

MF DM & M SERIES

Mowers & Mower Conditioners

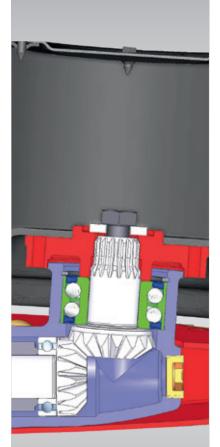




Page 04 MF M Series: Drum mowers



Page 06 MF Farmer DM Series: Disc mowers



Page 08 MF Professional DM Series



Page 09 driveGUARD®



Page 10 MF Disc Mowers: Rear-mounted Disc mower



Page 13MF Disc Mower Conditioners:
Trailed centre support



Page 18
Specifications

Contents

- 04 MF M Series: Drum mowers
- 6 MF Farmer DM Series: Disc mowers
- 08 MF Professional DM Series: Disc mowers and mower conditioners
- 09 driveGUARD®
- 10 MF Disc Mowers: Rear-mounted disc mower
- 11 MF Disc Mowers: Rear-mounted, centre support
- 12 MF Disc Mower: Rear mounted, centre support, vertical folding
- 13 MF Disc Mower Conditioners: Trailed centre support
- 14 MF Front-mounted Disc Mowers and Disc Mower Conditioners
- 16 MF Butterfly Disc Mower combination
- 18 Specifications



MF M Series:

Drum mowers

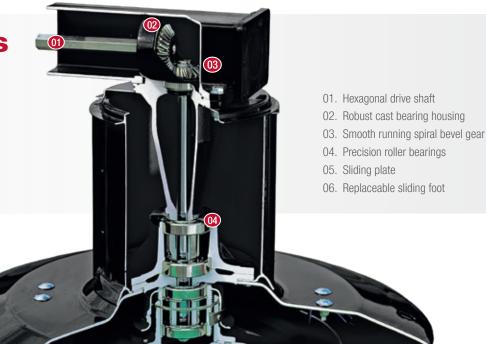
The M Series Drum mowers from Massey Ferguson offer a reliable and economical solution for the harvesting of high-quality forage even under the most difficult of conditions. A precise cut with a high output helps ensure a perfect compact swath. Large volumes of forage can be mown quickly without risk of blockage or damage. Massey Ferguson drum mowers are available in both front and rear attachment versions.

Key Features & Benefits

- Simple, robust and reliable
- Large drum contact area for low ground pressure and gentle crop treatment
- Large dimensioned square steel gear frames ensure exceptional reliability and a long service life
- Excellent swath formation guaranteed from the paired running of the drums with large passage area between drums

The Mowing Drum

At the heart of the MF M Series mowers is the mowing drum. Massey Ferguson drums are designed to provide perfect results in all conditions and be quick and easy to maintain. The drums are mounted at five points and are bolted not welded in position. The rotating gliding skids slide easily over uneven ground to reduce wear and prevent forage contamination. Replacement of the sliding foot is a quick and simple process. All Massey Ferguson drum mowers are equipped with the standard rapid change blade system and the spiral bevel gear drives run in a lifetime filled oil bath for smooth maintenance-free running.



Rear-mounted, side attachment drum mower





Front-mounted, pivoting headstock

The MF M 304 FP-V front-mounted mower with pivoting headstock is ideal for use in a combination with rear mounted mowers or a loader wagon. The pivoting linkage allows for lateral travel of up to \pm 7-5° for precise high speed mowing over uneven ground.

Rear-mounted, centre hitch attachment

The MF M 304 TL mower utilises a centre attachment hitch designed so that the mower unit is attached and towed from its centre of gravity. The centre attachment allows for a \pm 13° lateral pivot. The mower is lifted and lowered using a single acting hydraulic cylinder. Ground pressure is controlled with the Massey Ferguson TurboLift system. This system incorporates an adjustable hydropneumatic accumulator to control cutter bar pressure, ensuring the mower can adapt to the most varied of field conditions.



