



KION NORTH AMERICA

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# Counterbalanced Forklift 8,000 | 10,000 lbs. Capacity

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KBD40/KBD50  
Series 6012 Diesel Forklift Trucks

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# Technical Data

November 2018

	POS	ITEM DESCRIPTION	UNIT				
Specification	1.1	Manufacturer		KION BAOLI		KION BAOLI	
	1.2	Model designation		KBD40		KBD50	
	1.3	Power unit		Diesel		Diesel	
	1.4	Operation		Rider Seated		Rider Seated	
	1.5	Load capacity	Q	8000 lbs	3629 kg	10000 lbs	4536 kg
	1.6	Load center	c	24 in	600 mm	24 in	600 mm
	1.8	Axle center to fork face	x	22.1 in	562 mm	22.3 in	567 mm
	1.9	Wheelbase	y	78.7 in	2000 mm	78.7 in	2000 mm
	Weight	2.1	Service weight		14065 lbs	6380 kg	16270 lbs
2.2.1		Axle weight with load, front		20437 lbs	9270 kg	23810 lbs	10780 kg
2.2.2		Axle weight with load, rear		2756 lbs	1250 kg	2910 lbs	1360 kg
2.3.1		Axle weight without load, front		6658 lbs	3020 kg	6393 lbs	3030 kg
2.3.2		Axle weight without load, rear		7408 lbs	3360 kg	8995 lbs	4060 kg
Wheels and Tires	3.1	Tire: SE=(superelastic), P=(pneumatic), C=(cushion)	-	SE		SE	
	3.2	Tire size, front	-	300x15-20		300x15-20	
	3.3	Tire size, rear	-	7.00x12-12		7.00x12-12	
	3.5	Wheels, number front/rear (X=drive)	-	2X/2		2X/2	
	3.6	Track width, front	b10 mm(in)	46.5 in	1180 mm	46.5 in	1180 mm
	3.7	Track width, rear	b11 mm(in)	46.9 in	1190 mm	46.9 in	1190 mm
	Dimensions and Overall Sizes	4.1	Mast tilt, forward/backward	°	6°/6°		6°/6°
4.2		Height of mast, lowered	h1	98.7 in	2507 mm	98.7 in	2507 mm
4.3		Free lift	h2	50.5 in	1282 mm	50.5 in	1282 mm
4.4		Lift	h3	185.4 in	4700 mm	185.4 in	4700 mm
4.5		Height of mast, extended	h4	235 in	5975 mm	235 in	5975 mm
4.7		Height of overhead guard (cabin)	h6	89 in	2260 mm	89 in	2260 mm
4.8		Height of drive seat	h7	50.4 in	1280 mm	50.4 in	1280 mm
4.12		Tow coupling height	h10	14.9 in	380 mm	14.9 in	380 mm
4.19		Overall length	l1	164.6 in	4330 mm	164.6 in	4380 mm
4.20		Length to fork face	l2	122.4 in	3110 mm	122.4 in	3160 mm
4.21		Overall width	b1 / b2	58.5 in	1485 mm	58.5 in	1485 mm
4.22		Fork dimensions SxExL	SxExL	2x5x48 in	50x125x1219 mm	2x6x42 in	50x150x1219 mm
4.24		in of fork carriage	b3	54 in	1380 mm	54 in	1380 mm
4.31		Ground clearance with load, mast	m1	5.7 in	145 mm	5.7 in	145 mm
4.32		Ground clearance with load, center of wheelbase	m2	7.1 in	180 mm	7.1 in	180 mm
4.33	Aisle width, 48" (1220mm) load & 8" (200mm) clearance	Ast	186.8 in	4745 mm	188.5 in	4788 mm	
4.34	Aisle width, add load & operational clearance	Ast	130.8 in	3322 mm	132.5 in	3366 mm	
4.35	Turning radius	Wa	108.7 in	2760 mm	110.2 in	2800 mm	
4.36	Minimum pivoting point distance	b13	35.4 in	900 mm	35.4 in	900 mm	
Performance	5.1.1	Travelling speed, with load		14.3 mph	22 kmh	14.3 mph	22 kmh
	5.1.2	Travelling speed, without load		15.5 mph	24 kmh	15.5 mph	24 kmh
	5.2.1	Lifting speed, with load		88.5 fpm	0.47 m/s	88.5 fpm	0.45 m/s
	5.2.2	Lifting speed, without load		98.4 fpm	0.49 m/s	98.4 fpm	0.49 m/s
	5.3.1	Lowering speed, with load		78.7 fpm	0.38 m/s	78.7 fpm	0.38 m/s
	5.3.1	Lowering speed, without load		63 fpm	0.26 m/s	63 fpm	0.26 m/s
	5.5.1	Tractive force, with load		5600 lbf	25000 N	6300 lbf	28000 N
	5.5.2	Tractive force, without load		4500 lbf	20000 N	4700 lbf	21000 N
	5.7.1	Climbing ability, with load		20 %		20 %	
	5.7.2	Climbing ability, without load		20 %		20 %	
Engine	5.10	Service brake		Mechanical/hydraulic		Mechanical/hydraulic	
	7.1	Engine manufacturer/type		Kohler KD2504 TCR		Kohler KD2504 TCR	
	7.2	Engine rated power according to ISO 1585		74.3 hp	55.4 kw	74.3 hp	55.4 kw
	7.3	Rated speed		2200 rpm		2200 rpm	
	7.4	Number of cylinders/displacement		152.5 in³	4/2482 cc	152.5 in³	4/2482 cc
Other	8.1	Type of drive control		Hydrodynamic 2-speed		Hydrodynamic 2-speed	
	8.2	Working pressure for attachments		2900 psi	200 bar	2900 psi	200 bar
	10.1	Volume fuel tank		23.7 gal	90 l	23.7 gal	90 l

