

**MasterMover®**

# SM200+ SS

Battery powered electric tug



\* Please see disclaimer

# SM200+ SS



## Overview

The Stainless Steel range of electric tugs delivers the same level of performance as our mild steel ranges, but with the added benefit of seamlessly integrating into sterile environments.

Whether it's a biopharmaceutical cleanroom suite or a food manufacturing facility, our stainless steel electric tugs remove manual handling and drive operational efficiency without compromising the cleanliness of your facility.

Constructed from high-grade 316 stainless steel and with IP ratings of up to IP55 available, stainless steel electric tugs are ideally suited to the stringent requirements of sterile environments.

The Stainless Steel range of electric tow tugs facilitate the controlled movement of loads in tight spaces, with an array of coupling options available that put load security and safety at the forefront.

## 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 with automatic braking

### Performance

- Powerful weight-moving capabilities suited to every application
- Maximum traction even on wet floors
- Compact and manoeuvrable to deliver precise movements in even the tightest of spaces

### Power

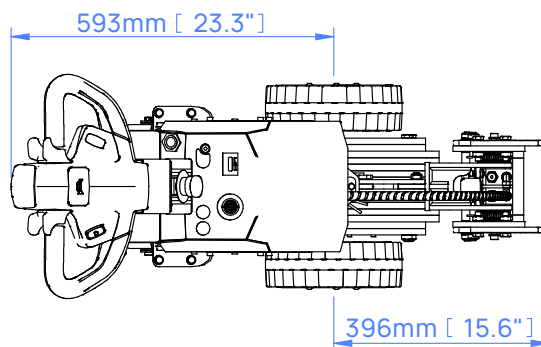
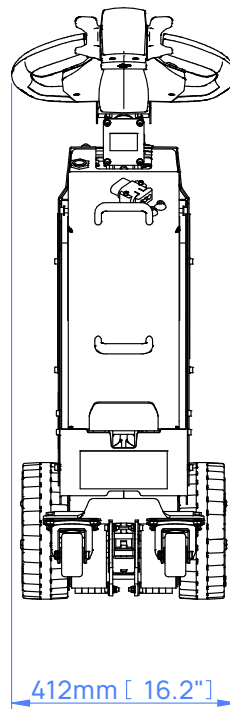
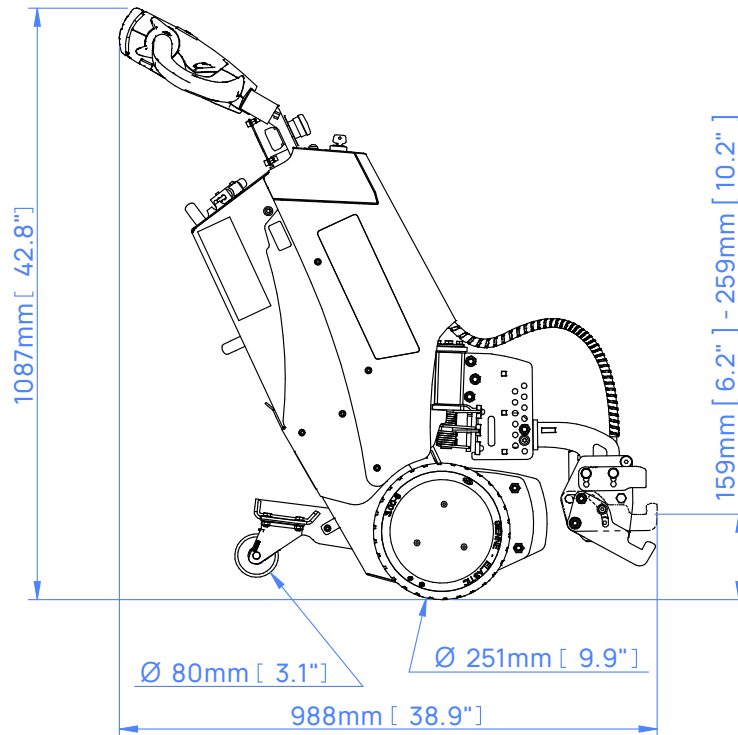
- Optimised motor output to optimise speed and power
- Maintenance-free, interchangeable battery options
- Powerful, effective, traction generation for smooth performance

### Connection

- Secure coupling systems to deliver the controlled movement of loads
- A range of coupling options available to connect to a variety of loads
- Custom couplings available



