

MasterMover®

SM100+

Battery powered electric tug



SM100+



Overview

Easily move wheeled loads weighing up to 2,000kg with the SmartMover range. Delivering effortless pushing, pulling and steering, the SmartMover improves safety, removes manual handling and drives operational efficiency.

With robust yet simple coupling systems, the SmartMover range ensures loads are secure and gives operators

complete control – even on slopes. Safety-focused, SmartMover electric tugs feature anti-crush functionality, emergency stop, variable speed settings and intuitive controls to keep operators, loads and equipment safe.

Benefit from versatility with various coupling options available, including a hydraulic clamp that delivers total load security.

Key Features

Safety

- Audible horn, flashing beacon, performance monitoring and emergency stop
- Intuitive parking brake stops loads, even on slopes
- Multiple speed settings for maximum control

Power

- Interchangeable, maintenance-free batteries for 24/7 operation
- Power display for real-time data
- Smart charging system to maximum battery longevity

Performance

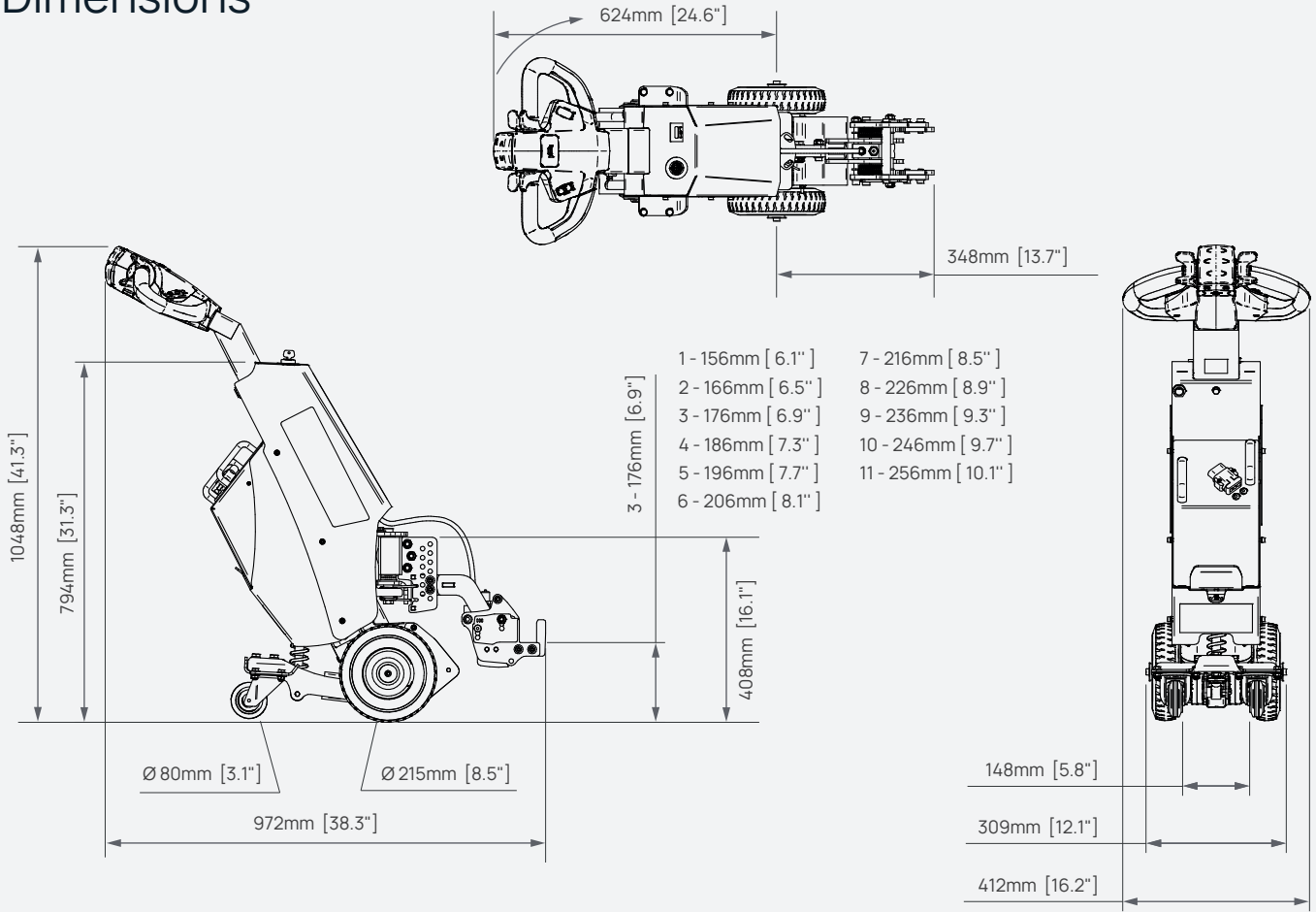
- Two high-powered motors for consistent performance
- 180° steering angle provides precise handling
- Powerful performance both indoors, outdoors and on slopes