MF M SERIES

MF DM Farmer Series:

Disc mowers

The MF DM 164, MF DM 205, MF DM 246 and MF DM 287 provide a sturdy and economical solution to the small and medium size farmer without compromising on quality and finish. Ideally suited to farmers with lower horsepower tractors or a limited amount of mowing to carry out, these mowers boast a host of features you would expect to find on larger, more expensive machines.



MF DM 164, MF DM 205, MF DM 246 and MF DM 287 features include:

- A PTO shaft with a free wheel clutch, which transfers power through a V belt from the tractor to the in-line cutterbar.
- Each individual cutting head is fitted with shear pin protection, preventing damage in case obstacles are hit. These pins can easily be replaced in the field.
- The flat profile is ideal for heavy crops and, combined with the standard stone guard and large hardened skid, ensures years of trouble-free service.
- Built to perform under the most difficult conditions.
- Provides an exact cut and high material flow without material build-up, leaving fluffy swaths and high quality forage.





Key Features & Benefits

- Suitable for multiple applications
- Suitable for use with smaller tractors
- Low power requirement
- Spring mounted cutter bar Low ground pressure, gentle on crop



Low weight - wide coverage

Massey Ferguson disc mowers with spur gear drive ensure a long working life and low operating costs. The lightweight construction maximises the yield, as even with smaller tractors wider working widths can be used. The simple, low maintenance design of these mowers also makes sure downtime is kept to a minimum.

Precise mowing – even under difficult conditions

The precision engineered gear bed cutter bar, with elliptical discs, rotating swathformers and robust conveyor drums, makes sure it is possible to achieve a clean cutting pattern and good throughput even on difficult terrain.

Key features of our cutter bar

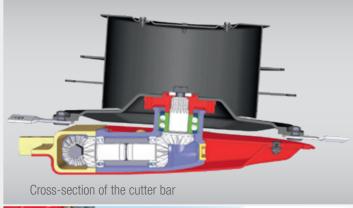
Low wear and simple to maintain. The bolted cutter bar has all components mounted in the base plate with a simple-to-remove cover plate.

- Equipped to handle all loads due to the robust construction with high quality materials
- Superior Massey Ferguson blades for an extremely high quality of cut
- High-quality roller bearings used throughout to ensure smooth running gears and long life
- Full sealing of the complete cutter bar

MF DM Professional Series:

Disc mowers and mower conditioners

Designed for contractors and larger farms and built to tackle the big jobs, the Professional Series offers many exclusive features that provide high performance and low operating costs.







Overcut: large overlap, positioned well towards the front

The secret to a perfect cut

The compact angle drive

At the heart of this system is a continuous, large-dimensioned hexagonal shaft and a robust angular gearbox under each mower disc. This results in even power distribution to all mower discs and the smoothing of torque loads. The wear on components is significantly lower when compared to a conventional spur gear cutter bar. The components are mounted to a robust yet flexible unit. The Massey Ferguson disc mowers with compact angle drive are durable with a low PTO power requirement, ensuring high output and cost efficient mowing at all times.

Ergonomics of the cutter bar

The ergonomics of the cutter bar determine whether you will harvest quality forage. The engineers at Massey Ferguson have succeeded in developing a perfectly streamlined cutter bar with the optimum profiles on the underside. As a result, even in adverse conditions, the formation of mounds of soil in field forage crops or on wet land is prevented. The soil is cleanly separated from the forage and flows away under the cutter bar. With a Massey Ferguson cutter bar, you can continue to work when others have had to give up or have not even been able to start working.

Knife overlap

A perfect cut is achieved due to the large overlap of the mower discs, which are positioned well towards the front. Massey Ferguson mowers use large mower discs and their special shape means that they can handle large volumes of forage — an important aspect, especially for heavy, lying material. A clean cutting pattern is guaranteed with a Massey Ferguson mower!

