	3500	3500	3500
Feed opening seed wagon single hop- per version (m)	1.00 x 2.40	1.00 x 2.40	1.00 x 2.40
Feed opening seed wagon double hopper version (m)	per 0.60 x 0.90	per 0.60 x 0.90	per 0.60 x 0.90
Capacity seed container (I)	70	70	70
Coulter pressure mechanical (kg)	150 - 300	150 - 300	150 - 300
Coulter pressure hydraulic (kg)	150 - 350	150 - 350	150 - 350
Depth control wheel Ø (cm)	40	40	40
Press wheels Ø (cm)	30 / 33	30 / 33	30 / 33
Catching roller	Standard	Standard	Standard
Row spacing (cm)	70 / 75	70 / 75 45 / 50	
Sowing depth (cm)	1.5 - 9	1.5 - 9	1.5 - 9
Drop height seed (cm)	45	45	45
Tyre size seed waggon	550/60-22.5 / Twin tyres 270/95 R 32	550/60-22.5 / Twin tyres 270/95 R 32	550/60-22.5 / Twin tyres 270/95 R 32
Operational speed (km/h)	2 - 12	2 - 12	2 - 12
Horsepower requirement (kW/hp)	75 / 100	95 / 130	110 / 150
DA control devices	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser and underpressure with adjustable flow rate, 1 DA hydr. filling auger single hopper	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser and underpressure with adjustable flow rate, 1 DA hydr. filling auger single hopper	1 DA hydr. functions, 1 DA hydr. fan direct drive fertiliser and underpressure with adjustable flow rate, 1 DA hydr. filling auger single hopper
Depressurized return flow (max. 5 bar)	1 for hydr. fan direct drive fertiliser and underpressure	1 for hydr. fan direct drive fertiliser and underpressure	1 for hydr. fan direct drive fertiliser and underpressure
Oil quantity hydr. fan fertiliser and vacuum (l/min)	50	50	50
Implement attachment adjustable drawbar (mm)	Pin Ø 40	Pin Ø 40	Pin Ø 40
Adjustable drawbar linkage with ring hitch ball joint (mm)	Hitch Ø 32 - 51	Hitch Ø 32 - 51	Hitch Ø 32 - 51

Maestro DV CoulterBars	4 NT CoulterBar	5 NT CoulterBar	6 NT CoulterBar	6 TD CoulterBar
Working width (m)	4.00	5.00	6.00	6.00
Coulter pressure (kg)	5 - 120	5 - 120	5 - 120	5 - 120
Horsepower requirement (kW/hp)	74 / 100	88 / 120	103 / 140	74 / 100
Transport width with 2.45 m track (m)	4.00	5.00	3.00	3.00
Transport width with 2.80 m track (m)	4.00	5.00	3.35	3.35
Transport width with 3.00 m track (m)	4.00	5.00	3.55	3.55
Transport height (m)	2.70	2.70	3.90	3.90
Transport length incl. Maestro DV (m)	7.40	7.80	7.80	7.80
Weight incl. Maestro DV (kg)	3800	4200	5200	4950
Hopper capacity seed wagon single hopper version (I)	2800	2800	2800	2800
Hopper capacity seed wagon double hopper version (I)	3500	3500	3500	3500
Feed opening seed wagon single hopper version (m)	1.00 x 2.40	1.00 x 2.40	1.00 x 2.40	1.00 x 2.40
Feed opening seed wagon double hopper version (m)	0.60 x 0.90 each	0,60 x 0,90 each	0,60 x 0,90 each	0,60 x 0,90 each
Number of seed coulters	20	25	30	40
Seed coulters/press wheels Ø (cm)	34/32	34 / 32	34 / 32	34 / 32
Row spacing seed coulters (cm)	20	20	20	15
Cutting disc system Ø (Inch)	17 or 18	17 or 18	17 or 18	
Tyre size seed waggon	550/60-22.5 (twin tyres 270/95 R 32 as an option)	550/60-22.5 (twin tyres 270/95 R 32 as an option)	550/60-22.5 (twin tyres 270/95 R 32 as an option)	550/60-22.5 (twin tyres 270/95 R 32 as an option)
Operational speed (km/h)	10 - 20	10 - 20	10 - 20	10 - 20
DA control devices	1 DA hydr. functions, 1 DA hydr. fan - direct drive, fertili- ser with adjustable flow rate, 1 DA hydraulic filling auger	1 DA hydr. functions, 1 DA hydr. fan - direct drive, fertili- ser with adjustable flow rate, 1 DA hydraulic filling auger	1 DA hydr. functions, 1 DA hydr. fan - direct drive, fertili- ser with adjustable flow rate, 1 DA hydraulic filling auger	1 DA hydr. functions, 1 DA hydr. fan - direct drive, fertili- ser with adjustable flow rate, 1 DA hydraulic filling auger
Depressurized return flow (max. 5 bar)	1 with hydr. fan - direct drive			
Oil quantity hydr. fan fertiliser and vacuum (l)	50	50	50	50
Implement attachment seed wagon (ajdustable drawbar) (mm)	Pin Ø 40	Pin Ø 40	Pin Ø 40	Pin Ø 40
Implement attachment coulter bar	4-point	4-point	4-point	4-point



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ExperienceTour

MAESTRO

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All specifications and diagrams are approximate and not binding. Technical features and design are subject to change.