Connection

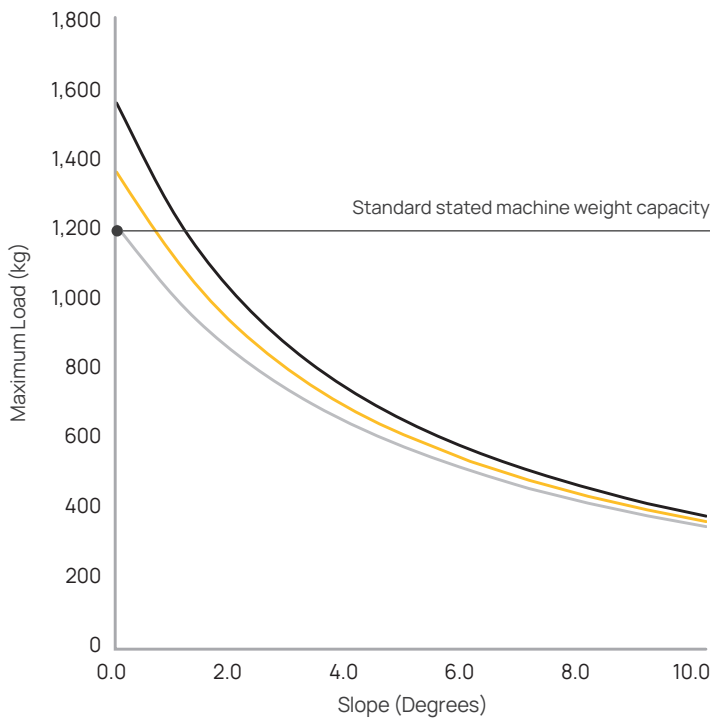
- Secure and easy-to-use coupling options, including hydraulics
- Variable coupling options for maximum flexibility
- Custom couplings available



