



12  
SERIES

MECALAC



**PERFORMANCE**



**VERSATILITY**



**MOBILITY**



**12MSX**



**12MTX**





12  
SERIES

3 VERSIONS,  
1 UNPARALLELED  
STANDARD

«Innovation moves mountains; it makes the world spin. We will never stop coming up with new features, striving to improve our current technology and adapting to changing realities and constraints faced; we will excel. Innovation lies at the very core of what our company stands for.»

12-SERIES



**12-SERIES**

# THE “12” LEGACY

*For the past 40 years, innovation, accuracy and the search for performance have been the leading keywords of our company's vision. At Mecalac, we imagine the machines designed for the construction sites of the 21st century. Since every job has its own characteristics and restrictions, since each country has its own culture, we build machines that respond perfectly to today's challenges. Our machines are created by Humans for Humans. We are proud to be men and women innovators who improve and push back the limits of our clients' objectives.*





MORE INFO  
+

12-SERIES



## 40 YEARS OF MTX INNOVATION

### THE UNIQUE CONCEPT BEHIND THE 12MTX ELEVATES SYNERGY TO NEW HEIGHTS WITH THE NEW 12-SERIES

#### OUR DESIGN: A STRATEGIC COMPONENT OF THE MECALAC IDENTITY

The Mecalac 12MTX excavator is a true embodiment of our brand: innovation, advanced technology, premium materials, and mechanical intelligence are at the forefront of our design. We are dedicated to continuously enhancing our products to meet the ever-evolving needs of our customers.

#### OUR VISION: CUSTOMER-DRIVEN EXPERTISE TO PUSH BOUNDARIES

Expertise is born from experience. Ours is rooted in the belief that profitability cannot be achieved without first addressing the challenges faced by operators, prioritizing ease of use, and ensuring operational versatility. When one driver with a single machine can handle diverse tasks on a work site without complex maneuvers, it transforms your perspective on what's achievable.

#### SIMPLICITY + VERSATILITY = PROFITABILITY

The 12MTX concept represents a bold departure from traditional construction equipment, offering a more efficient, versatile and profitable solution by combining the functionalities of a compact excavator, a loader, and a telehandler into a single multifunctional unit. This design has proved to be an effective and successful solution for over 40 years, making the 12MTX a legendary machine.

**“ IN 1984 MECALAC BROUGHT COMPACTNESS TO VERSATILITY WITH THE 1<sup>ST</sup> EXCAVATOR LOADER ”**

*- With the Series-12, the whole becomes greater than the sum of its parts -*

	DIG	LOAD	HANDLER	CARRIER	VERSATILITY	MOBILITY	360° COMPACTNESS
	✓	✓		✓	✓	✓	
		✓		✓	✓	✓	✓
		✓				✓	✓
<b>12 SERIES</b>	✓	✓	✓	✓	✓	✓	✓

**THIS IS THE RESULT OF THE SYNERGY BETWEEN DESIGN, ARCHITECTURE AND FUNCTIONALITY.**

With a simple click, transform your machine into an excavator, loader, or telehandler and benefit from the best of each function in any circumstance.



12-SERIES



**3 VERSIONS,  
1 UNPARALLELED  
STANDARD**

**12MSX**



**12MTX**



**12MRX**

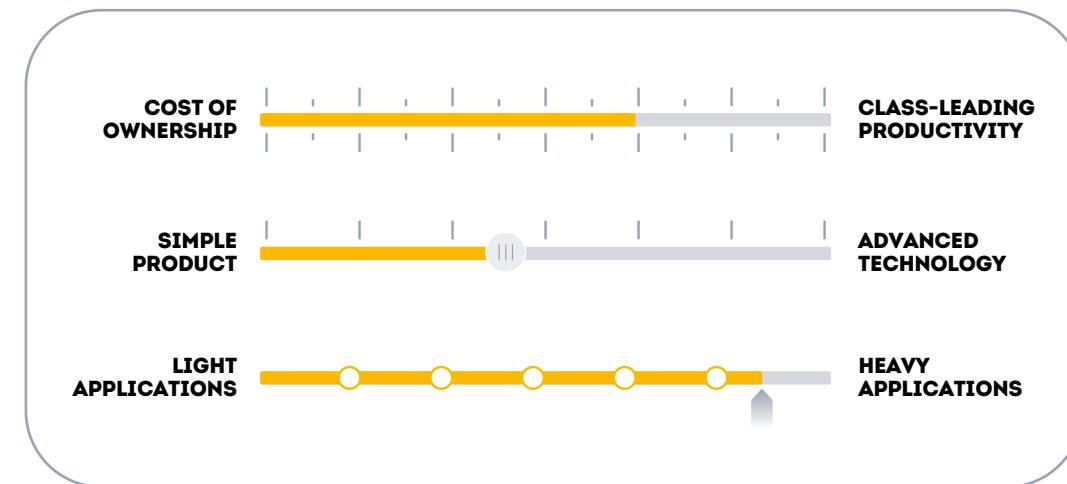


## ELEVATE YOUR BUSINESS: THE 12-SERIES UNLEASHES INNOVATION IN EVERY MOVE

### LEGACY TAILORED TO YOUR BUSINESS PROFILE

Where the Mecalac 12-Series on wheels preserves the core yet ground-breaking features which have made the base concept such a success, it can now offer various improvements for greater performance, versatility and mobility while enhancing operator comfort and safety.

For both urban and suburban environments, the 12-Series are now tailored to your business profile. Whether you are cautious to keep your costs low or eager to make the most profitable investment for the future, this series guarantees maximum profitability thanks to its unprecedented performance, ushering in a new generation of compact, versatile equipment for the construction sector.



THE POWER TO SLIDE THE CURSOR WHERE YOU WANT IT TO BE

# THE MECALAC 12

## *Experience*



DIGGING



LOADING





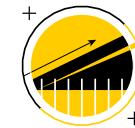
HANDLING



TOOL CARRIER



12-SERIES



PERFORMANCE



VERSATILITY



MOBILITY



# YES, IT'S A DIGGER...

## DETOUR-FREE DIGGING

**FREEDOM OF MOVEMENT AT ARM'S LENGTH**

- + Compact counterweight radius
- + Reach and dig depth
- + Great breakout force
- + Standard offset boom
- + Excellent visibility



# ...AND A WHOLE LOT MORE

- + 3D compactness at work
- + Impressive working amplitude
- + Impressive lifting force, up to 4t (8,820 lb)
- + Easy work around obstacles with the offset
- + Loader buckets



PARALLEL WORK



ULTIMATE COMPACTNESS



UP TO [0.98 YD<sup>3</sup>]  
**0.75 M<sup>3</sup>**



LOADER BUCKETS





# YES, IT'S A LOADER...

**LESS EFFORT REQUIRED**

**MORE EFFICIENCY**

- + Articulated chassis
- + Loader controls
- + Bucket volume of 750 liters (0,98 yd<sup>3</sup>)
- + 4x1 buckets
- + Inchng pedal
- + Engine speed control with a pedal



# ...AND A WHOLE LOT MORE

- + Full 360° upper structure rotation
- + Unique dump height
- + Flexible work positions
- + Fewer machine moves and positionings
- + Static loading



UP TO  
**5M**  
[16'5"]

UNBEATABLE DUMP HEIGHT



FLEXIBLE DUMP POSITIONS





# YES, IT'S A TELEHANDLER...

## HEIGHTENED PERFORMANCE

UNRIVALLED WEIGHT-LIFTING  
POWER RATIO

- + Balance, low center of gravity
- + Lift capacity, up to 4t (8,820 lb) with a hook
- + Load capacity, up to 2t (4,409 lb) with forks
- + Great horizontal and vertical reach
- + All-terrain capability



# ...AND A WHOLE LOT MORE

- + 360° rotation
- + Agility to handle pallet forks
- + Underfloor load handling capacity
- + Static loading
- + Terrain adaptability





# YES, IT'S THE BEST TOOL CARRIER...

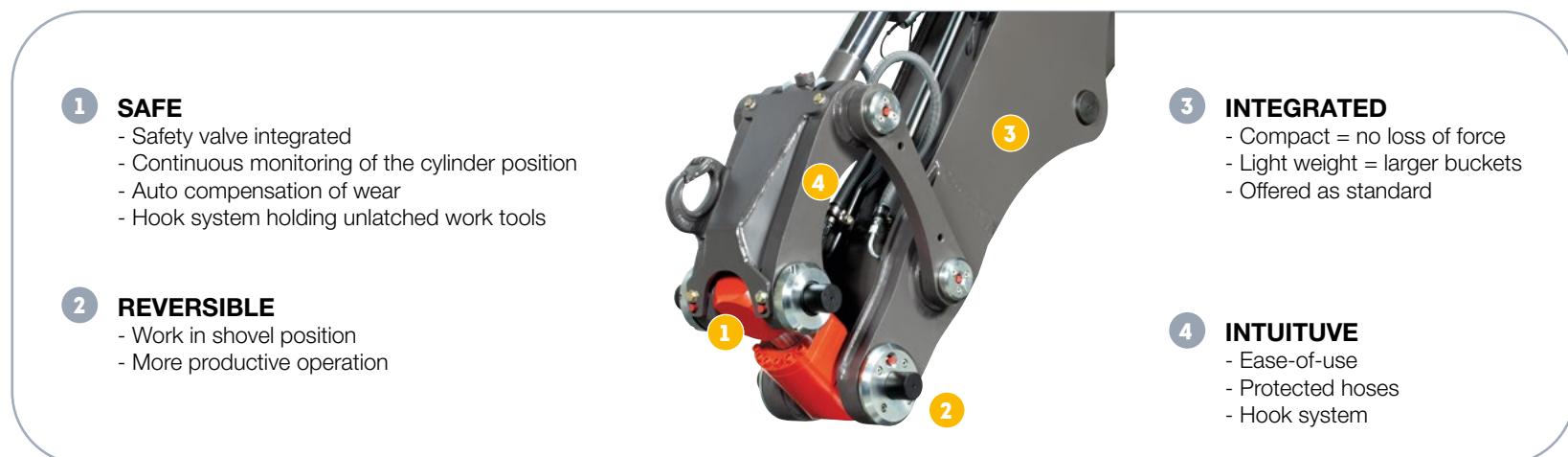
## WHERE TOOLS FIND THEIR PERFECT FIT

### THE 12-SERIES MEANS:

- + The balance of the machine makes it a great tool carrier
- + Flexible boom to always work in the best operating position
- + Hydraulic power: high flows and pressures
- + Hydraulic power: speed management

