

FH100-160-1

Hydro-Static diesel powered forklift



Safety



Reliability



Productivity



Rated capacity range

22,000-35,000 lbs.
(10,000-16,000 kg)

Load center

24" (600 mm)

Drive type

Hydrostatic

FH100-160-1

Characteristics

	FH100-1	FH120-1	FH135-1	FH160-1
Power type	Diesel	Diesel	Diesel	Diesel
Operation type	Sit down	Sit down	Sit down	Sit down
Rated capacity	22,000 lbs. (10,000 kg)	26,400 lbs. (12,000 kg)	30,000 lbs. (13,500 kg)	35,000 lbs. (16,000 kg)
Load center	24 in. (600 mm)	24 in. (600 mm)	24 in. (600 mm)	24 in. (600 mm)
x Load distance	30.3 in. (770 mm)	30.3 in. (770 mm)	31.9 in. (810 mm)	32.1 in. (815 mm)
y Wheelbase	120.1 in. (3,050 mm)	120.1 in. (3,050 mm)	120.1 in. (3,050 mm)	120.1 in. (3,050 mm)

Weight

	FH100-1	FH120-1	FH135-1	FH160-1
Service weight	32,055 lbs. (14,540 kg)	35,737 lbs. (16,210 kg)	38,570 lbs. (17,495 kg)	42,781 lbs. (19,405 kg)
Axle loading				
Loaded	Front	47,300 lbs. (21,455 kg)	53,958 lbs. (24,475 kg)	59,161 lbs. (26,835 kg)
	Rear	5,479 lbs. (2,485 kg)	6,030 lbs. (2,735 kg)	6,746 lbs. (3,060 kg)
Unloaded	Front	17,273 lbs. (7,835 kg)	18,816 lbs. (8,535 kg)	19,191 lbs. (8,705 kg)
	Rear	14,782 lbs. (6,705 kg)	16,920 lbs. (7,675 kg)	19,379 lbs. (8,790 kg)

Tires

	FH100-1	FH120-1	FH135-1	FH160-1
Tire type	Pneumatic	Pneumatic	Pneumatic	Pneumatic
Tire size	Front	9.00-20-14PR	10.00-20-16PR	11.00-20-16PR
	Rear	9.00-20-14PR	10.00-20-16PR	11.00-20-16PR
Number of wheel (front/rear)	4x/2	4x/2	4x/2	4x/2
b10 Tread, front	66.9 in. (1,700 mm)	66.9 in. (1,700 mm)	69.7 in. (1,770 mm)	69.7 in. (1,770 mm)
b11 Tread, rear	74.8 in. (1,900 mm)	74.4 in. (1,890 mm)	74.4 in. (1,890 mm)	73.6 in. (1,870 mm)

Performance

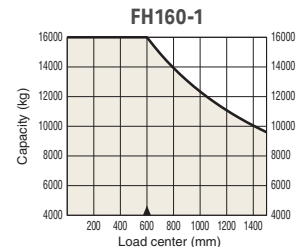
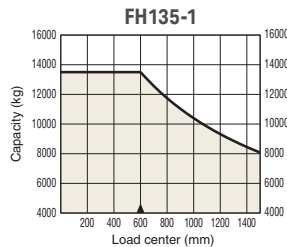
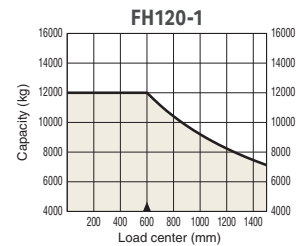
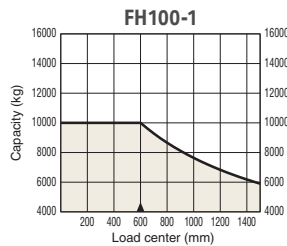
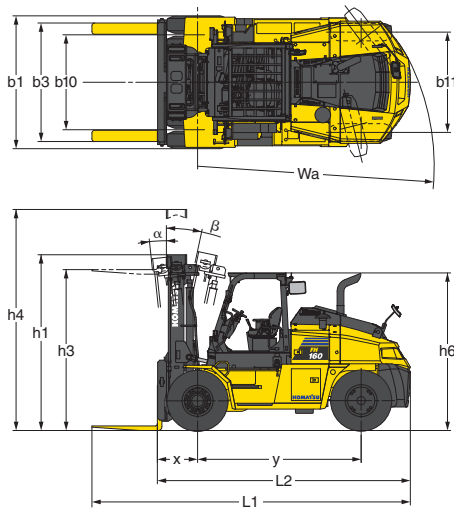
	FH100-1	FH120-1	FH135-1	FH160-1
Travel speed (FWD)	Loaded	14.9 mph (24.0 km/h)	14.9 mph (24.0 km/h)	13.7 mph (22.0 km/h)
	Unloaded	15.5 mph (25.0 km/h)	15.5 mph (25.0 km/h)	14.3 mph (23.0 km/h)
Lifting speed	Loaded	88.6 fpm (450 mm/s)	79.7 fpm (405 mm/s)	66.9 fpm (335 mm/s)
	Unloaded	93.5 fpm (475 mm/s)	84.6 fpm (430 mm/s)	69.9 fpm (355 mm/s)
Lowering speed	Loaded	86.6 fpm (440 mm/s)	78.7 fpm (400 mm/s)	78.7 fpm (400 mm/s)
	Unloaded	108.3 fpm (550 mm/s)	98.4 fpm (500 mm/s)	86.6 fpm (440 mm/s)
Max. drawbar pull	17,175 lbs. (76.4 kN)	16,905 lbs. (75.2 kN)	16,501 lbs. (73.4 kN)	18,299 lbs. (81.4 kN)
Max. gradeability	30%	25%	22%	21%
Service brake	Foot/Hydraulic	Foot/Hydraulic	Foot/Hydraulic	Foot/Hydraulic
Parking brake	Hand/Mechanical	Hand/Mechanical	Hand/Mechanical	Hand/Mechanical
Steering	FHPS	FHPS	FHPS	FHPS
Battery	2 x 12 V/92 Ah	2 x 12 V/92 Ah	2 x 12 V/92 Ah	2 x 12 V/92 Ah

