

### Hand towed Battery Pallet Stacker KBE 1000/2,5

#### **Standard equipment**

- Light duty application
- Hand towed and Battery powered Lifting/Lowering
- Capacity **1000 kg**
- Lifting height 2,5 m
- DC pump motor 2 kW
- Traction Battery 2x12V/90 Ah C5
- Automatic on-board charger 24V/15 A
- Battery discharge indicator
- Load backrest
- Steering device
- Castor wheels Polyurethane (right Drive side with brake)
- Load side Tandem rollers Polyamide/ as standard
- Robust Two stage mast with central cylinder

#### **Optional equipment**

• Modified Chassis (Straddle legs version)



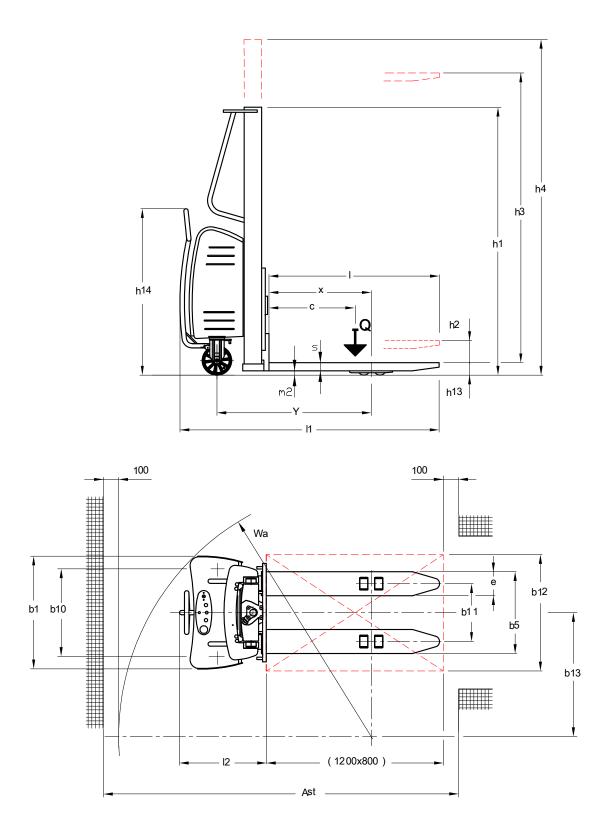
## Hand towed Battery Operated Pallet Stacker KBE 1000/2,5

