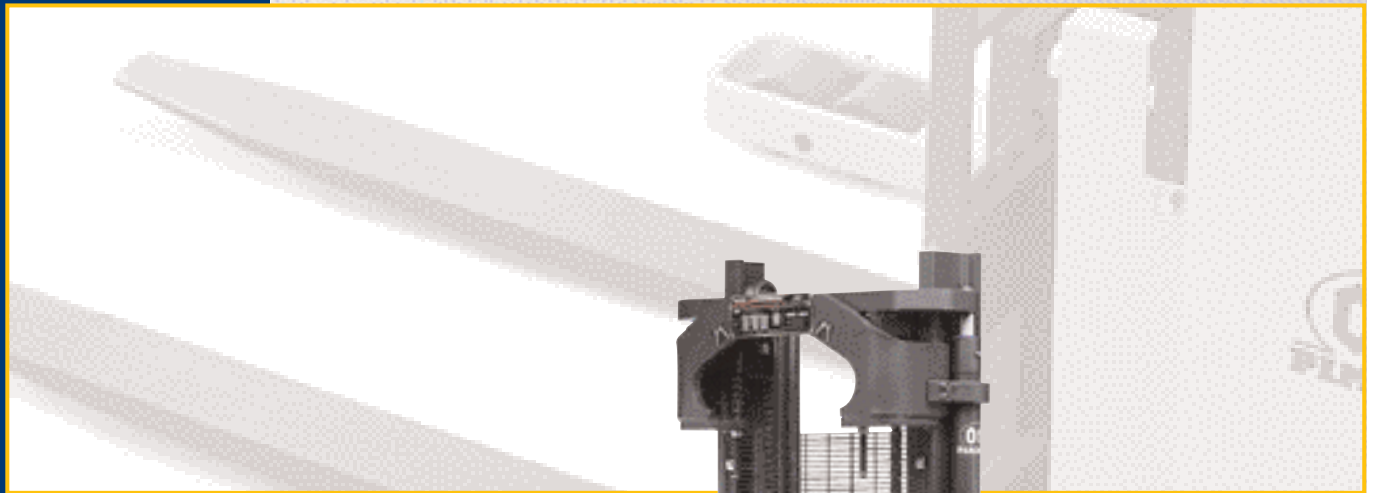


# CNS

## Technical data



designed to work



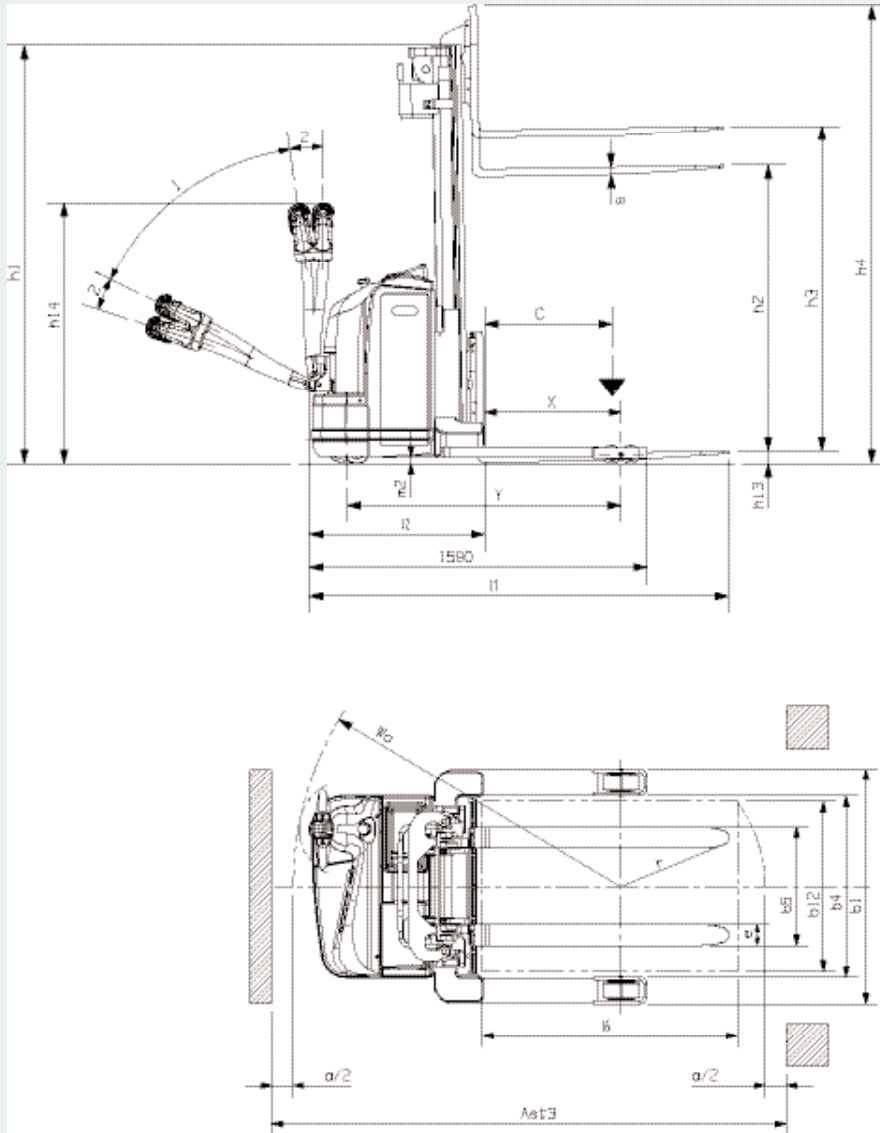
# CNS - Technical data

VDI 2198

|                 |   | OM PIMESPO  |   |
|-----------------|---|---|---|
| Characteristics | 1.1   | Manufacturer  |   |
|                 | 1.2   | Manufacturer type designation                                     | CNS 14 CNS 20   |
|                 | 1.3   | Drive unit: electric (battery or mains), diesel, petrol, fuel gas | Electric Electric                                       |
|                 | 1.4   | Operator type: hand, pedestrian, standing, seated, order-picker   | Pedestrian Pedestrian                                   |
| Weight          | 1.5   | Load capacity   | Q (Kg) 1400 2000  |
|                 | 1.6   | Load center   | c (mm) 600 600  |
|                 | 1.8   | Load distance, centre of drive axle to fork face                  | x (mm) 621 <sup>(6)</sup> 606 <sup>(6)</sup>            |
| Wheels, Tyres   | 1.9   | Wheelbase   | y (mm) 1291 1291  |
|                 | 2.1   | Truck weight (without battery)                                    | kg 1108 1157  |
|                 | 2.2   | Axle loading, loaded (front/ rear)                                | kg 897 / 1871 866 / 2586                                |
| Dimensions      | 2.3   | Axle loading, unloaded (front/ rear)                              | kg 901 / 467 946 / 506                                  |
|                 | 3.1   | Tyres: solid rubber, superelastic, pneumatic, polyurethane        | Polyurethane Polyurethane                               |
|                 | 3.2   | Tyre size (front)   | mm 230 / 120 230 / 120                                  |
|                 | 3.3   | Tyre size (rear)  | mm 85 ´ 90 85 ´ 70                                      |
|                 | 3.5   | Wheels number, front / rear (x= driven wheels)                    | 1x1 / 2 1x1 / 4   |
|                 | 3.6   | Tread, front  | b10 (mm) 574 574  |
|                 | 3.7   | Tread, rear   | b11 (mm) 980 / 1180 / 1380 980 / 1180 / 1380            |
