MasterMover

MT1000+

Battery powered electric tug



MT1000+



Overview

The MasterTug range delivers unrivalled manoeuvrability when moving heavy-wheeled loads. Utilising a unique weight transfer principle, the MasterTug range can move heavy weights whilst retaining an incredibly compact machine footprint.

The design makes the MasterTug range perfect for working in confined spaces and facilitating precise movements.

With ergonomic controls, lightweight steering and an intuitive design, MasterTug takes the strain and empowers an operator to move heavy loads with complete control. A secure coupling system maximises load security and performance, guaranteeing total peace of mind.

The powerful performance of the MasterTug allows operators to push, pull and steer loads inside, outside and on slopes with complete control.

Key Features

Safety

- Audible horn, flashing safety light, emergency stop button and anti-crush button
- Speed control with an optional two-speed selector switch for maximum control
- Complete load security

Performance

- Powerful weight-moving capabilities through weight transfer
- Start, move and stop movement on slopes
- Optimised hydraulics guarantee a smooth connection and movement

Power

- · AC motor optimises speed and power
- Slide out, interchangeable batteries deliver 24/7 performance
- · Optional Battery Protection System maximises longevity

Connection

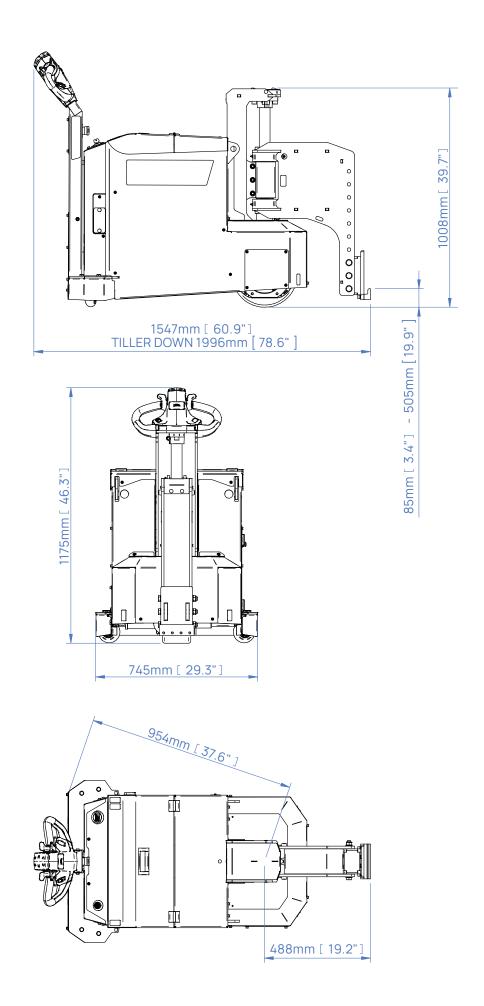
- Secure coupling system delivers controlled movement of loads
- Unique mast design enables operators to connect to loads at different heights
- CombiCoupling, BoxCoupling and custom coupling options available







Dimensions



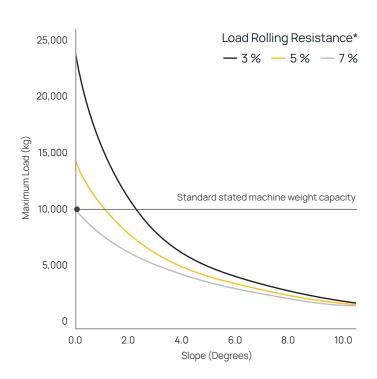
Slope Performance

The force required to move a load is based on load weight, slope angle and floor condition.

Movement on a slope increases the force required to safely start, stop and move the load.

If your application involves moving a load up or down a slope, speak to our team who will be happy to advise on which machine will meet your requirements.

^{*} Variables that affect rolling resistance include the quality of floor/terrain and the type/condition/quality of castor wheels.



