

TCL101

3-WHEEL DUAL-DRIVE SUPERCOMPACT COUNTERBALANCE FORKLIFT 1.0T

 1000 kg  4500 mm  80 V Li-Ion

 tramag

 EP



TCL is a compact 80V lithium-ion 3 wheels forklift designed for applications in tight indoor spaces, offering small turning radius and a low overall height that enables work in narrow aisles, low-clearance areas, mezzanines, and cargo lifts. Its dual-drive PMS Motor ensures smooth, agile handling, while automatic stop on ramp and speed reduction on turns support safe operation. TCL is the ideal forklift for light to medium-duty applications where maneuverability are the main priorities.

SPECIFICATION	REF	UNIT	VALUE
Battery type			Li-Ion
Battery nominal capacity		Ah	50
Battery voltage		V	80
Load capacity	Q	kg	1000
Load centre distance	c	mm	500
Service weight		kg	1950
Retracted mast height	h_1	mm	1990
Lift height	h_3	mm	2500
Height, mast extended	h_4	mm	3919
Overall length		mm	2604
Overall width	b_1/b_2	mm	1020
Length to face of forks	l ₂	mm	1684
Fork dimensions	s/e/l	mm	35X100X920
Turning radius		Wa	1422
Operator type			Seated operator
Load distance, centre of drive axle to fork		mm	310

Features

Compact size with high operator comfort

With its low service weight, compact size, and overhead guard height ($h_6 < 2000\text{mm}$), TCL is ideal for mezzanines and cargo lifts usage and in narrow spaces like intensive warehousing and HGVs.

Despite its compactness, the TCL prioritizes operator comfort with an ergonomic design, providing an ample legroom of 464mm and a good visibility for a comfortable operating experience.

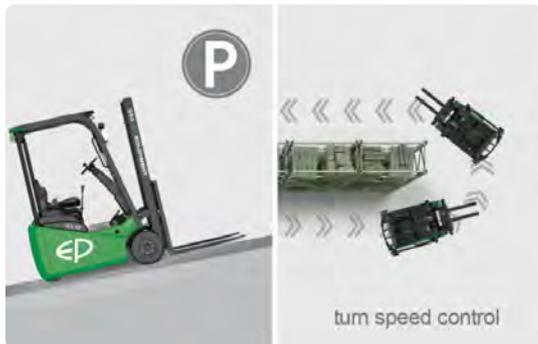


Dual drive motors

The unique dual drive motor system, unmatched in this capacity segment, gives the TCL outstanding traction and ultra-responsive steering. Together with its agile 3-wheel design, it turns on the spot and delivers an exceptionally tight turning radius — perfect for navigating busy, space-restricted environments. With a top speed of 13 km/h and powerful acceleration, the TCL ensures fast pallet handling and boosts everyday work efficiency.

80V Li-ion & PMSM technology

Equipped with 80V Li-ion battery and integrated single phase fast charger as standard, the TCL supports opportunity charging with no maintenance. Additionally, the TCL employs advanced permanent magnet synchronous motor (PMSM) technology and can achieve 10-15% energy savings and extend runtime by 10% compared to conventional motors.