Type sheet for industrial Trucks according to VDI 2198

1.2   Manufacturer's type designation   RBE 1000/2	Туре	sheet	for industrial Trucks according to VDI 2198			
1.3   Power unit		1.1	Manufacturer			VENI
Hand towe Battery lifting/lowering   Battery lifting/lowering   Battery lifting/lowering   Battery lifting/lowering   100	Characteristics	1.2	Manufacturer's type designation			KBE 1000/2,5
1.6   Load centre   C   (mm)   66     1.9   Wheelbase   X   (mm)   66     1.9   Wheelbase   X   (mm)   100     2.1   Service weight incl. battery   (kg)   46     3.1   Tyres front/rear (Polyurethane/PU, Polyamide/PA)   PU/F     3.2   Tyre size, front   (mm)   D 20xis     3.3   Tyre size, front   (mm)   D 20xis     3.5   Wheels, number front / rear (x=driven)   (mm)   68     3.6   Track width, front   (mm)   68     3.7   Track width, front   (mm)   68     4.2   Height, mast lowered   (mm)   18     4.3   Free lift   (mm)   12     4.4   Lift   (mm)   12     4.5   Height, mast extended   (mm)   29     4.9   Height of tiller in drive position min./max.   (mm)   29     4.15   Fork height, lowered   (mm)   25     4.15   Fork height, lowered   (mm)   25     4.15   Coverall width   (mm)   18     4.20   Length to fork face   (l2 (mm)   68     4.21   Overall length   (mm)   68     4.22   Fork dimensions   (mm)   (mm)   68     4.23   Ground clearance, centre of wheelbase   (mm)   (mm)   (mm)   (mm)     4.25   Turning radius   (mm)   (mm)   (mm)   (mm)   (mm)     4.36   Internal turning radius   (m/s)   (1.168/0.156     6.2   Lift meter rating \$2.156.		1.3	Power unit			Battery
1.6   Load centre   C   (mm)   66     1.9   Wheelbase   X   (mm)   66     1.9   Wheelbase   Y   (mm)   100     2.1   Service weight incl. battery   (kg)   46     3.1   Tyres front/rear (Polyurethane/PU, Polyamide/PA)   PU/F     3.2   Tyre size, front   (mm)   D 20xis     3.3   Tyre size, rear   (mm)   D 28xis     3.5   Wheels, number front / rear (x=driven)   (mm)   68     3.6   Track width, front   (mm)   68     3.7   Track width, front   (mm)   68     4.2   Height, mast lowered   (mm)   18     4.3   Free lift   (mm)   12     4.4   Lift   (mm)   12     4.5   Height, mast extended   (mm)   29     4.9   Height of tiller in drive position min./max.   (mm)   29     4.15   Fork height, lowered   (mm)   25     4.15   Fork height, lowered   (mm)   18     4.20   Length to fork face   (mm)   68     4.21   Overall length   (mm)   (mm)   68     4.22   Fork dimensions   (mm)   (mm)   (mm)   (mm)   (mm)     4.23   Cound clearance, centre of wheelbase   (mm)		1.4	Operation			Hand towed
1.6   Load centre						Battery lifting/lowering
1.6   Load centre   C   (mm)   66     1.9   Wheelbase   X   (mm)   66     1.9   Wheelbase   Y   (mm)   100     2.1   Service weight incl. battery   (kg)   46     3.1   Tyres front/rear (Polyurethane/PU, Polyamide/PA)   PU/F     3.2   Tyre size, front   (mm)   D 20xis     3.3   Tyre size, rear   (mm)   D 28xis     3.5   Wheels, number front / rear (x=driven)   (mm)   68     3.6   Track width, front   (mm)   68     3.7   Track width, front   (mm)   68     4.2   Height, mast lowered   (mm)   18     4.3   Free lift   (mm)   12     4.4   Lift   (mm)   12     4.5   Height, mast extended   (mm)   29     4.9   Height of tiller in drive position min./max.   (mm)   29     4.15   Fork height, lowered   (mm)   25     4.15   Fork height, lowered   (mm)   18     4.20   Length to fork face   (mm)   68     4.21   Overall length   (mm)   (mm)   68     4.22   Fork dimensions   (mm)   (mm)   (mm)   (mm)   (mm)     4.23   Cound clearance, centre of wheelbase   (mm)		1.5	Load capacity	Q	(kg)	1000
1.9   Wheelbase		1.6	Load centre	С	(mm)	600