In Application: MasterTug

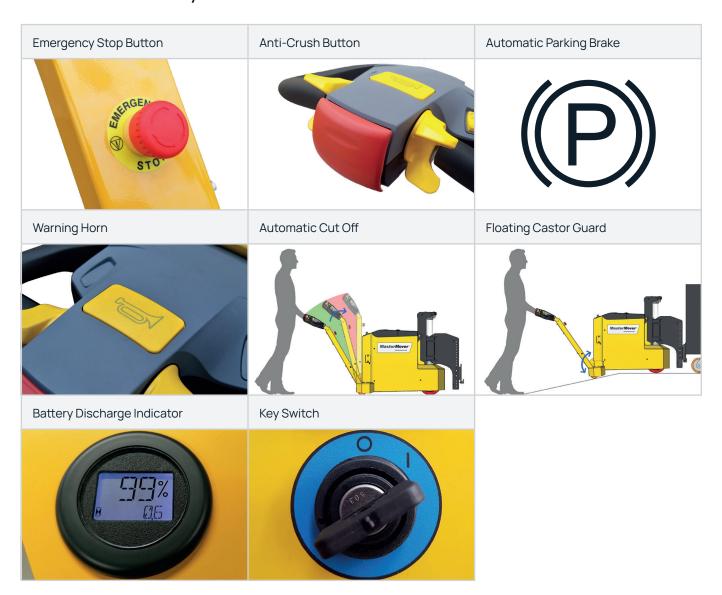








Standard Safety Features



Machine Options

| Additional AGM Battery Z63-00300 | Two Speed Selector Switch Z64-00501 | Flashing Light & Motion Beeper Z64-00500 |
|--|---|---|
| | | |
| Battery Protection System Z64-00504 | Battery Transportation Trolley Z64-00506 | Battery Transportation Stand Z64-00505 |
| -+ | | |
| CombiLock Z64-00502 | Remote Control Z64-00507 | |
| | | |

Couplings





Custom Engineering

We understand that every application is different. Whether it's a custom coupling to connect to your load, modifying our electric tugs to work in a challenging environment, or designing an entirely new solution for your application, our Customer Engineering team are here to help.

For more information on our custom engineering capabilities, please visit: mastermover.com/custom-solutions If you'd like to discuss your requirements, speak to your sales representative or email: sales@mastermover.com

Technical Specification

| Machine | |
|--|--|
| Product code | Z64-00101 |
| Maximum load (on castors I on rails) | 10,000 kg 40,000 kg |
| Maximum (push force I pull force) | 6,865 N I 6,865 N |
| Machine weight | 348 kg |
| Battery weight (standard) | 143 kg |
| Combined machine & battery weight (standard) | 491 kg |
| Drive type | Electric |
| Braking | Regenerative |
| Parking brake | Electromagnetic |
| Drive wheel type | Non-Marking Polyurethane |
| Castor wheel type | Non-Marking Polyurethane |
| Drive motor power | 2 kW |
| Controller type | AC |
| Standard machine speed (no speed selector switch) | 2 KPH |
| Hare mode speed (With two speed selector switch) | 3 KPH |
| Tortoise mode speed (With two speed selector switch) | 1.2 KPH |
| Maximum slope | 8° |
| Voltage | 24 v |
| Noise level | Motor ≤80 dBA I Flashing light ≤85 dBA I Horn ≤112 dBA |
| Metal work finish | Powder coat paint & zinc plated |
| IP rating | IP44 |
| Wheel diameter | 300 mm |
| Point loading | 0.5 (kg/mm²) 4.90 [N/mm²] |
| Hydraulic Specification | |
| Maximum Lift Force at the Coupling | 2,161 kg |
| AGM Battery | |
| Product code | Z64-00300 |
| Battery pack capacity | 179 Ah |
| Maximum distance per charge* | 9.5 km |
| Charge time (External charger) | 6 hrs |
| Charge time (Internal charger) | 9 hrs |
| External Charger | |
| Product code | Z64-00400 |
| Input voltage | 85 - 265 v |
| Hertz | 50 - 60 Hz |
| Amps | 30 A |
| Phase (single, three) | Single |
| IP Rating | IP30 |

