



TT0450-M-BM BedMover M020

Hospitals and healthcare facilities require efficiency, safety, and ease of use when transporting patients. The BedMover is the perfect solution for effortlessly moving hospital beds, reducing physical strain on staff while ensuring maximum patient comfort.

This innovative, electrically powered transport system securely attaches to the bed frame using two sturdy grippers. Once connected, the operator can place the detachable control unit at the head of the bed, allowing for intuitive and precise control of the movement. With smooth acceleration and responsive handling, maneuvering through hospital corridors becomes easier than ever.

The BedMover is powered by a reliable LiFePO₄ battery, ensuring long-lasting performance without the need for frequent recharging. The battery is exchangeable to facilitate 24/7 operation. Its intuitive design makes it simple to operate, even for first-time users, while its built-in emergency braking system enhances safety, providing immediate stopping power when needed.

For even greater convenience, an optional ride-on skateboard attachment can be connected to

the head board, allowing operators to stand and ride along instead of walking behind the bed. This feature makes patient transport faster and reduces fatigue for healthcare staff, improving overall workflow efficiency.

With the capacity to transport loads adding up to 450 kilograms (1,000 lbs), the BedMover is a game-changer for hospitals, clinics, and care facilities looking to improve mobility, enhance safety, and reduce the physical demands on their staff. Reliable, easy to use, and designed with both patient and operator comfort in mind, the BedMover is the smart choice for modern healthcare environments.

Would you like to improve hospital efficiency while ensuring safety and ease of transport? The BedMover is here to help.

STANDARD / OPTIONAL EQUIPMENT

STANDARD

Standard:

- Travel speed 5.8 km/h (3.6 mph)
- Automatic parking brake
- Active braking
- Wall protecting rollers
- Grippers with safety quick release
- Ignition key
- Non-marking drive wheels
- LiFePO₄ smart battery 24V, 40Ah
- Safety switch on tiller head and drive unit
- High-precision digital battery indication
- Ergonomic joystick steering
- Quiet motor and spindle system

OPTIONAL

- Sturdy skateboard with smart coupling (max. 120kg)
- Twin caster wheels for additional stability
- Extra smart battery



Features

Frame:

- Metal components are made from double coated steel;
- Robust metal cover protects drive system and components;
- The tiller can be adjusted to provide a comfortable walking position behind the tug when it is not attached to a bed.

Braking System:

- Active braking by reversing the Drive Control Lever (Joystick);
- Smooth braking by releasing the Drive Control Lever (Joystick);
- Immediate full braking by pressing the emergency stop.



Battery:

- 40Ah LiFePO₄ smart battery with integrated battery management system;
- Ensures precise battery indication and optimal running time;
- Integrated LED charge indicator;
- Integrated CANOpen communication;
- Quick-change battery swapping system.

External Charger:

- Optimized charging process for maximum energy efficiency and lower energy costs;
 - High performance: optimal use of battery capacity;
 - Easy plug connection and fast charging.
- Input: 100-240Vac. Output: 25.6V, 12A.

Controls & Display:

- Multiple control switches grouped on the drive unit;
- Safety switch on top of drive unit and on the tiller head for optimal patient safety.



TECHNICAL DATA TTO450-M-BM M020

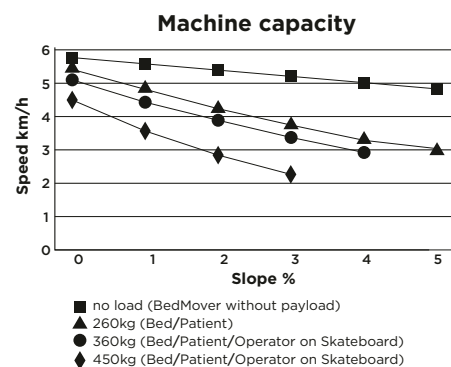
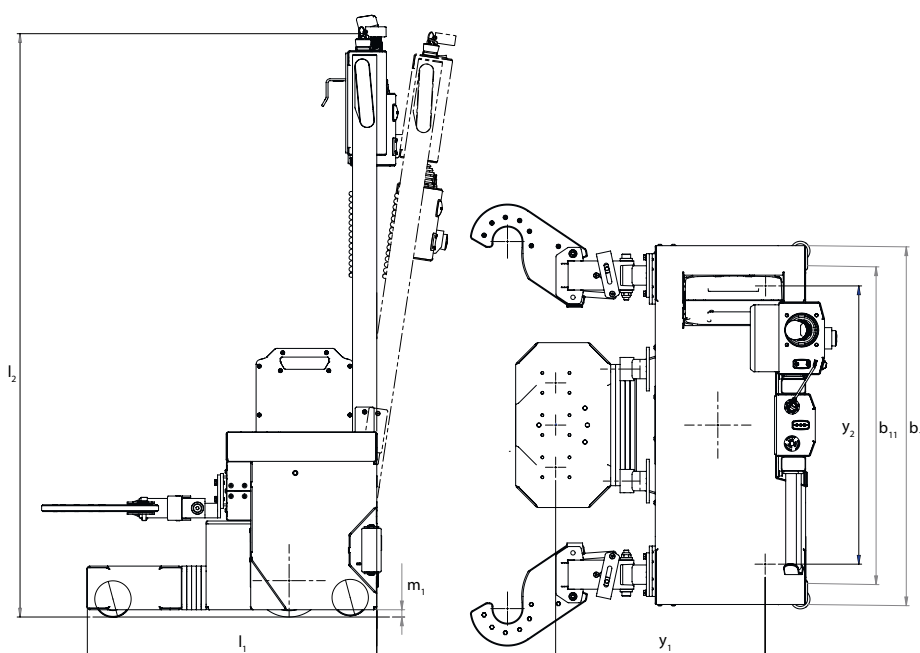
According to VDI 2198 in SI units.

