

Drummond **DRUM MOWERS**



EVOLVING AGRICULTURE

DEUTZ-FAHR DRUM MOWERS



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DEUTZ-FAHR provides a complete program of innovative agricultural machines.

A high quality, reliability and well handling are very important features in the development of the DEUTZ-FAHR machines.

Mowing is the first and very important step in the process of making silage.

And the DEUTZ-FAHR drum mowers will be your choice in a well considered decision!



DEUTZ-FAHR has with its drum mower program almost 50 years of experience as from the first invention of the drum mower. And the Research & Development department is still constantly improving the drum mowers to stay in front of the competition with innovations like: LIFT-CONTROL, Height adjustment FLEXPROTECT and the Modular design.

DEUTZ-FAHR DRUM MOWERS FOR A CLEAN CUT

The new generation of DEUTZ-FAHR drum mowers has been developed using a combination of experience and the most up-to-date mowing quality, technology and design engineering. The result is a complete series of front and rear drum mower units. The well-known features of the DEUTZ-FAHR drum mowers have been complemented by new solutions such as the FLEXPROTECT protective side covers and its modular structure.



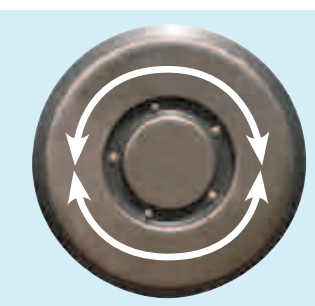
Flat sided drums

Round drums do not transport. DEUTZ-FAHR uses drums with two flat sides for optimal crop transport without the risk of blockage. Movement of the crop has an impact on the mowing quality. It is for this reason that DEUTZ-FAHR has chosen to use screwon transport strips.



Height adjustment

The cutting height is adjustable using a spindle attached to the top of the mower. This can be easily reached and infinitely adjusted.



Rotating saucers

The continuously rotating saucers have a major advantage. In uneven ground conditions, the saucer "rotates" over the ground rather than sliding, thus protecting the stubble. The positive effects of reduced crop contamination will be particularly noticeable on sensitive soils such as boggy land.

Quick change blades

Using the special blade tool, you can push the blade holder down and simply replace the blades. A quick and efficient system! Another advantage of this system is that the blade holders get less polluted.

FlexProtect

Damage to the side covers is now a thing of the past. The DEUTZ-FAHR FLEXPROTECT side covers are adding a new dimension to mowing with their design made of polythene. On encountering any obstacles, the material of the side cover bends, without breaking or damaging the mower. The material then returns back to its original shape. The FLEXPROTECT side covers are integrated on all the DEUTZ-FAHR drum mowers, except for the KM 3.16, 3.18 and 3.21 series.



KM 3.16 • KM 3.18 • KM 3.21



High output

With the three models of drum mowers, KM 3.16, KM 3.18 and KM 3.21, DEUTZ-FAHR provides high-quality technology and working widths up to 2.10 m. These DEUTZ-FAHR drum mowers are suitable for small and medium-sized farms. Its long-life and easy and safe operation are the key attributes of these machines. The KM 3.21 can be retrofitted with a conditioner which can be removed without any tools thanks to a special centre section and practical quick-locking mechanisms.

Safety break back system

On hitting an obstacle, the mower unit pivots back, thus absorbing the impact. Reversing the tractor re-engages the safety system, and the mower unit is set back into work position.

Working position

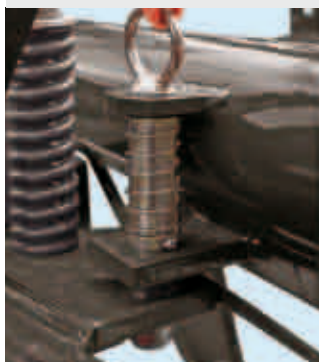
By using a cord, you can move the mower from transport position to working position and vice-versa. On the KM 3.21, this can be done from the tractor cab. A hydraulic folding cylinder is available as an option.

Compensation springs

Compensation springs are fitted as standard to transfer the weight from the mower unit to the tractor in order to keep ground pressure as low as possible.

Easy hitching

The KM 3.16 and KM 3.18 can be hitched easily to every tractor with Cat. I or II linkage pins. DEUTZ-FAHR can provide a special adapter for tractors with wide tyres.