Technical Specification

| Imput voltage 85 - 265 v Hertz 50 - 60 Hz Amps 20 A Phase (single, three) Single Prating IP30 Lithium Battery Z64-00302 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging 264-00402 Input voltage 85 - 265 v Hertz 50 - 60 Hz Amps 40 A Phase (single, three) Single IP rating IP30 Coupling IP30 Coupling (male I female) Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Standard Regressively Stope ind | Internal Charging | |
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| Heitz 50 - 60 Hz Amps 20 A Phase (single, three) Single IP rating IP30 Lithium Battery IP30 Lithium Battery IP30 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging IP30 Product code 264-00402 Input voitage 85 - 265 v Heirtz 50 - 66 Hz Amps 40 A Phase (single, three) Ip30 Coupling IP30 Coupling (male I female) Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Optional Safety Standard Emergency Stop Standard Enterpolity Optional (Points) Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Tie-Down Points Standard Integrated Tie-Down Poin | Product code | Z64-00401 |
| Amps 20 A Phase (single, three) Single IP rating IP30 Lithium Battery Product code Z64-0302 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging External Charging Product code Z64-00402 Input voltage 85-265 v Hertz 50-60 Hz Amps 40 A Phase (single, three) Single IP rating IP30 Coupling IP30 Coupling (male I female) Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Standard BoxToupling (male I f | Input voltage | 85 - 265 v |
| Phase (aingle, three) Single IP rating IP30 Lithium Battery Product code Z 64-00302 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging Product code Product code Z 64-00402 Input voltage 85-265 v Hertz 50-60 Hz Amps 40 A Phase (single, three) Single IP rating IP30 Coupling Optional Coxyling (male I female) Optional Coxyling (male I female) Optional Execty Standard Key Switch Standard Emergency Stop Standard Battery Discharge Indicator Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard | Hertz | 50 - 60 Hz |
| Prating Prat | Amps | 20 A |
| Lithium Battery Product code Z64-00302 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging | Phase (single, three) | Single |
| Product code 264-00302 Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging | IP rating | IP30 |
| Battery pack capacity 120 Ah Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging | Lithium Battery | |
| Maximum distance per charge* 6.4 km Charge time (External charger) 3 hrs External Charging 264-00402 Input voltage 85 - 265 v Hertz 50 - 60 Hz Amps 40 A Phase (single, three) Single IP rating IP 30 Coupling Page Coupling (male I female) Optional BoxCoupling (male I female) Optional Safety Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Out Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Standard Floating Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional | Product code | Z64-00302 |
| Charge time (External charger) 3 hrs External Charging Product code Z64-00402 Input voltage 85 - 265 v Hertz 50 - 60 Hz Amps 40 A Phase (single, three) Single IP rating IP 30 Coupling Page (Single, three) Coupling Optional BoxCoupling (male I female) Optional BoxCoupling (male I female) Optional Safety Standard Key Switch Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Out Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Standard Floating Castor Guard Standard Optional Sta | Battery pack capacity | 120 Ah |
| External Charging Product code 264-00402 Input voltage 85 - 265 v Hertz 50 - 60 Hz Amps 40 A Phase (single, three) Single IP rating IP30 Coupling Optional BoxCoupling (male I female) Optional Safety Standard Key Switch Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Caster Guard Standard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional | Maximum distance per charge* | 6.4 km |
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| Prating Prat | Amps | 40 A |
| CombiCoupling (male I female) CombiCoupling (male I female) CombiCoupling (male I female) Coptional Safety Key Switch Emergency Stop Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Automatic Parking Brake Integrated Lift Points Standard Integrated Tie-Down Points Standard Options Additional AGM Battery Optional Two Speed Selector Switch Optional CombiLock Optional | Phase (single, three) | Single |
