





## Electric 4-wheels forklifts – KBE 15 / 18 / 20 / 25

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**KBE 15 / 18 / 20 / 25**

Payload: 1.500 / 1.800 / 2.000 / 2.500 Kg

Load center: 500 mm

*EU Compliant*

# Engine, transmission and battery Suppliers



Main components come from high quality suppliers, in order to grant the best reliability:

Drive motor: SME (Italy)



Lift motor: SME (Italy)

Display: SME (Italy)



Electronic: SME (Italy)

# Engine, transmission and battery

## Technical data



Model	Battery Voltage: V	Nominal capacity K5: Ah	Drive motor rating S2 (60 min): kW	Type of motor	Lift motor rating at S3 15%: kW
KBE 15	48	505/560	8	AC	10
KBE 18	48	505/560	8	AC	10
KBE 20	48	625/700	8	AC	15
KBE 25	48	630/700	8	AC	15

Single drive motor



# Engine, transmission and battery

## Transmission and options

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- Standard transmission with differential: Zhongnan (China)
- They all have the electric direction control switch
- Low noise level thanks to optimized gear-mesh technology



# Engine, transmission and battery Maintenance



- Easy to access battery pack for fast maintenance
- The rational use of space grants a simple and fast battery elements substitution



# Engine, transmission and battery Safety



- Emergency stop button: in case of danger the operator can instantly stop the truck and avoid damages to people and materials
- ISO 3691 valve: (Mandatory for EU compliance) it deactivates hydraulic functions when the operator isn't on the seat
- Safety belt: for major safety of the driver

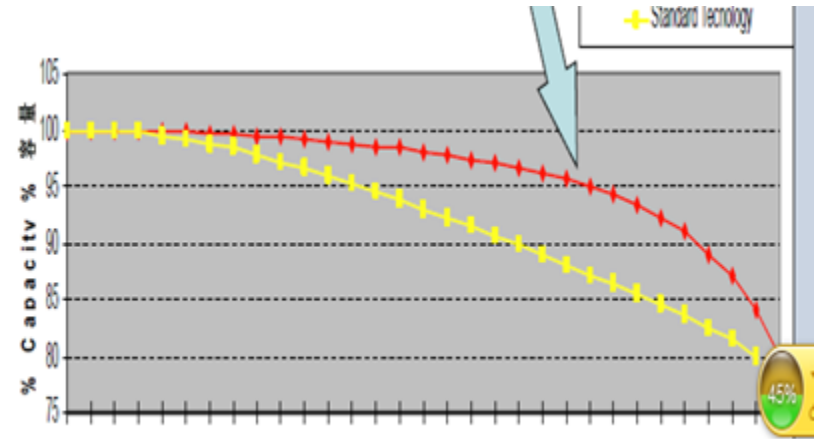




# Engine, transmission and battery Batteries



- KBE 15 / 18: 48 V 400/440/480 Ah batteries
- KBE 20 / 25: 48 V 630/700 Ah batteries
  
- The regenerative braking system helps extending the forklifts working hours and service life



## Engine, transmission and battery Batteries



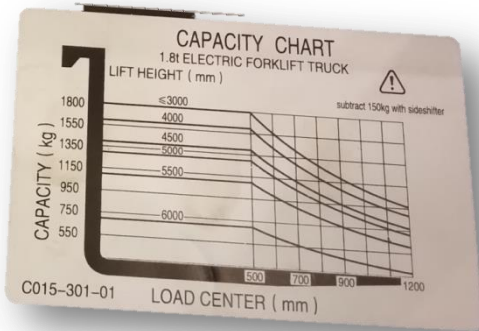
- KBE 15: 48 V from 400 Ah up to 480 Ah batteries
- KBE 18: 48 V from 400 Ah up to 480 Ah batteries
- KBE 20: 48 V 630/700 Ah batteries
  
- Optional battery water autofiller device on all forklifts



# Lifting group Structure



- Mast can be tele, 2 stage with free lift or triplex
- Capacity chart can give an indication on the range of use of the fork



- 2 stage with or without free lift and 3 stage with free lift optional masts available
- Many measures and capacity available