KM 4.27 FS • KM 4.29 FS

With the KM 4.27 FS and KM 4.29 FS models, DEUTZ-FAHR sets the standard in this class. The drum arrangement, FLEXPROTECT side protection and accessibility have yet to meet their equal. The mower unit attachment with two large outer drums and two small inner drums ensures maximum throughput for the forage. In this way, you can deposit a double swath that can be easily picked up by any following machine. Using the generously dimensioned swath discs, the finest of adjustments can be made: Narrow swath (90 cm) for day-to-day gathering of forage from sloping terrain, wide swath for hay.



Clean swath formation

Using large outer drums and small inner drums has great benefits: perfect ground adaptation, clean swath formation and high throughput.

TC 3.32

Foldable front cover

The foldable front protective cover on the KM 4.27 FS and KM 4.29 FS can be lifted upwards - convenient for daily inspection and blade exchange.

Optimal ground adaptation

The fixed headstock provides a good, well-priced solution for all grassland specialists. The flexible 'Flextop' top link connection and 'Frontflex' telescopic top ensure the unique ground adaptation in the driving direction. Traverse ground adaptation is ensured by the front linkage arms. For tractor lifts without pendulum device, a pendulum PENDELFLEX headstock (P) can be supplied if required.

TC 3.32

If you wish to use your mower unit for day-to-day gathering, but also want the possibility to use a conditioner for silage or hay harvesting, then the all new DEUTZ-FAHR TC 3.32 brings the solution!

Hitch the TC 3.32 to the rear to condition the fodder and deposit it across the whole mowing width. Adaptable to every situation with adjustable conditioning and spreading effects. Due to the fixed head stock with oscillating lower link pins the TC 3.32 is always very stable, even on steep slopes. PTO speed 540 min-1 as standard, 1000 min-1 by turning primary gear box (815 or 650 rpm by changing the sprockets).

The TC 3.32 is equipped with big pivoting wheels providing the best possible ground adaption. Because the wheels are attached directly to the head stock frame there is no extra load on the conditioner itself.

Cutting height adjustment

The cutting height is adjustable using a spindle at the top of the mower. This can be easily reached and infinitely adjusted.

You now no longer need to crawl under the mower to check whether the cutting height is evenly adjusted from left to right.



KM 4.27 • KM 4.29



3-point linkage

The adjustable 3-point linkage enables you to shift the machine to the left or right. When using the front and rear mower units in combination, this ensures that overlap is always at its optimum even when cornering.

Headland cylinder

The optional headland cylinder offers comfort in a large extend and gives the KM 4.27 and KM 4.29 sufficient ground clearance under any conditions.

The KM 4.27 and KM 4.29 models have a proven and tested drum design with over 25.000 units sold. Large outer drums and small inner drums mean benefits such as perfect ground contour following, clean swath formation and large throughput.

Safety break back system

Both mower units have a safety break back system – for optimum drum protection when hitting obstacles in the field. When hitting an obstacle, the mower unit pivots back and absorbs the impact. Reversing the tractor re-engages the safety system, and the mower unit is set back into work position.

Easy access to the drums

The front cover can be folded away, allowing easy access to the blades. This is perfect for inspections and mower maintenance.

Transport

You do not have to leave the tractor seat to swivel the DEUTZ-FAHR mower units easily and conveniently into transport position behind the tractor. A hydraulic cylinder is available as optional equipment to fold the machine up vertically behind the tractor.

NEW GENERATION OF MOWER UNITS

Direct drive



The new generation of DEUTZ-FAHR DRUMMASTER mowers allow easy maintenance through its modular design and extensive standardization.

First, when a small part of a component needed replacement, the whole component needed to be replaced. Through the modular design of the new mower generation small parts can be replaced when needed and individual drive damage does not result in total loss damage. Maintenance of the mower is quicker and easier, and repairs take less time. The new generation mowers can be used by tractor with more power. Because of the direct drive without V-belts the machine can process a higher capacity. This results in high power transmission possibilities without rpm losses and consequently high output with constant and perfect cutting performance.