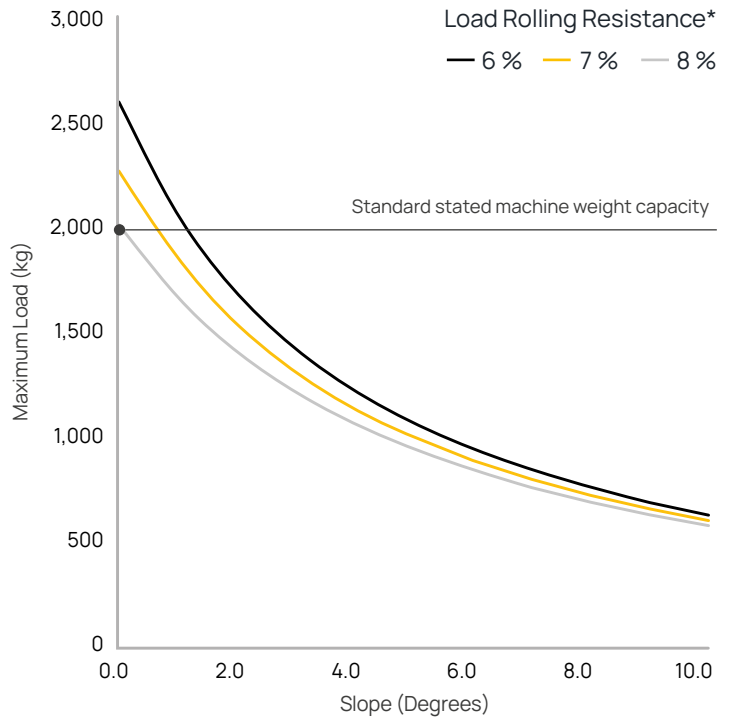
# Dimensions



# 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.



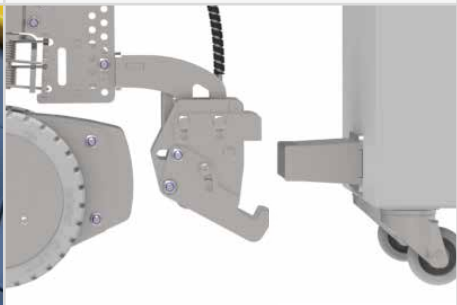
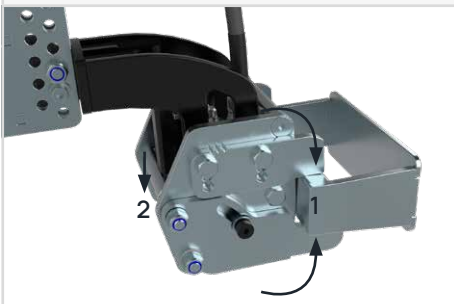

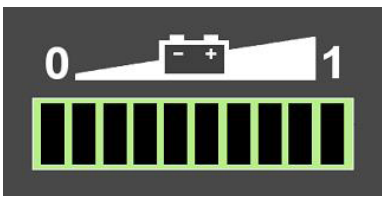




\* Variables that affect rolling resistance include the quality of floor/terrain and the type/condition/quality of castor wheels.




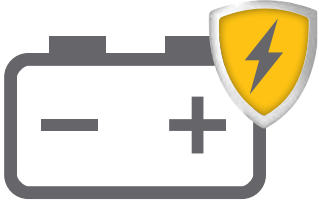
## In Application: SmartMover Stainless Steel



# Standard Safety Features

Anti-Crush Button	Warning Horn	Hydraulic AutoTilt Coupling
 A close-up photograph of a red and yellow emergency stop button mounted on a grey control panel.	 A close-up photograph of a yellow horn button with a horn symbol on a blue control panel.	 A technical diagram showing a hydraulic coupling mechanism with various metal parts and hoses.
Two Stage Lock to Load	Automatic Parking Brake	Battery Discharge Indicator
 A technical diagram of a two-stage lock mechanism with numbered arrows (1 and 2) indicating the locking sequence.	 A circular icon with a 'P' in the center, representing a parking brake.	 A battery discharge indicator showing a battery symbol with a scale from 0 to 1 and a green bar representing the charge level.
Emergency Stop	Key Switch	
 A close-up photograph of a red emergency stop button with a yellow label that says 'EMERGENCY STOP'.	 A close-up photograph of a blue key switch with a black handle.	

# Machine Options

<p>Additional AGM Battery Z56-00301</p>	<p>Flashing Light &amp; Motion Beeper Z56-00501</p>	<p>Two Speed Selector Switch Z56-00500</p>
 A rectangular, silver-colored metal battery box with a black handle on the front and a black terminal on top.	 A vertical black cylindrical device with a yellow flashing light lens at the top and a silver mounting post at the bottom.	 A close-up of a black plastic control panel featuring a yellow rectangular selector switch with two gear icons.
<p>Battery Protection System</p>		
 An icon of a battery with a minus sign on the left and a plus sign on the right, next to a yellow shield with a black lightning bolt.		

