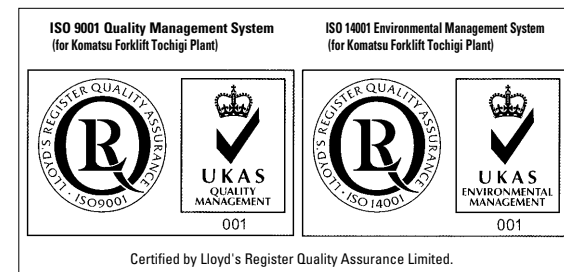


**KOMATSU**

# *FX20/GX20*

*series*



The illustrations do not necessarily show the standard version and features of the equipment. Features and specifications may vary by country and region. Products and specifications are subject to change without prior notice. Please contact your Komatsu dealer for detail information.

## **Komatsu Forklift Co., Ltd.**

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Form No. BR-FXGX20-002-ENG  
Printed in Japan 0905-1-06Shi

**KOMATSU FORKLIFT**



# Ultimate Power and Stability



Operability, productivity and economy are the themes underlying the FX20/GX20 series design. A high-performance engine for better power, highly reliable wet-disc brakes, a highly rigid mast, and electrically controlled four-speed transmission for excellent travel speed and acceleration make FX20/GX20 machines a joy to operate, as well as strong contributors to a company's bottom line.

## **FX20** series



**FD150-6/FD180-6/FD200Z-6**

## **GX20** series



**FD200-6/FD250Z-6**



# Superb Productivity

## Excellent Travel Performance

Powerful engine and nimble four-speed transmission bring travel speed and performance to the fore.



**GX20**  
(FD250Z-6) [Unloaded]

**34 km/h**  
(21.1mph)

**FX20**  
(FD150-6) [Unloaded]

**29 km/h**  
(18.0mph)

**GX20**  
(FD250Z-6) [Loaded]

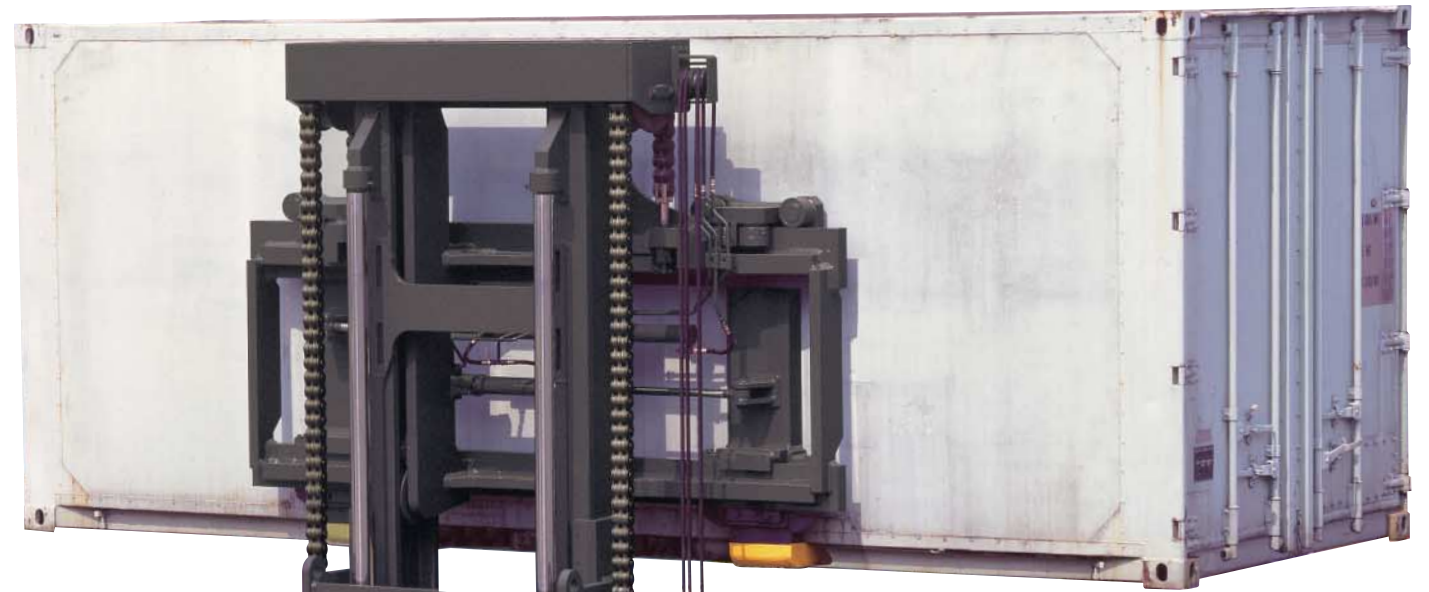
**270 mm/s**  
(53.1fpm)

**FX20**  
(FD150-6) [Loaded]

**360 mm/s**  
(70.9fpm)

## Fast Lifting Speeds

Hydraulic circuit has been optimized to achieve top-of-the-class lifting speeds.