### CONNECT NEW GENERATION: AN ATTACHMENT TO PROFITABILITY

- + Patented design
- + New cylinder design, with a larger piston
- + New piston guidance into the chamber
- + Less maintenance and spare parts



# ...AND A WHOLE LOT MORE

## DON'T SACRIFICE A STEADY FLOW FOR A CONSTANT, PRECISE GROUND SPEED: USE A 12-SERIES LOADER EXCAVATOR

- + Independent transmission: implements are powered from a separate pump
- + Cruise Control: maintains automatically a constant travel speed
- + Precise maximum speeds can be set, from 0.3, 0.6, 0.9 kph (0.19, 0.37, 0.56 mph) ... Up to the maximum speed of the machine.
- + The operator can fully concentrate on operating the tool at max. engine speed while maintaining clear and transparent control over the travel speed



FROM 0.3 KPH (0.19 MPH)  
TO MAX. AT CONSTANT SPEED

## DON'T TRADE YOUR MECALAC PRODUCTIVE TOOLS AGAINST A TILTROTATOR: USE A MECALAC TILTROTATOR

- + The best tiltrotator carrier thanks to its unique natural balance
- + Mounted in-between two CONNECT couplers for fast tool changes
- + Ability to drop the tiltrotator and keep using your loader buckets
- + The standard offset boom and tiltrotator together will let your dig deeper trenches, parallel to the machine



12-SERIES



**12-SERIES**

**THERE IS  
DEFINITELY  
ONE FOR YOU**

**3 VERSIONS  
1 UNPARALLELED STANDARD**





MORE INFO  
+

12-SERIES

# 12-SERIES



## ENHANCEMENT PACK

### ADDED VERSATILITY

- + Double inching brake pedal (standard)
- + High-efficiency auxiliary hydraulic line for work tools (optional)
- + Tool leak return line, free of pressure (optional)
- + Mecalac MR50 tiltrotator (optional)
- + Additional safety valve on the bucket linkage (optional)

### DESIGN

- + New hood design





#### ADDED COMFORT

- + Grammer comfortable seats
- + Ergonomic joysticks, "MWR type"
- + User-friendly monitor display interface and added profile setting options
- + New travel alarm adjustments
- + Removal of the cab swing lock pin
- + Additional retractable step control button accessible from the ground (optional)



#### ADDED PROTECTION

- + Enhanced protection with higher ROPS homologation
- + Enhanced road light efficiency, LED
- + Durable 12V batteries, improved engine start capabilities
- + Improved access to daily maintenance and toolbox with a single hood on the left
- + Mud fenders for added protection (optional)
- + Optimized engine air intake location



# 12MSX

## SMART INVESTMENTS START HERE

### MASTER PERFORMANCE FOR ALL

The 12MSX is tailored for customers seeking best-in-class products that are simple, durable, reliable, and user-friendly, all while providing an attractive return on investment.

As a gateway to enhanced profitability, the 12MSX enables you to achieve more than a traditional 10-ton excavator, all at the lowest cost in the 12-Series. It shares the same architecture as the 12MTX, maintaining a compact profile (2710 mm – 8'9" full swing diameter) and a 0.75 m<sup>3</sup> (0.98 yd<sup>3</sup>) loader bucket, with a lifting capacity of up to 4 tons (8,818 lb) at 360°. Its 55 kW (75 hp) engine does not require Diesel Exhaust Fluid (AdBlue®).



THE 12MSX COMES EQUIPPED WITH  
THE STANDARD FEATURES OF THE  
12-SERIES ENHANCEMENT PACK.



# THE 12MSX

## Touch



RETAINS THE VERY ESSENCE OF THE 12MTX  
+ ENGINEERED FOR MAXIMUM PROFITABILITY

- Standard Mecalac versatile boom with offset
- **NEW!** Tool oil leak return line, pressure-free (optional)
- **NEW!** High-efficiency auxiliary hydraulic line for work tools, including continuous flow – optional
- Standard CONNECT hydraulic quick coupler
- **NEW!** Mecalac MR50 tiltrotator – optional
- **NEW!** Additional safety valve on the bucket cylinder - optional
- 750 l. (0.98 yd<sup>3</sup>) loader bucket
- Standard in-line stabilizers
- Minimal machine width, 2247 mm (7'4")
- **NEW!** Front mud fenders – optional



- Large cab, optimal visibility
- Retractable steps, in-line
- Cooled lunchbox with air-conditioning option
- Unbeatable tail swing radius, 1385 mm (4'6")
- Heavy counterweight – optional
- Engine, 55kW (75 hp), no Diesel Exhaust Fluid (AdBlue®)
- **NEW!** Hood design
- Articulated undercarriage, loader drivetrain
- Oscillating axle and axle lock
- 25 kph (15.5 mph)



# 12MTX

**POWER BLEND  
OF LEGACY WITH  
CUTTING-EDGE  
TECHNOLOGY**

**YOUR TRUSTED PARTNER**

The 12MTX legacy: Experience the ultimate in versatility and efficiency, now advanced with the latest technology and productivity options.

The legacy of the 12MTX maintains its extreme compactness, productive loader bucket, and impressive 360° lifting performance, powered by a robust 85 kW (115 hp) engine.

Options such as joystick steering, boom float, and the Mecalac Tiltrotator will boost both your productivity and versatility to unprecedented levels of efficiency.



THE 12MTX COMES EQUIPPED WITH  
THE STANDARD FEATURES OF THE  
12-SERIES ENHANCEMENT PACK.



# THE 12MTX

Touch



## THE PERFORMANCE OF THE 12MTX

+ UPGRADED WITH TECHNOLOGY BUNDLES\*



### BOOM FLOAT

Allows the boom to move up and down freely without relying on pump flow

- + Faster and easier finishing work
- + Less vibrations and stress on the boom and stick, for instance when using a compaction plate.

### JOYSTICK STEERING

Allows you to steer the machine with the joystick at low speeds (up to 15kph - 9.3mph)

- + Easier repositioning without needing to remove your hands from the joysticks

### AUTOMATIC WORK BRAKE

Automatic brake and axle lock when the machine is ready to dig

- + Reduces fatigue, increases productivity

### BOOM SUSPENSION



### BOOM SUSPENSION

Enhanced ride comfort with boom-mounted accumulators that act as shock absorbers

- + Reduces bounce
- + Smoother experience at high speeds

### AUTOMATIC REVERSING FAN

Periodically reverses airflow to clear accumulated debris and dust

- + Reduces heat and clogging in the system for improved efficiency and durability

### FLows & PRESSURES SETTING

Both flow rates and pressures (high flow auxiliary) can be adjusted directly from the cab

- + Easier and quicker tool changes

\* These features are optional on the 12MTX.

+

# 12MRX

## ACCELERATE YOUR BUSINESS

### IN THE FAST LINE TO PRODUCTIVITY

The 12MRX is designed for customers who seek peak productivity and embedded cutting-edge technology.

If you want to achieve the best output and class-leading productivity, consider the 12MRX. It retains all the advantages of the 12MTX. Additionally, it features a larger pump for faster implement speeds, wide heavy-duty axles that allow speeds of up to 40 kph (25 mph), and enhanced traction force. Productivity options of the 12MTX come standard.



THE 12MRX COMES EQUIPPED WITH  
THE STANDARD FEATURES OF THE  
12-SERIES ENHANCEMENT PACK.



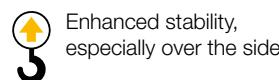
# THE 12MRX

## Touch



### MAXIMUM OUTPUT FOR A 10T EXCAVATOR

- + THE 12MTX TECHNOLOGY BUNDLES AS STANDARD  
BOOSTED FOR PEAK PERFORMANCE AND STATE-OF-THE-ART MOBILITY



Heavy counterweight  
+390 kg (+860 lb)



Higher speed  
↑↑ and traction



HEAVY DUTY  
WIDE AXLES



WIDE TIRES  
(OPTIONAL)



40 KPH  
[25 MPH]

#### OUTRAGEOUS PERFORMANCE

- + Larger-displacement hydraulic pump: boosted speed for the implements
- + Higher speed and traction force
- + Standard heavy-counterweight +390 kg (860 lb)
- + Higher stability, especially over the side

#### WITH MOBILITY ADD-ONS

- + Augmented ground speed (40 kph - 25 mph)
- + Shift-on fly gearbox
- + Higher gradeability and traction force
- + Heavy-duty and wide axles
- + Wide tires option with fenders