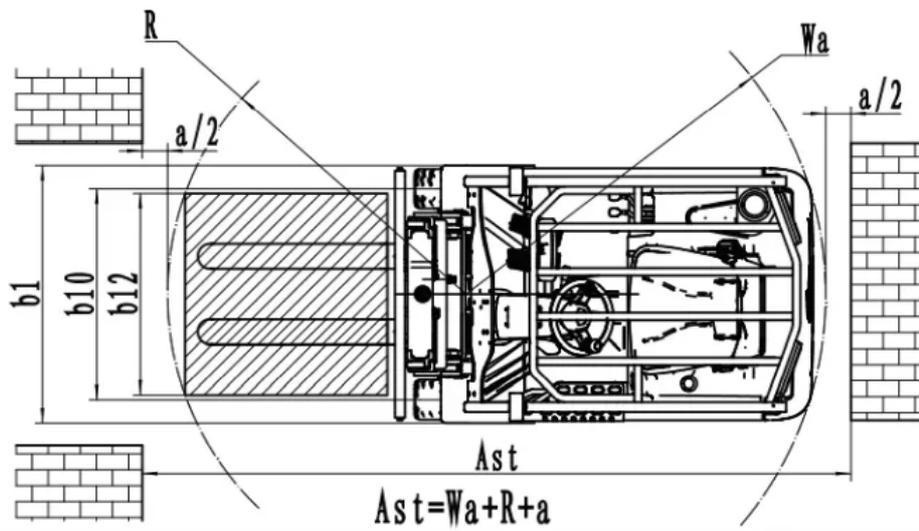
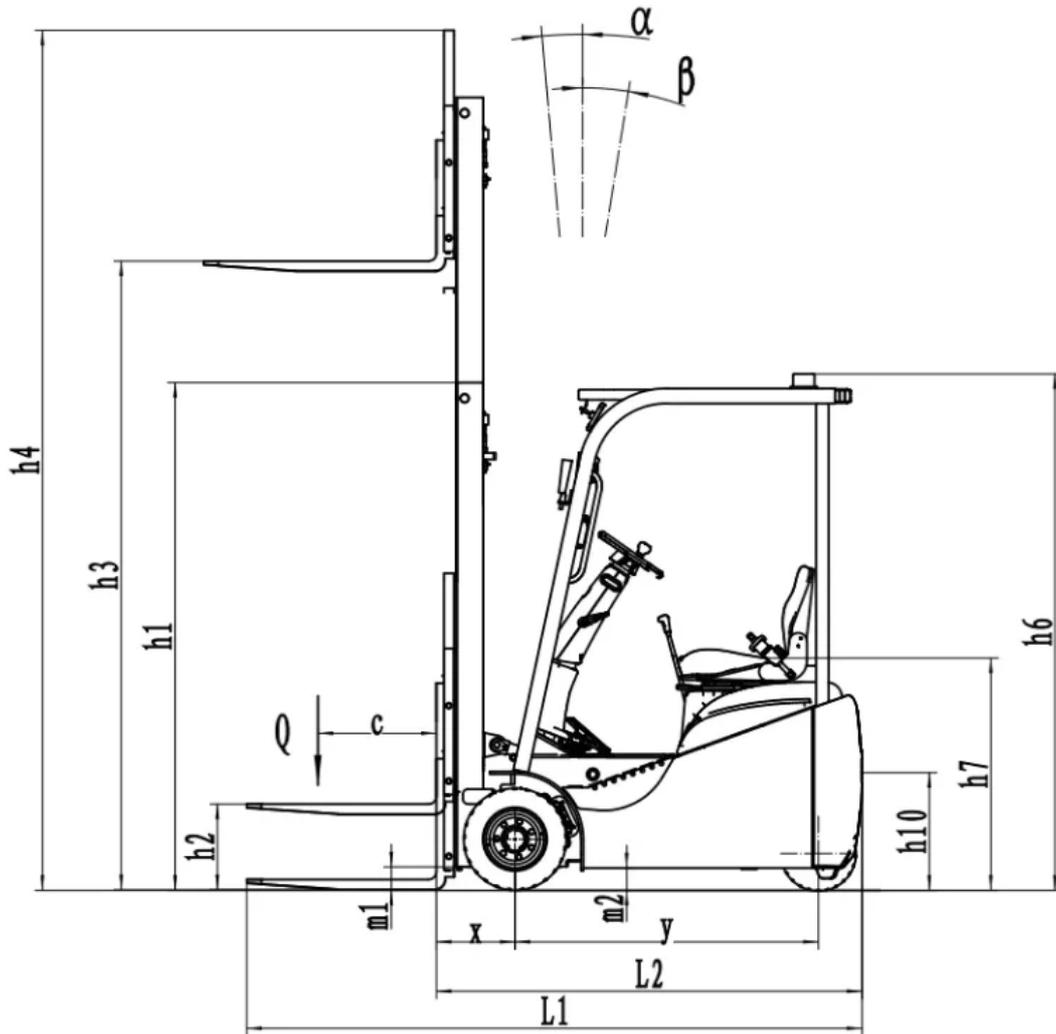
Top class features

The TCL features automatic stop on ramp and electric parking brake which can protect the forklift from accidentally rolling back when parked on a slope. It's also equipped with turn speed control as standard for maximum productivity safety and stability even in the tightest of corners.

