# Standard Equipment/Optional Equipment

## Standard Equipment

Long tiller with low mounting point End-of-stroke resistance Exxtral® motor and battery cover Creep speed control Safety lift system OptiLift® proportional lift system Hand protection at rear of mast (polycarbonate or mesh) Protection of lift cylinder Pallet stop Maintenance-free AC motor Linde LAC controller CAN-bus architecture Electromagnetic brake

Automatic parking brake Polyurethane or synthetic cushion rubber drive wheel Single polyurethane load wheel Fork length: 1150 mm Width over forks: 540 mm Storage compartment with clip (D08) Multifunction display Key switch or LFM Go (PIN code access) Protection to -10°C Vertical 2 PzS-B battery change for D06 (l2=709 mm) Vertical 2 PzS battery change for D08 (l2=764 mm) Initial lift Horn



# **Optional Equipment**

Alternative drive wheels Tandem load wheel Proportional Speed control Vertical 2 PzS-B battery change (D08) Lateral battery change Different Standard masts with max. lift height 2024 mm Additional buttons for lifting/lowering the forks on mast Automatic lifting of the forks Automatic lifting & lowering with foot protection Alternative fork length and width Load backrest

ac:access control (PIN or RFID Dual), an:usage analysis and dt:crash detection Cold store protection to -35°C Automatic watering system Built-in charger High frequency charger Additional emergency stop button Buzzer for noise sensitive areas

Other options available upon request

Linde Connected Soultions:

### Li-ION technology

Fast Full Charge Opportunity Charging Fast Intermediate Charging Maintenance Free Long Lifetime Good performance in Cold Store

#### Li-ION batteries

- fits in 2 PzS-SL compartment:

1,8kWh-3,6kWh (24V/82-164Ah)

- Battery fixation in battery housing extra weight

Optimized 24V-Li-ION charger

- v90: 1,8kWh (82 Ah)
- v160: 3,6kWh (164 Ah)

### Safety

The long tiller with its low mounting point ensures adequate safety clearance between operator and chassis. Creep speed, proportional speed control and safety lift functions provide optimum safety during transporting and stacking in confined areas. The low chassis skirt protects the operator's feet.

#### Performance

The D08 can handle two pallets at once with a maximum total capacity of 1800 kg. The innovative castor wheels ensure the optimum mix of stability and traction in all situations. The OptiLift mast control provides accurate, fully proportional lifting and assures quiet smooth operation.

### Comfort

All controls on the ergonomic tiller head can be easily operated by either hand. A Creep speed button offers utmost manoeuvrability in confined areas. Generous storage compartments for work equipment such as shrink wrap eases the operator's tasks.

### Reliability

Rugged construction makes the D06/D08 a Double Stacker that can be relied on. The Extraal® motor cover as well as the robust chassis are remarkably solid and resistant to damage. The sturdy mast and durable fork carriage are made of highgrade rolled steel to ensure easy and safe load handling.

### Service

The innovative castor wheels require no adjustment. Furthermore, a maintenance-free AC motor reduces service costs. Operating paramaters can be individually adjusted to the operator's need via the CAN-bus system. The service engineer has fast, easy access not only to truck data via the CAN-bus system but also to all main internal components.



# Pedestrian Double Stacker Capacity 600 kg - 800 kg

Series 1160

# Linde Material Handling



# Features

### Safety

- → Safety lift ensures hazard-free lifting with tiller in vertical position
- $\rightarrow$  Proportional speed control varies truck speed automatically in relation to tiller angle for safe, comfortable and productive operation
- → End-of-stroke resistance on tiller avoids accidental, abrupt braking
- $\rightarrow$  Soft tiller fold-back slows down tiller when returning into upright position avoiding tiller snapping on the motor cover
- $\rightarrow$  Long tiller arm with low mounting poi

### Lifting system

- $\rightarrow$  OptiLift mast control provides accurate, fully proportional lifting as well as smooth, quiet operation
- $\rightarrow$  Soft landing of forks protects load when lowering
- $\rightarrow\,$  Initial lift independent of main lift
- $\rightarrow$  Max. lift height up to 2024 mm
- $\rightarrow$  Max. load capacity in Double-Stacking use: 600 kg (D06) and 800 kg (D08) on forks/1000 kg on load arms

