

TWS-200i/300i

Walkie Electric Lithium-Powered Tow Tractor



NEW *Noblelift Products*
ARRIVAL



ELEVEX™
Material Handling Solutions

Innovative towing concept

Safe, versatile and user-friendly series of towing tractors TWS with unique modular design allows flexible configurations targeted on specific application needs. Suitable for use in commercial and light industrial environments: supermarkets, warehouses, logistic centers, various industrial facilities; capable of moving light construction, agricultural equipment and many more.

The truck is built out of several standard modules, which can be combined in various combinations:

Front wheel control module with the tiller head and universal steering formula, switchable between fixed tiller position (when tiller is locked in the centerline and not linked to the steering wheel) and steering control position (when tiller controls the steering angle of the wheel as well as moving direction).

Control module with battery compartment, which can be configured for use with selection of batteries, included to the EDGE model range, EDGE Pro model range or, alternatively, big capacity non-replaceable battery. The control module optionally can be equipped with integrated charger and remote-control unit.

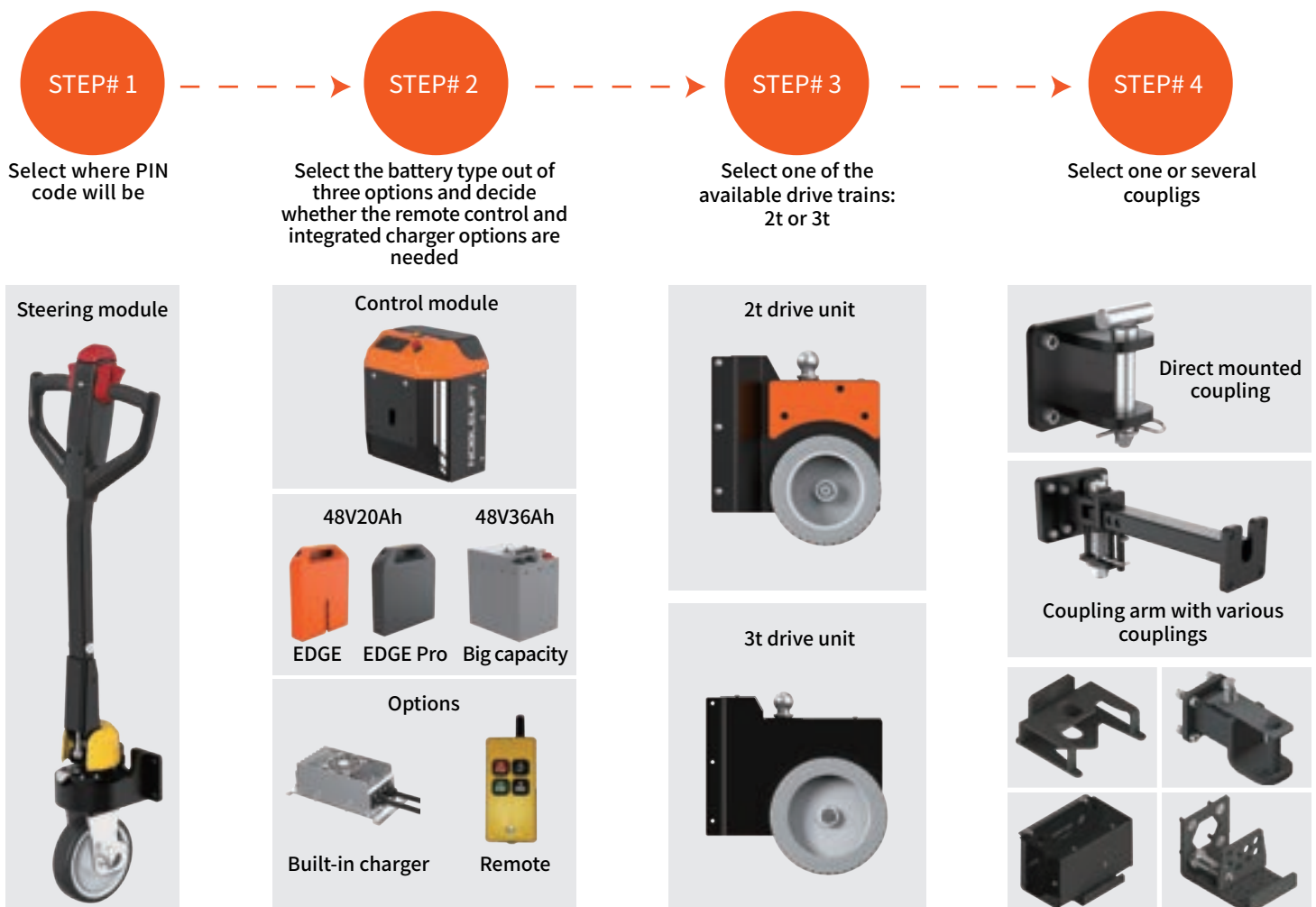
Drive modules designed for different towing capacities with soft solid non-marking rubber wheels having diameter 250 mm for 2t capacity and 300 mm for 3t capacity. The drive module is detachable from the control module (assembled), which allow to achieve flexibilities in configurations.