## Low Mast Height

Low mast height makes loading, unloading and other on-ship tasks easier.



## Emission-Controlled Exhaust

The FX20/GX20 series is the first in its class to employ emission-controlled diesel engines.



**6CT8.3-215**  
**GX20** series engine

Rated output  
**166 kW** (226HP)  
@2200min<sup>-1</sup>

Displacement: 8267cm<sup>3</sup> (504.5cu.in)

**6BG1-T**  
**FX20** series engine

Rated output  
**118 kW** (160HP) @2200min<sup>-1</sup>

Displacement: 6494cm<sup>3</sup> (396.3cu.in)

## Hydrostatic Power Steering

Fully hydrostatic power steering system minimizes kickback. Also, a reduced turning ratio allows the operator to handle sharp turns with ease.



## Small Turning Radius

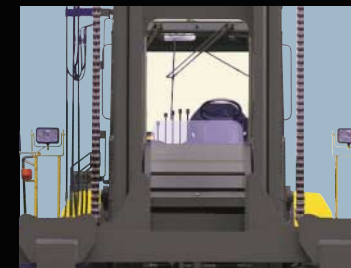
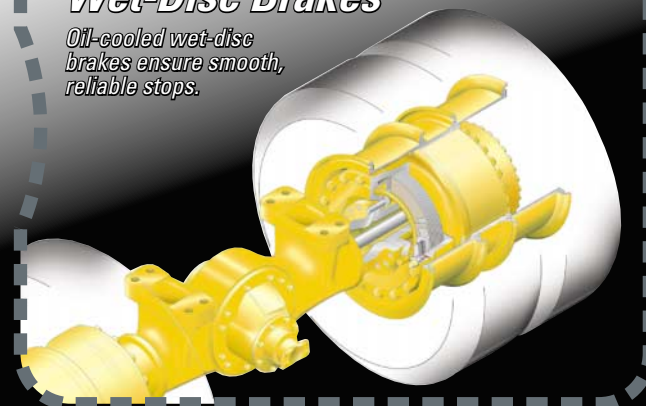
Sharp turning radius provides better maneuverability in tight spaces and better job efficiency.



FD250Z-6

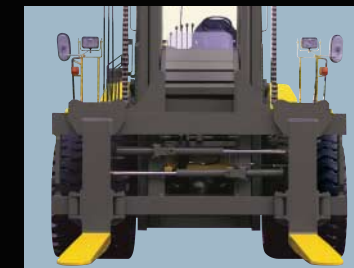
## Wet-Disc Brakes

Oil-cooled wet-disc brakes ensure smooth, reliable stops.



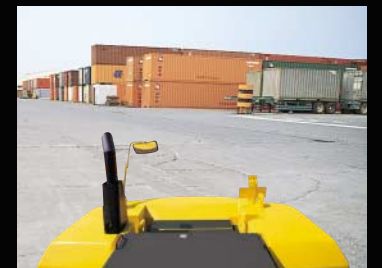
## Free-View Mast

Efficient mast design offers good forward visibility for better operating productivity.



## Hydraulic Fork Positioner (Optional)

Hydraulic fork positioner with side shift function substantially improves operational efficiency.

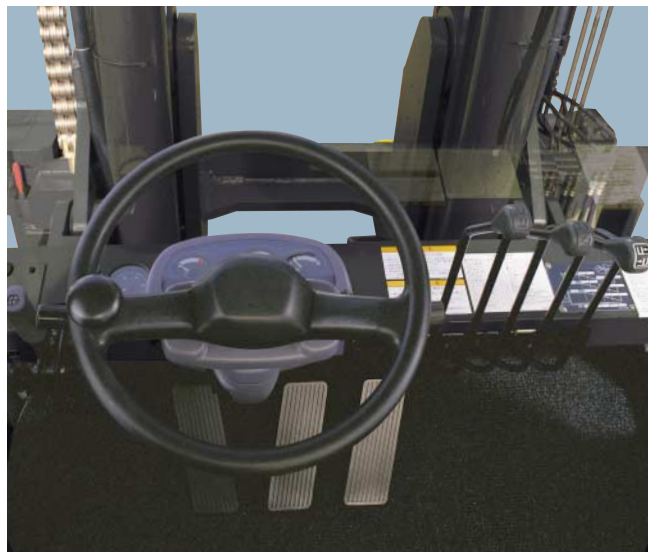


## Optimal Rear View

Wider viewing angle and rear under mirror help confirm that the path is clear.