# 12-SERIES

## EXPLORE THE DETAILS YOUR NEW 12-SERIES AT A GLANCE

SPECIFICATIONS		12MSX	12MTX	12MRX
ENGINE	EU Stage V*	EU Stage V / U.S. EPA Tier 4 Final	EU Stage V / U.S. EPA Tier 4 Final	
Engine model	DEUTZ TD 2.9L High Torque	DEUTZ TCD 3.6L	DEUTZ TCD 3.6L	
Engine power	55 kW (74 U.S. hp) at 2300 rpm	85 kW (114 U.S. hp) at 2200 rpm	85 kW (114 U.S. hp) at 2200 rpm	
Maximum torque	375 Nm (276 lbf) at 1400 rpm	460 Nm (339 lbf) at 1600 rpm	460 Nm (339 lbf) at 1600 rpm	
Emission technologies (SCR and DEF**)	Without SCR and DEF**	•	•	
OPERATING WEIGHT				
Without work tool	9600 kg - 10600 kg (21,164 lb - 23,369 lb)	9700 kg - 10800 kg (21,385 lb - 23,810 lb)	10400 kg - 11200 kg (22,928 lb - 24,692 lb)	
FRONT LINKAGE				
Boom type		Mecalac versatile boom with offset		
Hydraulic quick coupler		CONNECT, as standard		
Hydraulic pump, implements (speed)	72cc	75cc	95cc	
Maximum flow, high flow auxiliary	144 l/min (38 gpm)	157 l/min (41.5 gpm)	157 l/min (41.5 gpm)	
Maximum pressure, high flow auxiliary	280 bar (4,061 PSI)	300 bar (4,351 PSI)	300 bar (4,351 PSI)	
UNDERCARRIAGE				
Articulated chassis	•	•	•	
Axles	Standard	Standard	Heavy duty, wide 1920 mm (6'3")	
TRANSMISSION				
Gearbox	N/A	N/A	•	
Maximum ground speed	25 kph (15.5 mph)	32 kph (20 mph)	40 kph (25 mph)	
Maximum traction	4800 daN (10,791 lbf)	5650 daN (12,702 lbf)	6250 daN (14,051 lbf)	
Maximum gradeability	26°	30°	33°	

\* Product not available outside EU

\*\* SCR: Selective Catalytic Reduction

DEF: Diesel Exhaust Fluid / AdBlue®

• = Standard equipment

# 12-SERIES

## 3 VERSIONS, 1 UNPARALLELED STANDARD THERE IS DEFINITELY ONE FOR YOU!

SPECIFICATIONS		12MSX	12MTX	12MRX
COMFORT OPTIONS		EU Stage V*	EU Stage V / U.S. EPA Tier 4 Final	EU Stage V / U.S. EPA Tier 4 Final
Grammer comfortable seats, ergonomic joysticks, new display interface		•	•	•
VERSATILITY OPTIONS				
Double inching pedal		•	•	•
Flows and pressures control of the high flow auxiliary via the monitor of the cab		N/A	○	•
Hammer return with high efficiency auxiliary		○	○	○
Tool oil leak return line, pressure-free (optional)		○	○	○
2 <sup>nd</sup> safety valves on the bucket linkage		○	○	○
Mecalac MR50 Tiltrotator		○	○	○
PRODUCTIVITY OPTIONS				
Joystick steering		N/A	○	•
Automatic work brake		N/A	○	•
Boom float		N/A	○	•
Heavy counterweight		○	○	•
MOBILITY OPTIONS				
Wide tires, 600/40-22.5		N/A	N/A	○
40 kph (25 mph) speed		N/A	N/A	•
Boom suspension		N/A	○	•
SAFETY / PROTECTION OPTIONS				
Reversing fan		N/A	○	○
Higher ROPS homologation		•	•	•
New LED road lights		•	•	•

\* Product not available outside EU

• = Standard equipment

○ = Optional equipment



**12-SERIES**

# USER FRIENDLY

**PEOPLE ARE THE TRUE DRIVING FORCE  
BEHIND ANY JOB SITE**

- Visibility: see further beyond
- Simplicity that drives us
- Comfort: seat yourself in comfort and space
- Safety: stepping up to safety
- Maintenance: Keep your feet firmly on the ground





12-SERIES





**5.7M<sup>2</sup>** [61FT<sup>2</sup>]  
OF TOTAL  
VISIBILITY



USER-FRIENDLY

## SEE FURTHER BEYOND

### VISIONARY CAB

Maintaining focus on both the machine and the work site is a significant responsibility. With the 12-Series, we prioritize the driver's direct line of vision.

- Low hood lines,
- Single-pane rounded rear window for an unobstructed view,
- Cab positioned at the very front of the chassis for improved visibility into trenches,
- Mecalac boom kinematics that enhance side visibility,
- Fully or partially removable windshield

With the multi-level steering column, the steering wheel is positioned outside your visual perimeter of the working area. When combined with the standard rearview mirrors and cameras, the cab can only be described as... visionary.



# 12-SERIES



USER-FRIENDLY

## SIMPLICITY DRIVES US

PARKING, LOADER OR  
EXCAVATOR WORK  
OR ROAD MODE: ALL IN  
ONE SINGLE SWITCH.

With a unique selector, you can effortlessly switch from on-road mode to parking mode with a single movement. Gone are the days of manually adjusting high beam headlights, rotating beacons, unlocking the axle, and setting engine speed. You no longer need to worry about brakes, shifting the gearbox to idle, deactivating the foot throttle, or locking controls. Everything is done instantly and automatically by selecting the desired application, ensuring a seamless and safe driving experience on your work site.



*With the 12-Series, drivers can operate with confidence, as it's nearly impossible to make mistakes. The selector provides real-time visibility of every machine function on a color screen. Reassuring and effective, the onboard programmable computer allows users to customize and save driving parameters for three different drivers, in addition to the preset factory mode.*

# 12-SERIES

+

USER-FRIENDLY

## SEAT YOURSELF IN COMFORT

We haven't just improved the driving experience; we've redefined it. In the spacious cab featuring an adjustable pneumatic seat\*, drivers of all sizes can enjoy unparalleled comfort. The cab includes heating and air conditioning\*, soundproofing, a sunroof, wide armrests, multiple storage compartments, tinted windows, a sliding swing door, and even a cooled compartment\*.

From the seamlessly integrated threshold to the molded floor mat, every detail has been carefully considered by Mecalac in designing this cab, ensuring it meets all internal and external performance needs.

\*optional attachments.



12-**SERIES**



USER-FRIENDLY

## STEPPING UP TO SAFETY

THE STEP AUTOMATICALLY UNFOLDS JUST BELOW THE CAB ENTRY WHENEVER THE OPERATOR LIFTS THE CONSOLE TO EXIT THE MACHINE.

Stepping up and down from the cab is the source of too many work site accidents. There should not have accidents anymore due to slipping on a tire while climbing into the cab. No issues anymore, thanks to Mecalac's patented solution. The driver steps out to find a ledge directly underneath his/her feet. When lowering the console, the step slots back perfectly within the machine's width.

Whoever said you had to sacrifice safety for comfort?



**NEW!** Additional retractable step control button accessible from the ground (optional)

# 12-SERIES



USER-FRIENDLY

## KEEP YOUR FEET FIRMLY ON THE GROUND

### FILL UP YOUR TANK EFFORTLESSLY.

The tank in the 12-Series models is extremely accessible as it is located in the rear engine compartment at a reachable height. The operator does not have to carry out any operations at height, nor is there anything in the way when filling up the tank. With the majority of other excavators still mounting the fuel tank in the upperframe, filling up a 12-series wheel excavator loader is as simple as it is safe.



*With the 12-Series, it will be virtually impossible for your operator to fall from the machine. All maintenance points are accessible with both feet on the ground, including the diesel and DEF (AdBlue®) tanks. The engine maintenance points and radiator are housed in the rear compartment. The large left-side hood provides easy access to other components and even includes a space to store your tools.*





## SERVICES

# PERFORMANCE, PROFITABILITY, LONGEVITY

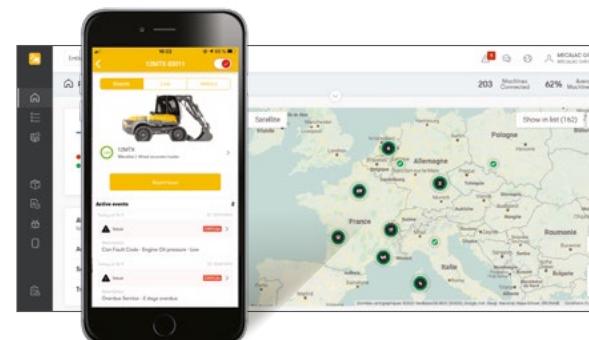
## DISCOVER OUR SERVICES



### MY MECALAC CONNECTED SERVICES

To optimise the use of its machines, MECALAC offers a range of telematics services:

- Remote fleet management
- Access to all machine usage data of the machines
- Limited machine downtime thanks to preventive maintenance





## MECALAC GENUINE PARTS

Only genuine MECALAC parts ensure optimum service life and maximum performance:

- Certified genuine parts
- Maintenance kits
- Extended warranty



## MECALAC TRAINING

Make full use of the full potential of your Mecalac machines:

- Efficient use
- Individual coaching
- Intensive practice



## MECALAC FINANCIAL SOLUTIONS

A complete range of financial products and associated services to meet your specific needs:

- Machine purchase
- Machine rental
- Competitive rates



## WARRANTY EXTENSIONS

Our solutions are well-adapted to your needs to maximise the life of your machines:

- Customised contracts
- Peace of mind
- Controlled expenses



The list of services offered may vary depending on your country.  
Consult your local Mecalac dealer for details.



**12-SERIES**

**YOUR  
12-SERIES  
& AVAILABLE  
OPTIONS**





12-SERIES



# 12-SERIES

## STANDARD EQUIPMENT

### UNDERCARRIAGE

Articulated with 4-wheel drive, each being of equal size and equipped with Alliance 18-19.5 18PR 224 single tires, oscillating rear axle with cab-controlled lock, limited slip differential on both axles

**12MSX** **12MTX** **12MRX**

• • •

Integrated oil-bath multi-disc brakes in both axles

• • •

Closed circuit hydrostatic transmission

• • •

Speed change, with exclusive Speed Control system to set the maximum speed:

- 0 kph to 25 kph (0 mph to 15.5 mph)

•

- 0 kph to 32 kph (0 mph to 19.8 mph)

•

- 0 kph to 40 kph (0 mph to 24.8 mph), with automatic and/or manual gear change

•

Outriggers separately, proportionally and electrically controlled

• • •

### ENGINE

DEUTZ TCD 2.9L Hi-Torque, 55kW (73 hp), "common rail" turbocharged engine, with chilled air inlet, 4 cylinders, water cooling. With Diesel Particulate Filter (DPF). Engine meets EU Stage V emissions standards. Free of Selective Catalytic Reduction device and Diesel Exhaust Fluid (AdBlue®)

•

DEUTZ TCD 3.6, 85kW (115 hp), "common rail" turbocharged engine, with chilled air inlet, 4 cylinders, water cooling. With Diesel Particulate Filter (DPF). Engine meets U.S. EPA Tier 4 Final / EU Stage V emissions standards.

