

## BX50 SERIES

2.0 TO 3.5 TON



### Gasoline and Diesel Engine Lift Trucks

- "Super Lift Hydraulic System" tandem pump that doubles lift speed at low rpm and continuous power KAPSIII steering system with synchronizer enabling an ergonomic smaller steering wheel
- Revolutionary "Dual-Floating" structure with shock absorbing transmission and engine to drastically reduce vibrations and obtain maximum comfort and optimum daily operator productivity
- Exceptional strength in the toughest activities thanks to the redesigned, "Heavy-Duty" cooling system, the high performance engines with low energy consumption and new wiring system
- Passive safety system in anticipation of the ISO3691 requirements with "man-on-board sensor" and blocking of hydraulic functions to prevent accidental use
- Exceptionally roomy and ergonomic operator compartment equipped with a standard shock-absorbing OSS seat for maximum comfort and rapid operations
- Immediate access to the major mechanical components for rapid ordinary maintenance at low cost

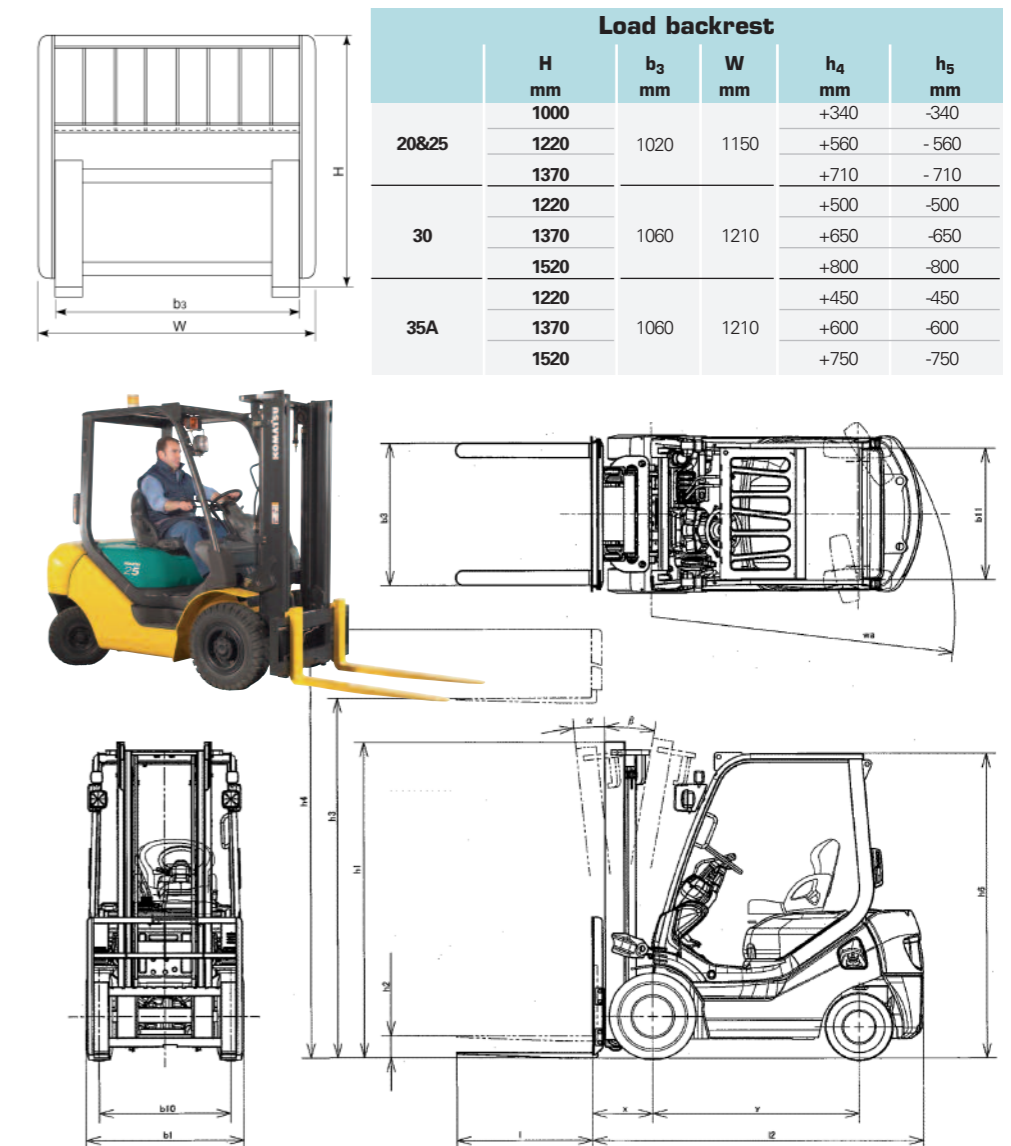
# BX50 SERIES

## 2.0 TO 3.5 TON

CHARACTERISTICS	Model Designation			FD20T-16R	FD25T-16R	FD30T-16R	FD35AT-16R	FG20HT-16R	FG25HT-16R	FG30T-16R	FG35AT-16R	
				Diesel					LPG			
WEIGHTS	Service Weight		kg	3380	3720	4340	5060	3370	3710	4330	5050	
				Axle Loading	Loaded	Front	Rear	500		500		
TYRES	Tyre Type <sup>o</sup>					Pneumatic				Pneumatic		
				Tyre Size	Front	Rear	2*2		2*2			
DIMENSIONS	Tread, Front	b10	mm		965	1.005	1.060	965	1.005	1.060		
				Tread, Rear	b11	mm	960	965	965	960	965	965
PERFORMANCES	Travel speed (FWD)	Loaded	1st/2nd/3rd				km/h	18,5	19	18	19	19,5
				Unloaded	1st/2nd/3rd	km/h		19,0	19,5	19	19,5	18,5
1.3	Power Type <sup>a</sup>											
1.4	Operation Type <sup>b</sup>											
1.5	Rated Capacity	Q	mm	2000	2500	3000	3500	2000	2500	3000	3500	
1.6	Load Center	c	mm	500				500				
1.8	Load Distance <sup>c</sup>	x	mm	470		490	505	470		490	505	
1.9	Wheelbase	y	mm	1650		1700		1650		1700		
2.1	Service Weight		kg	3380	3720	4340	5060	3370	3710	4330	5050	
2.2	Axle Loading	Loaded	Front	kg	4790	5510	6470	7540	4750	5480	6440	7510
2.2.1			Rear	kg	590	710	870	1020	620	730	890	1040
2.3		Unloaded	Front	kg	1600	1510	1680	1930	1560	1480	1640	1890
2.3.1			Rear	kg	1780	2210	2660	3130	1810	2230	2690	3160
3.1	Tyre Type <sup>o</sup>			Pneumatic				Pneumatic				
3.2	Tyre Size	Front		7.00-12-12PR(I)	28*9-15-12PR(I)	250-15-16PR(I)	7.00-12-12PR(I)	28*9-15-12PR(I)	250-15-16PR(I)			
3.3		Rear		6.00-9-10PR(I)	6.50-10-10PR(I)	6.50-10-12PR(I)	6.00-9-10PR(I)	6.50-10-10PR(I)	6.50-10-12PR(I)			