# Excellent Comfort and Convenience



## Integrated Instrument Panel

With all instruments in a single panel, major machine conditions can be monitored at a single glance.

Speedometer

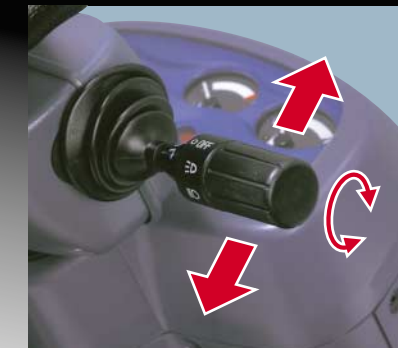
Integrated meter panel for at-a-glance checks

Meters	Safety indicators
1 Hourmeter	5 Engine oil pressure warning lamp
2 Water temperature gauge	6 Charge warning lamp
3 Torque converter oil temperature gauge	7 Operation lamp
4 Needle-type fuel gauge	8 Air cleaner element warning lamp
	9 Coolant level warning lamp
	10 Parking brake lamp



## Excellent Shifting

A rugged four-speed transmission and easy-to-operate electric control lever allow quick forward/reverse shifts. Also, a smooth-shifting automatic transmission (optional) is available for optimal gear selection even under frequent grade changes.



## Integrated Control

Integrated headlamp and direction indicator control column offers easy one-hand operation.



## Comfortable Seat

Blow-formed for durability, a new suspension seat with reclining function is provided as standard, for hours of working comfort.



## Tiltable Steering Column

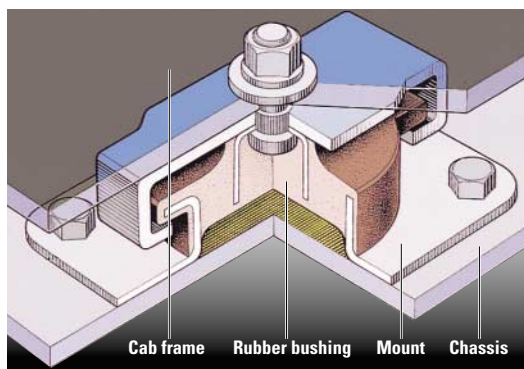
A tiltable steering column ensures convenient, fatigue-free operation.



## Steel Cab (Optional)

As an option, a fully enclosed steel cab allows the operator to work in quiet comfort.

# Easy Maintenance



## Full-Floating Suspended Cab

Full-floating suspended cab insulates operator from machine vibrations and provides hours of operator comfort.



## Mounting and Dismounting

Generously wide steps with skid-proof coating are conveniently placed for safe machine mounting and dismounting.



## Back-up Light and Buzzer

A backup lamp lights and a buzzer sounds to caution people in the vicinity when the machine is in reverse.



## Bonnet Cover

The top and sides of the bonnet cover fold out of the way for easy access.



## At-a-Glance Checks

A large fuel tank allows hours of work without the need for frequent fueling stops. Also, exterior fuel and hydraulic oil sight gauges allow simple checks of the machine's vital fluids from the ground.



## Air Cleaner

Easy access to the air cleaner, which extends outside the machine, encourages regular checks. As backup, a warning lamp inside the cab indicates clogging.