• •

### BOOM AND STICK

Mecalac Boom Kinematics, 3-part variable adjustment boom, incl. hydraulic offset boom. Boom cylinder fitted on parallelogram; stick 2210mm (7'3")

• • •

MAIN AUXILIARY HYDRAULIC LINE, proportional, with permanent flow function

• • •

Overload warning

• • •

Patented CONNECT hydraulic quick coupler, reversible, a Mecalac exclusive (without hook)

• • •

### LUBRICATION

Standard, manual

• • •

### 4 OPERATING MODES

4 operating modes: Park, Excavator, Loader and Road

• • •

Controls carried out via proportional, ergonomic joysticks

• • •

Advanced customization of various modes and controls and 3 customer profiles available

• • •

### WORK ASSISTANCE FUNCTIONS

Cylinder coupling function, a Mecalac exclusive, synchronizing cylinders for a simpler operation

• • •

Bucket control inversion, a Mecalac exclusive, to reverse the open/close function to keep the same driving logic when the bucket is in shovel position

• • •

Engine speed control by encoder or foot pedal

• • •

Eco Mode, to help reduce fuel consumption by adjusting power management and engine speed

• • •

Auto engine low idle, automatically reduces the engine speed if no function is required

• • •

Standard and optional equipment may vary. Consult your Mecalac dealer for details.



# 12-SERIES

## STANDARD EQUIPMENT

### THE CAB - COMFORT AND SAFETY

Left and right mirrors

**1** 2 front LED work lights and LED front and rear road lights

Rear and left-hand side cameras meets ISO 5006:2017

**2** Cab sliding swing door, a Mecalac exclusive

Safe access into/exit from the cab via an exclusive automatically extendable step, a Mecalac exclusive

Comfortable cab, panoramic, with all-around visibility. FOPS-ROPS certified (FOPS level II guard on roof window is standard), with:

- Front windshield, completely or partially retractable
- Sunshade for windshield or cab roof window
- Sliding side window integrated into the door
- Roof hatch

**3** 3-way adjustable steering column: 2 settings for the inclination, 1 setting for the height

Storage space behind the seat, with separate container (lunch-box type)

Right tilting console

Comfortable seat, adjustable to the driver's morphology

**4** Controls assisted by proportional ergonomic joysticks

Double pedal (inching / brake)

7" VGA color screen monitor combining machine parameters, warning indicators and alarm.

Work tools' flows can be set and recorded from the monitor

Diesel level gauge, indicators for filter replacement or system failures

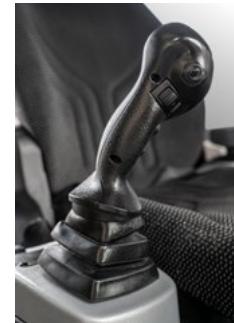
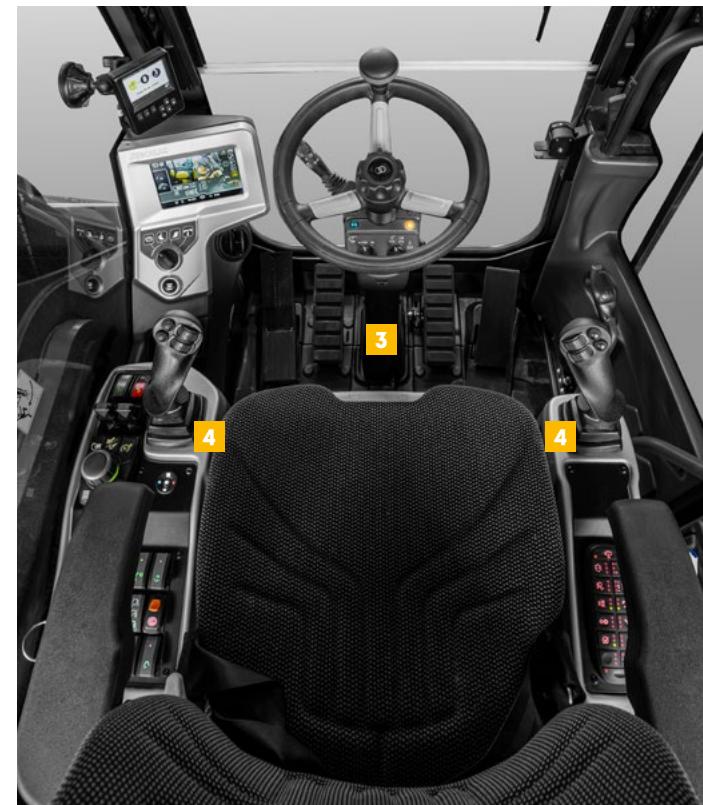
4 operator profiles available, including one with the factory settings

Soft-buttons panel, intuitive, jog-dial, start button

Radio-ready installation and 12V power supply

Heating system, meets ISO 10263 standards, with 6 independent air vents

Cab air filter and fuse box



Standard and optional equipment may vary. Consult your Mecalac dealer for details. Tiltrotator joysticks are optional.



## 12-SERIES

# OPTIONS TO TAILOR YOUR 12-SERIES TO YOUR NEEDS

### CUSTOM PAINT

Would you like to have your Mecalac 12-Series painted in your company's own colors?  
Personalize your Mecalac with your RAL codes.

Colors samples



### THE CAB - COMFORT AND SAFETY

	12MSX	12MTX	12MRX
Air conditioning	o	o	o
Heated pneumatic seat	o	o	o
Automatic work brake	N/A	o	•
Joystick steering	N/A	o	•
Radio with USB, Bluetooth and 2 loud-speakers	o	o	o
Dual-camera display	o	o	o
Switch for ISO/SAE pattern control	o	o	o
Travel alarm, traditional or "white noise"	o	o	o
Additional rear LED work light	o	o	o
Rotating beacon, LED	o	o	o
Cab rain protector	o	o	o
Exterior control button of the retractable step	o	o	o

### ENGINE AND COOLING

Automatic engine idle shutdown	o	o	o
Reversing fan	N/A	o	o

### ELECTRIC DIESEL REFUELING PUMP

Electric diesel refueling pump

o	o	•
---	---	---

### ADDITIONAL COUNTERWEIGHT

Additional counterweight +390kg (860 lb)

o	o	•
---	---	---

### TIRES

Single tires, Mitas, 18-19.5 16PR MPT-06 TBL

Single tires, Michelin, 18R19.5 XF TL / 445-0R19.5 XF

Single tires, Alliance, 600/40-22.5 331

o	o	o
---	---	---

o	o	o
---	---	---

N/A	N/A	o
-----	-----	---

### REAR PROTECTION BAR



Country packs available : • = Standard – o = Optional

Standard and optional equipment may vary.  
Consult your Mecalac dealer for details.



# 12-SERIES

## OPTIONAL EQUIPMENT

### BOOM, STICK AND QUICK COUPLERS

	12MSX	12MTX	12MRX
Extra versatility pack with boom suspension, boom float and setting of flows and pressures of the high flow auxiliary directly from the monitor	N/A	o	•
3x anti-drop safety check-valve (foreboom, boom, stick)	•	•	•
4x anti-drop safety check-valve (foreboom, boom, stick and bucket)	o	o	o
Additional anti-drop safety valve on the bucket cylinder	o	o	o
CONNECT hydraulic quick coupler fitted with a hook or lifting eye	o	o	o
Direct coupling system, for mounting attachments on the stick with pins. Without hook	o	o	o
2 additional LED lights on the boom	o	o	o
Lifting and handling homologation (for France only)	o	o	o

### AUXILIARY LINES

	12MSX	12MTX	12MRX
Auxiliary Line 1 (standard, proportional)	•	•	•
B Auxiliary Line 2: Offset cylinder bypass for rotating function of a clamshell (proportional)	o	o	o
C Auxiliary Line 3: Bucket cylinder bypass for opening / closing function of a clamshell	o	o	o
D Hammer return line	o	o	o
E Hammer return line with tool leak return line, free of pressure and continuous flow. High efficiency line.	o	o	o

### LUBRICATION

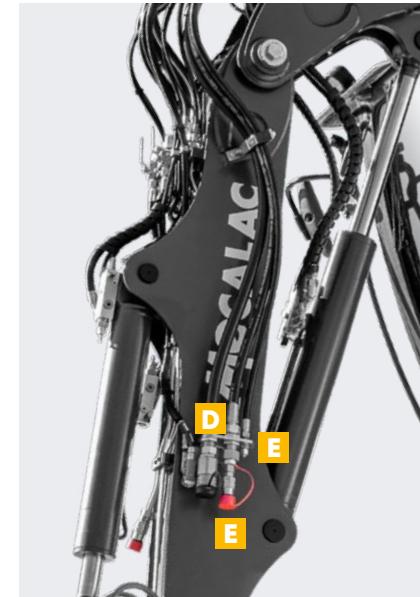
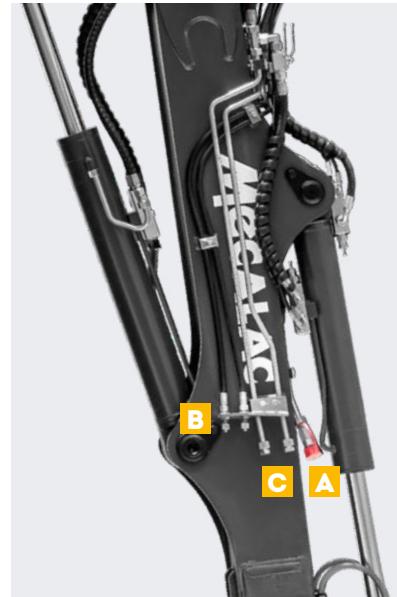
	12MSX	12MTX	12MRX
Centralized, manual lubrication for the whole of the parallelogram, boom and stick	o	o	o
Centralized, automatic lubrication for the whole of the parallelogram, boom and stick	o	o	o
Biodegradable hydraulic oil	o	o	o

### PREDISPOSITION FOR ADAPTING PALLET FORKS

	12MSX	12MTX	12MRX
(or other 3rd-point tools on stabilizers)	o	o	o

Country packs available : • = Standard – o = Optional

Standard and optional equipment may vary. Consult your Mecalac dealer for details.