3.5	Number of Wheel: Front/Rear(x=driven)			2*/2				2*/2				
3.6	Tread, Front	b10	mm	965	1.005	1.060	965	1.005	1.060			
3.7	Tread, Rear	b11	mm	960	965	965	960	965	965			
4.1	Tilting Angle	α/β	°	6/12				6/12				
4.2	Mast Height, Lowered	h1	mm	2.145	2.220	2.265	2.145	2.220	2.265			
4.3	Std. Free Lift	h2	mm	155	155	160	145	155	155	160	145	
4.4	Std. Lift Height	h3	mm	3300				3300				
4.5	Mast Height, extended	h4	mm	4.350	4.575	4.580	4.350	4.575	4.580			
4.7	Height, Overhead Guard	h6	mm	2.110	2.130	2.140	2.110	2.130	2.140			
4.19	Length, with Std. Forks	l1	mm	3.605	3.655	3.775	3.865	3.605	3.655	3.775	3.865	
4.20	Length, to Fork Face	l2	mm	2.535	2.585	2.705	2.795	2.535	2.585	2.705	2.795	
4.21	Width, at Tyre	b1	mm	1.150	1.235	1.290	1.150	1.235	1.290			
4.22	Forks: Thickness/Width/Length	s/e/l	mm	45x100x1100	45x100x1100	50x100x1100	45x100x1100	45x100x1100	50x100x1100			
4.23	Fork Carriage Class <sup>d</sup>			2A	3A	2A	3A					
4.24	Width, Fork Carriage	b3	mm	1.020	1.060	1.020	1.060					
4.31	Ground Clearance	Under Mast	m1	mm	115	135	115	135				
4.32		at Center of Wheelbase	m2	mm	160	180	160	180				
4.33	Right Angle Stacking Aisle	1000x1200 pallet mm	Ast	mm	3.655	3.710	3.860	3.990	3.655	3.710	3.860	3.990
4.34		1200x800 pallet mm	Ast	mm	3.855	3.910	4.060	4.190	3.855	3.910	4.060	4.190
4.35	Turning Radius	Wa	mm	2.190	2.240	2.370	2.480	2.190	2.240	2.370	2.480	
5.1	Travel speed (FWD)	Loaded	1st/2nd/3rd	km/h	18,5	19	18	19	19,5	19		
5.1.1					Unloaded	1st/2nd/3rd	km/h	19,0	19,5	19	19,5	18,5
5.2	Lifting Speed	Loaded/Unloaded		mm/s	630/685	520/555	450/490	630/685	520/555	450/490		
5.3	Lowering Speed	Loaded/Unloaded		mm/s	450/500	420/500	420/400	450/500	420/500	420/400		
5.6	Drawbar Pull	Loaded at 1.5km/h		kN	18,1	18,1	17,5	20,3	18,5	18,5	17,5	16,1
5.8	Gradeability	Loaded at 1.5km/h		%	36	31	25	26	38	32	26	20
5.10	Service Brake	Operation/Control			Foot/Hydraulic		Powerbrake	Foot/Hydraulic		Powerbrake		
5.11	Parking Brake	Operation/Control			Hand/Mechanical				Hand/Mechanical			
5.12	Steering				KAPS III				KAPS III			
6.4	Battery	Voltage/Capacity <sup>e</sup>		V/Ah	12/64				12/33			
7.1	Maker/Model				Komatsu / 4D94LE			4D98E	Nissan K25			
7.2	Output SAE gross			kW @ min -1	46@2450			53@2400				
7.3.1					Max. Torque, SAE gross	Nm @ min -1	186@1800			216@1700		
7.4	Num. of Cylinder, Displacement			# / cm <sup>3</sup>	4 / 3052			4 / 3318			4 / 2488	
7.6	Fuel Tank Capacity			Ltr	58				-			
8.2	Relief Pressure for Attachment			bar	181				181			
8.2.1	Tank Capacity			Ltr	60				60			
8.6	Clutch				Torque Converter				Torque Converter			
8.7	Transmission				TORQFLOW				TORQFLOW			