Adjustable cutting height adjustment with saucer brakes (1)

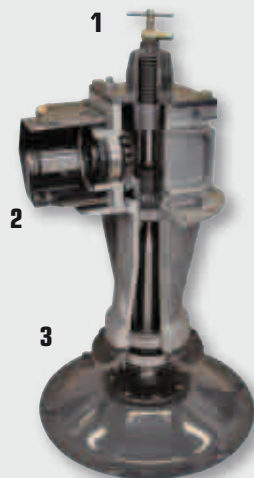
The cutting height is adjustable using a spindle attached to the top of the mower. This can be easily reached and infinitely adjusted. The saucers rotate on the ground, but remain in their raised position in order to prevent imbalances.

Oil bath drive (2)

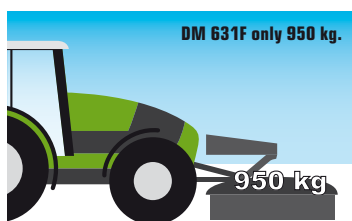
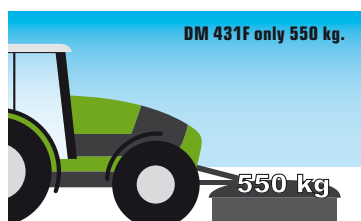
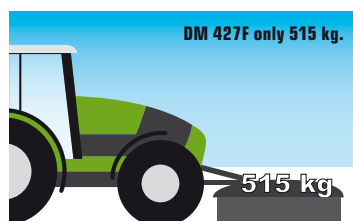
The gearing of the connecting shaft between the mower drums runs in an oil bath, which is the best way of protecting it from wear.

Separate drives (3)

The split drive shaft prevents axial torsion and (peak) loads between the drum skirts and saucers.

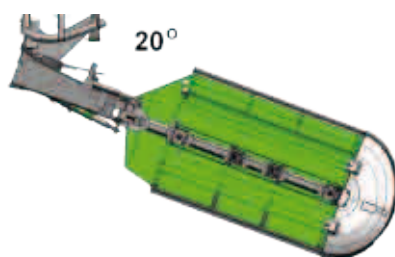


Modular design and one-hand quick change blades.



DRUMMASTER 427 • 431

The DM 427 and 431 LIFT-CONTROL have a direct driveline with integrated slipclutch and freewheel. The foldable front cover and FLEX-PROTECT side covers provide easy access to the drums, ideal for the daily inspections and maintenance of the mower unit. The unit's modular design and use of strong aluminium components make the overall weight of the mower unit very low. A wide spreading kit which can deposit the crop across the whole mowing width is optional.



The key to the system: Kinetics

The LIFT-CONTROL device is much more than just a suspension system with a nitrogen accumulator replacing the traditional spring. The principal advantage of the LIFT-CONTROL system is derived from the exclusive way in which kinetic forces that act on the mower unit are utilized. Our engineers have succeeded in making a active and dynamic suspension system as opposed to the passive system commonly in use.

As the force on the mower unit increases, the LIFT-CONTROL system automatically will lighten and raise the unit.

The greater the force, the lighter the mower unit gets.

The clear benefits are:

- Constant ground pressure
- Non-stop safety breakaway
- Excellent terrain following
- Less soil in the crops
- Minimize torn up turf

Adjust pressure easily and accurately

Through the accumulators, the ground pressure can be adjusted with great precision to the harvesting conditions, easily from the tractor seat. Therefore, on wet land minimal pressure on the ground prevents the fodder from becoming clogged and soiled. Lateral force, wear on the drums and tensile strength will be significantly reduced.



120° transport position



The weight of the machine is placed more evenly between the rear wheels. Tractor lights are always good visible.

Extreme possibilities of mowing slopes, 30° upwards and 30° downwards

DRUMMASTER 428F • 432F

The 428F and 432F models are equipped with direct drive. Turning the gearbox changes the direction of rotation. The input shaft, with a standard PTO height of 70 cm, is suitable for every size of tractor. With 1000 and 740 rpm integrated in the gearbox, no need for extra parts. Standard equipped with cw and ccw rotating direction and integrated freewheel clutch. A hydraulic folding device for the side covers is an optional equipment.



Swath Deposit

The arrangement of the drums gives the added advantage of fuel-saving. The models are equipped with a set of swath discs as standard. An extra pair of swath discs is available on request. This allows you to deposit the grass in an optimum swath for any following machinery.