# 12-SERIES

## ATTACHMENTS

ATTACHMENT TYPES	Width		Capacity		Weight		Teeth
	mm	in	L.	yd <sup>3</sup>	kg	lb	
<b>DIGGING BUCKET WITH TEETH</b>							
	350	14	150	0.20	206	453	3
	450	18	190	0.25	224	493	3
	600	24	275	0.36	257	565	3
	750	30	360	0.47	293	645	4
	900	35	450	0.59	330	726	5
	1200	47	630	0.82	395	869	5
<b>DIGGING BUCKET WITH NO TOOTH</b>							
	350	14	150	0.20	190	418	-
	450	18	190	0.25	209	460	-
	600	24	275	0.36	241	530	-
	750	30	360	0.47	273	601	-
	900	35	450	0.59	306	673	-
	1200	47	630	0.82	370	814	-
<b>TRENCHING / NARROW BUCKET WITH TEETH</b>							
	300	12	80	0.10	219	482	3
<b>TRAPEZOIDAL BUCKET</b>							
	1000/300	39 / 12	440	0.58	455	1001	-
<b>THUMB BUCKET (2 Hydraulic Thumbs)</b>							
	900	35	450	0.59	492	1082	5

Mecalac recommends using appropriate work tools to maximize the value customers receive from our products. The use of work tools, which are outside of Mecalac's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

ATTACHMENT TYPES	Width		Capacity		Weight		Teeth
	mm	in	L.	yd <sup>3</sup>	kg	lb	
<b>DITCH CLEANING BUCKET</b>							
	1800	71	400	0.52	350	770	-
Cutting edge	1800	71			47	103	
<b>TIlt Ditch Cleaning Bucket (2x 45° Tilt)</b>							
	2x linear cylinders	1700	67	367	0.48	485	1067
Cutting edge	1700	67			30.5	0	
<b>LOADER BUCKET</b>							
	2250	89	750	0.98	390	858	-
	2250	89	750	0.98	412	906	7
<b>4X1 MULTIPURPOSE BUCKET</b>							
	2200	87	540	0.71	617	1357	-
Cutting edge	2200	87	540	0.71	640	1408	7
	2200	87			62	136	
<b>ATTACHMENT TYPES</b>							
<b>PROTECTION BLADE 4X1 / SKID &amp; TEETH</b>							
	Width						
	mm	in					
	2200	87					



# 12-SERIES

## ATTACHMENTS

ATTACHMENT TYPES	Width	Capacity	Weight	Teeth
	mm   in	kg (lift)   lb (lift)	kg   lb	
<b>RIPPER TOOTH</b>				



Tooth "MTG"

212 466 1

ATTACHMENT TYPES	Width	Capacity	Weight	
	mm   in	kg (lift)   lb (lift)	kg   lb	
<b>HANDLING JIB (To use with 4 safety check valves in Europe)</b>				



4100 161 500 1100 140 308

<b>PALLET FORKS (To use with 4 safety check valves in Europe)</b>	351	772
KIT pallet forks, mounted on stabilizers	55	121



ADAPTER TYPES TO CONNECT QUICK COUPLER					
	mm	in	L.	yd <sup>3</sup>	Teeth
Hammer adapter plate to weld (no hole)	104.5	230			
Hammer adapter plate to screw (for hammers MB50)	105.5	232			
Coupling plate for ISO 24410 tools	127	279			
Ears (brackets) kit to weld	91	200			
Handling plate with hook*	104	229			
Adapter CONNECT - Active Lock	93	205			

\* To use with 3 safety check valves



CLAMSHELL ADAPTER				
	mm	in	L.	yd <sup>3</sup>
Clamshell short braket C50	67.3	148		



ASPHALT CUTTER				
	mm	in	L.	yd <sup>3</sup>
Cutting disc Ø450 - C50	67.3	148		



WORK TOOLS

MECALAC  
TIltrotator

12-SERIES

ATTACHMENT TYPES	PIN to PIN height	Rotation Torque	Weight (1x CONNECT)
	mm   ft in	Nm   lbf.ft	kg   lb
<b>MECALAC MR50 TILTROTATORS - TWIN CONNECT (2X 40° TILT)</b>			

without grapple module 686 2'3" 8200 6,050 574 1,270  
with grapple module 686 2'3" 8200 6,050 683 1,510

ATTACHMENT TYPES	Width	Capacity	Weight	
	mm   in	L.   yd <sup>3</sup>	kg   lb	Teeth
<b>GRADING BUCKET FOR TILTROTATORS</b>				



1300 51 321 0.42 246 541 -

ATTACHMENT TYPES	Weight
	kg   lb
<b>HAMMER</b>	

Hammer MB40 365 803  
Hammer MB50 445 979

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# 12-SERIES

## TECHNICAL DATA

WEIGHT	12MSX	12MTX	12MRX
In running order without bucket, with full fuel, with 75 kg (165 lb) operator and standard single tires.	9600 - 10600 kg (21,160 - 23,370 lb)	9700 - 10800 kg (21,380 - 23,810 lb)	10400 - 11200 kg (22,930 - 24,690 lb)

ENGINE	12MSX	12MTX	12MRX
4 in-line diesel cylinders	DEUTZ TCD 2.9L HT	DEUTZ TCD 3.6L	DEUTZ TCD 3.6L4
Turbo charged engine with intercooler, EGR valve, catalytic converter (DOC) and Diesel Particulate Filter (DPF)	•	•	•
Selective Catalytic Reduction (SCR) systems	•	•	•
Meets emissions standards	EU Stage V U.S. EPA Tier 4 Final*	EU Stage V U.S. EPA Tier 4 Final*	EU Stage V U.S. EPA Tier 4 Final*
Engine power (DIN 70020)	55.4 kW (75 hp) - 74.3 imperial hp at 2300 rpm	85 kW (115 hp) - 114 imperial hp at 2200 rpm	85 kW (115 hp) - 114 imperial hp at 2200 rpm
Torque - maximum	375 N.m (276 ft.lbf) at 1400 rpm	460 N.m (339 ft.lbf) at 1600 rpm	460 N.m (339 ft.lbf) at 1600 rpm
Displacement	2900 cm <sup>3</sup> (177 in <sup>3</sup> )	3621 cm <sup>3</sup> (221 in <sup>3</sup> )	3621 cm <sup>3</sup> (221 in <sup>3</sup> )
Cooling system	Water	Water	Water
Dry/cartridge cyclonic air filter	•	•	•
Fuel tank capacity	140 l (37 gal)	140 l (37 gal)	140 l (37 gal)

\*Depending on your local legislation - U.S. Environmental Protection Agency (EPA)

ELECTRICAL SYSTEM	12MSX	12MTX	12MRX
Batteries	120 Ah	120 Ah	120 Ah
Voltage	12 V	12 V	12 V
Alternator	120 A	120 A	120 Ah
Starter	3.2 kW	3.2 kW	3.2 kW
Battery disconnect switch	•	•	•
Electric sockets sealed	•	•	•

EMISSIONS	12MSX	12MTX	12MRX
Noise emission:			
Interior sound level - LpA (according to ISO 6396)	73 dB	72 dB	72 dB
External sound level - LwA (according to ISO 6395)	98 dB	99 dB	99 dB
Meets Noise Directives (EC Directive on noise emissions - equipments used outdoors)			
	2000/14/EC and EN474-1:2006 + A1:2009		

UNDERCARRIAGE	12MSX	12MTX	12MRX
Articulated type	•	•	•
Minimum turning radius - inside of tires	2.63 m (103.5 in)	2.63 m (103.5 in)	2.56 m (78.7 in)
Minimum turning radius - outside of tires	4.91 m (193.3 in)	4.91 m (193.3 in)	4.98 m (196 in)
Front chassis fitted with 2 separate front outriggers acting on proportional control	•	•	•

Standard and optional equipment may vary. Consult your Mecalac dealer for details.