## Lifting group Forks



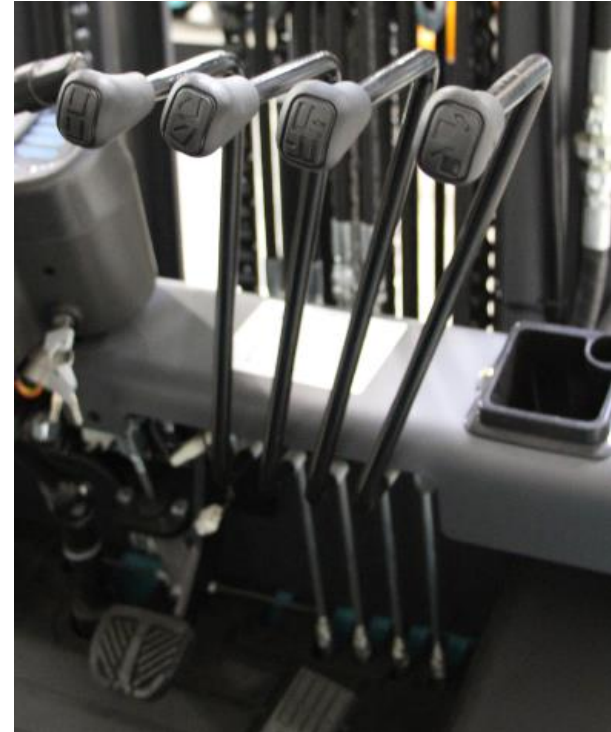
- Standard forks:
  - KBE 15 / 18: 920 mm
  - KBE 20 / 25: 1070 mm
- Optional forks:
  - Only KBE 15 / 18: 1070 mm
  - All KBEs: 1220 mm
  - All KBEs: 1370 mm
  - All KBEs: 1520 mm
  - KBE 20 / 25: 1670 mm
  - KBE 20 / 25: 1820 mm



## Lifting group Hydraulic system



- Standard is a 2 ways hydraulic valve
- In most of the cases the 3<sup>rd</sup> valve with pipe is mounted (available for 2 or 3 stage mast) in order to be used for the optional sideshift function
- It is recommended to install also the 4<sup>th</sup> valve possibly without pipe so that a further function can be easily added



## Lifting group

### Sideshift (optional)



- Sideshift available in 2 different mounts:
  - Integrated: it is part of the mast, in case of failure, the whole load carriage needs to be substituted
  - Hang on: it is added to the regular load carriage, in case of failure can be removed without affecting the forklift operativeness, the drawback is a reduction of the load capacity due to the center of gravity that moves forward



## Ergonomics and comfort Seat



- Comfort seat (Mandatory for EU compliance) standard on all models
- Adjustable seat (150 mm stroke) and tilted back ( $\pm 8^\circ$  tilt) ensure the best comfort



## Ergonomics and comfort

### Visibility



- The wide mast grants high visibility
- The thin structure of the overhead guard leaves free sight from each side
- The peculiar shape of the counterweight for all KBE models gives up to 400 mm of additional rear view





## Ergonomics and comfort

### Ergonomics



- Assist grip to help operators of all heights to get on board
  - Optional rear grip with integrated horn
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- All KBE models have a wide step for comfortable access and exit from both side



# Wheels Tyres



- Superelastic tyres on all wheels of all models
- KBE 15 / 18 / 20 / 25 have pneumatic tyres as an option

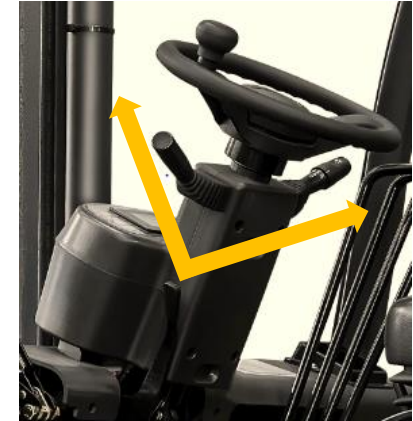
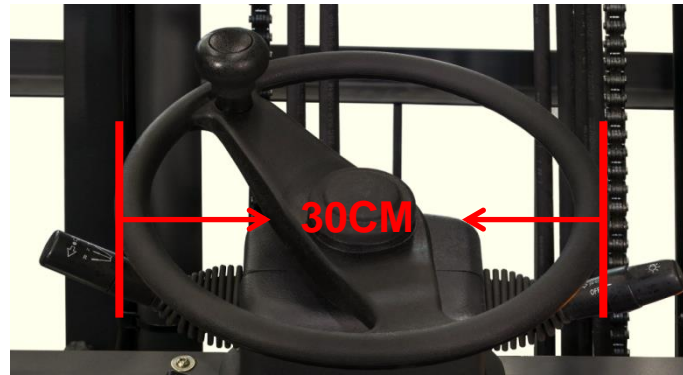


