



# TVL202

## 80V DUAL-DRIVE THREE-WHEEL COUNTERBALANCE FORKLIFT 2.0T

2000 kg 6000 mm 80 V Li-Ion



The TVL202 is a 80V lithium-ion 3 wheels forklift purpose-built for loading, unloading and stock goods on production plants, retail storage and logistics hub including low-ceiling warehouse environments thanks to the overhead guard height below 2 meters. Its compact chassis and tight turning radius enable agile operation in confined aisles, while the dual 80V PMS motors ensure stable power output for smooth lifting and acceleration. TVL offers energy-efficient operation, minimal noise, and outstanding operator comfort — even in continuous-use applications.

SPECIFICATION	REF	UNIT	VALUE
Battery type			Li-Ion
Battery nominal capacity K5		Ah	150
Battery voltage		V	80
Rated capacity	Q	kg	2000
Load centre distance	c	mm	500
Service weight		kg	3483
Height, mast lowered	$h_1$	mm	1995
Lift	$h_3$	mm	3000
Height, mast extended	$h_4$	mm	4054
Overall length	$l_1$	mm	3075
Overall width	$b_1/b_2$	mm	1176
Length to face of forks	$l_2$	mm	2025
Fork dimensions	s/e/l	mm	40X122X1070
Turning radius	$W_a$	mm	1641
Manufacturer			EP
Model designation			TVL202

# Features

## Innovative integral cast chassis for superior stability

The TVL182/202 is built on EP's self-developed integral cast chassis design, which means there's no longer a joint interface between chassis and counterweight. It delivers outstanding structural strength and a naturally lower center of gravity. This ensures excellent truck stability even under full load and at high lift heights, while minimizing vibration and mast shaking. The robust frame further enhances durability, extending the service life of the truck.



## Compact size for operations in low-clearance and tight spaces

With an overall height of less than 2,000mm, the TVL182/202 is designed for seamless operation in confined spaces such as containers, underground garages, and low-ceiling warehouses. Combined with a tight turning radius of just 1,641 mm (TVL182), this compact truck offers agility, enabling operators to retrieve and stack efficiently in areas where conventional forklifts simply cannot fit.

## 80V Dual drive motors and PMSM technology

Equipped with 80V dual drive motors and advanced Permanent Magnet Synchronous Motor (PMSM) technology, the TVL182/202 delivers sensitive steering and up to 10-15% energy savings compared with conventional forklifts.

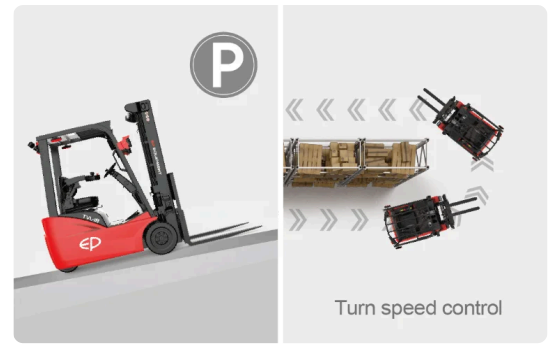


## Dual charging flexibility

The lithium-powered TVL182/202 is equipped as standard with an 80V/35A internal single phase charger and the plug for external charger connection. Selection of external single phase or three-phase chargers with power up to 80V 100A give operators flexible and efficient charging options for all working scenarios.

## Safety-guaranteed functions

Safety is further supported by automatic stop on ramp, electromagnetic parking brake and turn speed control, making every turn and stop at ramp secure.



## Effortless and precise control

Multiple functions are integrated into the armrest, within easy reach at the palm-sized control area, operated via fingertip or joystick, and include:

forward/reverse direction switch, lifting/lowering, tilting, sideshift and 4th way, horn, turning light switch, storage box with USB port, emergency switch.