TRANSMISSION	12MSX	12MTX	12MRX
Closed hydrostatic transmission with Senso Drive automotive type automatic regulation	•	•	•
Hydraulic motor	115 cm <sup>3</sup> (7 in <sup>3</sup> )	150 cm <sup>3</sup> (9 in <sup>3</sup> )	115 cm <sup>3</sup> (7 in <sup>3</sup> )
Pump	130 L/min (34 gpm)	182 L/min (48 gpm)	190 L/min (50 gpm)
Pressure - maximum	470 bar (6,800 psi)	470 bar (6,800 psi)	470 bar (6,800 psi)
Hydraulic variable displacement pump and motor allow for a continuously variable transmission rate over the whole speed range of the machine			
Speed - maximum	25 kph (15.5 mph)	32 kph (19.8 mph)	40 kph (24.8 mph)
Gearbox, 2 mechanical gears, with automatic gearshift	•	•	•
Traction force - maximum	4800 daN (10,791 lbf)	5650 daN (12,700 lbf)	6250 daN (14,050 lbf)
Gradeability	26° / 48%	30° / 58%	33° / 64%
Steering column hydraulically assisted	•	•	•
Electronically controlled travel direction (FNR) located under the right joystick	•	•	•
"Inching" control to gradually reduce speed control before braking	•	•	•
AXLES AND WHEELS	12MSX	12MTX	12MRX
4-wheel drive	•	•	•
Front rigid drive axle	•	•	•
Oscillating rear axle to +/- 10° and oscillation lock by hydraulic cylinders	•	•	•
Wide front and rear axle, heavy duty	•	•	•
Limited split differential on both axles	45%	45%	45%
BRAKES	12MSX	12MRX	12MTX
Double circuit central braking unit	•	•	•
Hydraulically-controlled brake pedal	•	•	•
Oil-immersed multi-disk brakes on each axle	•	•	•
Inching brake acting on all 4 wheels	•	•	•
UPPERCARRIAGE	12MSX	12MTX	12MRX
Full 360° rotation	•	•	•
Internal ring gear drive	•	•	•
Rotation via hydraulic motor (with automatic disc braking)	•	•	•
SHOCKLESS type damped crossover valve for upper carriage rotation movement and soft stop	•	•	•
Rotation speed	9 rpm	9 rpm	9 rpm
Rotation torque	2210 daN.m (16,300 ft lbf)	2210 daN.m (16,300 ft lbf)	2210 daN.m (16,300 ft lbf)
Hydraulic motor	750 cm <sup>3</sup> (45.8 in <sup>3</sup> )	750 cm <sup>3</sup> (45.8 in <sup>3</sup> )	750 cm <sup>3</sup> (45.8 in <sup>3</sup> )
Pressure - maximum	270 bar (3,900 psi)	270 bar (3,900 psi)	270 bar (3,900 psi)

CAB	12MSX	12MTX	12MRX
Superior comfort panoramic cab		FOPS/ROPS homologated	
Cab mounted on 4 rubber silent blocks	•	•	•
Front windshield partially or fully retractable	under the cab roof	under the cab roof	under the cab roof
Sliding door	•	•	•
Opening door window	•	•	•
Seat can be set and adjusted to the operator height and weight, with seatbelt		Grammer seat. Height and longitudinal adjustment	
Heating system, compliant with ISO 10263		High flow fan, high capacity for demisting and defrosting	
Controls assisted by Rexroth ergonomic, proportional joysticks	•	•	•
Dashboard contains a color screen, which automatically adapts contrast and light levels to current conditions	•	•	•
Electronics dashboard containing all safety and monitoring information, visual indicators and alarms	•	•	•
Fuel levels and coolant temperature indicated on the dashboard	•	•	•
Hydraulic flows can be set directly from the dashboard	•	•	•
2 front working lights, LED	•	•	•
Cooled storage compartment (lunch box)	•	•	•
Rear and side cameras (on the turret)	•	•	•
HYDRAULICS (IMPLEMENTS AND SWING CIRCUITS)	12MSX	12MTX	12MRX
Hydraulic circuit capacity	185 l (48.9 gal)	190 l (50 gal)	190 l (50 gal)
Hydraulic oil tank capacity	82 l (21.7 gal)	82 l (21.7 gal)	82 l (21.7 gal)
Variable displacement pump - maximum	72 cm <sup>3</sup> (4.4 in <sup>3</sup> )	75 cm <sup>3</sup> (4.5 in <sup>3</sup> )	95 cm <sup>3</sup> (5.8 in <sup>3</sup> )
Maximum flow rate	144 l/min (38 gpm)	157 l/min (41.5 gpm)	157 l/min (41.5 gpm)
Maximum working pressure	280 bar (4,060psi)	300 bar (4,350 psi)	300 bar (4,350 psi)
Power management, Active Control.	•	•	•
Proportional Load Sensing with individual balance for each component: boom, adjustable boom, dipperstick, bucket and auxiliary circuit	•	•	•
Proportionality of functions achieved at all times, regardless of the pressure level of each component: "flow sharing"	•	•	•
Cooling (hydraulic circuit)	ventilated fan	ventilated fan	ventilated fan
Anti-cavitation overpressure relief valve on each component: boom, adjustable boom, dipperstick and bucket	•	•	•
Anti-drop safety valve for each component: boom, adjustable boom, dipperstick	•	•	•
Hydraulically-assisted proportional control of functions using joysticks or pedals supplied at low pressure with emergency accumulator	•	•	•
BOOM AND STICK	12MSX	12MTX	12MRX
Mecalac variable kinematics consisting of 4 parts: boom, adjustable boom, offset boom and dipperstick	•	•	•
Right and left offset by hydraulic cylinder	•	•	•
System allowing all penetration forces to be kept, regardless of the angular position of the offset	•	•	•
Left offset	1829 mm (6'0")	1829 mm (6'0")	1829 mm (6'0")
Right offset	1859 mm (6'1")	1859 mm (6'1")	1859 mm (6'1")
Boom cylinder with end-of-travel shock absorber	•	•	•
Stick length	2210 mm (7'3")	2210 mm (7'3")	2210 mm (7'3")
CONNECT coupling system			
- Take up with automatic mechanical locking	•	•	•
- Detection of incorrect locking			
- Hydraulically-controlled unlocking			

Standard and optional equipment may vary. Consult your Mecalac dealer for details.

## OPERATING MODES\*

### EXCAVATOR MODE: enables the machine to be operated like an excavator:

- Upperframe rotation and dipperstick control with the left joystick
- Bucket and intermediate boom or boom control with the right joystick
- Travel control with the pedal and travel direction (FNR) control under the right joystick
- Deactivation of the travel alarm
- Deactivation of the overload alarm
- Engine speed setting through the throttle
- Activation of Speed Control
- Locks the oscillating axle when the brake pedal is fully pressed
- Screen display in excavator mode

### LOADER MODE: enables the machine to be operated like a loader:

- Lifting (adjustable boom) and bucket control with the right joystick
- Screen display in loader mode

### ROAD MODE

- Turns on road headlights
- Turns on the rotating beacon
- Locks hydraulic functions (boom/stick, swing, outriggers)
- Unlocks the oscillating axle (only if oscillation lock selector is on AUTO and not activated via the right joystick)
- Deactivation of the travel alarm
- Deactivation of the overload alarm
- Speed display in kph (mph)
- Engine speed setting through the press of the travel pedal
- Deactivation of the joystick steering feature
- Screen display in road mode

### PARKING MODE

- Engages the parking brake
- Turns the transmission into Neutral
- Deactivates the accelerator pedal
- Locks hydraulic functions (boom / stick, swing, outriggers)
- Screen display in economy mode
- Locking of the oscillating axle
- Turns on road headlights and rotating beacon

\* Possible customization of these modes and controls



## CONNECT QUICK COUPLER



### PRODUCTIVITY

- Reversibility as standard, adapted to all attachments and to the four functions of our machines
- Simple pick-up of attachments, optimum visibility, in both directions
- Maintenance-free, no need for additional lubrication, reduced risks of failure
- The advantage of a compact and light coupler is used to enhance the bucket volume



### SAFETY

- Impossible for a bucket to drop, once lifted off the ground no matter if locked or not, regardless of the direction of the tool, a "hook" system prevents the bucket from falling.
- Safety-valve integrated into the cylinder
- Continuous detection of the cylinder position, "real time" measurement of the locking of the tool, associated with an acoustic warning signal in the cab
- Automatic hydraulic compensation of play by an over-dimensioned length of the cylinder rod
- Simple user interface, avoiding any risk of mis-operation



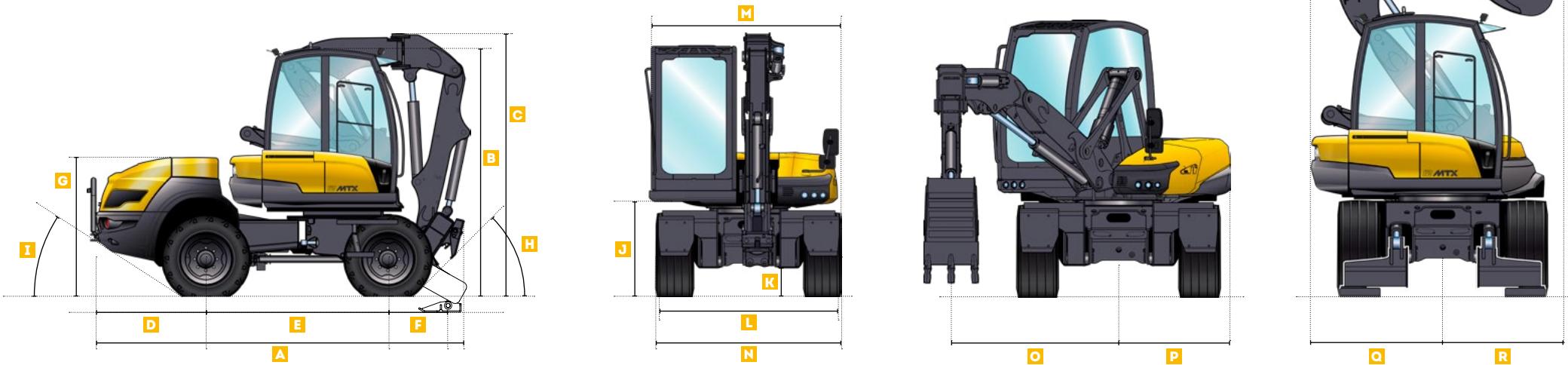
### RELIABILITY

- Use of 500 hb steel for the eyehooks, the steel used for the buckets is of the worldwide highest durability
- 100% Mecalac: the machine, quick-coupler and attachments are designed to work together. CONNECT is dedicated to Mecalac



