

# TVL182

## 80V DUAL-DRIVE THREE-WHEEL COUNTERBALANCE FORKLIFT 1.8T

 1800 kg    6000 mm    80 V Li-Ion



The TVL182 is 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 |                                | Ah   | 80/150-230 |
| Battery voltage          |                                | V    | 80         |
| Load capacity            | Q                              | kg   | 1800       |
| Load centre distance     | c                              | mm   | 500        |
| Service weight           |                                | kg   | 3283       |
| Retracted mast height    | h <sub>1</sub>                 | mm   | 1995       |
| Lift height              | h <sub>3</sub>                 | mm   | 3000       |
| Height, mast extended    | h <sub>4</sub>                 | mm   | 4054       |
| Overall length           |                                | mm   | 3075       |
| Overall width            | b <sub>1</sub> /b <sub>2</sub> | mm   | 1076       |
| Length to face of forks  | l <sub>2</sub>                 | mm   | 2025       |
| Fork dimensions          | s/e/l                          | mm   | 40*100*920 |
| Turning radius           |                                | Wa   | 1641       |
| Model designation        |                                |      | TVL182     |
| Drive                    |                                |      | Electric   |

# 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 1,641mm (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 with advanced Permanent Magnet Synchronous Motor (PMSM) technology, the TVL182/202 delivers sensitive steering and up to 10-15% energy savings compared with conventional forklifts.



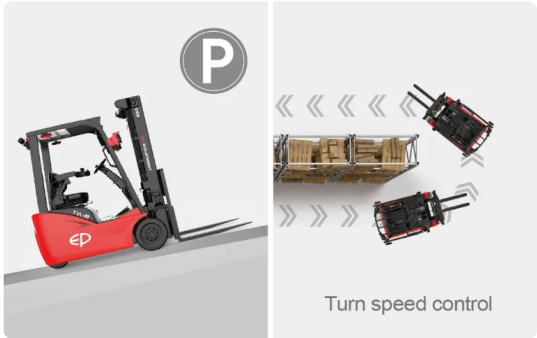


### Dual charging flexibility

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

The TVL182/202 features joystick control as standard and fingertips as an option. Positioned at the end of armrest, all operations can be done just with fingers, increasing precision and ergonomics.

### 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

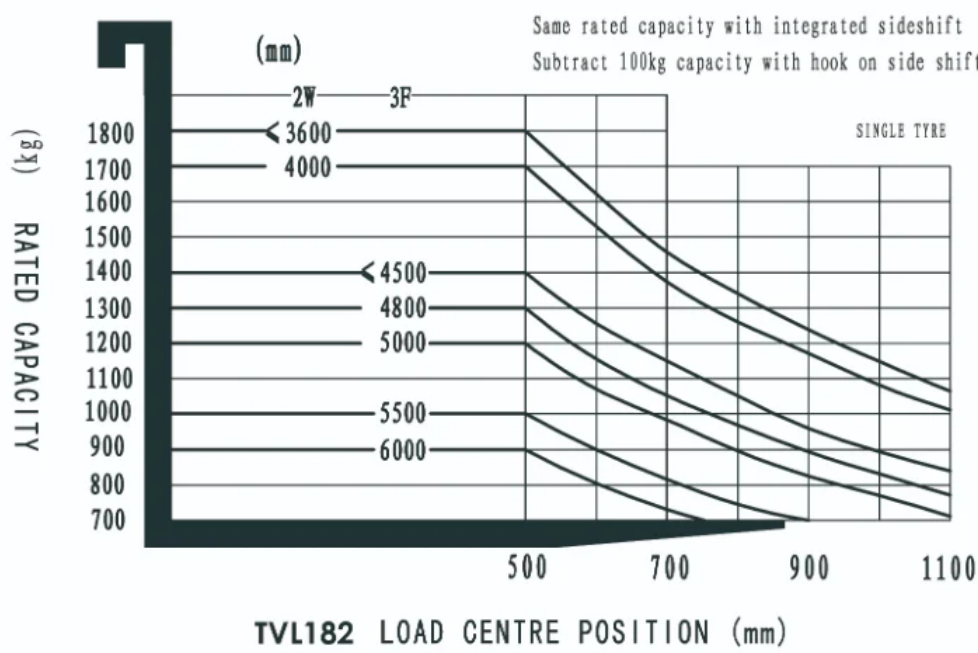
| SPECIFICATION |                   | REF | UNIT | VALUE    |
|---------------|-------------------|-----|------|----------|
| 1.2           | Model designation |     |      | TVL182   |
| 1.3           | Drive             |     |      | Electric |
| 1.4           | Operator type     |     |      | Seated   |
| 1.5           | Load capacity     | Q   | kg   | 1800     |