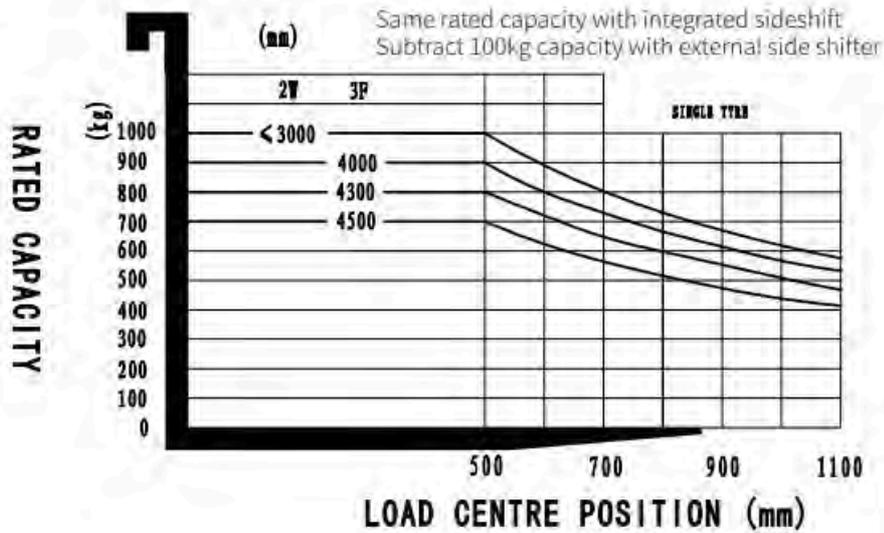
VDI Chart

	SPECIFICATION	REF	UNIT	VALUE
1.4	Operator type			Seated operator
1.5	Load capacity	Q	kg	1000
1.6	Load centre distance	c	mm	500
1.8	Load distance, centre of drive axle to fork		mm	310
1.9	Wheelbase		mm	1200
2.1	Service weight		kg	1950
2.2	Axle loading, laden front/rear		kg	2585/365
2.3	Axle loading, unladen front/rear		kg	910/1040
3.1	Tyre type			Solid rubber
3.2	Tyre size, front		mm	16X6-8
3.3	Tyre size, rear		mm	3.5-5
3.5	Wheels, number front/rear (x=drive wheels)			2X/2
3.6.1	Tread width, front	b_{10}	mm	838
3.7.1	Tread width, rear	b_{11}	mm	208
4.0	Max lift height	H	mm	4500
4.1	Tilt of mast/fork carriage forward/backward		°	6/6
4.12	Tow coupling height		mm	483
4.19	Overall length		mm	2604
4.2	Retracted mast height	h_1	mm	1990
4.20	Length to face of forks	l2	mm	1684
4.21	Overall width	b_1/b_2	mm	1020
4.22	Fork dimensions	s/e/l	mm	35X100X920
4.23	A,B Fork carriage class/type A, B			2A
4.24	Fork carriage width		mm	960
4.3	Free lift		mm	120
4.31	Ground clearance, laden, below mast		mm	93
4.32	Ground clearance, centre of wheelbase		mm	89
4.34.1	Aisle width for pallets 1000×1200 crossways		Ast	3063
4.34.2	Aisle width for pallets 800×1200 lengthways		Ast	3184
4.35	Turning radius		Wa	1422
4.4	Lift height	h_3	mm	2500
4.5	Height, mast extended	h_4	mm	3919