Dimensions




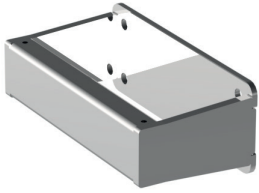
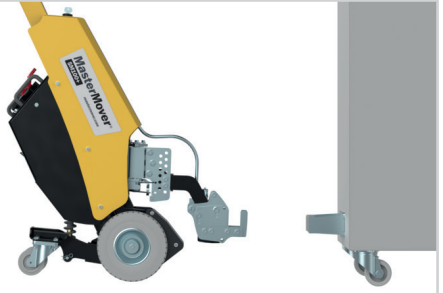
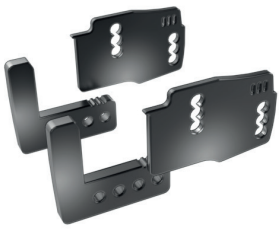
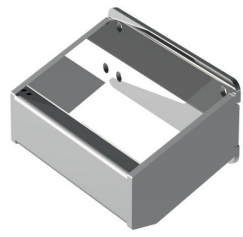
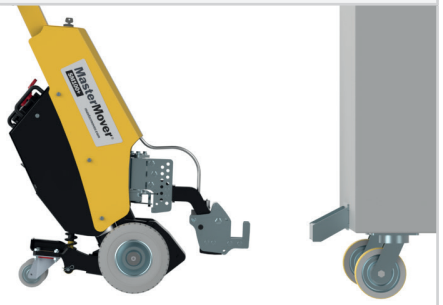
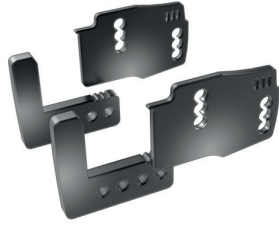
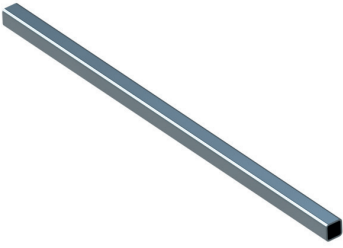
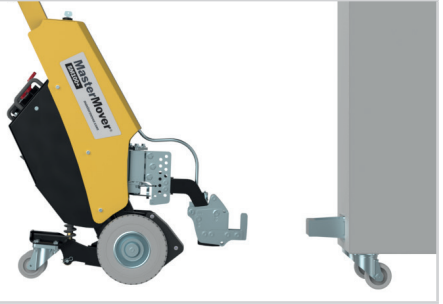
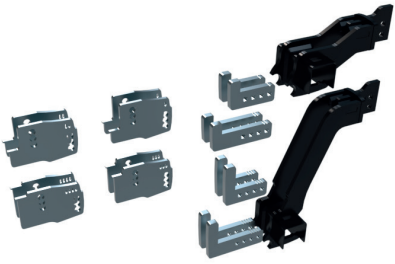


Slope Performance



Load Rolling Resistance*
 — 7% — 8% — 9%

* Other variables that affect load moving capability could include quality of floor/terrain and the type/condition/quality of load wheels.



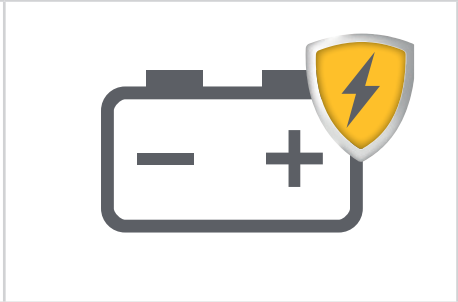
Couplings

<p>A-Frame Z35-00600 male Z35-00700 female - straight</p>		
		
<p>A-Frame Z35-00600 male Z35-00701 female - angled</p>		
		
<p>Box Section Sizes 20x20 to 75x75mm</p>		
		
<p>Variable Kit Z35-00601 male</p>	<p>Rollcage Pivot Link Bar</p>	<p>Xriss-Xcross Straps</p>
		


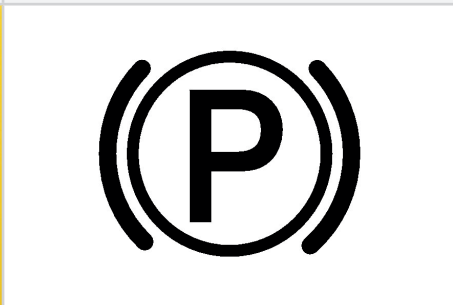
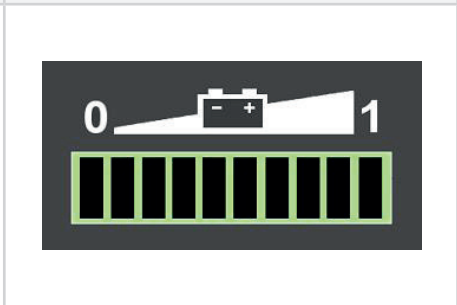


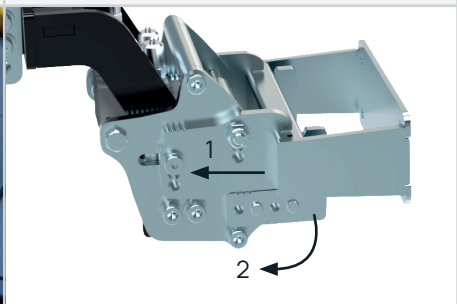
Custom Couplings

Where required, custom coupling solutions can be designed by our in-house Design and Engineering team.