The proportional hydraulic valve ensures precise control of all hydraulic functions without affecting steering behaviour



## Ergonomic and spacious operator workplace

The new chassis layout creates a larger operating space, giving drivers more legroom and comfort during long shifts. Combined with a wide-view mast and optimized overhead guard design, the TVL182/202 provides excellent visibility and minimizes blind spots, ensuring both a comfortable and safe driving experience.



## VDI Chart

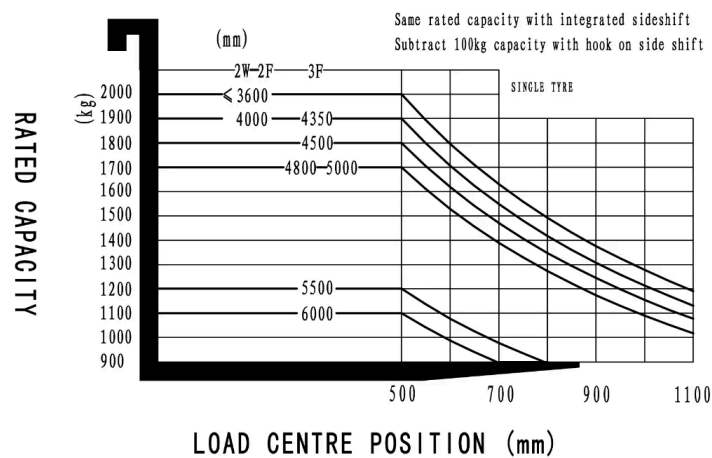
	SPECIFICATION	REF	UNIT	VALUE
1.1	Manufacturer			EP
1.2	Model designation			TVL202
1.3	Drive			Electric
1.4	Operator type			Seated
1.5	Rated capacity	Q	kg	2000
1.6	Load centre distance	c	mm	500
1.8	Load distance, centre of drive axle to fork	x	mm	382
1.9	Wheelbase	y	mm	1400
2.1	Service weight		kg	3483
2.2	Axle loading, laden front/rear		kg	4844/639
2.3	Axle loading, unladen front/rear		kg	1584/1899

