

DEUTZ-FAHR KM Serie - DM Serie - TC 3.32





# DEUTZ-FAHR DRUMMASTER GRASS HARVESTING AT ITS BEST!



## A WELL CONSIDERED DECISION

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!

## **OVER 50 YEAR EXPERIENCE**

DEUTZ-FAHR has with its drum mower program over 50 years of experience as from the first invention of the drum mower.

## STAYING IN FRONT WITH NEW INNOVATIONS

The Research & Development department is still constantly improving the drum mowers to stay in front with innovations like: LIFT-CONTROL, Height adjustment, FLEXPROTECT and Modular design.



## 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 complimented by new solutions such as the FLEXPROTECT protective side covers and its modular structure.

### **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.



#### **FLAT SIDED DRUMS**

Round drums do not transport well. That is why 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 screw-on transport strips.



## QUICK CHANGE OF 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.



## **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 and reducing PTO power requirement. The positive effects of reduced crop contamination will be particularly noticeable on sensitive soils such as boggy land.



## **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.





AS RELIABLE AND ECONOMICAL AS THE BIG MOWERS



## KM 3.16 KM 3.18 KM 3.21

#### THREE MEDIUM-SIZE MODELS

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 DRUMMASTER 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.

#### 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.









SAFETY BREAK

TRANSPORT / WORKING POSITION COMPENSATION SPRINGS

**EASY HITCHING** 



## UNCOMPROMISING SET-UP FOR PROFESSIONAL USE



## **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 the KM 4.29 sufficient ground clearance under any conditions.

### **FOLDING TRANSPORT CYLINDER**

Also as option available is the folding cylinder, to keep the centre of gravity as close as possible to the tractor.

### **TRANSPORT**

Without leaving the tractor seat, the mower unit can be put easily into transport position behind the tractor. A hydraulic cylinder is available as optional equipment to do it hydraulically.

## KM 4.27 KM 4.29

The KM 4.27 and 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.

### **EASY ACCESS TO THE DRUMS**

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



EASY ACCES TO THE DRUMS

### 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.





SAFETY BREAK BACK SYSTEM





## HIGH PERFORMANCE



FIXED HEADSTOCK + FRONTFLEX

CUTTING HEIGHT ADJUSTMENT



PENDELFLEX PENDULUM HEADSTOCK

## KM 4.27FS KM 4.29FS

With the KM 4.27FS and KM 4.29FS 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.

#### **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.

#### **FOLDABLE FRONT COVER**

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

## **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.

#### **CLEAN SWATH FORMATION**

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



CLEAN SWATH FORMATION



## A CONDITIONER FOR SILAGE OR HAY HARVESTING!



## 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 TC 3.32 brings the solution!

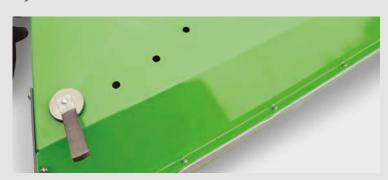
#### TC 3.32

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<sup>-1</sup> as standard, 1000 min<sup>-1</sup> by turning primary gear box. The conditioner rotor speed of 815 rpm can be changed into 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.



ADJUSTABLE CONDITIONER INTENSITY



ADJUSTABLE SPREADING WIDTH



**BIG PIVOTING WHEELS** 



CONDITIONER ROTOR

SPEED OF 815 RPM CAN BE

CHANGED INTO 650 RPM BY

CHANGING THE SPROCKETS



## INNOVATIVE AND HIGH CLASS MOWER UNIT TECHNOLOGY



## 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

## NEW GENERATION OF MOWER UNITS

The new generation of DEUTZ-FAHR DRUMMASTER mowers allow easy maintenance through its modular design and extensive standardization. The DEUTZ-FAHR DRUMMASTER mowers feature a foldable front cover and FLEXPROTECT side covers for easy access to the drums, ideal for the daily inspection 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.

### ADVANTAGES MODULAR DESIGN

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 tractors 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.



**MODULAR DESIGN** 







## CREATING CLEAN AND NARROW SWATHS



## DM 432F

The DM 432F model is 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 use of the two large outer drums and the two smaller inner drums has great benefits for the front mower: a clean swath formation, perfect ground adaptation and high throughput with little PTO power requirement.

The arrangement of the drums has the added advantage that it is fuel-saving. Both 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 432F model is available in two versions: with fixed headstock or PENDELFLEX 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.



CUTTING HEIGHT ADJUSTMENT



FIXED HEADSTOCK + FRONTFLEX



CLEAN SWATH FORMATION



PENDELFLEX PENDULUM HEADSTOCK



## CREATING CLEAN AND NARROW SWATHS



120° TRANSPORT POSITION



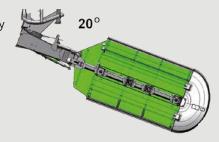
### THE KEY TO THE SYSTEM: KINETICS

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. DEUTZ-FAHR engineers have succeeded in making an 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.