2.1 Service weight incl. battery  3.1 Tyres front/rear (Polyurethane/PU, Polyamide/PA)  3.2 Tyre size, front  (mm) D 200x5  (mm) D 82x5  (mm) D 82x5  (mm) M 86  3.5 Wheels, number front / rear (x=driven)  3.6 Track width, front  3.7 Track width, front  4.2 Height, mast lowered  4.3 Free lift  4.4 Lift  4.5 Height, mast extended  4.9 Height of tiller in drive position min./max.  4.15 Fork height, lifted  4.10 Overall length  4.11 (mm) D 112  4.12 (mm) M 124  4.15 Fork height, lifted  4.15 Fork height, lifted  4.10 Overall width  4.20 Length to fork face  4.21 Overall width  4.22 Fork dimensions  3.3 Tyres ize, front  (mm) D 20x5  (mm) M 66  1.1 (mm) M 186  1.2 (mm) M 129  4.15 Fork height, lifted  1.3 (mm) M 126  4.21 Overall width  4.22 Fork dimensions  3.4 Aisle width with pallet 800x1200 mm along forks  4.33 Internal turning radius  4.34 Lifting speed, with/ without load  6.3 Lifting speed, with/ without load  6.3 Lift motor rating \$3.45%/  (MM) 0.136/0.16  (MM)  6.3 Lift motor rating \$3.45%/  (MM)  6.4 Lift motor rating \$3.45%/  (MM)  6.4 Lift motor rating \$3.45%/  (MM)  6.5 Lift motor rating \$3.45%/  (MM)  6.5 Lift motor rating \$3.45%/  (MM)  6.6 Lift motor rating \$3.45%/  (MM)  6.7 Lift motor rating \$3.45%/  (MM)  6.8 Lift motor rating \$3.45%/  (MM)  6.9 Lift motor rating \$3.45%/  (MM)  6.0 Lift motor rating \$3.45%/		1.8	Axle centre to fork face	x	(mm)	690
3.1 Tyres front/rear (Polyurethane/PU, Polyamide/PA) 3.2 Tyre size, front 3.3 Tyre size, rear  (mm) D 200xt 3.3 Tyre size, rear  (mm) D 82xt (mm) D 82		1.9	Wheelbase	у	(mm)	1088
3.2   Tyre size, front   (mm)   D 200xt	Weight	2.1	Service weight incl. battery		(kg)	460
3.3   Tyre size, rear   (mm)   D 82xi     3.5   Wheels, number front / rear (x=driven)   (mm)   2     3.6   Track width, front   b <sub>10</sub> (mm)   68     3.7   Track width, rear   b <sub>11</sub> (mm)   44     4.2   Height, mast lowered   h <sub>1</sub> (mm)   12     4.4   Lift   h <sub>3</sub> (mm)   24     4.5   Height, mast extended   h <sub>4</sub> (mm)   298     4.9   Height of tiller in drive position min./max.   h <sub>14</sub> (mm)   116     4.15   Fork height, lowered   h <sub>13</sub> (mm)   250     4.15   Fork height, lifted   h <sub>3</sub> +h <sub>13</sub> (mm)   250     4.15   Fork height, lifted   h <sub>3</sub> +h <sub>13</sub> (mm)   250     4.10   Overall width   h <sub>1</sub> (mm)   68     4.20   Length to fork face   l <sub>2</sub> (mm)   68     4.21   Overall width   b <sub>1</sub> (mm)   68     4.22   Fork dimensions   S/e/I (mm)   55/165/118     4.23   Ground clearance, centre of wheelbase   m <sub>2</sub> (mm)   4.34     4.36   Internal turning radius   Ma (mm)   170     4.37   Turning radius   Ma (mm)   170     4.38   Lifting speed, with/ without load   (m/s)   0.136/0.16     6.3   Lift motor rating S3 45%   (kW)   2.2     10   Lift motor rating S3 45%   (kW)   2.2     11   Lift motor rating S3 45%   (kW)   2.2     12   Lift motor rating S3 45%   (kW)   2.2     13   Lift motor rating S3 45%   (kW)   2.2     14   Lift   Mm   Mm   Mm   Mm   Mm   Mm   Mm   M	Wheels/tyres	3.1	Tyres front/rear (Polyurethane/PU, Polyamide/PA)			PU/PA
3.7   Track width, rear   b <sub>11</sub>   (mm)   44     4.2   Height, mast lowered   h <sub>1</sub>   (mm)   18     4.3   Free lift   h <sub>2</sub>   (mm)   12     4.4   Lift   h <sub>3</sub>   (mm)   24     4.5   Height, mast extended   h <sub>4</sub>   (mm)   29     4.9   Height of tiller in drive position min./max.   h <sub>14</sub>   (mm)   116     4.15   Fork height, lifted   h <sub>3</sub> +h <sub>13</sub>   (mm)   25     4.15   Fork height, lifted   h <sub>3</sub> +h <sub>13</sub>   (mm)   25     4.19   Overall length   l <sub>1</sub>   (mm)   18     4.20   Length to fork face   l <sub>2</sub>   (mm)   68     4.21   Overall width   b <sub>1</sub>   (mm)   55/165/118     4.22   Fork dimensions   s/e/l   (mm)   55/165/118     4.25   Overall forks width   b <sub>5</sub>   (mm)   55/165/118     4.32   Ground clearance, centre of wheelbase   m <sub>2</sub>   (mm)   4     4.34   Aisle width with pallet 800x1200 mm along forks   Ast   (mm)   24     4.35   Turning radius   Wa   (mm)   177     4.36   Internal turning radius   b <sub>13</sub>   (mm)   84     5.2   Lifting speed, with/ without load   (m/s)   0.136/0.16     6.3   Lift motor rating \$3.15%   (kW)   0.168/0.15     6.3   Lift motor rating \$3.15%   (kW)   0.168/0.15     7   Lift motor rating \$3.15%   (kW)   0.168/0.15     6.3   Lift motor rating \$3.15%   (kW)   0.168/0.15     6.4   Lift motor rating \$3.15%   (kW)   0.168/0.15     7   Lift motor rating \$3.15%   (kW)   0.168/0.15     7   Lift motor rating \$3.15%   (kW)   0.168/0.15     8   Lift motor rating \$3.15%   (kW)   0.168/0.15     9   Lift motor rating \$3.15%   (kW)   0.168/0.15     1   Lift motor rating \$3.15%   (kW)   0		3.2	Tyre size, front		(mm)	D 200x50