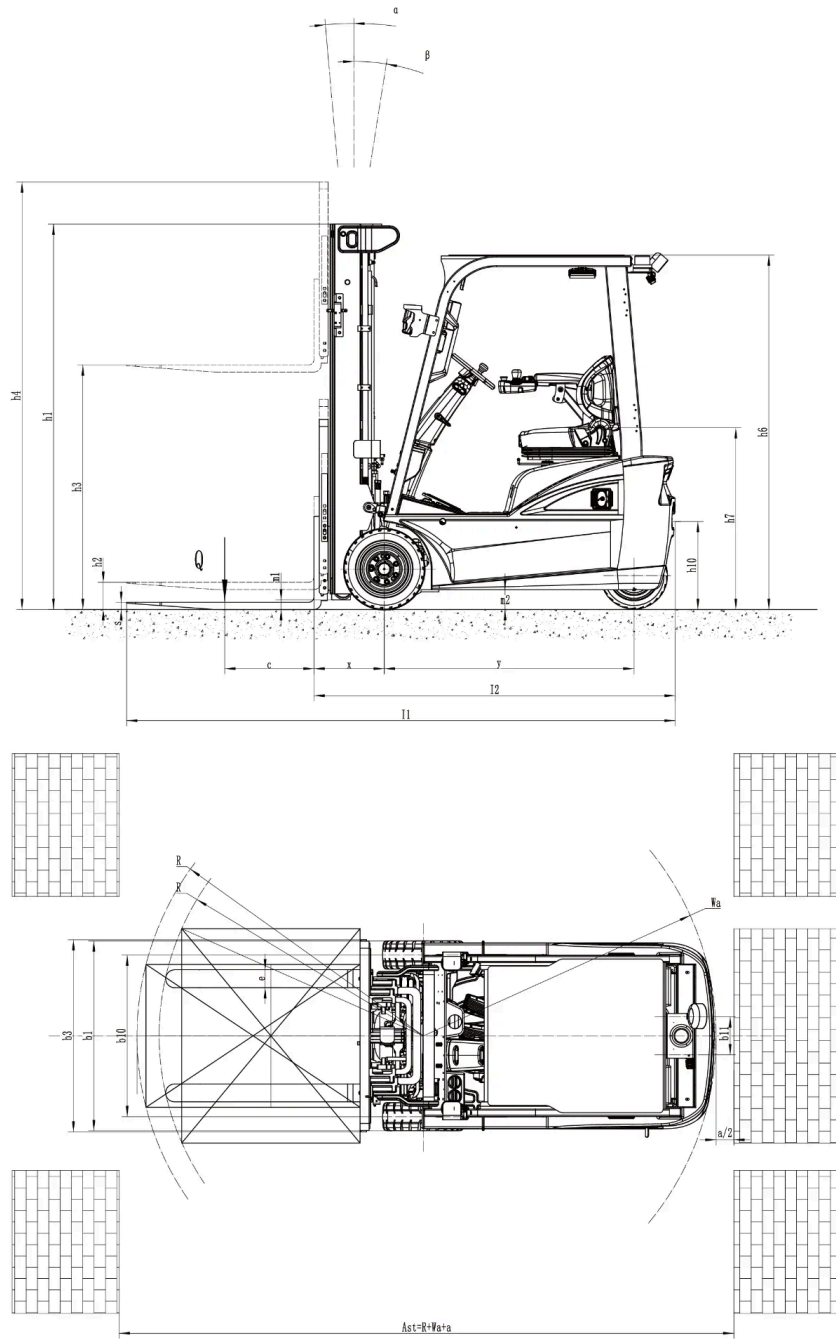
SPECIFICATION		REF	UNIT	VALUE
3.1	Tyres			Solidrubber
3.2	Tyre size, front		mm	200/50-10
3.3	Tyre size, rear		mm	140/55-9
3.5	Wheels, number front/rear (x=drive wheels)			2x/2
4.1	Tilt of mast/fork carriage forward/backward		°	5/5
4.2	Height, mast lowered	$h_1$	mm	1995
4.3	Free lift	$h_2$	mm	100
4.4	Lift	$h_3$	mm	3000
4.5	Height, mast extended	$h_4$	mm	4054
4.7	Height of overhead guard (cabin)	$h_6$	mm	1984
4.8	Seat height relating to SIP/stand height	$h_7$	mm	1017
4.12	Coupling height	$h_{10}$	mm	492
4.19	Overall length	$l_1$	mm	3075
4.20	Length to face of forks	$l_2$	mm	2025
4.21	Overall width	$b_1/b_2$	mm	1176
4.22	Fork dimensions	$s/e/l$	mm	40X122X1070
4.23	Fork carriage ISO 2328, class/type A, B			2A
4.24	Fork carriage width		mm	1040
4.31	Ground clearance, laden, below mast		mm	90
4.32	Ground clearance, centre of wheelbase	$m_2$	mm	110
4.34.1	Aisle width for pallets 1000×1200 crossways	$A_{st}$	mm	3320
4.34.2	Aisle width for pallets 800 × 1200 lengthways	$A_{st}$	mm	3446
4.35	Turning radius	$W_a$	mm	1641
5.1	Travel speed, laden/unladen		km/h	13/14
5.2	Lift speed, laden/unladen		m/s	0.32/0.4
5.3	Lowering speed, laden/unladen		m/s	0.43/0.45
5.8	Max. gradeability, laden/unladen		%	15/17
5.10	Service brake			Electromagnetic
5.11	Parking brake			Electromagnetic
6.1	Drive motor rating S2 60 min		kW	5.0X2
6.2	Lift motor rating at S3 15%		kW	16
6.4	Battery nominal capacity K5		Ah	150
6.4	Battery voltage		V	80
6.4.1	Battery type			Li-Ion

