

# TL - TN Technical Data



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VDI 2198

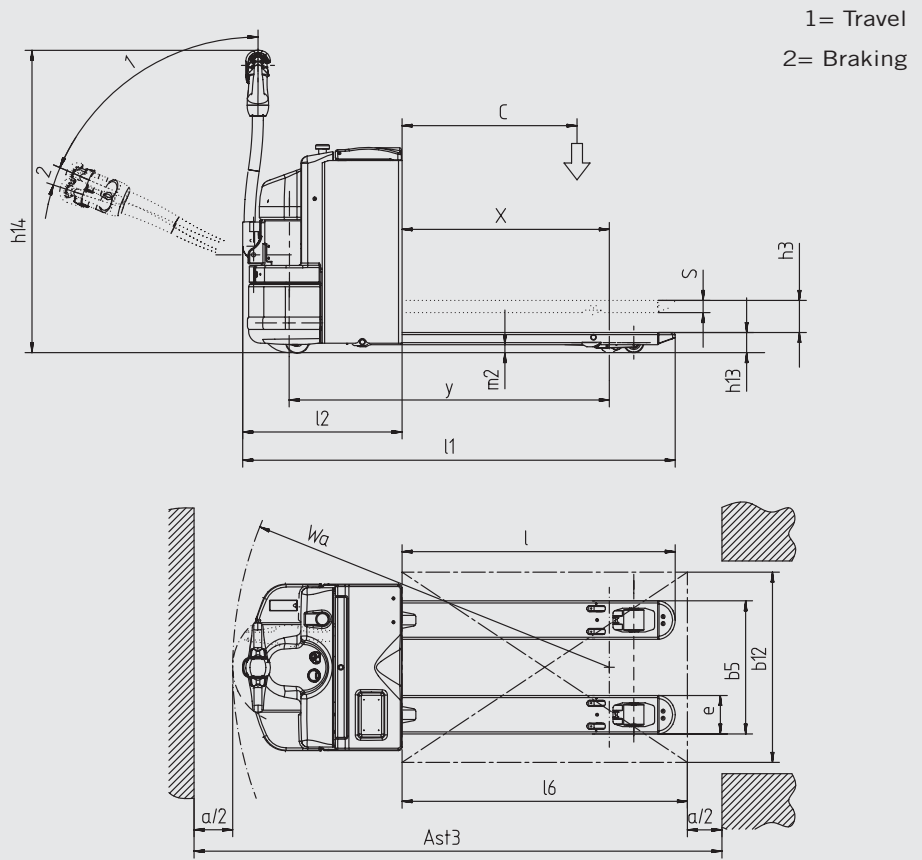
Specification	1.1	Manufacturer		OM	OM	OM
	1.2	Model designation		TL <sup>ac</sup> 16	TL <sup>ac</sup> 18	TL <sup>ac</sup> 20
	1.3	Power: battery, diesel, LPG, electric mains		Electric	Electric	Electric
	1.4	Operation: manual, pedestrian, stand.on, seated, orderpicker		Pedestrian	Pedestrian	Pedestrian
	1.5	Load capacity	Q (t)	1,6	1,8	2
	1.6	Load centre	c (mm)	600 <sup>(1)</sup>	600 <sup>(1)</sup>	600 <sup>(1)</sup>
	1.8	Load distance	x (mm)	871	871	871
	1.9	Wheelbase	y (mm)	1239 <sup>(2)</sup> 1306 <sup>(3)</sup>	11239 <sup>(2)</sup> 1306 <sup>(3)</sup>	1306 <sup>(3)</sup>
	Weights	2.1	Unladen weight	kg	252 261	252 261
2.2		Axle loading with load (front/rear)	kg	672/1332 <sup>(2)</sup> 703/1370 <sup>(3)</sup>	716/1488 <sup>(2)</sup> 745/1528 <sup>(3)</sup>	786/1687 <sup>(3)</sup>
2.3		Axle loading without load (front/rear)	kg	322/82 <sup>(2)</sup> 371/102 <sup>(3)</sup>	322/82 <sup>(2)</sup> 371/102 <sup>(3)</sup>	371/102 <sup>(3)</sup>
Wheels and Tyres	3.1	Tyres Rubber, Pneumatic shaped solid, Pneumatic, Polyurethane		Rubber	Polyurethane	Polyurethane
	3.2	Tyre size, front	mm	230x75/100x40	230x75/100x40	230x75/100x40
	3.3	Tyre size, rear	mm	85 X 90	85 X 90	85 X 90
	3.5	Wheels, number front/rear (x = driven)		1x-2/2	1x-2/2	1x-2/2
	3.6	Front axle width	b10 (mm)	/	/	/
	3.7	Track width, rear	b11 (mm)	358/398/488	358/398/488	358/398/488
	Dimensions and Overall Sizes	4.4	Lift height	h3 (mm)	135	135
4.9		Height of tiller arm in working position min./max.	h14 (mm)	762/1232	762/1232	762/1232
4.15		Lowered height	h13 (mm)	85	85	85
4.19		Overall length	l1 (mm)	1693 1760	1693 1760	1760
4.20		Length to face of forks	l2 (mm)	543 610	543 610	610
4.21		Overall width	b1 (mm)	710	710	710
4.22		Fork dimensions	s/e/l (mm)	50/162/1150 <sup>(4)</sup>	50/162/1150 <sup>(4)</sup>	50/162/1150 <sup>(4)</sup>
4.25		Outside fork width	b5 (mm)	520/560/650	520/560/650	520/560/650
4.32		Ground clearance centre of wheelbase	m2 (mm)	168	168	168
4.33		Aisle width with pallets 1000 x 1200 crossways	Ast3 (mm)	1793 1860	1793 1860	1860
4.34		Aisle width with pallets 800 x 1200 lengthwise	Ast3 (mm)	1993 2060	1993 2060	2060
4.35	Turning radius	Wa (mm)	1464 1531	1464 1531	1531	
Performance	5.1	Travel speed with/without load	km/h	'6/6	'6/6	'6/6
	5.2	Lift speed with/without load	m/s	0,035/0,040	0,035/0,041	0,035/0,041
	5.3	Lowering speed with/without load	m/s	0,071/0,039	0,050/0,048	0,050/0,048
	5.7	Gradeability KB 30' (with/without load)	%	-	-	-
	5.8	Max. gradeability KB 5' (with/without load)	%	8 <sup>(1)</sup> /21 <sup>(1)(5)</sup>	7 <sup>(1)</sup> /21 <sup>(1)(5)</sup>	6,5 <sup>(1)</sup> /21 <sup>(1)(5)</sup>
	5.10	Service brake		Electric	Electric	Electric
Engine	6.1	Drive motor, S2 60 minute rating	kW	1	1	1
	6.2	Lifting motor, S3 15% rating	kW	1	1,2	1,2
	6.3	Battery DIN 43531/35/36 A, B, C, no		British Standard DIN 43535 B	British Standard DIN 43535 B	DIN 43535 B
	6.4	Battery voltage/capacity at 5 hour rate	V/Ah	24/110 (150) 24/160 (220-250)	24/110 (150) 24/160 (220-250)	24/160 (220-250)
	6.5	Battery weight	kg	123 (152) 150 (212-217)	123 (152) 150 (212-217)	150 (212-217)
Others	8.1	Drive control		Eletronic	Eletronic	Eletronic
	8.4	Average noise lebel, driver's ear	dB (A)	< 70	< 70	< 70