Characteristics	1.1	Manufacturer		Movexx International B.V.
	1.2	Manufacturer's type designation		TTO450-M-BM
	1.3	Drive		Electric with LiFePO ₄ battery
	1.4	Operator type		Pedestrian
	1.5	Rated capacity/rated load	Q [t]	0.45
	1.7	Rated drawbar pull	F [N]	136
	1.9	Wheelbase	y [mm]	432
wt	2.1	Weight incl. battery		kg 100
Tyres/Chassis	3.1	Tyres	front/rear	PU/Solid Rubber Non-Marking
	3.2	Tyres size	front	mm 75
	3.3	Tyres size	rear	mm 150
	3.4	Auxiliary wheel size		mm 75
	3.5	Wheels, number (x = driven)	front/rear	1/x1
	3.6	Tread	front/rear	b ₁₀ /b ₁₁ [mm] -/574
Dimensions	4.9	Tiller height	min-max	h ₁₄ [mm] 1200
	4.15	Fork height	lowest/highest (stroke)	h ₁₃ [mm] 231/617(386)
	4.19	Overall length		l ₁ [mm] 600
	4.21	Overall width		b ₁ [mm] 740
	4.31	Ground clearance	front of machine	m ₁ [mm] 15
	4.32	Ground clearance	center of wheel base	m ₂ [mm] 15
Performance	5.1	Travel speeds forwards	with/without load	km/h 4.5 / 5.8
	5.1.1	Travel speed backwards	with/without load	km/h 4.5 / 5.8
	5.5	Max drawbar pull (S2 = 60 min)	with/without load	N 136
	5.6	Max drawbar pull (S2 = 5 min)	with/without load	N 273
	5.8	Maximum slope (0,2 min)	with/without load	% 3.0 / 5.0
	5.10	Service brake		Electromagnetic
Drive	6.1	Drive motor output (S2 = 60 min)		kW 0.13
	6.4	Battery voltage/nominal capacity		V/Ah 24/40
	6.5	Battery weight +/- 5%		kg 7.7
Other	8.1	Type of drive unit		DC
	10.7	Sound level at operator's ear		dB(A) <65

* The maximum payload is affected by the type of slope, operating time and floor type. See the graphic below for an indication of the allowable slope to load ratio (depending on slope surface/wheel type/machine weight).

** The maximum load [N] is determined by the engine power of the machine but is affected by the type of wheels of the machine and of the towed load, the type of surface and the drivable weight of the machine.