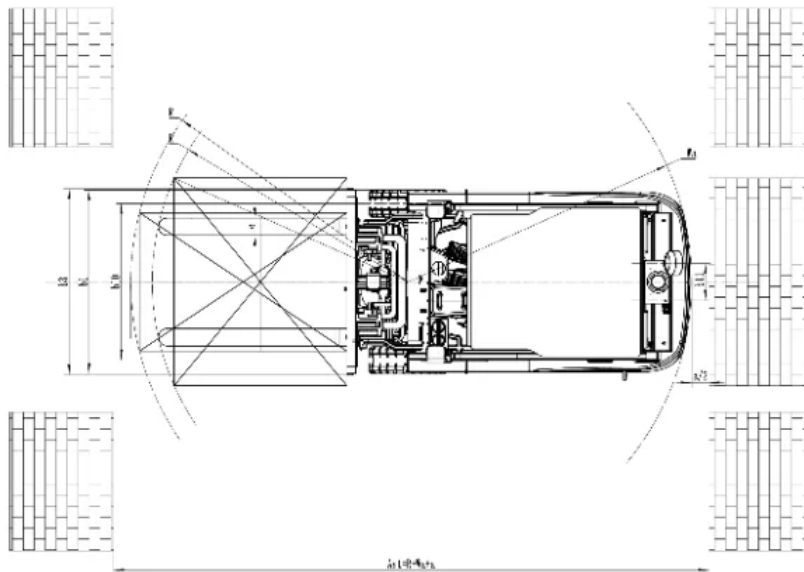
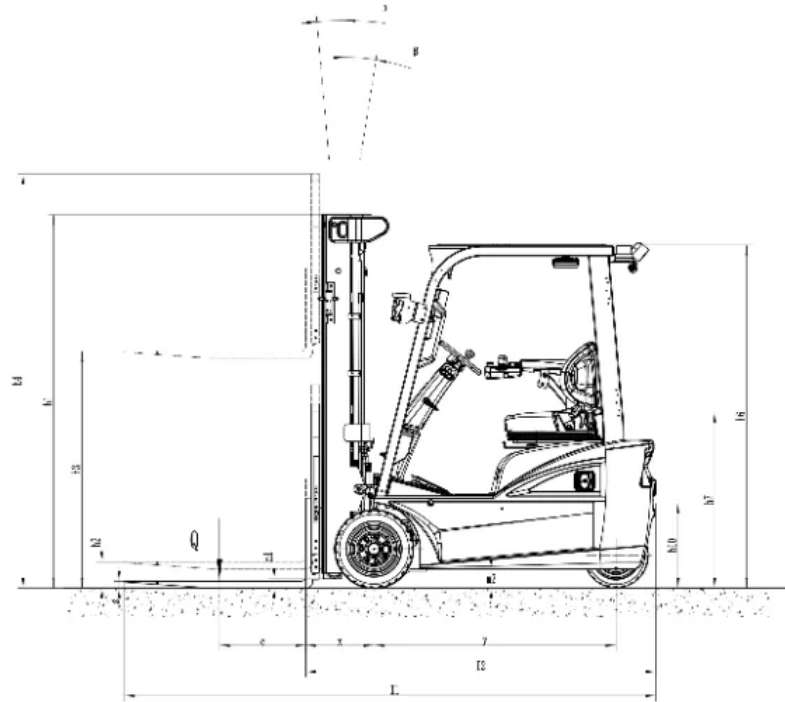
|        | SPECIFICATION                               | REF                            | UNIT | VALUE           |
|--------|---------------------------------------------|--------------------------------|------|-----------------|
| 1.6    | Load centre distance                        | C                              | mm   | 500             |
| 1.8    | Load distance, centre of drive axle to fork |                                | mm   | 382             |
| 1.9    | Wheelbase                                   |                                | mm   | 1400            |
| 2.1    | Service weight                              |                                | kg   | 3283            |
| 2.2    | Axle loading, laden front/rear              |                                | kg   | 4504/579        |
| 2.3    | Axle loading, unladen front/rear            |                                | kg   | 1570/1713       |
| 3.1    | Tyre type                                   |                                |      | Solidrubber     |
| 3.2    | Tyre size, front                            |                                | mm   | 18*7-8          |
| 3.3    | Tyre size, rear                             |                                | mm   | 140/55          |
| 3.5    | Wheels, number front/rear (x=drive wheels)  |                                |      | 2x/2            |
| 4.0    | Max lift height                             | H                              | mm   | 6000            |
| 4.1    | Tilt of mast/fork carriage forward/backward |                                | °    | 5/5             |
| 4.12   | Tow coupling height                         |                                | mm   | 492             |
| 4.19   | Overall length                              |                                | mm   | 3075            |
| 4.2    | Retracted mast height                       | h <sub>1</sub>                 | mm   | 1995            |
| 4.20   | Length to face of forks                     | l <sub>2</sub>                 | mm   | 2025            |
| 4.21   | Overall width                               | b <sub>1</sub> /b <sub>2</sub> | mm   | 1076            |
| 4.22   | Fork dimensions                             | s/e/l                          | mm   | 40*100*920      |
| 4.23   | A,B Fork carriage class/type A, B           |                                |      | 2A              |
| 4.24   | Fork carriage width                         |                                | mm   | 1040            |
| 4.3    | Free lift                                   |                                | mm   | 100             |
| 4.31   | Ground clearance, laden, below mast         |                                | mm   | 90              |
| 4.32   | Ground clearance, centre of wheelbase       |                                | mm   | 110             |
| 4.34.1 | Aisle width for pallets 1000×1200 crossways |                                | Ast  | 3320            |
| 4.34.2 | Aisle width for pallets 800×1200 lengthways |                                | Ast  | 3446            |
| 4.35   | Turning radius                              |                                | Wa   | 1641            |
| 4.4    | Lift height                                 | h <sub>3</sub>                 | mm   | 3000            |
| 4.5    | Height, mast extended                       | h <sub>4</sub>                 | mm   | 4054            |
| 4.7    | Height of overhead guard (cabin)            |                                | mm   | 1984            |
| 4.8    | Seat height/standing height                 |                                | mm   | 1017            |
| 5.1    | Travel speed, laden/unladen                 |                                | km/h | 13/14           |
| 5.10   | Service brake                               |                                |      | Electromagnetic |
| 5.11   | Parking brake                               |                                |      | Electromagnetic |
| 5.2    | Lifting speed, laden/unladen                |                                | m/s  | 0.35/0.42       |
| 5.3    | Lowering speed, laden/unladen               |                                | m/s  | 0.43/0.45       |