## Signalling and controls

### Steering wheel



- Reduced steering wheel diameter (30cm) to reduce steering time and operator's fatigue
- Adjustable steering wheel (11° of tilt)

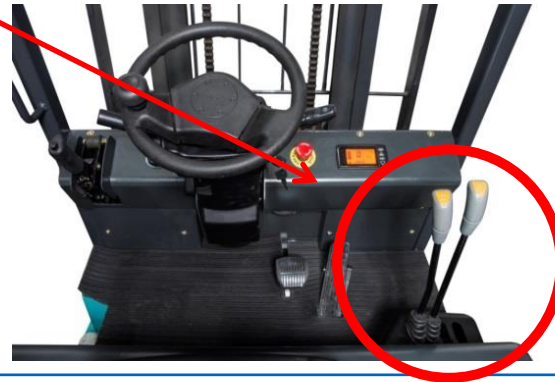


# Signalling and controls

## Pedals and controls



- Easy to reach pedals
- ON KBEs front mounted control levers are the standard, but you can have side mounted ones as an optional
- Handbrake next to the steering wheel
- Controls active only when the operator is placed on the driver seat (ISO 3691 valve)  
Mandatory for EU compliance



## Signalling and controls Display



LCD compact display shows all the data:

- Drive speed
- Drive mode
- Residual electricity
- Working hours
- Handbrake status
- Programmed maintenance indicator
- Empty seat alarm
- Slow speed operating
- Overheat indicator



# Signalling and controls

## Display



### Buttons and indicators:

- E-S-H button allows to choose the operating mode: Economic, Midrange, High mode
- Enter button can be used to change parameters with the help of arrow buttons
- Indicators on the left give information about:
  - Alarm (also shows the error code number in the display)
  - Lights and steering indicators status
  - Insufficient brake fluid



## Signalling and controls Lights



- Optional front LED lights (standard ones are halogen)
- Optional rear complete LED light group (standard ones are halogen)
- Optional flashing beacon
- Optional big rear working lamp
- Series reverse acoustic alarm



## Performances



<b>Model</b>	<b>Max speed: km/h (laden/unladen)</b>	<b>Max lift speed: m/s (laden/unladen)</b>	<b>Ast: mm (laden/unladen)</b>	<b>Max gradeability: % (laden/unladen)</b>
KBE 15	13/15	0,360/0,440	3498	12/15
KBE 18	13/15	0,360/0,440	3548	12/15
KBE 20	12/14	0,310/0,420	3754	12/15
KBE 25	12/14	0,300/0,400	3804	12/15



## Accessories

### Standard configuration

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#### KBE 15/18

- 2 stage mast VM3000
- 920 mm forks
- SE tyres
- Load backrest
- Lights
- Front and rear indicators
- ISO safety valve 3691
- Comfort seat

#### KBE 20/25

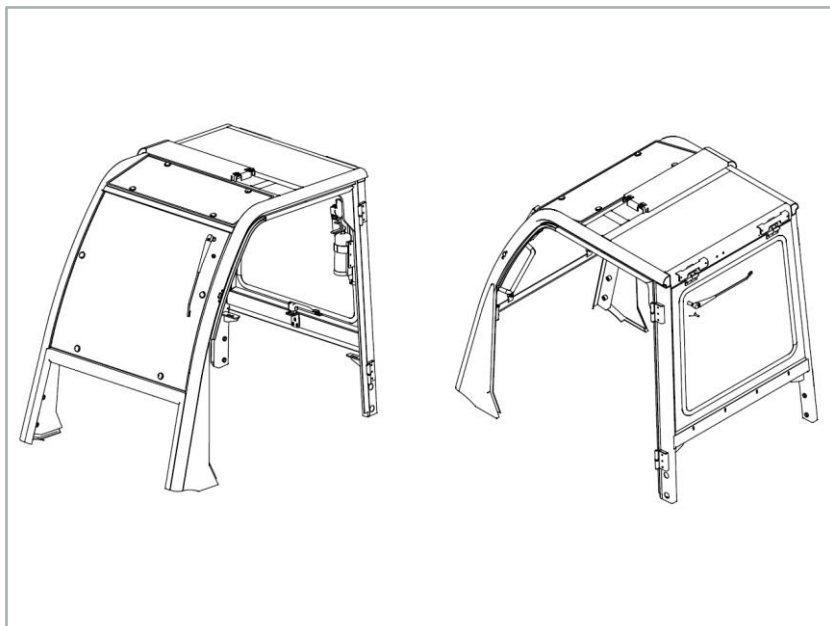
- 2 stage mast VM3000
- **1070 mm forks**
- SE tyres
- Load backrest
- Lights
- Front and rear indicators
- ISO safety valve 3691
- Comfort seat