Machine Options

Two Speed Selector Switch Z35-00500	Flashing Light & Motion Beeper Z35-00501	Battery Protection System
		

Machine Safety Features

Key Switch	Automatic Parking Brake	Battery Discharge Indicator
 A close-up photograph of a key switch. It features a black plastic handle with a keyhole, mounted on a blue circular base. The base is set against a yellow background. The handle is currently in the 'off' position, indicated by a small '0' above it. A '1' is visible on the right side of the base, indicating the 'on' position.	 A black and white symbol for an automatic parking brake. It consists of a large, bold letter 'P' centered within a circle. The circle is partially enclosed by two curved lines on the left and right sides, suggesting a brake pedal or a specific function.	 A diagram of a battery discharge indicator. At the top, a battery symbol with '-' and '+' signs is shown between a '0' on the left and a '1' on the right. Below this, a horizontal bar is divided into ten equal segments. The first seven segments from the left are filled with a light green color, while the remaining three segments on the right are empty, representing a charge level.
Anti-Crush Button	Warning Horn	Two Stage Lock and Load
 A photograph of a red and yellow plastic button. The button is rectangular with rounded corners and is mounted on a grey plastic housing. It is positioned on a control panel, likely for emergency stopping or anti-crush protection.	 A photograph of a yellow rectangular button with a black horn symbol embossed on it. The button is mounted on a grey plastic housing, serving as a warning horn control.	 A technical diagram of a two-stage lock and load mechanism. It shows a metal component with two distinct stages of operation. Stage 1 is indicated by a horizontal arrow pointing to the left, and Stage 2 is indicated by a curved arrow pointing downwards. The diagram illustrates how the mechanism can be locked in two different positions.

SM100+ Technical Specification

Machine	
Z Code	Z35-00101
Maximum load (on castors)	1,200 kg
Maximum push force	1,079 N
Maximum pull force	1,079 N
Combined machine & battery weight	79 kg
Drive type	Twin Electric Motor
Braking	Regenerative
Parking brake	Electromagnetic
Drive wheel type	Non-Marking Rubber
Castor wheel type	Non-Marking Polyurethane
Drive motor power	2 x 0.22 kW
Controller type	DC
Standard machine speed	4.2 KPH
Hare mode speed (With two speed selector switch)	5.4 KPH
Tortoise mode speed (With two speed selector switch)	1.8 KPH
Maximum possible machine speed	6 KPH
Maximum slope	30°
Voltage	24 v
Noise level	Motor ≤80 dBA Flashing light ≤85 dBA Horn ≤112 dBA
Metal work finish	Powder coat paint & zinc plated
IP rating	IP44
Wheel diameter	220 mm
Hydraulic Specification	
Clamp Force at the Coupling	387 kg
AGM Battery	
Z codes	Z35-00300
Battery pack capacity	22 Ah
Maximum distance per charge*	7.7 km
Charge time	4 hrs 30 mins
External Charger	
Input voltage	85 - 265 v
Hertz	50 - 60 Hz
Amps	5 A
Phase (single, three)	Single
IP Rating	IP30

SM100+ Technical Specification

Lithium Battery	
Z Code	Z35-00301
Battery pack capacity	39 Ah
Maximum distance per charge*	15.5 km
Charge time (External charger)	1 hrs 45 mins
External Charging	
Input voltage	85 - 265 v
Hertz	50 - 60 Hz
Amps	25 A
Phase (single, three)	Single
IP rating	IP30
Coupling	
A-Frame - Straight (male female)	Optional
A-Frame - Angled (male female)	Optional
Box Section	Optional
Variable Kit	Optional
Rollcage Pivot Link Bar	Optional
Xriss-Xcross Straps	Optional
Safety	
Key Switch	Standard
Automatic Parking Brake	Standard
Battery Discharge Indicator	Standard
Anti-Crush Button	Standard
Warning Horn	Standard
Two Stage Lock to Lock	Standard
Options	
Flashing Safety Light and Motion Bleeper	Optional
Two Speed Selector Switch	Optional
Battery Protection System	Standard

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CE ISO 9001 ISO 45001