*** All values in this table have a tolerance of +/- 5%.



TECHNICAL DATA TTO450-M-BM M020

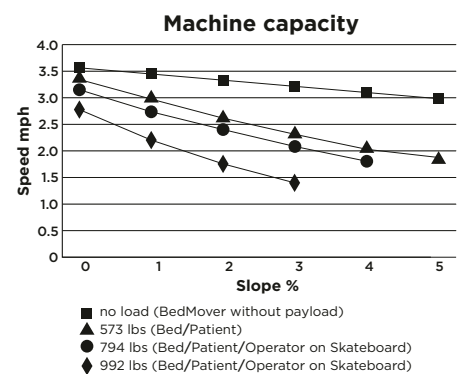
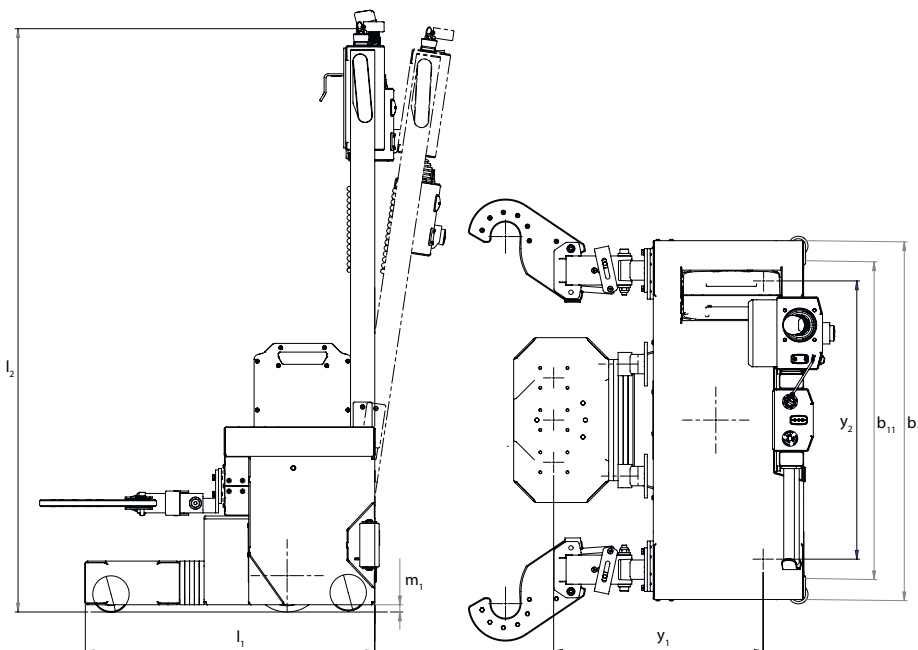
According to VDI 2198 in USCS units.

Characteristics	1.1	Manufacturer		Movexx International B.V.
	1.2	Manufacturer's type designation		TTO450-M-BM
	1.3	Drive		Electric with LiFePO ₄ battery
	1.4	Operator type		Pedestrian
	1.5	Rated capacity/rated load	Q [tn(US)]	0.5
	1.7	Rated drawbar pull	F [lbf]	30.6
	1.9	Wheelbase	y [in]	17
wt	2.1	Weight incl. battery		lb 220
Tyres/Chassis	3.1	Tyres	front/rear	PU/Solid Rubber Non-Marking
	3.2	Tyres size	front	in 3
	3.3	Tyres size	rear	in 5.9
	3.4	Auxiliary wheel size		in 3
	3.5	Wheels, number (x = driven)	front/rear	1/x1
	3.6	Tread	front/rear	b ₁₀ /b ₁₁ [in] -/22.5
Dimensions	4.9	Tiller height	min-max	h ₁₄ [in] 1200
	4.15	Fork height	lowest/highest, (stroke)	h ₁₃ [in] 9.1/24.3 (15.2)
	4.19	Overall length		l ₁ [in] 23.5
	4.21	Overall width		b ₁ [in] 29.1
	4.31	Ground clearance	front of machine	m ₁ [in] 0.6
	4.32	Ground clearance	center of wheel base	m ₂ [in] 0.6
Performance	5.1	Travel speeds forwards	with/without load	mph 2.8/3.6
	5.1.1	Travel speed backwards	with/without load	mph 2.8/3.6
	5.5	Max drawbar pull (S2 = 60 min)	with/without load	lbf 30.6
	5.6	Max drawbar pull (S2 = 5 min)	with/without load	lbf 61.4
	5.8	Maximum slope (0.2 min)	with/without load	% 3.0/5.0
	5.10	Service brake		Electromagnetic
Drive	6.1	Drive motor output (S2 = 60 min)		hp 0.18
	6.4	Battery voltage/nominal capacity		V/Ah 24/40
	6.5	Battery weight +/- 5%		lb 17
Other	8.1	Type of drive unit		DC
	10.7	Sound level at operator's ear		dB(A) <65

* The maximum payload is affected by the type of slope, operating time and floor type. See the graphic below for an indication of the allowable slope to load ratio (depending on slope surface/wheel type/machine weight).

** The maximum load [lbf] is determined by the engine power of the machine but is affected by the type of wheels of the machine and of the towed load, the type of surface and the drivable weight of the machine.

*** All values in this table have a tolerance of +/- 5%.





Movexx International BV. reserves the right to make adjustments to this publication at any time, without notice or obligation. Data in this publication are for reference use only. It is the responsibility of the reader of this information to verify any and all information presented herein. All Images of products shown in this document are indicative only. The actual products may differ from the displayed image. No rights can therefore be derived from the images shown. For more information contact us at info@movexx.com.

movexx
smart electric tugs

Generatorstraat 17-19
3903 LH Veenendaal
The Netherlands

T +31 (0)318 51 99 00
E info@movexx.com
I www.movexx.com