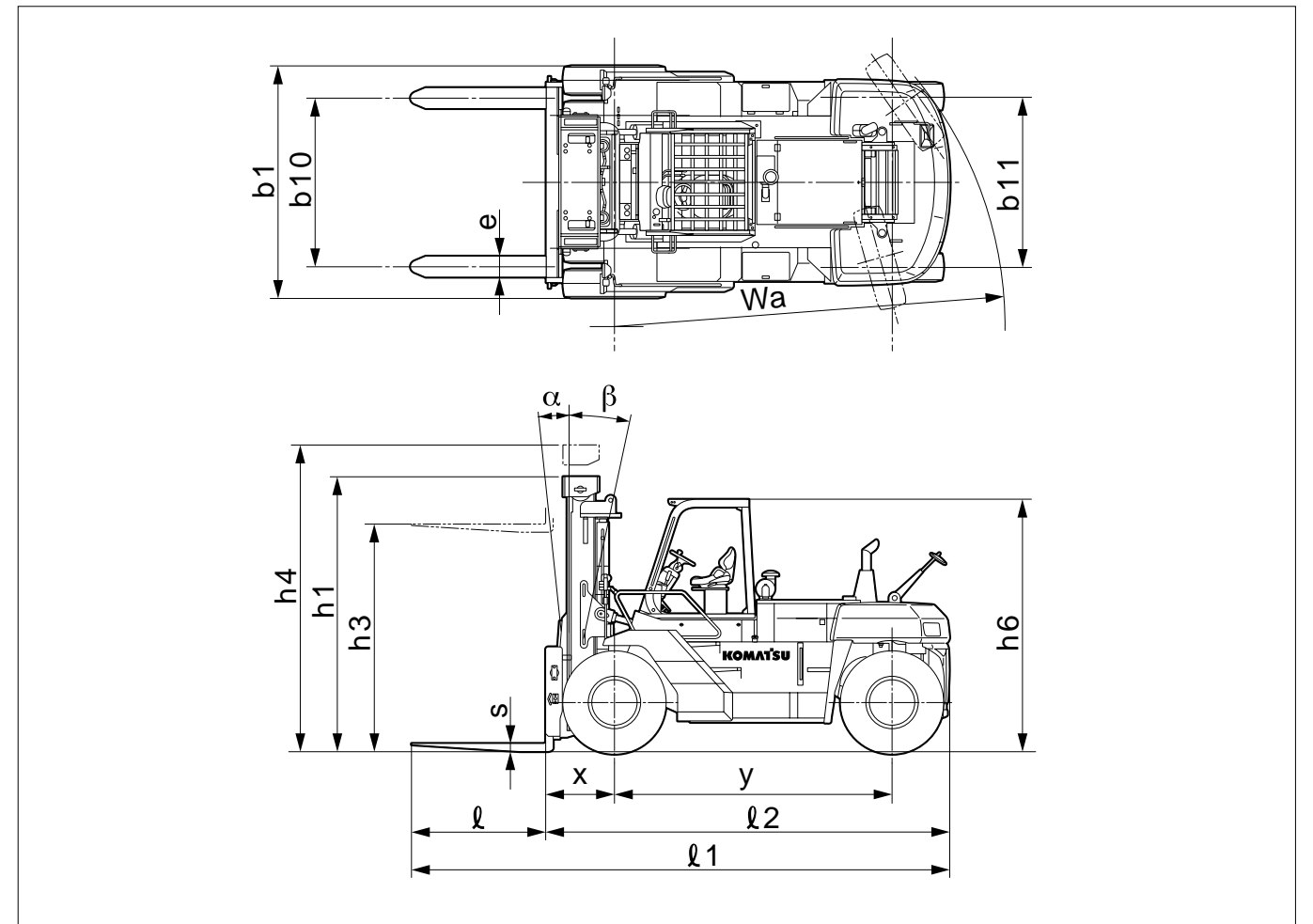


Specification Sheet

				FX20				
Characteristics	1.2	Model	Manufacturer's Designation	FD150-6	FD180-6	FD200Z-6		
	1.3	Power Type	Electric, Diesel, Gasoline, LPG, Cable	Diesel	Diesel	Diesel		
	1.4	Operation Type	Pedestrian, Driver standing, Sitting, Order picking	Sitting	Sitting	Sitting		
	1.5	Rated Capacity	Q	Rated Capacity kg(lb.)	15000(33,000)	18000(40,000)	20000(44,000)	
	1.6	Load Center	c	Rated Load Center mm(in.)	900(36)	900(36)	900(36)	
	1.8	Load Distance	x	Front Axle Center to Fork Face mm(in.)	865(34.1)	925(36.4)	925(36.4)	
	1.9	Wheelbase	y	mm(in.)	3700(145.7)	3700(145.7)	3700(145.7)	
	2.1	Service Weight		kg(lb.)	21680(47,800)	25125(55,390)	26880(59,260)	
	Weight	2.2	Axle Loading	Loaded	Front	kg(lb.)	33670(74,230)	39660(87,430)
Rear		kg(lb.)			3010(6,640)	3465(7,640)	3870(8,530)	
2.2.1		Unloaded		Front	kg(lb.)	11520(25,400)	12780(28,170)	13150(28,990)
2.3				Rear	kg(lb.)	10160(22,400)	12345(27,220)	13730(30,270)
2.3.1								
Tyre	3.1	Tyre Type	Cushion, Elastic Cushion, Pneumatic, Polyurethane	Pneumatic	Pneumatic	Pneumatic		
	3.2	Tyre Size	Front	12.00-24-16PR	13.00-24-18PR	14.00-24-20PR		
	3.3		Rear	12.00-24-16PR	13.00-24-18PR	14.00-24-20PR		
	3.5	Number of Wheel	Front/Rear(x=driven)	4x/2	4x/2	4x/2		
	3.6	Tread, Front	b10	mm(in.)	2230(87.8)	2230(87.8)	2230(87.8)	
	3.7	Tread, Rear	b11	mm(in.)	2305(90.7)	2305(90.7)	2265(89.2)	
	Basic Measurement	4.1	Tilting Angle	$\alpha/\beta$	Forward/Backward degree	6/12	6/12	6/12
4.2		Mast Height, Lowered	h1	2-stage Std. Mast mm(in.)	3300(129.9)	3600(141.7)	3640(143.3)	
4.3		Std. Free Lift	h2	2-stage Std. Mast from Ground mm(in.)	0(0.0)	0(0.0)	0(0.0)	
4.4		Std. Lift Height	h3	2-stage Std. Mast from Ground mm(in.)	3000(118)	3000(118)	3000(118)	
4.5		Mast Height, Extended	h4	2-stage Std. Mast mm(in.)	4790(188.6)	5090(200.4)	5130(202.0)	
4.7		Height, Overhead Guard	h6	mm(in.)	3295(129.7)	3325(130.9)	3360(132.3)	
4.19		Length, with Std. Forks	$l1$	mm(in.)	7145(281.3)	7205(283.7)	7205(283.7)	
4.20		Length, to Fork Face	$l2$	mm(in.)	5325(209.6)	5385(212.0)	5385(212.0)	
4.21		Width, at Tyre	b1	mm(in.)	2985(117.5)	3015(118.7)	3095(121.9)	
4.22		Forks	s/e/l	Thickness/Width/Length mm(in.)	90x250x1820(3.5x9.8x71.7)	95x270x1820(3.7x10.6x71.7)	95x280x1820(3.7x11.0x71.7)	
4.23		Fork Carriage Class	ISO 2328, Type A/B/no		Pin Mount	Pin Mount	Pin Mount	