| CombiCoupling (male I female) BoxCoupling (male I female) Safety Key Switch Standard Emergency Stop Standard Battery Discharge Indicator Anti-Crush Button Standard Automatic Cut Off (as tiller arm returns to vertical) Automatic Parking Brake Integrated Lift Points Integrated Tie-Down Points Standard Options Additional AGM Battery Two Speed Selector Switch CombiLock Optional Optional Optional | IP rating | IP30 |
| BoxCoupling (male I female) Safety Key Switch Standard Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Two Speed Selector Switch Optional CombiLock Optional | Coupling | |
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| Key SwitchStandardEmergency StopStandardBattery Discharge IndicatorStandardAnti-Crush ButtonStandardWarning HornStandardAutomatic Cut Off (as tiller arm returns to vertical)StandardAutomatic Parking BrakeStandardIntegrated Lift PointsStandardIntegrated Tie-Down PointsStandardFloating Castor GuardStandardOptionsAdditional AGM BatteryOptionalFlashing Safety Light and Motion BleeperOptionalTwo Speed Selector SwitchOptionalCombiLockOptional | BoxCoupling (male I female) | Optional |
| Emergency Stop Standard Battery Discharge Indicator Standard Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional CombiLock Optional | Safety | |
| Battery Discharge Indicator Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Options Additional AGM Battery Additional AGM Battery Optional Two Speed Selector Switch Optional CombiLock Optional | Key Switch | Standard |
| Anti-Crush Button Standard Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional CombiLock Optional | Emergency Stop | Standard |
| Warning Horn Standard Automatic Cut Off (as tiller arm returns to vertical) Standard Automatic Parking Brake Standard Integrated Lift Points Standard Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional CombiLock Optional | Battery Discharge Indicator | Standard |
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| Automatic Parking Brake Integrated Lift Points Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Additional AGM Battery Additional AGM Battery Flashing Safety Light and Motion Bleeper Two Speed Selector Switch Optional CombiLock Standard Optional Optional Optional Optional | Warning Horn | Standard |
| Integrated Lift Points Integrated Tie-Down Points Standard Floating Castor Guard Standard Options Additional AGM Battery Optional Flashing Safety Light and Motion Bleeper Two Speed Selector Switch Optional CombiLock Standard Optional Optional Optional Optional | Automatic Cut Off (as tiller arm returns to vertical) | Standard |
| Integrated Tie-Down Points Floating Castor Guard Standard Options Additional AGM Battery Additional Safety Light and Motion Bleeper Two Speed Selector Switch CombiLock Optional Optional | Automatic Parking Brake | Standard |
| Floating Castor Guard Options Additional AGM Battery Additional Safety Light and Motion Bleeper Two Speed Selector Switch CombiLock Optional Optional | Integrated Lift Points | Standard |
| OptionsAdditional AGM BatteryOptionalFlashing Safety Light and Motion BleeperOptionalTwo Speed Selector SwitchOptionalCombiLockOptional | Integrated Tie-Down Points | Standard |
| Additional AGM Battery Flashing Safety Light and Motion Bleeper Two Speed Selector Switch CombiLock Optional Optional | Floating Castor Guard | Standard |
| Flashing Safety Light and Motion Bleeper Optional Two Speed Selector Switch Optional CombiLock Optional | Options | |
| Two Speed Selector Switch Optional CombiLock Optional | Additional AGM Battery | Optional |
| CombiLock Optional | Flashing Safety Light and Motion Bleeper | Optional |
| | Two Speed Selector Switch | Optional |
| Battery Protection System Optional | CombiLock | Optional |
| | Battery Protection System | Optional |

Technical Specification

| Battery Transportation Stand | Optional |
|--------------------------------|----------|
| Battery Transportation Trolley | Optional |
| Remote Control | Optional |



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