Various couplings that can be attached directly to the drive module or via the coupling arm.

Trailer ball coupling located on the top of drive unit.

The selected innovative design approach allows the trucks to be configured and tailored to required applications by local distributors. Additionally, this approach provide high level of flexibility in customization projects.

Built your own solution in several simple steps

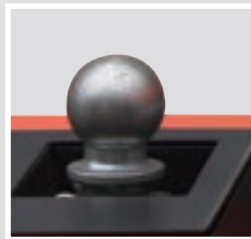


Standard couplings



Standard towing frame coupling

The standard frame has opening of 56 mm. The connection is made by manually released security pin with diameter of 25 mm, which can be secured in its position by pin.



Trailer ball coupling

Standard configuration of TWS trucks includes the trailer ball coupling, which height can be manually adjusted. The size of the ball is 50.8 mm (57.8 mm available).

Optional solutions



Coupling arm can be fixed with towing tractor and adjusted vertically on its sliding guides stepless. It is equipped with centering spring on rotating hinge. The arm can be mounted to the towing tractor by its either flange depending on your application needs.

To the free end of coupling arm various couplings can be mounted. Refer to selection of offered couplings on the right side.

It is also possible to install customized couplings which can be mounted to the flange with help of screws. The pattern of holes is 60x60 mm, the diameter of holes is 8,5 mm.



Manual coupling

The coupling with effective height of hooking plate 25 mm is customizable through repositioning of clamping bracket within the nominal range 25-60 mm, the decoupling is prevented with help of spring-loaded pin with manual release, which position is adjustable through reposition to one of the available holes.



Pin coupling

The pin coupling is equipped with top holding spring loaded bracket, preventing decoupling of trailers. The diameter of pin is 20 mm, available nominal height of pin under the holding bracket is 70 mm.



Special coupling

Coupling for pin connectors used on various trolleys and towing containers.



Electric coupling

The coupling is equipped with linear actuator allowing to make coupling/decoupling operations from the tiller of towing tractor.

PIN code lock on tiller or chassis



Features



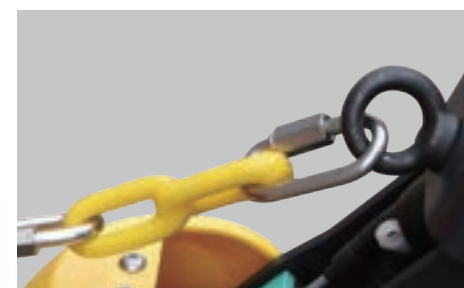
The truck is equipped with signal beacon for additional safety in working areas.



The emergency switch is located on top front surface, next to PIN code panel, if it is placed on the chassis.



The covers of the truck are made out of stamped steel and secure the internal components from various impacts. If truck is equipped with fast replaceable battery, the hinged battery cover can be opened giving access to the battery.