# Couplings

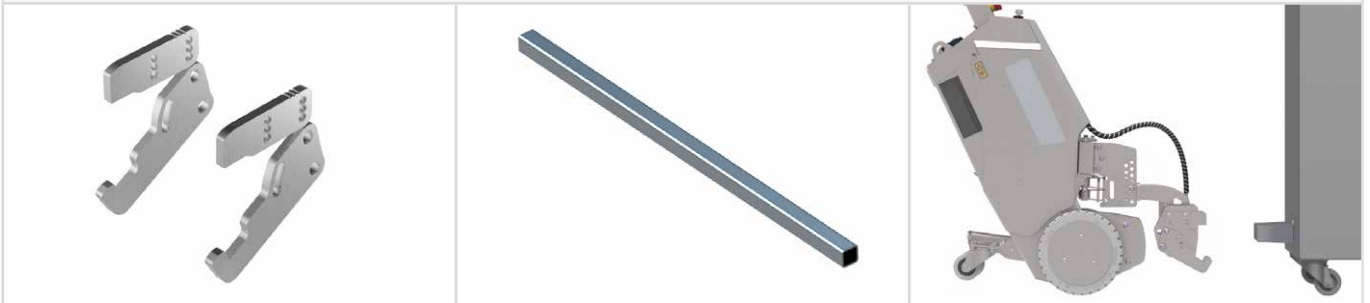
Hydraulic AutoTilt Coupling - 50mm x 25mm (A frame)  
Z56-00604 male | Z56-00700 female - straight



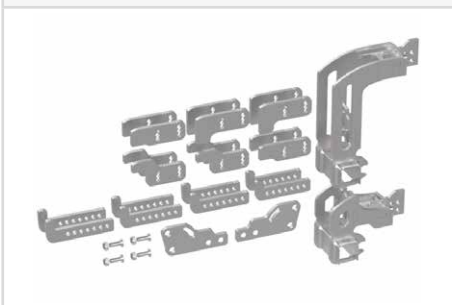
Hydraulic AutoTilt Coupling - 50mm x 25mm (A frame)  
Z56-00604 male | Z56-00701 female - angled



Box Section  
Sizes 20x20 to 75x75mm



Hydraulic AutoTilt Variable Kit  
Z56-00605 male



## 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](https://mastermover.com/custom-solutions)

If you'd like to discuss your requirements, speak to your sales representative or email: [sales@mastermover.com](mailto:sales@mastermover.com)

# Technical Specification

Machine	
Product code	Z56-00101
Maximum load (on castors   on rails)	2,000 kg   8,000 kg
Maximum force (push   pull)	1,570 N   1,570 N
Machine weight	125 kg
Battery weight (standard)	24 kg
Combined machine & battery weight (standard)	149 kg
Drive type	Twin Electric Motor
Braking	Regenerative
Parking brake	Electromagnetic
Drive wheel type	Non-Marking Rubber
Castor wheel type	Non-Marking Polyurethane
Drive wheel diameter	250 mm
Drive motor power	2 x 0.24 kW
Controller type	DC
Standard machine speed (Without two 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	10°
Voltage	24 v
Noise level	Motor ≤80 dBA   Flashing light ≤85 dBA   Horn ≤112 dBA
Metal work finish	Stainless Steel 316 grade   180-grit abrasive to 0.76µ satin finish
IP rating	IP44
Hydraulic Specification	
Clamp Force at the Coupling	775 kg
AGM Battery	
Product code	Z56-00301
Battery pack capacity	35 Ah
Maximum distance per charge†	5.3 km
Charge time	7 hrs
External Charger	
Product code	Z56-00400
Input voltage	85 - 265 v
Hertz	50 - 60 Hz
Amps	5 A
Phase (single, three)	Single
IP Rating	IP30

# Technical Specification

Lithium Battery	
Product code	Z56-00302
Battery pack capacity	39 Ah
Maximum distance per charge†	6 km
Charge time (External charger)	1 hrs 45 mins
External Charger	
Product code	Z56-00401
Input voltage	85 - 265 v
Hertz	50 - 60 Hz
Amps	25 A
Phase (single, three)	Single
IP rating	IP30
Coupling	
Hydraulic AutoTilt Coupling - 50mm x 25mm (A frame) - Straight (male   female)	Optional
Hydraulic AutoTilt Coupling - 50mm x 25mm (A frame) - Angled (male   female)	Optional
Box Section	Optional
Hydraulic AutoTilt Variable Kit	Optional
Safety	
Key Switch	Standard
Automatic Parking Brake	Standard
Battery Discharge Indicator	Standard
Emergency Stop	Standard
Hydraulic AutoTilt Coupling	Standard
Anti-Crush Button	Standard
Warning Horn	Standard
Two Stage Lock to Load	Standard
Options	
Additional AGM Battery	Optional
Flashing Safety Light and Motion Bleeper	Optional
Two Speed Selector Switch	Optional
Battery Protection System	Standard

**MasterMover®**

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UK  
CE ISO 9001 ISO 45001