3.7   Track width, rear   b <sub>11</sub>   (mm)   44      4.2   Height, mast lowered   h <sub>1</sub>   (mm)   18      4.3   Free lift   h <sub>2</sub>   (mm)   12      4.4   Lift   h <sub>3</sub>   (mm)   24      4.5   Height, mast extended   h <sub>4</sub>   (mm)   29      4.9   Height of tiller in drive position min./max.   h <sub>14</sub>   (mm)   116      4.15   Fork height, lowered   h <sub>13</sub>   (mm)   25      4.15   Fork height, lifted   h <sub>3</sub> +h <sub>13</sub>   (mm)   25      4.16   Verall length   l <sub>1</sub>   (mm)   18      4.20   Length to fork face   l <sub>2</sub>   (mm)   68      4.21   Overall width   b <sub>1</sub>   (mm)   55/165/118      4.22   Fork dimensions   s/e/l   (mm)   55/165/118      4.23   Ground clearance, centre of wheelbase   m <sub>2</sub>   (mm)   4    4.34   Aisle width with pallet 800x1200 mm along forks   Ast   (mm)   24      4.35   Turning radius   Wa   (mm)   17      4.36   Internal turning radius   b <sub>13</sub>   (mm)   84    5.2   Lifting speed, with/ without load   (m/s)   0.136/0.16    6.3   Lift motor rating \$23,15%   (kW)   0.136/0.16    6.3   Lift motor rating \$23,15%   (kW)   0.136/0.16    6.3   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.3   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.4   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.5   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.5   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.5   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.7   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.8   Lift motor rating \$23,15%   (kW)   0.168/0.15    6.9   Lift motor ra		3.3	Tyre size, rear		(mm)	D 82x70
Solution		3.5	Wheels, number front / rear (x=driven)		(mm)	2/4
4.2   Height, mast lowered   h <sub>1</sub> (mm)   18'		3.6	Track width, front	b <sub>10</sub>	(mm)	688
4.3   Free lift		3.7	Track width, rear	b <sub>11</sub>	(mm)	400
4.4 Lift	Dimensions	4.2	Height, mast lowered	h <sub>1</sub>	(mm)	1810
4.5 Height, mast extended 4.9 Height of tiller in drive position min./max. 4.15 Fork height, lowered 4.15 Fork height, lifted 4.15 Fork height, lifted 4.16 Overall length 4.17 Overall length 4.18 Length to fork face 4.20 Length to fork face 4.21 Overall width 4.22 Fork dimensions 4.25 Overall forks width 4.26 Ground clearance, centre of wheelbase 4.37 Ground clearance, centre of wheelbase 4.38 Aisle width with pallet 800x1200 mm along forks 4.39 Internal turning radius 5.2 Lifting speed, with/ without load 5.3 Lowering speed, with/ without load 5.3 Lowering speed, with/ without load 6.2 Lift motor ratios \$3.15%		4.3	Free lift	$h_2$	(mm)	120
4.9 Height of tiller in drive position min./max.  4.15 Fork height, lowered  4.15 Fork height, lifted  4.16 Voverall length  4.17 Overall length  4.18 Length to fork face  4.19 Overall width  4.20 Length to fork face  4.21 Overall width  4.22 Fork dimensions  4.25 Overall forks width  4.26 Ground clearance, centre of wheelbase  4.37 Aisle width with pallet 800x1200 mm along forks  4.38 Internal turning radius  5.2 Lifting speed, with/ without load  5.3 Lowering speed, with/ without load  6.3 Lift motor rating \$3.1594		4.4	Lift	$h_3$	(mm)	2410
4.15 Fork height, lowered		4.5	Height, mast extended	$h_4$	(mm)	2955
4.151 Fork height, lifted		4.9	Height of tiller in drive position min./max.	h <sub>14</sub>	(mm)	1160
4.21       Overall width       b1       (mm)       80         4.22       Fork dimensions       s/e/l       (mm)       55/165/115         4.25       Overall forks width       b5       (mm)       56         4.32       Ground clearance, centre of wheelbase       m2       (mm)       24         4.34       Aisle width with pallet 800x1200 mm along forks       Ast       (mm)       24*         4.35       Turning radius       Wa       (mm)       170         4.36       Internal turning radius       b13       (mm)       84         5.2       Lifting speed, with/ without load       (m/s)       0.136/0.16         5.3       Lowering speed, with/ without load       (m/s)       0.168/0.13		4.15	Fork height, lowered	h <sub>13</sub>	(mm)	90