The values presented are to be taken as indicative and not binding; they refer to the standard equipment

1) Value referred to fork length L= 1150 mm  
 2) With battery 24V/110/150Ah  
 3) With DIN Standard battery 24V/220 Ah (250Ah)  
 4) Refer to enclosed table for different fork length

5) For geometric limit  
 6) With DIN battery large 24V/330Ah (375 Ah)  
 7) With fork l= 980 mm

OM	OM
TN 22	TN 30
Electric	Electric
Pedestrian	Pedestrian
2,2	3
600 <sup>(1)</sup>	600 <sup>(1)</sup>
872	872
1347 1419	1347 1419
329 338	354 363
854/1887 890/1936	1037/2529 1065/2586
(860/1889) <sup>(3)</sup> (903/1940) <sup>(6)</sup>	(1043/2531) <sup>(3)</sup> (1077/2591) <sup>(6)</sup>
411/130 469/157	432/134 490/161
(417/132) <sup>(3)</sup> (482/161) <sup>(6)</sup>	(438/136) <sup>(3)</sup> (503/165) <sup>(6)</sup>
Polyurethane	Polyurethane
250/100	250/100
85 X 90	85 X 70
1x-2/2	1x-2/4
-	-
358/398/488	358/398/488
135	135
1183/1380	1183/1380
85	85
1819 1891	1819 1891
671 743	671 743
710	710
50/162/1150 <sup>(4)</sup>	50/162/1150 <sup>(7)</sup>
520/560/650	520/560/650
168	168
1912 <sup>(7)</sup> 1984 <sup>(7)</sup>	1912 <sup>(7)</sup> 1984 <sup>(7)</sup>
2112 2184	2112 2184
1584 1656	1584 1656
5,5/6	6/6
0,033/0,076	0,03/0,076
0,045	0,045
-	-
-	-
Electric	Electric
1,2	2,5
2,2	2,2
DIN 43535 B	DIN 43535 B
24/220 (250) 24/330 (375)	24/220 (250) 24/330 (375)
212 (220) 288 (305)	212 (220) 288 (305)
Eletronic	Eletronic
< 70	< 70