|                 | 4.2   | Height, mast lowered  | h1 (mm) 2327 1977                                       |
|                 | 4.3   | Free lift   | h2 (mm) 1701 1351                                       |
|                 | 4.4   | Lift height   | h3 (mm) 5390 4380                                       |
|                 | 4.5   | Height, mast extended   | h4 (mm) 6016 <sup>(3)</sup> 5006 <sup>(3)</sup>         |
|                 | 4.6   | Initial lift  | h5 (mm) / /   |
|                 | 4.9   | Height of tiller in drive position min / max                      | h14 (mm) 762 / 1232 762 / 1232                          |
|                 | 4.15  | Forks height, lowered   | h13 (mm) 40 50  |
|                 | 4.19  | Overall length  | l1 (mm) 1997 <sup>(5)</sup> 2012 <sup>(5)</sup>         |
| 4.20            | Length to face of forks   | l2 (mm) 847 <sup>(5)</sup> 862 <sup>(5)</sup>                     |   |
| 4.21            | Overall width   | b1 (mm) 1107 / 1307 / 1507 1107 / 1307 / 1507                     |   |
| 4.22            | Fork dimensions   | s/e/l (mm) 35 / 100 / 1150 45 / 130 / 1150                        |   |
| 4.24            | Fork carriage width   | b3 (mm) 820 820   |   |
| 4.25            | Maximum forks width   | b5 (mm) 400 / 720 430 / 750                                       |   |
| 4.26            |   | b4 (mm) 853 / 1053 / 1253 853 / 1053 / 1253                       |   |
| 4.31            | Ground clearance, laden, below mast                             | m1 (mm) / /   |   |
| 4.32            | Ground clearance, centre of wheelbase                           | m2 (mm) 30 30   |   |
| 4.33            | Aisle width for pallets 1000x1200 crossways (1200 forking side) | Ast3 (mm) 2508 <sup>(2) (5)</sup> 2515 <sup>(2) (5)</sup>         |   |
| 4.34            | Aisle width pallets 800x1200 lengthways (800 forking side)      | Ast3 (mm) 2496 <sup>(2) (5)</sup> 2508 <sup>(2) (5)</sup>         |   |
| 4.35            | Turning radius  | Wa (mm) 1588 <sup>(2)</sup> 1588 <sup>(2)</sup>                   |   |