Tyres				Tyre Size		Rim Size	Tread mm	Overall Width mm	Additional Weight Kg
20&25	Front	PN	Single	7.00-12-12PR	5.00Sx12	965	1150	0	
			Double <sup>(1)</sup>	5.00Sx12DT	1185	1595	+140		
		SE	Single	7.00-12	5.00Sx12DT	965	1070	+60	
	Double <sup>(1)</sup>		1185	1520	+250				
	Rear	PN		6.00-9-10PR	4.00Sx9DT	975	-	0	
		SE		6.00-9				+32	
30	Front	PN	Single	28x9-15-12PR	7.00Tx15	1005	1235	0	
			Double <sup>(1)</sup>		1260	1745	+205		
		SE	Single	28x9-15	7.00Sx15	1005	1070	+70	
	Double <sup>(1)</sup>		1260	1520	+340				
	Rear	PN		6.50-10-10PR	5.00Fx10DT	980	-	0	
		SE		6.50-10				+45	
35A	Front	PN	Single	250-15-16PR	7.00Fx15	1060	1290	0	
			Double <sup>(1)</sup>	6.00-15-10PR	4.50Ex15SDC	1110	1520	+17	
		SE	Single	250-15	7.00Fx15	890	1070	+62	
	Double <sup>(1)</sup>		6.00-15	4.50Ex15SDC	1110	1520	+124		
	Rear	PN		6.50-10-12PR	5.00Fx10TB	965	-	0	
		SE		6.50-10				+43	