## Handling

- $\rightarrow$  Compact and robust chassis for easy handling in narrow spaces
- $\rightarrow$  A Creep speed button ensures high manoeuvrability in confined areas when operating with tiller in upright position
- $\rightarrow$  Long tiller arm reduces steering effort
- $\rightarrow$  Pallet stop for fast stacking of two pallets



# Batteries and chargers

- $\rightarrow$  Lead acid BS or 2PzS battery up to 250Ah
- $\rightarrow$  Lateral change for 2PzS compartment
- $\rightarrow$  Optional build-in charger available
- $\rightarrow$  Lithium-ion batteries available
- $\rightarrow$  Opportunity charging 60% in 40 min

### Braking

- $\rightarrow$  Highly efficient mechanical brake when tiller is fully raised or lowered
- $\rightarrow$  Automatic electric braking on releasing traction butterfly or reversing direction
- $\rightarrow$  Truck slows down prior to stopping remaining under complete control at all times
- $\rightarrow$  No roll-back when starting on a slope



### Controls

- $\rightarrow$  Separate controls for initial lift and main lift
- $\rightarrow$  OptiLift proportional lifting controls
- $\rightarrow$  Creep speed ensures high manoeuvrability in confined areas
- $\rightarrow$  All controls are ergonomicly integrated in tiller head
- $\rightarrow$  Additional lifting/lowering buttons on chassis side (option)
- $\rightarrow$  Automatic lifting or lifting/lowering function (option)

## Traction

- → Compact, efficient and maintenancefree 1.2 kW AC motor
- $\rightarrow$  Max. travel speed: 6 km/h (adjustable)
- $\rightarrow$  Innovative castor wheel design offers maximum traction and stability for demanding applications such as loading/unloading



### Maintenance

- $\rightarrow$  Adjustment-free castor wheels
- → Maintenance-free, moisture and dustproof AC motor
- $\rightarrow$  CAN-bus architecture enables fast, easy access to all truck data and adjustment of truck parameters
- $\rightarrow$  Fast and convenient access to main components via front service panel