# 12-SERIES

## DIMENSIONS



### MACHINE DIMENSIONS

	12MSX	12MTX	12MRX
A Overall length	4619 mm (15')	4619 mm (15')	4619 mm (15')
B Cab height	3064 mm (10')	3064 mm (10')	3064 mm (10')
C Height with boom retracted	3464 mm (11'4")	3464 mm (11'4")	3464 mm (11'4")
D Rear overhang	1407 mm (4'6")	1407 mm (4'6")	1407 mm (4'6")
E Wheelbase	2225 mm (7'3")	2225 mm (7'3")	2225 mm (7'3")
F Front overhang	933 mm (3')	933 mm (3')	933 mm (3')
G Hood height	1744 mm (5'7")	1744 mm (5'7")	1744 mm (5'7")
H Approach angle	53°	53°	53°
I Departure angle	30°	30°	30°
J Height under upper carriage	1165 mm (3'8")	1165 mm (3'8")	1165 mm (3'8")
K Ground clearance	354 mm (1'2")	354 mm (1'2")	345 mm (1'1")
L External width of the outriggers	2187 mm (7'2")	2187 mm (7'2")	2187 mm (7'2")
M Width in road position	2332 mm (7'7")	2332 mm (7'7")	2397 mm (7'9")
N Width at wheels, standard tires	2260 mm (7'4")	2260 mm (7'4")	2390 mm (7'10")
O Width at wheels, Alliance wide tires, 600/40-22.5			2520 mm (8'3")

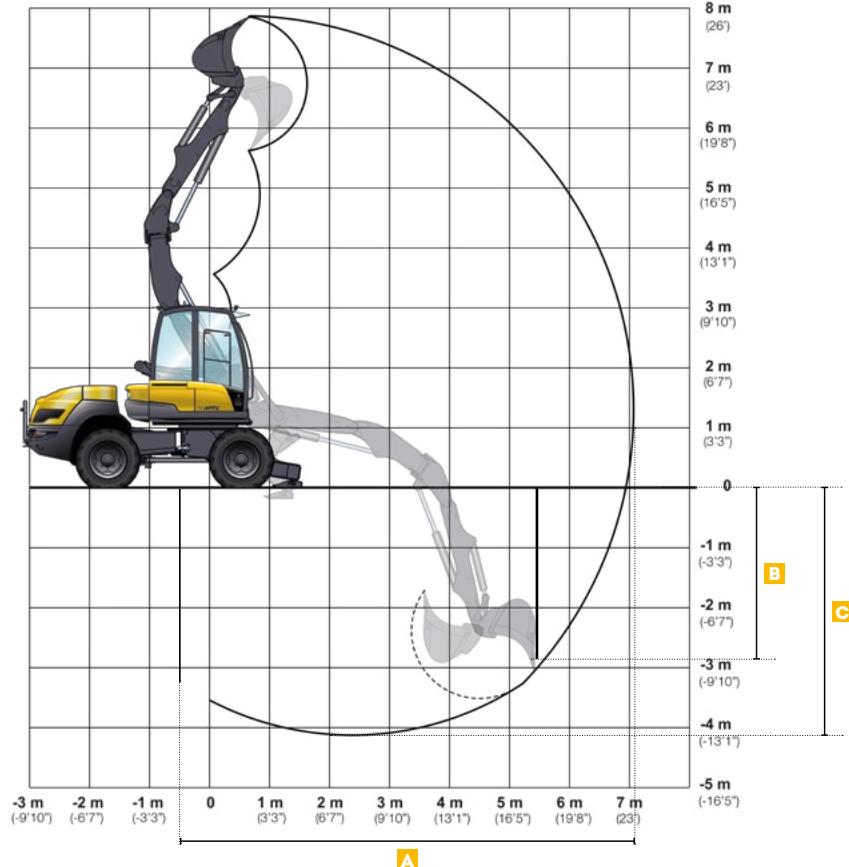
### MACHINE DIMENSIONS

	12MSX	12MTX	12MRX
O Boom right offset, maximal	1859 mm (6'1")	1859 mm (6'1")	1859 mm (6'1")
P Boom left offset, maximal	1829 mm (6'0")	1829 mm (6'0")	1829 mm (6'0")
P Outside dimension with max. offset	1239 mm (4'0")	1239 mm (4'0")	1239 mm (4'0")
Q Rear counterweight swing radius	1385 mm (4'5")	1385 mm (4'5")	1385 mm (4'5")
R Front swing radius	1325 mm (4'3")	1325 mm (4'3")	1325 mm (4'3")
S Full swing diameter	2710 mm (8'9")	2710 mm (8'9")	2710 mm (8'9")



# 12-SERIES

## BOOM PERFORMANCE AND LIFTING CAPACITY



PERFORMANCE	12MSX	12MTX	12MRX
Break-out force	5550 daN (12,900 lbf)	5950 daN (13,820 lbf)	5950 daN (13,820 lbf)
Penetration/Tear-out force	3070 daN (7,120 lbf)	3290 daN (7,640 lbf)	3290 daN (7,640 lbf)
Maximum lifting force with hook	4000 kg (8,820 lb)	4000 kg (8,820 lb)	4000 kg (8,820 lb)
<b>A</b> Maximum reach	7125 mm (23'4")	7125 mm (23'4")	7125 mm (23'4")
<b>B</b> Vertical digging depth	2240 mm (7'3")	2240 mm (7'3")	2240 mm (7'3")
<b>C</b> Maximum digging depth	4100 mm (13'4")	4100 mm (13'4")	4100 mm (13'4")

### 12MSX - 12MTX

#### LIFTING FORCE WITH LIFTING HOOK - STABILISERS ON GROUND

All the weights are given in kg (lb).

	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
	2M (7 FT)		3M (10 FT)		4.5M (15 FT)		6M (20 FT)	
<b>4.5M (15 FT)</b>	3280*	3280*	3190*	3190*	2460*	1530		
	(7,230*)	(7,230*)	(7,030*)	(7,030*)	(5,420*)	(3,370)		
<b>3M (10 FT)</b>	4000*	4000*	3480*	3480*	2910*	1490		
	(8,820*)	(8,820*)	(7,670*)	(7,670*)	(6,415*)	(3,285)		
<b>1.5M (5 FT)</b>	4000*	4000*	3480*	2740*	3100*	1310	1720*	740
	(8,820*)	(8,820*)	(7,670*)	(6,040*)	(6,835*)	(2,890)	(3,790*)	(1,630)
<b>0 M</b>	4000*	4000*	3480*	1960	3080*	1240		
	(8,820*)	(8,820*)	(7,670*)	(4,320*)	(6,790*)	(2,735)		
<b>-1.5M (-5 FT)</b>	4000*	4000*	3170*	1860	2580*	1090		
	(8,820*)	(8,820*)	(6,990*)	(4,100*)	(5,690*)	(2,400)		
<b>-3M (-10 FT)</b>	4000*	4000*	3270*	2080				
	(8,820*)	(8,820*)	(7,210*)	(4,590*)				

#### WORKING CONDITIONS

- On wheels with stabilisers on ground
- On horizontal, compact ground
- Equipment used without offset
- Front and rear frame aligned
- Without tools (bucket, shovel...)
- With lifting hook (4t capacity)
- 75% of the tipping load or 87% of the hydraulic capacity
- Maximum values determined for optimal position of boom and cylinders

The lifting capabilities shown with an asterisk (\*) are limited by the hydraulic capabilities or capability of the lifting hook.

The other values are limited by the stability of the machine.

The weight of the chain sling, bucket and other auxiliary lifting devices must be deducted from the nominal load to determine the load which can be lifted.

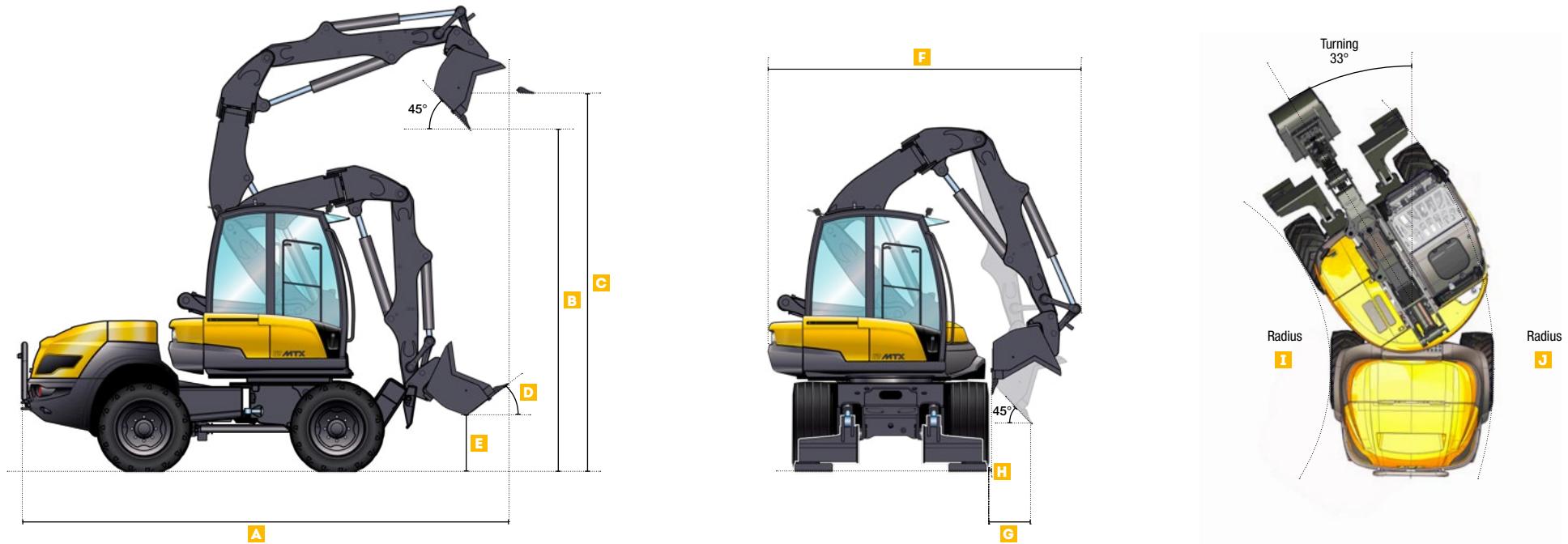


All elements added to the end of the dipperstick must be taken into consideration when measuring the real lifting capacities in kg (lb), particularly their positions and weights.