(1) standard width fork carriage is installed in any case

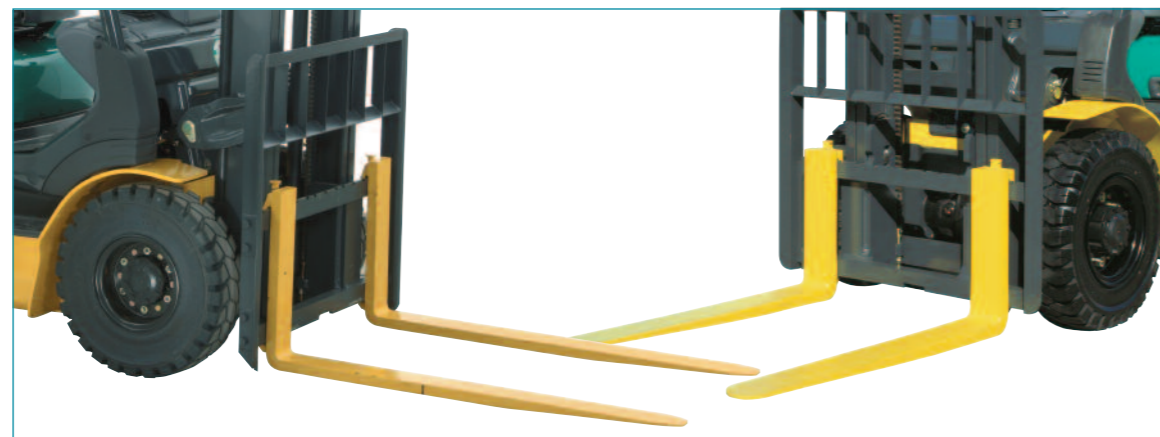


(1) Data for truck with FV3.3mt mast WITHOUT load backrest  
 VDI Fuel Consumption 45 cycle/hour: K25 LPG -> 3.0 kg/hour 4D94LE -> 2.8 litres/hour  
 VDI Fuel Consumption 60 cycle/hour: K25 LPG -> 4.0 kg/hour 4D94LE -> 3.7 litres/hour

A= Electric, Diesel, Gasoline, LPG, Cable  
 B= Pedestrian, Driver Standing, Sitting, Order Picking  
 C= Front axle center to fork face

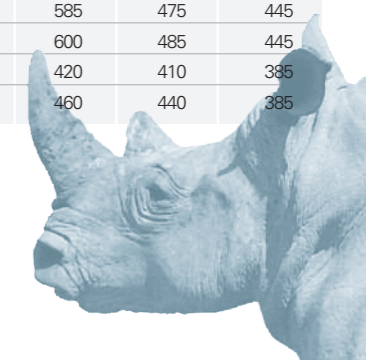
D= Cushion, Elastic Cushion, Pneumatic, Polyurethane  
 E= ISO 2328, Type A/B  
 F= at 5-hour rating

Model		Capacity kg@ 500mm												Mast weight	
		Integral Sideshift x = x+40mm						Standard carriage							
		Superelastic		Pneumatic		Superelastic		Pneumatic		Superelastic		Pneumatic			
h <sub>3</sub> mm	h <sub>1</sub> mm	h <sub>4</sub> [!] mm	h <sub>2</sub> /h <sub>5</sub> [!] mm	α <sub>°</sub>	β <sub>°</sub>		Single	Double	Single	Double	Single	Double	Single	Double	Mast weight
					<p><b>FD20T-16R / FG20HT-16R</b></p> <p><b>FV</b> FOH Std = 425 FOH SS = 445</p> <p><b>FFV</b> FOH=425</p> <p><b>TFV</b> FOH Std = 435 FOH SS = 450</p>										
<p><b>FD25T-16R / FG25HT-16R</b></p> <p><b>FV</b> FOH Std = 425 FOH SS = 445</p> <p><b>FFV</b> FOH=425</p> <p><b>TFV</b> FOH Std = 445 FOH SS = 460</p>															



Model		Capacity kg@ 500mm												Mast weight	
		Integral Sideshift x = x+40mm						Standard carriage							
		Superelastic		Pneumatic		Superelastic		Pneumatic		Superelastic		Pneumatic			
h <sub>3</sub> mm	h <sub>1</sub> mm	h <sub>4</sub> [!] mm	h <sub>2</sub> /h <sub>5</sub> [!] mm	α <sub>°</sub>	β <sub>°</sub>		Single	Double	Single	Double	Single	Double	Single	Double	Mast weight
					<p><b>FD30T-16R / FG30HT-16R</b></p> <p><b>FV</b> FOH Std = 445 FOH SS = 460</p> <p><b>FFV</b> FOH=445</p> <p><b>TFV</b> FOH Std = 445 FOH SS = 470</p>										
<p><b>FD35AT-16R / FG35AT-16R</b> (Hook-ON SS Data - Integral SS Available)</p> <p><b>FV</b> FOH Std = 455 FOH SS = 495</p> <p><b>TFV</b> FOH Std = 475 FOH SS = 485</p>															