	SPECIFICATION	REF	UNIT	VALUE
6.5	Battery weight		kg	165
6.6	Energy consumption according to DIN EN 16796		kWh/h	5.85 <sup>1)</sup>
6.7	Turnover output according to VDI 2198			112
6.8	Turnover efficiency according to VDI 2198			22.72
8.1	Type of drive unit			PMSM
10.1	Operating pressure for attachments		bar	180
10.2	Oil volume for attachments		ℓ/min	35
10.5	Steering design			Hydraulic
10.7	Sound pressure level at the driver's seat		dB(A)	65
15.1	Charger output current		A	35

## VDI Drawing

### RATED CAPACITIES AND LOAD CENTERES GRAPH





## Mast Options

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	MAST EXTENDED HEIGHT, NO BACKREST (H4, MM)	MAST EXTENDED HEIGHT, WITH BACKREST (H4, MM)	FREE LIFT HEIGHT, NO BACKREST (H2, MM)	FREE LIFT HEIGHT, WITH BACKREST (H2, MM)
2-Standard Mast	3000	1995	3665	4054	100	100
2-Standard Mast	3600	2295	4265	4654	100	100

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	MAST EXTENDED HEIGHT, NO BACKREST (H4, MM)	MAST EXTENDED HEIGHT, WITH BACKREST (H4, MM)	FREE LIFT HEIGHT, NO BACKREST (H2, MM)	FREE LIFT HEIGHT, WITH BACKREST (H2, MM)
2-Standard Mast	4000	2545	4665	5054	100	100
2-Free Mast	3000	1995	3665	4054	1360	970
2-Free Mast	3600	2295	4265	4655	1660	1270
2-Free Mast	4000	2545	4665	5055	1910	1520
3-Free Mast	4350	2010	5015	5404	1375	835
3-Free Mast	4500	2060	5165	5554	1425	1035
3-Free Mast	4800	2160	5465	5854	1525	1135
3-Free Mast	5000	2225	5665	6054	1590	1200
3-Free Mast	5500	2395	6165	6554	1760	1370
3-Free Mast	6000	2610	6665	7054	1975	1585

## Options

ITEM	OPTIONS (optional items marked in yellow)
Fork dimension	122*40*1070   122*40*920   122*40*1150   122*40*1200   122*40*1220   122*40*1370   122*40*1500   122*40*1670   122*40*1820
Fork carriage height option	1067mm (42in)   1220mm (48in)   1520mm (60in)   Yes and not customized
Front wheel material	Normal solid   Traceless solid
Rear wheel material	Normal solid   Traceless solid
Battery capacity	80V150AH   80V230AH
Charger	80V-35A Internal   80V100A External
Battery display indicator (BDI)	With hourmeter (Bluetooth) without PSE
Attachments	No   Built-in sideshifter   External shifter   Fork positioner with sideshift
Traction pin	Yes and not customized
Anti-static chain	Yes
Front lamp	LED
Rear lamp	No   LED
Blue lamp	No   Front   Rear   Front and rear
Area warning lamp	No   Both side   Both side and rear

ITEM	OPTIONS (optional items marked in yellow)
Rearview mirror	One in front   Two on side and one in front
Buzzer	Yes and not customized
OPS system	Yes and not customized
USB interface	Cigarette lighter socket   USB dual port
Telematics	Yes and not customized
Cabin	No   Basic half-cabin   Upgrade full-cabin   Full cabin
Proportional lift system	Yes and not customized
Overhead guard	Yes and not customized
Special AUS/NZ options	No   Yes and not customized (Only for Australia standard)
Operator identification device	No   Card reader   Fingerprint lock
Lifting electronic limit	No   Yes and not customized
Hydraulic control	Electromagnetic
Rear armrest horn	No   Yes and not customized
Wiper water unit	No   Yes, only with cabin and not customized