| Performance     | 5.1   | Travel speed: Loaded / unloaded                                   | km/h 5,5 / 6 5 / 6                                      |
|                 | 5.2   | Lift speed: Loaded / unloaded                                     | m/s 0,12 / 0,24 0,10 / 0,17                             |
|                 | 5.3   | Lowering speed: Loaded / unloaded                                 | m/s 0,40 / 0,32 0,40 / 0,36                             |
|                 | 5.7   | Gradeability KB 15': Loaded / unloaded                            | % 1,2% / 6,3% 0,5% / 6,5%                               |
|                 | 5.8   | Max gradeability KB 5': Loaded / unloaded                         | % 4,1% / 9,0% <sup>(4)</sup> 2,8% / 9,0% <sup>(4)</sup> |
|                 | 5.10  | Service brake   | Electric Electric                                       |
| Electric Motors | 6.1   | Drive motor rating S2 60min                                       | kW 1 1  |
|                 | 6.2   | Lift motor rating at S3 15%                                       | kW <sup>(1)</sup> 2,2 / 3 3                             |
|                 | 6.3   | Battery according to British Standard / DIN 43531/35/36 A, B, C   | DIN DIN   |
|                 | 6.4   | Battery voltage / nominal capacity k5                             | V / Ah 24 / 240 (315 - 375) 24/315 (375)                |
|                 | 6.5   | Battery weight (± 5%)   | kg 260 (295 - 304) 295 (304)                            |
| Other           | 8.1   | Control unit type   | Electronic Electronic                                   |
|                 | 8.4   | Sound level at the driver's ear according to DIN 12 053           | dB (A) < 70 < 70  |

(1) with simplex mast duplex up to h3= 3580 mm  
 (2) with tiller active in vertical position - 45mm  
 (3) with load back rest: + 543 mm with 14 Q.li version  
 + 573 mm with 20 Q.li version

(4) max gradeability due to geometric dimensions  
 (5) with simplex and duplex mast -21mm  
 (6) with simplex and duplex mast +21mm