|       | SPECIFICATION                           | REF | UNIT  | VALUE      |
|-------|-----------------------------------------|-----|-------|------------|
| 5.8   | Max. gradeability, laden/unladen        |     | %     | 15/17      |
| 6.1   | Drive motor rating S2 60 min            |     | kW    | 5*2        |
| 6.2   | Lift motor rating at S3 15%             |     | kW    | 13         |
| 6.4   | Battery nominal capacity                |     | Ah    | 80/150-230 |
| 6.4   | Battery voltage                         |     | V     | 80         |
| 6.4.1 | Battery type                            |     |       | Li-Ion     |
| 8.1   | Type of drive control                   |     |       | PMSM       |
| 10.5  | Steering design                         |     |       | Hydraulic  |
| 10.7  | Sound pressure level at the drivers ear |     | 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) | FORWARD TILT (A, DEG) | BACKWARD TILT (B, MM) | LOAD DISTANCE (X, KG) |
|-----------------|----------------------|------------------------------|--------------------------------------------|----------------------------------------------|----------------------------------------|------------------------------------------|-----------------------|-----------------------|-----------------------|
| 2-Standard Mast | 3000                 | 1995                         | 3665                                       | 4054                                         | 100                                    | 100                                      | 5                     | 5                     | 382                   |

| 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) | FORWARD TILT (A, DEG) | BACKWARD TILT (B, MM) | LOAD DISTANCE (X, KG) |
|-----------------|----------------------|------------------------------|--------------------------------------------|----------------------------------------------|----------------------------------------|------------------------------------------|-----------------------|-----------------------|-----------------------|
| 2-Standard Mast | 3600                 | 2295                         | 4265                                       | 4654                                         | 100                                    | 100                                      | 5                     | 5                     | 382                   |
| 2-Standard Mast | 4000                 | 2545                         | 4665                                       | 5054                                         | 100                                    | 100                                      | 5                     | 5                     | 382                   |
| 3-Free Mast     | 4350                 | 2010                         | 5015                                       | 5404                                         | 1375                                   | 835                                      | 5                     | 5                     | 394                   |
| 3-Free Mast     | 4500                 | 2060                         | 5165                                       | 5554                                         | 1425                                   | 1035                                     | 5                     | 5                     | 394                   |
| 3-Free Mast     | 4800                 | 2160                         | 5465                                       | 5854                                         | 1525                                   | 1135                                     | 5                     | 5                     | 394                   |
| 3-Free Mast     | 5000                 | 2225                         | 5665                                       | 6054                                         | 1590                                   | 1200                                     | 5                     | 5                     | 394                   |
| 3-Free Mast     | 5500                 | 2395                         | 6165                                       | 6554                                         | 1760                                   | 1370                                     | 5                     | 5                     | 394                   |
| 3-Free Mast     | 6000                 | 2610                         | 6665                                       | 7054                                         | 1975                                   | 1585                                     | 5                     | 5                     | 394                   |

## Options

| ITEM                            | OPTIONS (optional items marked in yellow)                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Fork dimension                  | 100*40*920   100*40*1070   100*40*1100   100*40*1150   100*40*1220   100*40*1370   100*40*1520   100*40*1800   100*40*1200 |
| Attachments                     | No   Built-in sideshifter   External shifter   Fork positioner with sideshift                                              |
| Traction pin                    | 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                                                                                     |
| Area warning lamp               | No   Both side   Both side and rear                                                                                        |
| 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                                                                                                     |
| Front lamp                      | LED                                                                                                                        |

| ITEM                           | OPTIONS (optional items marked in yellow)                 |
|--------------------------------|-----------------------------------------------------------|
| Rear lamp                      | No   LED                                                  |
| Blue lamp                      | No   Front   Rear   Front and rear                        |
| Cabin                          | No   Basic half-cabin   Upgrade full-cabin   Full cabin   |
| 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              |