Features of the compact angle drive

Everything is well thought-out for a high level of operational reliability and low operating costs

A great deal of engineering expertise has gone into the design of the cutter bar. For example, the main hexagonal drive shaft was designed with a predetermined breaking point, which interrupts the flow of power between the cutter bar and the tractor, in the event of a sudden heavy overload, preventing expensive and time consuming repairs. Bolt-on skids and quick-change knives reduce downtime. With lifetime oil filling, the cutter bar is largely maintenance-free and the lubrication of the cutter bar is ensured in all mowing situations.

Axial or paired running – anything is possible

Due to the compact angle drive being bolted, you can change the direction of rotation of each module to meet your individual mowing needs – even after many years.

The mower discs are converted from axial running to paired running by simply switching the angle drive — all without any additional components.

You can flexibly adapt your Massey Ferguson mower to changing general conditions. Whatever comes your way, you always have the right mowing technology.



Bolted structure



Hexagonal shaft for efficient transmission of power



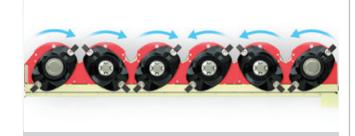
Streamline cutter bar (underside)



Quick change knives

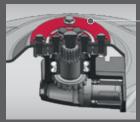


Paired running



Axial running

drive GUARD®





Every farmer knows from experience that foreign objects accidentally drawn into the mower can cause significant damage.

Massey Ferguson prevents precisely this kind of damage with driveGUARD® – the industry leading overload protection system



Better protected than ever

When the mower disc becomes jammed by a foreign object the **driveGUARD®** shears off at the predetermined breaking points.

This interrupts the power train and the mower disc turns freely.



Nothing is more cost-effective driveGUARD® offers the customer extremely cost-effective and reliable protection because only the throw-away overload disc will have to be replaced if the need arises.

MF DM Disc Mowers:

Rear-mounted disc mower

MF DM 255 P, MF DM 306 P & MF DM 357 P

The MF Professional Series disc mowers feature individual compact angular gears that provide an extremely smooth power transfer to all discs, resulting in less wear than a conventional gear drive and ensuring a longer and more reliable cutter bar life. The wedgeshaped bar provides the added benefit of a low cut and the 'Big Disc' design ensures a large overlap, which results in a clean cut even when faced with high volume and difficult crops.

The modular design enables guick and easy servicing in the field, should it be required.



Rear-mounted three-point side attachment

Lateral suspension with a controlled lifting linkage results in a compact transport position and low transport height. A guick change knife system is standard on the Professional Series mowers, increasing the efficiency of operation.

As an option, the MF DM 255 P can be guickly and easily retrofitted with a roller (RC) or tine conditioner (KC), while the ME DM 306 P can be retrofitted with a KC tine conditioner.

A sturdy exterior support quarantees the long working life of the protective covers thus increasing the operational safety of the machine.









Tine conditioner

MF DM Disc Mowers:

Rear-mounted three-point centre attachment

MF DM 408 TL & MF DM 459 TL

- Rear-mounted mower for medium power tractor classes
- Hydro-pneumatic suspension
- Ease of handling

$\label{thm:constraint} \textbf{Hydro-pneumatic suspension system} - \textbf{TurboLift system}$

Infinitely variable ground pressure control, with the ability to change ground pressure on-the-move as field conditions vary.

- Free-floating cutting
- Patented sliding guide
- Adaptable to a variety of conditions
- Improved cutting quality
- Reduced load on the support frame, support tube and three-point linkage
- Gentle on the turf sward
- Reduced forage contamination
- Precise support and guidance of the mowing bar
- Very good adjustment to the ground

The support frame – the backbone of any mower

The cutter bar is supported and guided by the support frame. This is manufactured from high-quality, warp-resistant steel and is designed for extremely high loads.







TurboLift system



Sliding guide

MF DM Disc Mowers:

Rear Mounted. Centre support, vertical folding

MF DM 265 TL-V (KC or RC), MF DM 316 TL-V (KC or RC), MF DM 367 TL-V (KC or RC)

- Rear mounted centre support mower with vertical folding
- Hydro-pneumatic suspension
- SafetySwing protection system
- NEW heavy duty Global cutterbar
- Low profile spur gear cutter bar

Centre support with vertical folding.