Headstock

The DM 428F and DM 432F models are available in two versions: with fixed headstock or PENDEFLEX pendulum headstock. This ensures perfect ground contour following, even in the most difficult conditions. A floating headstock can also be supplied for extra comfort and security.



Fixed headstock + Frontflex



PENDEFLEX pendulum headstock

DRUMMASTER 493



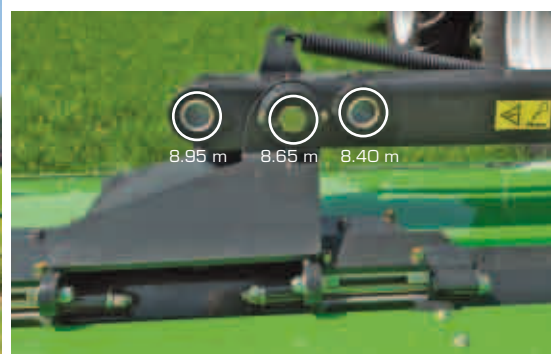
If you want to mow wide working widths, the DM 493 is the right mower combination for you. With its two mower units (of the DM 431), mowing up to a width of 8.95 m is possible with the DM 493 front and rear combination. Farms with tractors in the 74 to 110 kW/100-150 hp range can now achieve maximum mowing width, and therefore the highest work rates.

Simply impressive: the DM 493 front and rear combination The two rear units of the mower combination are built from a tested and proven design. With the legendary drum design of more than 25.000 front and rear mounted mowers so far sold; these mower units have proven themselves in real, tough operating conditions. One special feature is its arrangement of mower drums: Large outer drums and small inner

drums produce a swath form to match intake and follow the contours of the land perfectly. The freely rotating saucers make this mower very easy to tow.

Adjustable working width and overlap

The working width of the mower units can be set in three levels: 8.40 m, 8.65 m and 8.95 m. This has the advantages that you can use front mower units of different working widths, which in turn means that you can increase the overlap in hilly conditions.





With the help of an attachment kit for the front mounted mower (special equipment), the DM 493 can be used as a reverse drive combination.

Compact design for best weight transfer

The DM 493 has a weight of 1900 kg. With one front mounted mower and two mowers attached to the rear of the tractor, this mower combination ensures an excellent weight transfer for the best manoeuvrability in sloping terrain.

LIFT-CONTROL

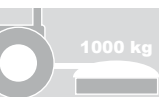
The DM 493 is fitted as standard with a hydraulic safety break back system. On hitting an obstacle, the mower units move upwards and backwards, independently of each other.

This hydraulic safety break back system also controls the ground pressure hydro pneumatically.



Independent lifting: The DM 493 drum mower rear combination is standard equipped with a multifunctional hydraulic valve.

DRUMMASTER 631



1000 kg

Hydraulic suspension

The ground pressure on the DM 631 and DM 631F can be adjusted hydraulically. The operator will find this system easy and uncomplicated to use.



FREE-FLOAT attachment

The DM 631 drum mower is equipped with the FREE-FLOAT suspension concept. The mowing unit is able to independently float, to give more precise ground contour following, giving it the best impact protection imaginable, since the mower unit can move upwards and backwards.



Transport position

The DM 631 is swung upwards hydraulically through 125° for transport. The central and low gravity point of the mower in transport position results in outstanding weight distribution during road transport. Tractor lights are always good visible.

2-SPEED converter

The DM 631 has a two-level lever change gearbox for conditioner speeds of 900 or 650 rpm. You can choose between intensive conditioning or low fuel consumption if the grass needs only light conditioning. The conditioner rotor can be removed with just a few hand movements. This way, the farmer can use the mower unit with or without a conditioner, depending on the working conditions.