4.24		Width, Fork Carriage	b3	mm(in.)	2640(103.9)	2650(104.3)	2650(104.3)	
4.31		Ground Clearance	m1	Under Mast mm(in.)	300(11.8)	300(11.8)	335(13.2)	
4.32			m2	at Center of Wheelbase mm(in.)	335(13.2)	360(14.2)	400(15.7)	
4.33		Right Angle Stacking Aisle	Ast	plus load length mm(in.)	5865(230.9)	5925(233.3)	5925(233.3)	
4.35		Turning Radius	Wa	mm(in.)	5000(196.9)	5000(196.9)	5000(196.9)	
4.36	Distance to Turning Center	b13	from Chassis Center mm(in.)	2250(88.6)	2250(88.6)	2250(88.6)		
Performance	5.1	Travel Speed(FWD)	Loaded, 1st /2nd/3rd/4th	km/h(mph)	7/12/20/20(4.3/7.5/12.4/12.4)	7/12/18/18(4.3/7.5/11.2/11.2)	7/12/18/18(4.3/7.5/11.2/11.2)	
	5.1.1		Unloaded, 1st /2nd/3rd/4th	km/h(mph)	7/13/22/29(4.3/8.1/13.7/18.0)	7/13/22/29(4.3/8.1/13.7/18.0)	7/13/22/28(4.3/8.1/13.7/17.4)	
	5.2	Lifting Speed	Loaded/Unloaded	mm/s(fpm)	360/390(70.9/76.8)	310/340(61.0/66.9)	270/290(53.1/57.1)	
	5.3	Lowering Speed	Loaded/Unloaded	mm/s(fpm)	400/400(78.7/78.7)	350/350(68.9/68.9)	350/350(68.9/68.9)	
	5.6	Max. Drawbar Pull	Loaded, 3min, rating	N(lb.)	95000(21,360)	91000(20,460)	86000(19,330)	
	5.8	Max. Gradeability	Loaded, 3min, rating/1.5km/h	%	27.7	22.2	19.1	
	5.10	Service Brake	Operation/Control		Foot/Wet Disc Brake	Foot/Wet Disc Brake	Foot/Wet Disc Brake	
	5.11	Parking Brake	Operation/Control		Hand/Mechanical	Hand/Mechanical	Hand/Mechanical	
5.12	Steering	Type		Power Steering	Power Steering	Power Steering		
I.C. engine	6.4	Battery	Voltage/Capacity at 5-hour rating V/Ah	24/96	24/96	24/96		
	7.1	Make/Model		ISUZU/6BG1-T	ISUZU/6BG1-T	ISUZU/6BG1-T		
	7.2	Rated Output, SAE gross	kW(HP)	118(160)	118(160)	118(160)		
	7.3	Rated RPM	min <sup>-1</sup>	2200	2200	2200		
	7.3.1	Max. Torque, SAE gross	Nm(lbf)@min <sup>-1</sup>	588(434)@1600	588(434)@1600	588(434)@1600		
	7.4	No. of Cylinder / Displacement	cm <sup>3</sup> (cu.in)	6/6494(396.3)	6/6494(396.3)	6/6494(396.3)		
	7.6	Fuel Tank Capacity	Ltr(U.S.gal.)	400(105.7)	400(105.7)	400(105.7)		
Others	8.2	Relief Pressure for Attachment	bar(psi)	206(3,000)	206(3,000)	206(3,000)		
	8.2.1	Tank Capacity	Ltr(U.S.gal.)	340(89.8)	340(89.8)	340(89.8)		
	8.6	Clutch		Torque Converter	Torque Converter	Torque Converter		
	8.7	Transmission		TORQFLOW	TORQFLOW	TORQFLOW		

Performance may vary due to operating conditions. The performance shown represents nominal values under typical operating conditions. Specifications are subject to improvements and changes without notice.