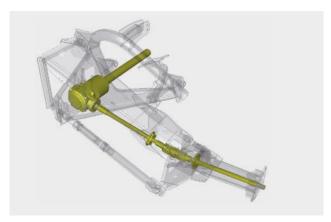
The clear benefits are:

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



## DM 432 LIFT-CONTROL

The DEUTZ-FAHR DM 432 LIFT-CONTROL has a direct driveline with integrated slipclutch and freewheel. The foldable front cover and FLEXPROTECT 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.



DIRECT DRIVE

## 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.





EXTREME POSSIBILITIES OF MOWING SLOPES, 30° UPWARDS AND 30° DOWNWARDS



## EASY TOWING AND HIGH OUTPUT!

mower combination ensures an excellent weight transfer for the

best manoeuvrability in sloping terrain.

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.





THREE DIFFERENT WORKING WIDTHS.



MORE INFORMATION ABOUT THE LIFT-CONTROL SYSTEM CAN BE FOUND AT THE KM 431 LIFT-CONTROL PAGES.

#### 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.

## 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 advantage that you can use front mower units of different working widths, which in turn means that you can increase the overlap in hilly conditions.

## DM 493 LIFT-CONTROL

If you want to mow wide working widths, the DM 493 LIFT-CONTROL is the right mower combination for you. With its two mower units (of the KM 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.





FOR A ROAD TRANSPORT WIDTH OF LESS THAN 3.00 M, THE MOWER UNITS ARE SWUNG UPWARDS USING HYDRAULIC CYLINDERS.



## EFFICIENT MOWING WITH REDUCED DRYING TIMES!





#### TRANSPORT POSITION

## DM 631

## 2-SPEED CONVERTER

The DM 631 and DM 631F have 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. In this way, the farmer can use the mower unit with or without a conditioner, depending on the working conditions.



2-SPEED CONVERTOR



REMOVED ROTOR

## 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.



## EFFICIENT MOWING WITH REDUCED DRYING TIMES!



## DM 631F

### FREE-FLOAT ATTACHMENT

With the FREE-FLOAT suspension concept of the DM 631 and DM 631F, DEUTZ-FAHR has ensured that the mowers follow the contours of the land in the way that you always wanted. The mowing unit is able to independently float and is hydraulically adjustable, to give more precise ground contour following. Giving it the best impact protection imaginable, since the mower unit can move upwards and backwards. With the integrated telescopic connection and parallel attachment, the DM 631F front mower unit can easily adjust to any unevenness and every contour of the ground both lengthways and crossways. No damage to the stubble! This attachment provides extra security when it comes into contact with obstacles.



2-SPEED CONDITIONER

## **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.





SPECIFICATIONS	KM 3.16	KM 3.18	KM 3.21	KM 4.27	KM 4.29	DM 431	DM 493			
DIMENSIONS										
Working width	165 cm	185 cm	210 cm	265 cm	295 cm	310 cm	840/865/895 cm			
Transport width	140 cm	150 cm	160 cm	180 cm	200 cm	230 cm	300 cm			
Hitch	cat. I+II			cat. II						
Number of drums	2			4			8			
Number of blades	6		8	10	12		24			
Cutting height adjustment	spacers				spacers		continuously			
Quick change blades				•						
Swath discs	(1x) o			(2x) o						
Hydraulic folding cylinder	0			o*	o*		•			
PTO speed (min-1)	540				540 • / 1000 0	1000				
Wheels				-						
Weight	380 kg	420 kg	580 kg	725 kg	780 kg	800 kg	1900 kg			
Necessary hydraulic tractor equipment	-				-	2+1	3			
Theoretical PTO power requirem.	20 kW (27 hp)	25 kW (35 hp)	30 kW (40 hp)	40 kW (55 hp)	47 kW (65 hp)	51 kW (70 hp)	85 kW (115 hp)			
• = standard equipment o = optional equipment - = not available * Further options such as headland and swivel cylinder available.										



SPECIFICATIONS	KM 4.27FS	KM 4.29FS	DM 432F	DM 631F	DM 631	TC 3.32				
DIMENSIONS										
Working width	265 cm	295 cm		310 cm	180 cm					
Transport width	255 cm	255 cm								
Hitch		cat. II + III	cat II							
Number of drums		-								
Number of blades	10	12	12	-						
Cutting height adjustment		-								
Quick change blades		-								
Swath discs		-								
Hydraulic folding cylinder	-	-	-	-	•	-				
PTO speed (min-1)	1000 • / 540 0 / 740 0	540 • / 1000 ∘								
Wheels		6.00-9 6PR								
Weight	585 kg	655 kg	575 kg	950 kg	1000 kg	475 kg				
Necessary hydraulic tractor equipment		-		1	2+1	-				
Theoretical PTO power requirem.	37 kW (50 hp)	44 kW {60 hp}	51 kW (69 hp)	59 kW (80 hp)	66 kW (88 hp)	18 kW (25 hp)				
* Further options such as headland and swivel cylinder avaliable.  * Further options such as headland and swivel cylinder avaliable.										



The use of original lubricants and coolants is recommended.