MF DM TL-V mowers fold vertically for transporting within the machine's centre of gravity and provide excellent weight distribution of the tractor / mower combination. With compact transport dimensions of less than 3 m wide and a transport height of lower than 4 m these machines are ideally suited where road transport is a regular requirement.

Hydro-pneumatic suspension system.

TurboLift system for infinitely variable ground pressure control. Adapts to varying field conditions and eliminates damage to the sward.

SafetySwing protection system.

Prevents damage in the event of hitting an obstruction by moving backwards and upwards. Automatically re-engages into the working position through its own weight. Additionally MF TL-V mowers feature all round plastic bumpers to protect against minor damage and a hydraulically foldable end panel to reduce height when in the transport position.









Simple conditioner adjustment



SafetySwing



Low profile spur gear cutter bar

MF Disc Mower Conditioners: Trailed centre support

MF DM 306 TR & MF DM 357 HS TR

- Versatile trailed mower
- Centrally controlled drawbar linkage

Ease of handling with superb agility

The MF DM 306 TR & MF DM 357 HS TR are trailed mowers with a centrally controlled drawbar linkage. These machines are characterised by ease of handling and superb agility. The mower can be pivoted at the rear of the tractor both to the left and right. This gives you an enormous advantage, particularly with forage lying on the ground, on sloping terrain and for hillside lines.

Adapts very well to ground contours

The cutter bar is mounted at the outermost points on the support frame. With the parallel adaptation of the mower to uneven ground, the mower is reliably prevented from piercing the sward, producing top-class quality forage without forage contamination.

Conditioner – achieving quality forage faster

The MF DM 306 TR & MF DM 357 HS TR can be fitted with a tine or roller conditioner as standard. With a conditioner, you achieve quality forage faster because the water loss from your crop is accelerated.

With the specially developed trailed suspension mounting of the cutter bar, the ground pressure is reduced to a minimum – whatever the pivot movement.

User-friendly

The working height can be set over an infinitely adjustable cutting height of 3.5-7.0 cm. As a result, you can react flexibly to changing working conditions. In addition, you can perfectly adapt the contact pressure of the mower to the conditions. Due to the high lift height of the mower, turning manoeuvres on the headland can be carried out seamlessly without causing any damage to transverse swaths.







MF Disc Mowers:

Front-mounted - Pivoting headstock

MF DM 254 FP & MF DM 306 FP

• Perfect for operating in mower combinations

Conditioning process-MF DM 306 FP

- Tine and roller conditioners available
- Gentle forage treatment
- No crushing
- Less loss due to crumbling compared to flail conditioners

Conditioner intensity

- Adaptable to a variety of conditions
- Easily adjustable to four positions without tools
- Easy to replace individual elements

Simple direct-drive concept

- Overload protection
- Low weight
- Easy to operate with little additional power demand









Front Mounted 3 dimensional ground adaptation

MF DM 316 FQ (KC or RC), MF DM 367 FQ, (KC or RC)

- NEW three dimensional ground adaptation system
- NEW heavy duty Global cutterbar
- TurboLift System
- Optional side shift feature
- Direct attachment to tractor linkage.

Ground Adaptation

The design of the MF DM FQ mower linkage means the mower bed is pulled. The use of pulled bars, steering rods and cylinders with ball joints ensures exceptional three-dimensional ground adaption for perfect forage production with minimum loss.

Heavy Duty Cutterbar

The heavy duty Global cutterbar features the widest disc diameter on the market resulting in higher inertia to ensure high output and reduced power consumption in heavier crops.

TurboLift System

The well known TurboLift system used on other MF disc mowers is a standard feature on the FQ range for infinitely variable ground pressure in all field conditions, eliminating damage to the sward.

Ease of Use

The MF FQ mower range feature direct attachment to the tractor linkage without an 'A' frame. This results in a shorter front overhang for better stability and comfort. The integrated parking position is operated by simply moving a lever when uncoupling from the tractor. Additionally the FQ mowers feature foldable protective covers for transport, a wide opening front cover and quick blade change for easy maintenance.