Drawing



Standard Equipment

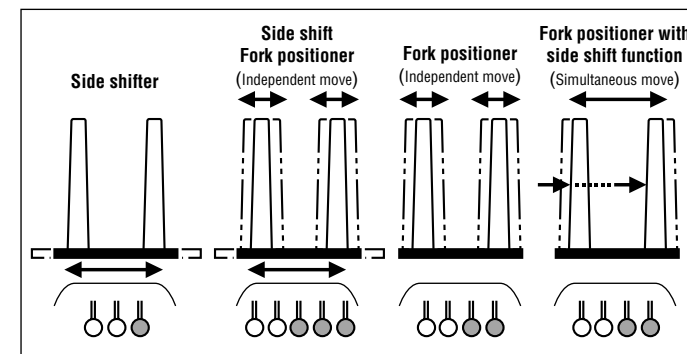
- Headlights •Turn signal lamps •Stop and tail lamps •Backup lamps •Tiltable steering column
- Deluxe operator seat •Floor mat •Overhead guard •Cyclonic air cleaner •Rear view mirror
- Rear under mirror •Backup buzzer •Fuel cap with lock key •Manual fork positioner •Drawbar pin
- Engine oil pressure warning lamp •Charge warning lamp •Air cleaner element

Options

- Steel cab •Automatic transmission •Air conditioner •Rear working light •Fire extinguisher

Attachments

- Side shifter •Side shift fork positioner (Independent move) •Fork positioner (Independent move)
- Fork positioner with side shift function (Simultaneous move)



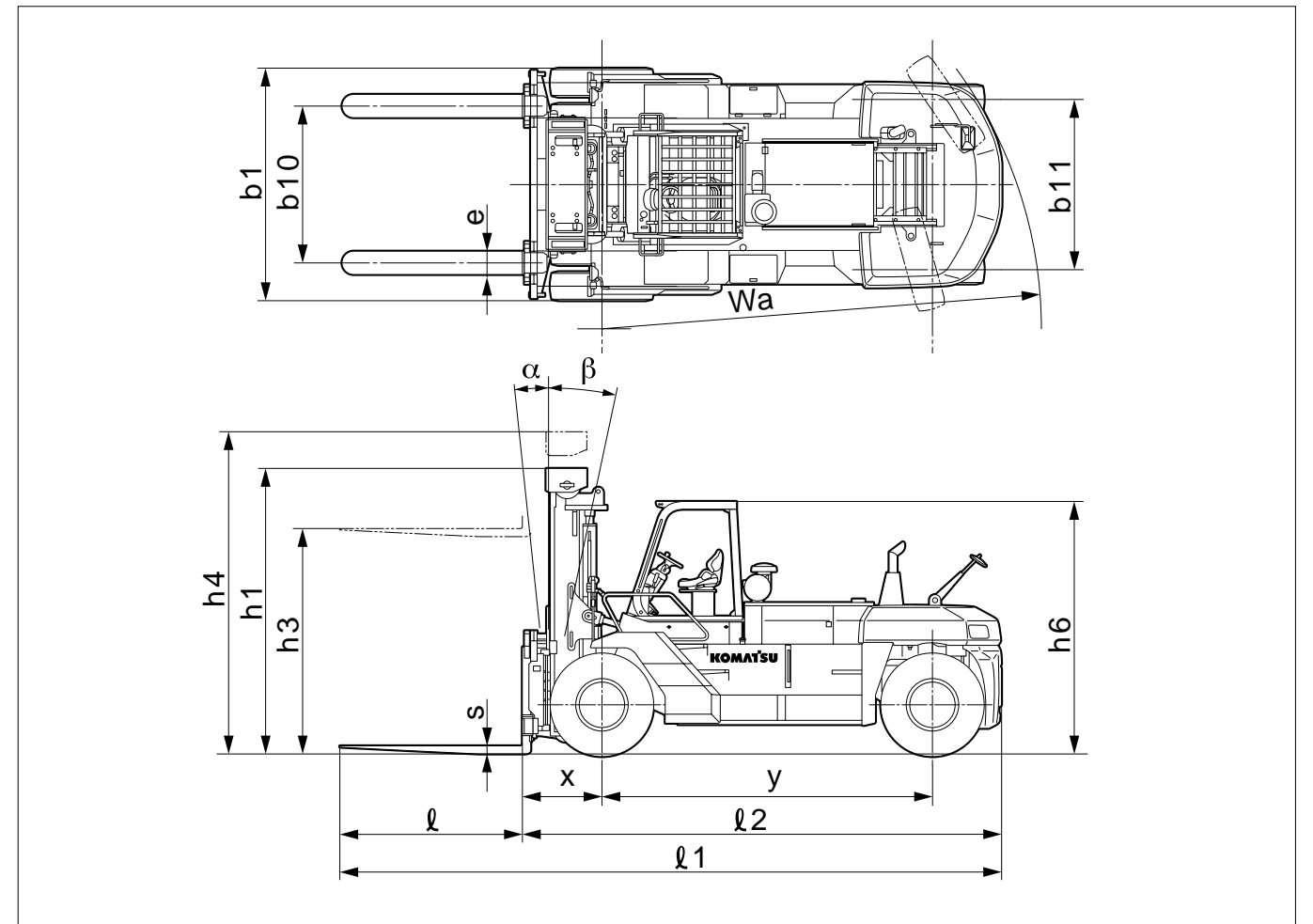
There are more options and attachments. Please contact with your Komatsu dealer for the availability.