## Accessories

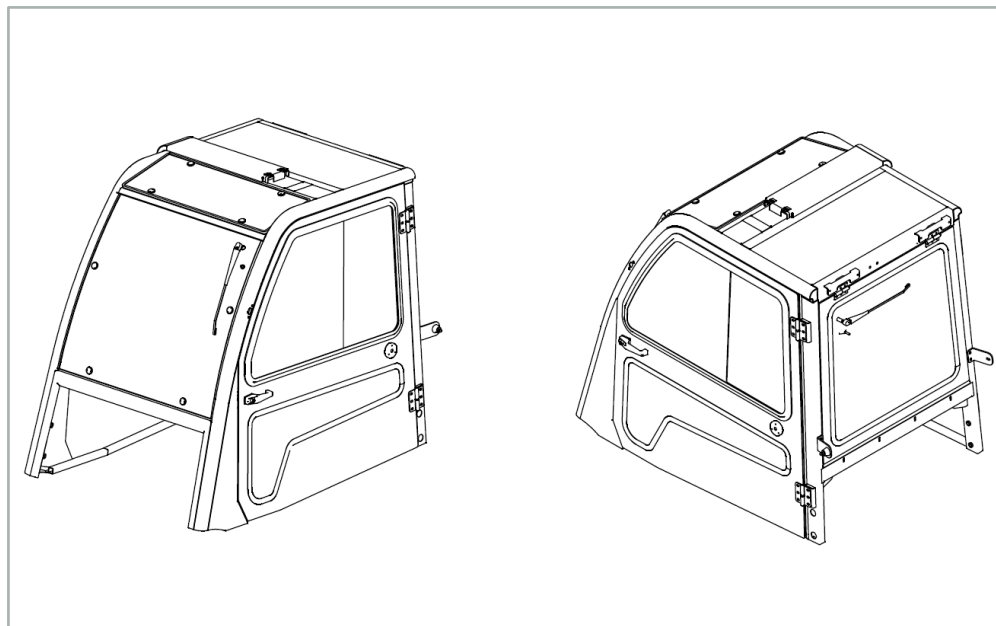
### Optional cabins



#### Half steel cabin



#### Full steel cabin



## Heater

It is possible to mount it only if full cabin is present

It boosts the comfort of the cabin for the operator especially during winter

Accessory	KBE 15	KBE 18	KBE 20	KBE 25
Heater (only available with full cabin)	•	•	•	•

## Cold store specs

Modifications to the truck that allow the truck to work inside fridge cells

It includes drive motor protected IP54

Accessory	KBE 15	KBE 18	KBE 20	KBE 25
Cold store specs	•	•	•	•

## Accessories

### Battery charger



#### European chargers

Charger type	Plug	Battery type	Charging time
Wa 48/60 3Φ	SB 350	48 V / 400 Ah	12 h
Wa 48/80 3Φ	SB 350	48 V / 440 Ah	12 h
Wa 48/80 3Φ	SB 350	48 V / 480 Ah	12 h
Wa 48/100 3Φ	SB 350	48 V / 630 Ah	12 h
Wa 48/100 3Φ	SB 350	48 V / 700 Ah	12 h
W0Wa 48/100 3Φ	SB 350	48 V / 400 Ah	8 h
W0Wa 48/100 3Φ	SB 350	48 V / 440 Ah	8 h
W0Wa 48/120 3Φ	SB 350	48 V / 480 Ah	8 h
W0Wa 48/140 3Φ	SB 350	48 V / 630 Ah	8 h
W0Wa 48/160 3Φ	SB 350	48 V / 700 Ah	8 h