Low profile spur gear cutter bar



MF Disc Mowers: **Butterfly**

MF DM 8312 TL, MF DM 8312 TL-KC, MF DM 8312 TL-RC, MF DM 9314 TL & MF DM 9314 TL-KC

- Butterfly mower conditioners 8.3 and 9.3 metres
- Three-point linkage attachment
- Hydro pneumatic suspension
- SafetySwing anti-collision device

Mower units are mounted at their centre of gravity

- Adapts very well to the ground contours
- Reduced load on tractor lift arms

Trailed mower – pulling is easier than pushing

- Soil conserving
- Fuel saving

Constant, continuously variable ground surface pressure

- Adaptable to a variety of conditions
- **SafetySwing** anti-collision device
- Each mower unit avoids obstructions independently
- Mower unit folds backwards and upwards
- Re-engagement into working position through its own weight

Contact pressure adjustable while driving

- Low ground impact
- No forage contamination

Free-floating cutting

- Gentle on turf sward
- Reduced forage contamination







MF DM 8312 TL-KC RC & MF DM 9314 TL-KC

Rear-mounted Butterfly

The MF DM 8312 and MF DM 9314 feature free-floating cutting, which reduces the load on the support frame, support tube and the 3-point linkage hitch. It allows for improved cutting quality on uneven ground thanks to its TurboLift-system (TL), which enables hydro-pneumatic discharge and continuous adjustment of pressure on the cutter bar.

The mowers are also fitted with impact **SafetySwing** protection, which can independently fold back and up around the slanting axle should an obstacle be hit.



If an incident occurs, the mower will return to its working position under its own weight, saving time without the need to reverse.

Both mowers feature one-lever operation for quick change at the headlands, making the transition from working to turning fast and simple.





MF DM 9314 EL TL-KCB

Mower combination with conveyor belts and ISOBUS control system

Advanced machine technology, coupled with a state-of-the-art ISOBUS equipment control system, makes this mower combination with conveyor belt stand out from the rest. A working width of 9.30~m allows large volumes of forage to be processed efficiently. For the MF DM 9314~TL-KCB, a particularly wide conveyor belt (940~x~2,700~mm) has been developed that can handle larger volumes of forage with ease, and continuously operate at higher working speeds.

- Hydraulic floating mower units TurboLift system
- SafetySwing impact guard
- Trailed cutter bar hitch attachment pulling is easier than pushing
- Operation of all mower functions via the ISOBUS control system
- Comprehensive speed monitoring of rotating parts
- Wide conveyor belt with integrated hydraulic lateral movement

- Central, single or partial swath delivery to conveyor belts that can be raised individually
- ComfortChange quick-change blade system as standard, to safely replace blades without losing time
- Retrofit kit available for non-ISOBUScompatible tractors
- Active ground pressure control



Specifications

MF Drum Mowers

	Model
Co	nfiguration
	Width (m)
Mi	n. pwr (hp)
1	Neight (kg)
	PTO (rpm)
	Drums
KC (Conditioner

ME M OOA ED V	ME M OOA ED V	ME M OOA TI
MF M 294 FP-V	MF M 304 FP-V	MF M 304 TL
Front - Pivoting	Front - Pivoting	3 pt - Centre
Headstock	Headstock	Support
2.86	3.06	3.06
75	75	82
846	874	1,105
1000	1000	1000
4	4	4
-	-	-

MF Disc Mowers

Model
Configuration
Width (m)
Min. pwr (hp)
Weight (kg)
PTO (rpm)
Discs
KC Conditioner
RC Conditioner

MF DM 164	MF DM 205	MF DM 246/ MF DM 246 ISL	MF DM 287/ MF DM 287 ISL	MF DM 255 / MF DM 255 P	MF DM 306/ MF DM 306 P	MF DM 357/ MF DM 357 P
3 pt - Side Mount	3 pt - Side Mount	3 pt - Side Mount	3 pt - Side Mount	3 pt - Side Mount	3 pt - Side Mount	3 pt - Side Mount
1.66	2.06	2.42	2.82	2.55	3.00	3.50
30	41	50	60	54	61	68
372	407	437 / 510	475 / 550	630	724	798
540	540	540	540	540/1000	540/1000	540/1000
4	5	6	7	5	6	7
-	-	-	-	0	0	-
-	-	-	-	0	-	-