Specification Sheet

				GX20			
Characteristics	1.2	Model	Manufacturer's Designation		FD200-6	FD250Z-6	
	1.3	Power Type	Electric, Diesel, Gasoline, LPG, Cable		Diesel	Diesel	
	1.4	Operation Type	Pedestrian, Driver standing, Sitting, Order picking		Sitting	Sitting	
	1.5	Rated Capacity	Q	Rated Capacity	kg(lb.)	20000(44,000)	25000(55,000)
	1.6	Load Center	c	Rated Load Center	mm(in.)	1220(48)	1220(48)
	1.8	Load Distance	x	Front Axle Center to Fork Face	mm(in.)	950(37.4)	955(37.6)
	1.9	Wheelbase	y		mm(in.)	4400(173.2)	4400(173.2)
	2.1	Service Weight			kg(lb.)	29300(64,600)	32535(71,730)
	Weight	2.2	Axle Loading	Loaded	Front	kg(lb.)	45085(99,390)
Rear		kg(lb.)			4215(9,290)	4675(10,310)	
Unloaded		Front		kg(lb.)	15230(33,580)	15515(34,210)	
		Rear		kg(lb.)	14070(31,020)	17020(37,520)	
Tyre	3.1	Tyre Type	Cushion, Elastic Cushion, Pneumatic, Polyurethane		Pneumatic	Pneumatic	
	3.2	Tyre Size	Front		14.00-24-20PR	14.00-24-24PR	
	3.3		Rear		14.00-24-20PR	14.00-24-24PR	
	3.5	Number of Wheel	Front/Rear(x=driven)		4x/2	4x/2	
	3.6	Tread, Front	b10	mm(in.)	2230(87.8)	2230(87.8)	
	3.7	Tread, Rear	b11	mm(in.)	2265(89.2)	2265(89.2)	
	Basic Measurement	4.1	Tilting Angle	$\alpha/\beta$	Forward/Backward	degree	6/12
4.2		Mast Height, Lowered	h1	2-stage Std. Mast	mm(in.)	3800(149.6)	3800(149.6)
4.3		Std. Free Lift	h2	2-stage Std. Mast from Ground	mm(in.)	0(0.0)	0(0.0)
4.4		Std. Lift Height	h3	2-stage Std. Mast from Ground	mm(in.)	3000(118)	3000(118)
4.5		Mast Height, Extended	h4	2-stage Std. Mast	mm(in.)	5290(208.3)	5290(208.3)
4.7		Height, Overhead Guard	h6		mm(in.)	3360(132.3)	3360(132.3)
4.19		Length, with Std. Forks	$l_1$		mm(in.)	8690(342.1)	8695(342.1)
4.20		Length, to Fork Face	$l_2$		mm(in.)	6270(246.8)	6275(246.8)
4.21		Width, at Tyre	b1		mm(in.)	3095(121.9)	3095(121.9)
4.22		Forks	s/e/l	Thickness/Width/Length	mm(in.)	105x290x2420(4.1x11.4x95.3)	105x310x2420(4.1x12.2x95.3)
4.23		Fork Carriage Class	ISO 2328, Type A/B/no			Pin Mount	Pin Mount
4.24		Width, Fork Carriage	b3		mm(in.)	2670(105.1)	2670(105.1)
4.31		Ground Clearance	m1	Under Mast	mm(in.)	305(12.0)	305(12.0)
4.32			m2	at Center of Wheelbase	mm(in.)	395(15.6)	395(15.6)
4.33		Right Angle Stacking Aisle	Ast	plus load length	mm(in.)	6800(267.7)	6805(267.9)
4.35		Turning Radius	Wa		mm(in.)	5850(230.3)	5850(230.3)
4.36	Distance to Turning Center	b13	from Chassis Center	mm(in.)	2350(92.5)	2350(92.5)	
Performance	5.1	Travel Speed(FWD)	Loaded, 1st /2nd/3rd/4th	km/h(mph)	9/15/23/28(5.6/9.3/14.3/17.4)	9/15/22/25(5.6/9.3/13.7/15.5)	
	5.1.1		Unloaded, 1st /2nd/3rd/4th	km/h(mph)	10/17/28/34(6.2/10.6/17.4/21.1)	10/17/28/34(6.2/10.6/17.4/21.1)	
	5.2	Lifting Speed	Loaded/Unloaded	mm/s(fpm)	300/320(59.1/63.0)	270/280(53.1/55.1)	
	5.3	Lowering Speed	Loaded/Unloaded	mm/s(fpm)	350/350(68.9/68.9)	350/350(68.9/68.9)	
	5.6	Max. Drawbar Pull	Loaded, 3min, rating	N(lb.)	109000(24,500)	109000(24,500)	
	5.8	Max. Gradeability	Loaded, 3min, rating/1.5km/h	%	23.6	20.2	
	5.10	Service Brake	Operation/Control		Foot/Wet Disc Brake	Foot/Wet Disc Brake	
	5.11	Parking Brake	Operation/Control		Hand/Mechanical	Hand/Mechanical	
5.12	Steering	Type		Power Steering	Power Steering		
I.C. engine	6.4	Battery	Voltage/Capacity at 5-hour rating		V/Ah	24/96	24/96
	7.1	Make/Model				CUMMINS/6CT8.3-215	CUMMINS/6CT8.3-215
	7.2	Rated Output, SAE gross			kW(HP)	166(226)	166(226)
	7.3	Rated RPM			min <sup>-1</sup>	2200	2200
	7.3.1	Max. Torque, SAE gross			Nm(lbft) @ min <sup>-1</sup>	912(673) @ 1500	912(673) @ 1500
	7.4	No. of Cylinder / Displacement			cm <sup>3</sup> (cu.in)	6/8267(504.5)	6/8267(504.5)
	7.6	Fuel Tank Capacity			Ltr(U.S.gal.)	600(158.5)	600(158.5)
Others	8.2	Relief Pressure for Attachment			bar(psi)	206(3,000)	206(3,000)
	8.2.1	Tank Capacity			Ltr(U.S.gal.)	490(129.4)	490(129.4)
	8.6	Clutch				Torque Converter	Torque Converter
	8.7	Transmission				TORQFLOW	TORQFLOW