# 12-SERIES

## LOADING



MACHINE DIMENSIONS		12MSX	12MTX	12MRX
A	Overall length	5617 mm (18'5")	5617 mm (18'5")	5617 mm (18'5")
B	Dumping height	4077 mm (13'4")	4077 mm (13'4")	4077 mm (13'4")
C	Loading height	4498 mm (14'9")	4498 mm (14'9")	4498 mm (14'9")
D	Digging angle	40°	40°	40°
E	Clearance under bucket	651 mm (2'2")	651 mm (2'2")	651 mm (2'2")
F	Minimal turning radius upper structure	3600 mm (11'9")	3600 mm (11'9")	3600 mm (11'9")
G	Minimum side dumping distance (bucket at 45°)	403 mm (1'4")	403 mm (1'4")	403 mm (1'4")
H	Minimum side dumping distance (bucket at 90°)	78 mm (0'3")	78 mm (0'3")	78 mm (0'3")
I	Minimum turning radius - inside of tires	2620 mm (8'7")	2620 mm (8'7")	2560 mm (78.7 in)
J	Minimum turning radius - outside of tires	4910 mm (16'1")	4910 mm (16'1")	4980 mm (196 in)

PERFORMANCE		12MSX	12MTX	12MTX
Lifting power - according to ISO 14397-2		3780 daN (8,500 lbf)	4050 daN (9,105 lb)	4050 daN (9,100 lbf)
Digging force - according to ISO 14397-2		5970 daN (13,420 lbf)	6400 daN (14,390 lb)	6400 daN (14,390 lbf)
Traction force of the machine		4800 daN (10,790 lbf)	5650 daN (12,700 lb)	6250 daN (14,050 lbf)

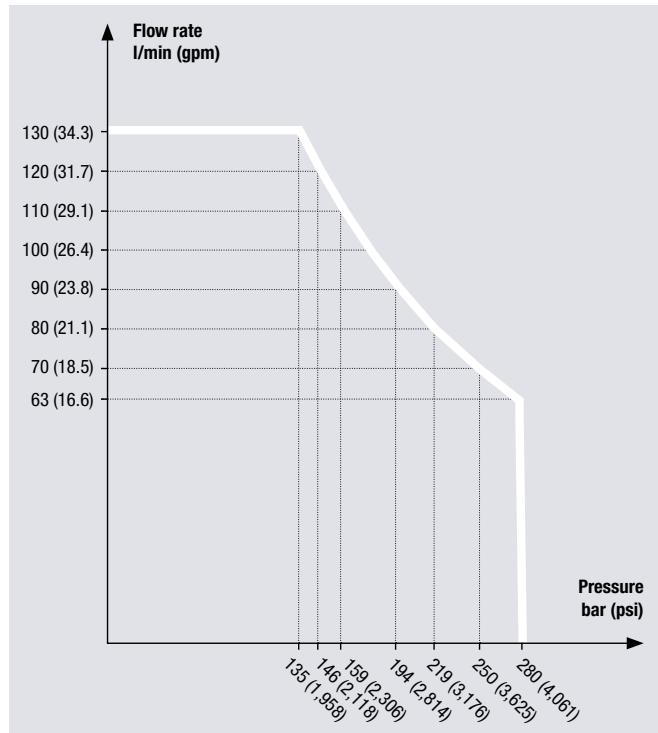


# 12-SERIES

## HYDRAULIC TOOL CARRIER

### 12MSX

#### AUXILIARY 1 (PROPORTIONAL)



#### AUXILIARY LINE 2

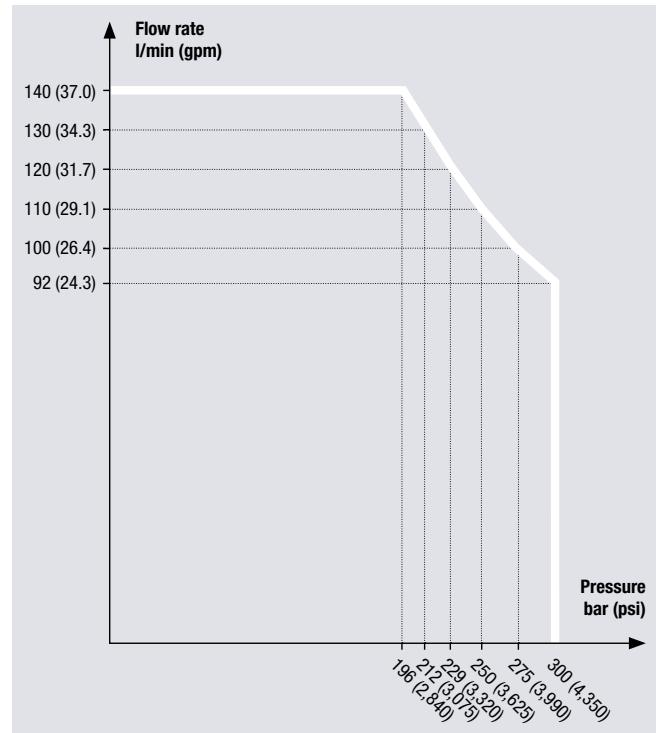
12MSX	
Offset cylinder diverted (clamshell rotation)	Option
Flow rate, maximum	3-35 l/min (0.8-9.2 gpm)
Pressure, maximum	280 bar (4,060 psi)
Controls	Proportional

#### AUXILIARY LINE 3

12MSX	
Bucket cylinder diverted (clamshell function)	Option
Flow rate, maximum	120 l/min (31.7 gpm)
Pressure, maximum	280 bar (4,060 psi)

### 12MTX - 12MRX

#### AUXILIARY 1 (PROPORTIONAL)



#### AUXILIARY LINE 2

12MTX - 12MRX	
Offset cylinder diverted (clamshell rotation)	Option
Flow rate, maximum	3-35 l/min (0.8-9.2 gpm)
Pressure, maximum	300 bar (4,350 psi)
Controls	Proportional

#### AUXILIARY LINE 3

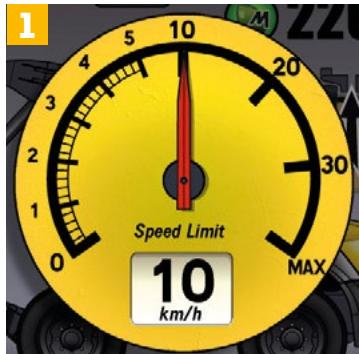
12MTX - 12MRX	
Bucket cylinder diverted (clamshell function)	Option
Flow rate, maximum	120 l/min (31.7 gpm)
Pressure, maximum	300 bar (4,350 psi)

METRIC MEASUREMENTS ARE THE CRITICAL VALUES

- 1 Litre = 0.26417 US Liquid Gallons
- 1 Litre = 0.21997 Imperial Liquid Gallons



## 12-SERIES HYDRAULIC TOOL CARRIER



### 12MSX

#### 1 SPEED CONTROL - AVAILABLE RANGE IN KPH (MPH)

0.3 - 0.6 - 0.9 - 1.2 - 1.5 - 2 - 3 - 4 - 5 - 7 - 10 - 15 - 20 - Max.  
(0.2 - 0.4 - 0.5 - 0.7 - 0.9 - 1.2 - 1.9 - 2.5 - 3.1 - 4.3 - 6.2 - 9.3  
- 12.4 - Max.)

#### 2 CUSTOMIZABLE PARAMETERS

Memory storage of:  
- Name of the attachments  
- Respective flow rates

### 12MTX

#### 1 SPEED CONTROL - AVAILABLE RANGE IN KPH (MPH)

0.3 - 0.6 - 0.9 - 1.2 - 1.5 - 2 - 3 - 4 - 5 - 7 - 10 - 15 - 20 - 25 - 30 - Max.  
(0.2 - 0.4 - 0.5 - 0.7 - 0.9 - 1.2 - 1.9 - 2.5 - 3.1 - 4.3 - 6.2 - 9.3 - 12.4  
- 15.5 - 18.6 - Max.)

#### 2 CUSTOMIZABLE PARAMETERS

Memory storage of:  
- Name of the attachments  
- Respective flow rates  
- Respective pressure rates (optional)

### 12MRX

#### 1 SPEED CONTROL - AVAILABLE RANGE IN KPH (MPH)

0.3 - 0.6 - 0.9 - 1.2 - 1.5 - 2 - 3 - 4 - 5 - 7 - 10 - 15 - 20 - 25 - 30 - 35 - Max.  
(0.2 - 0.4 - 0.5 - 0.7 - 0.9 - 1.2 - 1.9 - 2.5 - 3.1 - 4.3 - 6.2 - 9.3 - 12.4 - 15.5  
- 18.6 - 21.7 - Max.)

#### 2 CUSTOMIZABLE PARAMETERS

Memory storage of:  
- Name of the attachments  
- Respective flow rates  
- Respective pressure rates (standard)

Standard and optional equipment may vary.  
Consult your Mecalac dealer for details.





Not all features are available in all regions. Please check with your local Mecalac dealer for specific offering availability in your area.

For more complete information on Mecalac products, dealer services and industry solutions, visit us on the web at [www.mecalac.com](http://www.mecalac.com)

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