In steering mode with central fixed tiller position, when ball trailer coupling is used, the truck may experience the lifting of front wheel, in this case the additional chain can be connected to the tiller bar, which will allow operator to generate extra force during application.



Optionally the truck can be equipped by integrated charger, the plug holder ensures that the truck can't be operated until the plug is securely placed in its storing position.

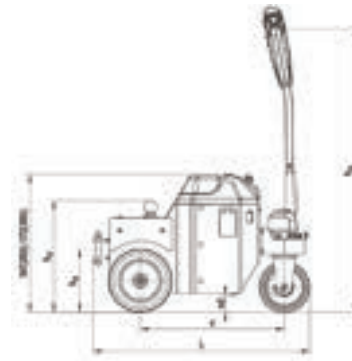
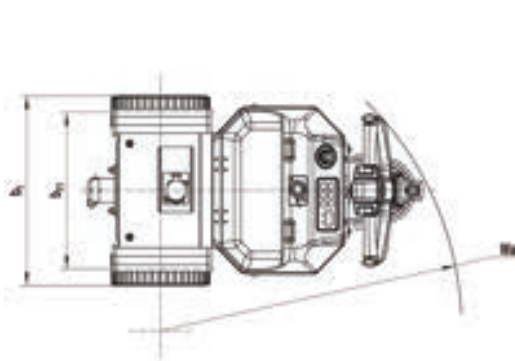


The connector for adjustment of controller's parameters and diagnostics is located behind the removable plastic cover and easily accessible from outside.



The switch between two different steering modes is realized in two steps:

- ① the locking pin is switching the system between two positions (free rotation of front wheel or connection with steering handle),
- ② the axle on the front wheel need to be switched between dedicated positions to ensure correct system work. The switch can be made without tools in less than 30 seconds.



Type sheet for industrial truck acc. to VDI 2198

NO.20250611

Distinguishing mark

1.2	Manufacturer's type designation		TWS-200i	TWS-300i
1.3	Power (battery, diesel, petrolgas, manual)		Battery	Battery
1.4	Operator type		pedestrian	pedestrian
1.5	Load Capacity / rated load	Q (t)	2.0	3.0
1.7	Rated drawbar pull	F (N)	400	600
1.9	Wheelbase	Y(mm)	570	626

Weight

2.1	Service weight (without battery)	kg	190	327
2.3	Axle loading, unladen front/ rear	kg	65/125	103/224

Tires, Chassis

3.1	Tires		Rubber	Rubber
3.2	Tire size, front	Øxw(mm)	Ø200X50	Ø200X50
3.3	Tire size, rear	Øxw(mm)	Ø250X80	Ø300X80
3.5	Wheels, number front/rear (x=driven wheels)		1+2X	1+2X
3.7	Tread, rear	b11 (mm)	386	512

Dimensions

4.9	Height of tiller in drive position min. / max.	h14 (mm)	750/1120	750/1120
4.12	Coupling height	Towing pin	h10 (mm)	160-300
		Towing ball	h10 (mm)	440/465
4.19	Overall length	l1(mm)	880	950
4.21	Overall width	b1(mm)	466	592
4.32	Ground clearance, centre of wheelbase	m2 (mm)	72	94
4.35	Turning radius	Wa (mm)	770	950

Performance data

5.1	Travel speed, laden/ unladen	km/h	4.0/4.8	4.5/5.0
5.5	Drawbar pull, laden/ unladen	N	400/-	600/-
5.6	Max. drawbar pull, laden/ unladen	N	800/-	1600/-
5.10	Service brake		Electromagnetic	Electromagnetic

Electric- motor

6.1	Drive motor rating	kW	0.5	1.3
6.3	Battery acc. to DIN 43531/ 35/ 36 A, B, C, no		No	No
6.4	Battery voltage, nominal capacity K5	V/Ah	48/20(48/36)	48/20(48/36)
6.5	Battery weight	kg	7.7 (18)	7.7 (18)

Additional data

8.1	Type of drive control		BLDC	BLDC
8.4	sound level at driver's ear acc. to EN 12053	dB(A)	<70	<70