Performance may vary due to operating conditions. The performance shown represents nominal values under typical operating conditions. Specifications are subject to improvements and changes without notice.

Drawing



Standard Equipment

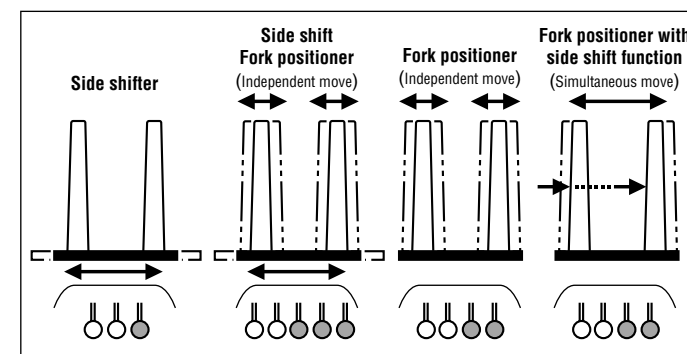
- Headlights ●Turn signal lamps ●Stop and tail lamps ●Backup lamps ●Tiltable steering column
- Deluxe operator seat ●Floor mat ●Overhead guard ●Cyclonic air cleaner ●Rear view mirror
- Rear under mirror ●Backup buzzer ●Fuel cap with lock key ●Manual fork positioner ●Drawbar pin
- Engine oil pressure warning lamp ●Charge warning lamp ●Air cleaner element

Options

- Steel cab ●Automatic transmission ●Air conditioner ●Rear working light ●Fire extinguisher
- Load indicator ●Rotating lamp

Attachments

- Side shifter ●Side shift fork positioner (Independent move) ●Fork positioner (Independent move)
- Fork positioner with side shift function (Simultaneous move)



There are more options and attachments. Please contact with your Komatsu dealer for the availability.