SPECIFICATION	REF	UNIT	VALUE
4.7	Height of overhead guard (cabin)	mm	1960
4.8	Seat height/standing height	mm	464
5.1	Travel speed, laden/unladen	km/h	11/13
5.10	Service brake		Electromagnetic
5.11	Parking brake		Electromagnetic
5.2	Lifting speed, laden/unladen	m/s	0.28/0.35
5.3	Lowering speed, laden/unladen	m/s	0.35/0.35
5.8	Max. gradeability, laden/unladen	%	13/15
6.1	Drive motor rating S2 60 min	kW	2.0x2
6.2	Lift motor rating at S3 15%	kW	7
6.4	Battery nominal capacity	Ah	50
6.4	Battery voltage	V	80
6.4.1	Battery type		Li-Ion
6.5	Battery weight	kg	65
10.5	Steering design		Hydraulic
10.7	Sound pressure level at the drivers ear	dB(A)	68



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)	HEIGHT, MAST EXTENDED, NO SHELVING (H4, MM)	HEIGHT, MAST EXTENDED, WITH SHELVING (H4, MM)
2-Stage Single Cylinder 2500t	2500	1745	2995	3565	120	120	6	6
2-Stage Single Cylinder 2700t	2700	1845	3195	3765	120	120	6	6
2-Stage Single Cylinder 3000t	3000	1990	3495	4065	120	120	6	6
2-Stage Single Cylinder 3300t	3300	2145	3795	4365	120	120	6	6
2-Standard Mast	2500	1778	3045	3555	105	105	6	6
2-Standard Mast	2700	1878	3245	3755	105	105	6	6
2-Standard Mast	3000	2028	3545	4055	105	105	6	6
2-Standard Mast	3300	2178	3845	4355	105	105	6	6
2-Standard Mast	3600	2328	4145	4655	105	105	6	6
2-Free Mast	2500	1753	3045	3555	1260	725	6	6
2-Free Mast	2700	1853	3245	3755	1360	825	6	6
2-Free Mast	3000	2003	3545	4055	1510	975	6	6
2-Free Mast	3300	2153	3845	4355	1660	1125	6	6

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)	HEIGHT, MAST EXTENDED, NO SHELVING (H4, MM)	HEIGHT, MAST EXTENDED, WITH SHELVING (H4, MM)
2-Free Mast	3600	2303	4145	4655	1810	1275	6	6
3-Free Mast	4000	1863	4546	5055	1370	835	6	6
3-Free Mast	4300	1963	4826	5335	1470	935	6	6
3-Free Mast	4500	2028	5046	5555	1535	1000	6	6

Options

ITEM	OPTIONS (optional items marked in yellow)
Fork dimension	600*600 2A 100*35*920 600*600 2A 100*35*750 600*600 2A 100*35*1070 900*600 2A 100*40*1150 900*600 2A 100*40*1220
Seat type	Regular+ safety belt switch Comfortable + safety belt switch Suspension + safety belt switch
Attachments	No Built-in sidsifter External shifter
Traction pin	Yes and not customised
Front wheel material	Normal solid Non-marking solid
Rear wheel material	Normal solid Non-marking solid
Battery capacity	80V50Ah 80V100Ah
Charger	80V-35A Single-phase built-in charger
Battery display indicator (BDI)	With hourmeter
Area warning lamp	No Both side Both side and rear
Rearview mirror	One in front Two on sides and one in front
Buzzer	Yes and not customised
OPS system	Yes and not customised
USB interface	No
Telematics	Yes and not customised
Front lamp	LED
Rear lamp	No LED
Warning lamp	Yes and not customised
Blue lamp	No Rear Front Front and rear

ITEM	OPTIONS (optional items marked in yellow)
Cabin	No
Overhead guard	Yes and not customised
Clamp interlock	No
Anti-static chain	Yes and not customised
Turn signal light	LED
Special AUS/NZ options	No Only for Australia standard
Turn speed control	Yes and not customised
Heating system during lithium battery charging	No Yes and not customised
Operator identification device	Card reader
Lifting electronic limit	No
Hydraulic control	Mechanical lever
Rear armrest horn	No