Forks Speed		mm/s		FD20T-16R	FD25T-16R	FD30T-16R	FD35AT-16R	FG20HT-16R	FG25HT-16R	FG30T-16R	FG35AT-16R
				Loaded	Unloaded	Loaded	Unloaded	Loaded	Unloaded	Loaded	Unloaded
FV	Lifting	620	670	620	670	515	410	630	630	520	450
	Lowering	450	500	450	500	400	450	450	450	420	420
FFV	Lifting	590	625	585	625	470	—	585	595	450	—
	Lowering	435	420	430	420	390	—	435	430	390	—
TFV	Lifting	595	630	585	630	495	410	585	585	475	445
	Lowering	440	460	420	460	410	385	440	420	410	385



**KOMATSU**

# BX50 SERIES

## 2.0 TO 3.5 TON



New 3.5ton Compact



Agility, Comfort and Productivity



Outstanding Cooling System



Reliable Components



Low-Cost Maintenance

The introduction of the new BX50 Komatsu series represents a new standard of IC engines in the forklift truck market. The product line now consists of 8 Diesel and LPG models ranging from 2.0 tons to the unique of 3.5-ton super compact. Our main objective was to satisfy customers needs by increasing their hourly productivity with a new "SLHS" hydraulic system, reduced energy consumption, low maintenance costs and operators who can continue to perform due to the comfortable driving conditions ensured by the revolutionary "Dual-Floating" design in which the engine, cab and transmission are independent of the frame.

Komatsu realizes that a satisfied and well-rested operator works efficiently and productively due to the:

- Drastic reduction in vibrations from the transmission and surface due to the Dual-Floating structure
- Roomy, shock absorbing OSS seat
- New, highly legible display with redesigned multifunctional levers
- Excellent living conditions and accessibility in the operator compartment, which can accommodate the tallest of European drivers
- Exceptional visibility provided by the new masts, counterweight and centrally positioned wide angle rear view mirror, a standard feature on all trucks
- Lightness of the smaller steering wheel (300mm) and redesigned hydraulic levers

All of which ensure that the comfort of the individual who is responsible for the actual productivity of the truck is maintained throughout the shift.

Customer satisfaction also derives from the knowledge of always being able to count on the renowned reliability of KOMATSU trucks for any application and in the most difficult situations, and now reflected in the BX50 product line with the following features:

- A redesigned transmission with a universal joint made of aluminium alloy for improved heat dissipation, supported by a new cooling system with dedicated radiator for the transmission oil system which is seven times more powerful than the previous one
- The latest generation electrical system with waterproof connectors and centralized fuse boxes, together with covers that have been designed to be watertight
- Robust, powerful engines (4D92E and K21) protected by a cyclone filter

- Reinforced OSS driver's seat

In anticipation of the new safety regulations that will come into force, the BX50 series meets the ISO3691 standards with its man-on-board sensor which, in the event of his/her absence, blocks all hydraulic functions and disconnects the transmission by means of an alarm signal if the parking brake has not been applied.

The new transmission with torque converter and independent front axle guarantees gentle clutch control and rapid changes of direction with powerful but gradual acceleration. Loads are approached smoothly and the redesigned electronic control directional levers and halogen lights (Standard features) are now closer to the driving wheel for quicker and safer control.

The KAPS III steering system is extremely light, quick and completely hydraulic with a system that synchronizes the position of the steering wheel and angle of the wheels to prevent the drifting phenomenon from the steering wheel and swaying movement typical of trucks that are not equipped with this feature, resulting in more precise and safer driving over long distances and in and outside the warehouse.

The combination of the hydraulic pump for heavy duty work, the high torque (147-157Nm) at low rpm of engine, the high visibility of the forks and the integral side shifter (optional) allow for high lifting speeds and rapid, safe stacking operations.

Simplified maintenance was one of the basic concepts that Komatsu specifically aimed for when developing the product and achieved by the exceptionally easy access to the engine/transmission compartment without the necessity to change the position of the steering column.

A wide range of options to meet the needs of the European market is available from the catalogue; please do not hesitate to contact your nearest Komatsu Forklift dealer who will send an expert to analyze your requirements and recommend the best investment and application solution for you.

Please visit our website, [www.komatsuforklift.net](http://www.komatsuforklift.net), where you can evaluate the entire range of Komatsu Forklift products and register with us to receive news and information and access the reserved areas.

# KOMATSU

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This brochure may contain equipment that are not available in your area. Please consult your Komatsu Forklift distributor for those items you may require. Materials and specifications are subject to change without notice.

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