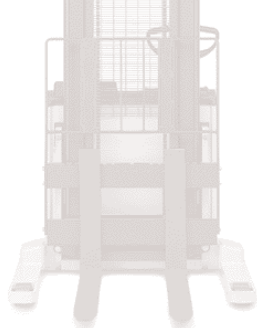
Version 1,4 t

| Mast           | $h_3$<br>(mm) | $h_1$<br>(mm) | $h_2$<br>(mm) | $h_4$<br>(mm) | Residual<br>capacity |
|----------------|---------------|---------------|---------------|---------------|----------------------|
| <b>Mono</b>    | 1510          | 1977          | 1351          | 2136          | 1400                 |
| <b>Simplex</b> | 2900          | 1977          | 140           | 3526          | 1400                 |
|                | 3580          | 2327          | 140           | 4206          | 1300                 |
|                | 3980          | 2527          | 140           | 4606          | 1200                 |
|                | 4480          | 2777          | 140           | 5106          | 1000                 |
| <b>Duplex</b>  | 2990          | 1977          | 1351          | 3616          | 1400                 |
|                | 3600          | 2327          | 1701          | 4226          | 1300                 |
| <b>Triplex</b> | 4170          | 1877          | 1251          | 4796          | 1100                 |
|                | 4470          | 1977          | 1351          | 5096          | 1000                 |
|                | 4940          | 2177          | 1551          | 5566          | 850                  |
|                | 5390          | 2327          | 1701          | 6016          | 700                  |

Version 2,0 t

| Mast           | $h_3$<br>(mm) | $h_1$<br>(mm) | $h_2$<br>(mm) | $h_4$<br>(mm) | Residual<br>capacity |
|----------------|---------------|---------------|---------------|---------------|----------------------|
| <b>Simplex</b> | 2900          | 1977          | 90            | 3526          | 2000                 |
|                | 3580          | 2327          | 90            | 4206          | 1800                 |
| <b>Triplex</b> | 4380          | 1977          | 1351          | 5006          | 1200                 |





## CNS - Pedestrian stacker truck

### The Product Line

Closely derived from the CN series of tiller forklifts but with front support straddles mounted outside the frame, the CNS forklift can handle loads such as pallets with ties on the ground on the pick-up side. Also, because the truck can be equipped with special tools such as claws or hooks, it can safely handle rolls, coils, and drums. The CNS forklift is available with a rated capacity of 1,400 kg and 2,000 kg.

### The Structure

- The straddles are available with 3 different inside gauges: 850 mm, 1,050 mm, 1,250 mm
- The 4-point support with side-mounted tiller configuration provides a high degree of stability as well as perfect visibility during loading and unloading operations at height
- The traction unit and castor wheel are completely enclosed within the frame, providing better protection for the operator's feet
- The CNS model can be configured with a single standard chassis and two types of mast with a rated load capacity of 1,400 kg and 2,000 kg
- The battery compartment is fully lined with sheet metal and can accommodate DIN and BS batteries. Standard battery removal is from the side.
- The polyethylene covers manufactured with rotational molding technology are very strong and flexible, and can withstand hard bumps without buckling.

### Tiller

- The tiller consists of a new, single unit tiller head made of very strong plastic, and an oval-shaped tubular arm assembled by robotic welding
- The shape and mounting of the tiller provide the best operating position for operators of all sizes
- The lightweight tiller and easy controls greatly reduce operator fatigue even during long shifts. When released, the tiller returns smoothly to the rest position without bumping or bouncing, and without jeopardizing the safety of the operator. Tiller-operated proportional control of the lift/lower functions of the forks is standard functionality on all trucks.

### Traction Unit

- The separately excited traction motor has a rated power of 1 kW
- The castor wheel is easily adjusted to provide excellent grip and stability

### Lift Unit

- Masts with a rated load capacity of 1,400 kg and 2,000 kg
- Simplex, Duplex and Triplex masts with ample visibility and lifting heights up to 5,000 mm are available
- The masts can be delivered upon request with low free lift or high free lift of the forks.
- Two different lift motors are available, 2.2 kW and 3 kW, to meet load capacity and lift height requirements.

### Braking

The truck features two separate braking systems:

- Service brake ~ Inversion braking on the traction motor (regenerative braking) performed by the electronic control when the lever is released
- Handbrake ~ Electromagnetic brake

### Electronic System

- 24 V DC power
- High frequency static electronic control of the traction motor and pump on all models
- The hour meter signals any malfunctions
- The new electronic systems ensure low energy consumption and quiet operations. The control system protects the motor and battery from early wear by preventing high power spikes.
- The electrical systems and wiring are protected to IP 54 and are waterproof and dustproof, ensuring greater reliability over time. The SAAB connector terminals are protected to IP 67.

### Optional Equipment

- -30° cold stores conditioning
- Dual rollers (CNS 14)
- Slick-tire wheel (CNS 14 only)
- 50A built-in rectifier
- Load restrainer
- Tiller always on

Information and data reported here are not intended as binding in any way and refer to standard truck specification.