MF Three-point linkage mounted disc mowers with centre support

Model
Working width approx. m
Transport width approx. m
Transport length approx.m
Mower discs
Blades per disc
Swath width approx. m
Power demand approx. kW/hp
Necessary hydraulic outlets
PTO rpm
Overrunning clutch
Weight approx. kg
KC Conditioner
RC Conditioner

MF DM 408 TL	MF DM 459 TL
4.00	4.50
2.3	2.3
5.60	6.10
8	9
2	2
3.3	3.8
72/99	84/115
1 X SAV, 1 X DAV	1 X SAV, 1 X DAV
540/1000	540/1000
•	•
980	1,100
-	-
-	-

MF Disc Mowers - Centre Support, Vertical Folding

Model
Working width (m)
Mower discs
Swath width approx. m
PTO (rpm)
Min. power hp (KC/RC model)
Transport width (m)
Transport height (m)
Weight approx. kg
KC Conditioner
RC Conditioner

MF DM 265 TL-V	MF DM 316 TL-V	MF DM 367 TL-V
2.6	3.1	3.6
5	6	7
0.60 - 1.80	0.8 - 2.3	1.0 - 2.8
1000	1000	1000
75	85	95
2.2	2.5	2.8
3.17	3.58	3.99
950	1,050	1,200
0	0	0
О	0	0

MF Trailed

Model
Configuration
Width (m)
Min. pwr (hp)
Weight (kg)
PTO (rpm)
Discs
Conditioner

MF DM 306 TR	MF DM 357 HS TR
Trailed	Trailed
3	3.50
102	120
2,388	2,560
540/1000	540/1000
6	7
RC or KC	RC or KC

MF Mower Combination

Model
Working width approx. m
Transport width approx. m
Transport heigth approx. m
Mower discs
Blades per disc
Swath width approx. m
Power demand approx. kW/hp
Necessary hydraulic outlets
PTO rpm
Overrunning clutch
Warning panels
Electrical lightning
Weight approx. kg
KC Conditioner
RC Conditioner

MF DM 8312 TL	MF DM 9314 TL	MF DM 9314 EL TL-KCB
8.3	9.3	9.3
2.78	2.78	2.78
3.73	3.9	3.9
2 X 6	2 X 7	2 X 7
2	2	2
2 X 1.45 - 2.25	2 X 1.85 - 3.25	2 X 1.80 - 3.00
132/180	155/200	168/228
2 X SAV, 1 X DAV	2 X SAV, 1 X DAV	1 X Load Sensing
1000	1000	1000
•	•	•
•	•	•
•	•	•
2,410	2,830	3,450
0	0	•
0	-	-

MF Front-Mounted

Model
Configuration
Width (m)
Min. pwr (hp)
Weight (kg)
PTO (rpm)
Discs
KC Conditioner
RC Conditioner

MF DM 254 FP	MF DM 306 FP	MF DM 306 FP-K	MF DM 306 FP-SL	MF DM 316 FQ	MF DM 367 FQ
Alpine	Pivoting Headstock	Pivoting Headstock	Pivoting Headstock	Ground Adaption	Ground Adaption
2.5	3	3	3	3.12	3.62
38	75	75	75	85	95
474	734	694	854	950	1020
540/1000	1000	1000	1000	1000	1000
4	6	6	6	6	7
-	О	0	О	О	О
-	0	-	-	0	0

⁻ Not available/not applicable

Standard specification

Optional



MASSEY FERGUSON

A world of experience. Working with you.

www.MasseyFerguson.com

- www.facebook.com/masseyfergusonglobal
- Twitter.com/MF_EAME
- Instagram.com/MasseyFergusonGlobal
- www.YouTube.com/MasseyFergusonGlobal