4.21       Overall width       b1       (mm)       80         4.22       Fork dimensions       s/e/l       (mm)       55/165/115         4.25       Overall forks width       b5       (mm)       56         4.32       Ground clearance, centre of wheelbase       m2       (mm)       24         4.34       Aisle width with pallet 800x1200 mm along forks       Ast       (mm)       24*         4.35       Turning radius       Wa       (mm)       170         4.36       Internal turning radius       b13       (mm)       84         5.2       Lifting speed, with/ without load       (m/s)       0.136/0.16         5.3       Lowering speed, with/ without load       (m/s)       0.168/0.13		4.151	Fork height, lifted	h <sub>3</sub> +h <sub>13</sub>	(mm)	2500
4.21       Overall width       b1       (mm)       80         4.22       Fork dimensions       s/e/l       (mm)       55/165/115         4.25       Overall forks width       b5       (mm)       56         4.32       Ground clearance, centre of wheelbase       m2       (mm)       24         4.34       Aisle width with pallet 800x1200 mm along forks       Ast       (mm)       24*         4.35       Turning radius       Wa       (mm)       170         4.36       Internal turning radius       b13       (mm)       84         5.2       Lifting speed, with/ without load       (m/s)       0.136/0.16         5.3       Lowering speed, with/ without load       (m/s)       0.168/0.13		4.19	Overall length	I <sub>1</sub>	(mm)	1800
4.22       Fork dimensions       s/e/l       (mm)       55/165/115         4.25       Overall forks width       b <sub>5</sub> (mm)       56         4.32       Ground clearance, centre of wheelbase       m <sub>2</sub> (mm)       24         4.34       Aisle width with pallet 800x1200 mm along forks       Ast       (mm)       24*         4.35       Turning radius       Wa       (mm)       170         4.36       Internal turning radius       b <sub>13</sub> (mm)       84*         5.2       Lifting speed, with/ without load       (m/s)       0.136/0.16*         5.3       Lowering speed, with/ without load       (m/s)       0.168/0.13*		4.20	Length to fork face	$I_2$	(mm)	650
4.25 Overall forks width 4.32 Ground clearance, centre of wheelbase 4.34 Aisle width with pallet 800x1200 mm along forks 4.35 Turning radius 4.36 Internal turning radius 5.2 Lifting speed, with/ without load 5.3 Lowering speed, with/ without load 6.3 Lift motor rating \$3.15%		4.21	Overall width	b <sub>1</sub>	(mm)	800
4.32 Ground clearance, centre of wheelbase 4.34 Aisle width with pallet 800x1200 mm along forks Ast (mm) 24' 4.35 Turning radius 4.36 Internal turning radius 5.2 Lifting speed, with/ without load 5.3 Lowering speed, with/ without load 6.3 Lift motor rating \$3.15%  6.3 Lift motor rating \$3.15%  (mm) 6.3 Lift motor rating \$3.15%		4.22	Fork dimensions	s/e/l	(mm)	55/165/1150
4.34 Aisle width with pallet 800x1200 mm along forks  4.35 Turning radius  4.36 Internal turning radius  5.2 Lifting speed, with/ without load  5.3 Lowering speed, with/ without load  6.2 Lift motor rating \$3.15%  6.3 Lift motor rating \$3.15%  6.4 Lift motor rating \$3.15%		4.25	Overall forks width	$b_5$	(mm)	560
4.35 Turning radius 4.36 Internal turning radius 5.2 Lifting speed, with/ without load 5.3 Lowering speed, with/ without load 6.2 Lift motor rating \$3.15%  (mm) 84 (mm) 87 (mm) 88 (mm) 89 (mm) 89 (mm) 80 (m		4.32	Ground clearance, centre of wheelbase	$m_2$	(mm)	40
4.36 Internal turning radius		4.34	Aisle width with pallet 800x1200 mm along forks	Ast	(mm)	2410
5.2 Lifting speed, with/ without load 5.3 Lowering speed, with/ without load (m/s) 0.136/0.16 (m/s) 0.168/0.13		4.35	Turning radius	Wa	(mm)	1700
5.2 Lifting speed, with/ without load (m/s) 0.136/0.16 5.3 Lowering speed, with/ without load (m/s) 0.168/0.13		4.36	Internal turning radius	b <sub>13</sub>	(mm)	840
6.2 Lift motor rating \$2.15% (AM)	Performance	5.2	Lifting speed, with/ without load		(m/s)	0.136/0.160
6.2 Lift motor rating S3 15% (kW) 2 6.4 Battery voltage/ rated capacity C5 (V/Ah) 2x12-24/5		5.3	Lowering speed, with/ without load		(m/s)	0.168/0.134
6.4 Battery voltage/ rated capacity C5 (V/Ah) 2x12-24/S	Drive	6.2	Lift motor rating S3 15%		(kW)	2.0
					` '	2x12-24/90



# KBE 1000/2,5



VDI 2198 - Four wheel Forklift Truck top view, reduced load width - b12 / 2 ≤ b13