nde Material Handling

# Technical Data according to VDI 2198

	1.1	Manufacturer		LINDE	LINDE
	1.2	Manufacturer's type designition		D06	D08 / [D08 ION] <sup>1)</sup>
10	1.2a	Series		1160-00	1160-00
stice	1.3	Power unit		Battery	Battery
Characteristics	1.4	Operation		Pedestrian	Pedestrian
	1.5	Load capacity/Load	Q (t)	0.6 / 1.0 2)	0.8 / 1.0 <sup>3) 4)</sup>
S	1.6	Load centre distance	c (mm)	600	600
	1.8	Axle centre to fork face	x (mm)	862 / 928 5) 6)	858 / 924 6) 5)
	1.9	Wheelbase	y (mm)	1413 / 1479 5) 6)	1463 / 1529 6) 5)
S	2.1	Service weight	(kg)	854 7)	948 [886] 1) 7)
Weights	2.2	Axle load with load, front/rear	(kg)	912 / 1542 7)	991 / 1757 [940 / 1746] <sup>1)7)</sup>
We	2.3	Axle load without load, front/rear	(kg)	615 / 2397)	674 / 274 [623 / 263] <sup>1)7)</sup>
	3.1	Tyres rubber, SE, pneumatic, polyurethane	( )/	Polyurethane	Polyurethane <sup>®</sup>
	3.2	Tyre size, front		Ø 230 x 75	Ø 230 x 75
wheels/Tyres	3.3	Tyre size, rear		Ø 85 x 85 (Ø 85 x 60) <sup>9)</sup>	Ø 85 x 85 (Ø 85 x 60) <sup>9)</sup>
ls/T	3.4	Auxiliary wheels (dimensions)		2x Ø 125 x 40	2x Ø 125 x 40
hee	3.5	Wheels, number front/rear (x = driven)		$1x + 2/2(1x + 2/4)^{9}$	$1x + 2 / 2 (1x + 2 / 4)^{9}$
$\geq$	3.6	Track width, front	b10 (mm)	482 5)	482 5)
	3.7	Track width, rear	b11 (mm)	360 / 380 5) 10)	360 / 380 5) 10)
	4.2	Height of mast, lowered	h1 (mm)	1465 5)	1465 5)
	4.3	Free lift	h2 (mm)	150 5)	150 5)
	4.4	Lift	h3 (mm)	2024 5)	2024 5)
	4.5	Height of mast, extended	h4 (mm)	2652 5)	2652 5
	4.6	Initial lift	h5 (mm)	125	125
	4.9	Height of tiller arm in operating position, min/max	h14 (mm)	740 / 1230	740 / 1230
	4.10	Height of reach legs	h8 (mm)	80	80
	4.15	Height, lowered	h13 (mm)	86	86
S	4.19	Overall length	 l1 (mm)	1859 5)	1914 <sup>5)</sup>
Dimensions	4.20	Length to fork face	l2 (mm)	709 5)	764 <sup>5)</sup>
nen	4.21	Overall width	b1/b2 (mm)	720 5)	720 5)
Dir	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	60 x 180 x 1150 <sup>11)</sup>	60 x 180 x 1150 <sup>11)</sup>
	4.24	Width of fork carriage	b3 (mm)	711 5)	711 5)
	4.25	Fork spread	b5 (mm)	540 / 560 <sup>s)</sup>	540 / 560 5)
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	210 / 230	210 / 230
	4.31	Ground clearance, below mast	m1 (mm)	20 / 145 12)	20 / 145 12)
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	20 / 145 12)	20 / 145 12)
	4.34.1	Aisle width for pallets $1000 \times 1200$ crossways	Ast (mm)	2104 13)	2158 13)
	4.34.2	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2154 13)	2208 13)
	4.35	Turning radius	Wa (mm)	1616 / 1682 6)	1666 / 1732 6) 14)
	5.1	Travel speed, with/without load	(km/h)	6 / 6 15)	6 / 6 15)
e	5.2	Lifting speed, with/without load	(m/s)	0.114 / 0.152 7)	0.1 / 0.152 7)
Performance	5.3	Lowering speed, with/without load	(m/s)	0.245 / 0.171 7)	0.251 / 0.171
form	5.8	Maximum climbing ability, with/without load	(%)	14.0 / 25.0	-
Per	5.9	Acceleration time, with/without load	(s)	7.6 / 6.6	
	5.10	Service brake	(-)	Electro-magnetic	Electro-magnetic
	6.1	Drive motor rating S2 60 min	(kW)	1.2	1.2
	6.2	Lift motor rating at \$3 15%	(kW)	1.2	1.2
è	6.3	Battery according to DIN 43531/35/36 A,B,C,no	()	2PzB	43 535/B [Li-ION] 1)
Drive	6.4	Battery voltage/rated capacity (5h)	(V)/(Ah)	24 / 150 16)	24 / 250 [23 / 82] 1)
	6.5	Battery weight (± 5%)	(kg)	157	212 [150] <sup>1)</sup>
	6.6	Power consumption according to VDI cycle	(kWh/h)	0.61	-
	10.7	Sound pressure level LpAZ (at the driver's seat)	(dB(A))	65	65
	2) Load max. 3) 1600 (auxi 4) Load max. 5) (± 5	<ul> <li>1) Figures in [] with Li-ION battery see line 6.4</li> <li>2) Load distribution e.g. 600 kg on the forks, 1000 kg on the fork arms. Total load max. 1600 kg.</li> <li>3) 1600 kg on the load arms (initial lift) - reduced to 800 kg on the lifted forks (auxiliary lift)</li> <li>4) Load distribution e.g. 800 kg on the forks, 1000 kg on the fork arms. Total load max. 1800 kg.</li> <li>5) (± 5 mm)</li> <li>6) Forks upraised / lowered 7) (± 10%)</li> </ul>			





Masts (D06/D08) (in mm)	Standard mast	
Lift	h3	1574
Lift + fork height	h3+h13	1660
Height lowered	h1	1365
Height raised	h4	2202
Free lift	h2	150