## Performance

A powerful Kohler Tier 4 turbo diesel engine provides outstanding quality and performance. Kohler's advanced, common rail direct injection system and Electronic Control Unit (ECU) with fuel mapping make these trucks more fuel efficient. Maintenance costs are lower with no requirement for a Diesel Particulate Filter (DPF) or Diesel Exhaust Fluid (DEF).

## Quality & Support

Baoli forklifts come with the KION NA Standard Warranty and 12-months return on initial parts orders excluding maintenance parts.

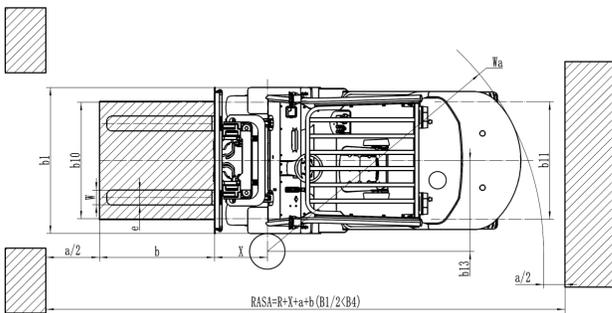
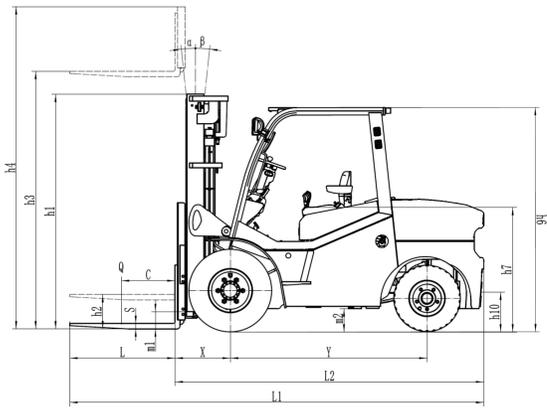
1<sup>st</sup> Year: Standard Equipment/Unlimited Hours

2<sup>nd</sup> Year: Standard Powertrain/4,000 Hours

Extended warranty available

## Service Network

Fully integrated into the KION North America supply chain and service system, Baoli provides shared resources from KION brands which offers a well-developed sales and service network. With Baoli spare parts in stock at the KION North America warehouse, spare parts delivery is possible within 24 hours throughout the U.S. through our authorized dealers.



## Standard Features

- Solid pneumatic (SE) drive and steer tires
- Triplex 98.7 - 185 - 50.5 mast
- 6° forward, 6° backwards tilt
- 54" wide x 48" high load backrest
- 89" high overhead guard
- 38" wide load backrest
- Left and right external rearview mirrors
- Tilting, adjustable steering column
- Comfort suspension seat with orange seat belt
- Rear road lights (brake, reverse, turn signals)
- LED twin spotlights forward - OHG mounted
- Back-up alarm and strobe light
- High air intake
- KION NA Standard Warranty



## Comfort & Convenience

The KBD line is equipped with many operator comfort and convenience features at no extra cost. The fully suspended and cushioned operator compartment, super elastic tires, adjustable comfort suspension seat and tilt steering column provide a more comfortable ride while accommodating different operators. Dual rearview mirrors and LED work lights are among the work assist features on this model.



## Easy Maintenance

- 500-hour maintenance interval
- No diesel exhaust fluid or regeneration required
- Single-side engine maintenance
- Engine hood opens to nearly 90 degrees
- Onboard diagnostics



## Options

- 4th-function hydraulics with four individual mechanical levers
- Blue spotlight rear – Left OHG mounted
- LED single spotlight rear – Right OHG mounted
- Full cab with heater (front/rear windows, wipers, right/left doors with glass, operator fan)
- Dual tires front
- Baoli orange color
- High-mounted air pre cleaner
- Fire extinguisher

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Standard truck meets all applicable mandatory requirements of ANSI/ITSDF B56.1 standards for powered industrial trucks. NOTE: Performance data may vary due to motor and system efficiency tolerances. The performance depicted represents nominal values obtained under typical operating conditions. Metric dimensions are in millimeters unless otherwise specified. All metric dimensions are not direct equivalents due to rounding data. The descriptions and specifications included on this data sheet were in effect at the time of printing. KION North America Corporation reserves the right to make improvements and changes in specification or design without notice and without incurring obligation. Please check with your authorized Baoli dealer for information on possible updates or revisions.