SPECIFICATIONS	KM 3.16	KM 3.18	KM 3.21	KM 4.27	KM 4.29	KM 4.27FS	KM 4.29FS
Working width (cm)	165	185	210	265	295	265	295
Transport width (cm)	140	150	160	180	200	255	285
Hitch	cat. I+II	cat. I+II	cat. II	cat. II	cat. II	cat. II + A-frame ISO 11000-2 (cat. II)	cat. II + A-frame ISO 11000-2 (cat. II)
Number of drums	2	2	2	4	4	4	4
Number of blades	6	6	8	10	12	10	12
Cutting height adjustment	spacers	spacers	spacers	spacers	spacers	continuously	continuously
Driveline	V-belt	V-belt	V-belt	V-belt	V-belt	V-belt	V-belt
Swath discs	(1x) ○	(1x) ○	(1x) ○	(2x) ○	(2x) ○	(2x) ● / (2x) ○	(2x) ● / (2x) ○
Hydraulic folding cylinder	○	○	○	○*	○*	–	–
Adapter for wide tractors	○	○	–	–	–	–	–
PTO speed (min -1)	540	540	540	540 ● / 1000 ○	540 ● / 1000 ○	540 ○ / 740 ○ / 1000 ●	540 ○ / 740 ○ / 1000 ●
Weight (kg)	380	420	580	725	780	585	655
Wheels	–	–	–	–	–	–	–
Necessary hydraulic tractor equipment	–	–	–	–	–	–	–
Theoretical PTO power requirement (kW/hp)	20 / 27	25 / 35	30 / 40	40 / 55	47/65	37 / 50	44 / 60
* Further options such as headland and swivel cylinder available. ● = standard equipment ○ = special equipment – = not available							
Standard equipment and options vary according to country.							

DM 427	DM 431	DM 493	DM 428F	DM 432F	DM 631F	DM 631	TC 3.32
270	310	840/865/895	270	310	310	310	180
225	230	300	260	300	300	300	255
cat. II	cat. II	cat. II	cat. II + A-frame ISO 11000-2 (cat. II)	cat. II + A-frame ISO 11000-2 (cat. II)	cat. II + A-frame ISO 11000-2 (cat. II)	cat II + III	cat II
4	4	8	4	4	4	4	–
10	12	24	10	12	12	12	–
continuously	continuously	continuously	continuously	continuously	continuously	continuously	–
direct	direct	direct	direct	direct	direct	direct	–
(2x) ○	(2x) ○	○	(2x) ● / (2x) ○	(2x) ● / (2x) ○	–	–	–
●	●	●	○	○	–	●	–
–	–	–	–	–	–	–	–
540 ○ / 1000 ●	540 ○ / 1000 ●	1.000	740 ○ / 1000 ●	740 ○ / 1000 ●	1.000	1.000	540 ● / 1000 ○
760	800	1.900	540	575	950	1.000	475
–	–	–	–	–	–	–	6.00-9 6pr
2+1	2+1	3	–	–	1	2+1	–
40 / 54	44 / 60	85/115	40 / 54	51 / 69	59 / 80	66 / 88	18 / 25

SURE AND SAFE WITH ORIGINAL DEUTZ-FAHR SERVICE AND PARTS

Original service is wise

Only your DEUTZ-FAHR specialist dealer knows your machine inside and out. Only your dealer has regularly trained mechanics and experts on call. Only dealers have the special tools and diagnostic equipment required for competent diagnosis and inspection. All this gives you peace of mind – without doubt.

Original parts make good sense

As you placed your trust in the original machine, we recommend you use original parts when required. Only these comply with the high quality and safety standards of DEUTZ-FAHR and ensure correct function and operation without problems – guaranteed.

DEUTZ-FAHR lubricants

We recommend genuine DEUTZ-FAHR lubricants. The outstanding quality of this product range, which is made exclusively for DEUTZ-FAHR, ensures that your machine always receives exactly what it needs.

Your DEUTZ-FAHR dealer will be pleased to answer your questions:

This printed material is designed for international use. The illustrations it contains show both special equipment and incomplete standard equipment. The availability of some illustrated models, standard and special equipment can vary from country to country. Only the dealer's price list stipulates whether such illustrated equipment is included as a standard feature or whether it is a special accessory. In addition the illustrated mounted implements and special accessories may not always comply with the respective statutory regulations. It is the responsibility of the customer – after consultation with the dealer – to verify this, taking the operating instructions into account. All information and illustrations in this brochure are subject to correction; errors excepted. Furthermore all information contained in this brochure is not binding and is subject to modifications of a technical and commercial nature or those resulting from statutory regulations. No claims whatsoever can be derived from these. SAME DEUTZ-FAHR DEUTSCHLAND GmbH reserves the right to make any changes to the design and technical construction and also the scope of standard equipment at any time and without prior notice.

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