1= Travel  
2= Braking

TL								
				British Standard battery			DIN Standard battery	
l mm	c mm	x mm	y mm	l <sub>1</sub> mm	W <sub>a</sub> mm	y mm	l <sub>1</sub> mm	W <sub>a</sub> mm
800	400	521	889	1343	1114	956	1410	1181
980	500	701	1069	1523	1294	1136	1590	1361
1150	600	871	1239	1693	1464	1306	1760	1531
1450	715	1171	1539	1993	1764	1606	2060	1831
1600	800	1321	1689	2143	1914	1756	2210	1981

TN								
				British Standard battery			DIN Standard battery	
l mm	c mm	x mm	y mm	Open platform		Open platform		
				l <sub>1</sub> mm	W <sub>a</sub> * mm	y mm	l <sub>1</sub> mm	W <sub>a</sub> * mm
800	400	522	997	1469	1234	1069	1541	1306
980	500	702	1177	1649	1414	1249	1721	1486
1150	600	872	1347	1819	1584	1419	1891	1656
1450	715	1172	1647	2119	1884	1719	2191	1956
1600	800	1322	1797	2269	2034	1869	2341	2106
1980	1000	1702	2177	2649	2414	2249	2721	2486
1980 pc	1000	1354	1829	2649	2066	1901	2721	2138
2160	1072,5	1882	2357	2829	2594	2429	2901	2666
2160 pc	1072,5	1534	2009	2829	2246	2081	2901	2318
2400	1200	2122	2597	3069	2834	2669	3141	2906
2400 pc	1200	1774	2249	3069	2486	2321	3141	2558

\* Based on tiller in vertical position (Tiller active in vertical position)

## TL - TN

# Pedestrian low lift pallet trucks



**Pedestrian low lift power pallet trucks TL and TN.** The model range includes the TL for standard and the TN for heavy-duty applications with capacities from 1.600 up to 3.000 kg.

**Chassis:** ■ The battery compartment is thoroughly enclosed within the chassis protecting the DIN and BS standard batteries. Batteries are removed from the top but as an option side removal is available. ■ The forks are manufactured of high resistance Domex steel. ■ The paint is applied by the most advanced painting technology available. All non-painted components are treated for corrosion protection. ■ The strong polyethylene bonnets are both resistant and flexible so as to absorb shocks without deformation.

**Tiller:** ■ The welded tiller arm is oval to increase strength incorporating a new concept handle in high resistance plastic. ■ The unique tiller shape and joint enables all operators to assume the most comfortable operating position independently of stature. ■ The lightweight tiller is user friendly enabling continuous use and ensuring minimum operator fatigue. On release the tiller returns to the upright position in a steady, controlled manner. A standard feature of these models is the ability to drive the truck with the tiller in the upright position at reduced speed in confined spaced.

**Drive:** ■ Reliable and powerful motors start from 1 kW (ac for TL model) up to 2.5 kW (for TN30), ensuring equal performance both laden and unladen.

**Electronic system:** ■ The power supply is 24V AC. ■ Traction and lift electronics are enclosed in one static high frequency control unit with MOSFET type transistors. ■ The electronics incorporate a regenerative braking system thus allowing energy recovery on release of the accelerator. ■ The service meter is dual-purpose and is also used for fault detection. ■ The new electronic control systems are not only silent but reduce overall power consumption, increasing battery life. The system constantly monitors the functions of the pallet truck, protecting against power surge and damage to the battery.

■ All electrical systems and wiring are produced to IP54 standard and protected against water spray and dust infiltration, giving increased reliability. Saab electrical connections incorporated in the wiring have increased protection to IP67 standard.

**Braking system:** Two different braking modes are incorporated as standard: ■ reverse current braking (re-generative) ■ automatic electromagnetic parking brake with inductive sensors on the tiller at both stop positions.

**Maintenance:** ■ Readily accessible lifting points facilitate battery installation and removal operations. ■ OM staff can reprogram all the acceleration, braking and speed parameters via the electronic control system. ■ The first service is due at 1.000 operational hours, except for those components stated otherwise.

Technical data are given as an indication.

OM Carrelli Elevatori reserves the right to modify them without notice.



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