I.C engine

	FH100-1	FH120-1	FH135-1	FH160-1
Make	Komatsu	Komatsu	Komatsu	Komatsu
Model	SAA4D107E-3-A	SAA4D107E-3-A	SAA4D107E-3-A	SAA4D107E-3-A
Rated output, SAE net	100 kW	100 kW	100 kW	100 kW
Rated RPM	2200 rpm	2200 rpm	2200 rpm	2200 rpm
Max. torque, SAE net	620 Nm	620 Nm	620 Nm	620 Nm
No. of cylinder/displacement	4/4.5 L	4/4.5 L	4/4.5 L	4/4.5 L
Fuel tank capacity	73.9 US Gal. (280 L)	73.9 US Gal. (280 L)	73.9 US Gal. (280 L)	73.9 US Gal. (280 L)

Others

	FH100-1	FH120-1	FH135-1	FH160-1
Relief Pressure for Attachment	3,133 PSI (21.6 MPA)	3,133 PSI (21.6 MPA)	3,133 PSI (21.6 MPA)	3,133 PSI (21.6 MPA)
Hydraulic tank Capacity	59.4 US Gal. (225 L)	59.4 US Gal. (225 L)	59.4 US Gal. (225 L)	59.4 US Gal. (225 L)
Transmission	Hydro-Static	Hydro-Static	Hydro-Static	Hydro-Static



Max fork height Overall height (lowered/extended)

	FH100-1	FH120-1	FH135-1	FH160-1
118.1" (3,000 mm)	113.8" (2,890 mm)/173.2" (4,400 mm)	124.4" (3,160 mm)/183.9" (4,670 mm)	124.8" (3,170 mm)/184.3" (4,680 mm)	129.5" (3,290 mm)/189.0" (4,800 mm)
129.9" (3,300 mm)	119.7" (3,040 mm)/185.0" (4,700 mm)	130.3" (3,310 mm)/195.7" (4,970 mm)	130.7" (3,320 mm)/196.1" (4,980 mm)	135.4" (3,440 mm)/200.8" (5,100 mm)
137.8" (3,500 mm)	123.6" (3,140 mm)/192.9" (4,900 mm)	134.3" (3,410 mm)/203.5" (5,170 mm)	134.6" (3,420 mm)/203.9" (5,180 mm)	139.4" (3,540 mm)/208.7" (5,300 mm)
145.7" (3,700 mm)	127.6" (3,240 mm)/200.8" (5,100 mm)	138.2" (3,510 mm)/211.4" (5,370 mm)	138.6" (3,520 mm)/211.8" (5,380 mm)	143.3" (3,640 mm)/216.5" (5,500 mm)
157.5" (4,000 mm)	133.5" (3,390 mm)/212.6" (5,400 mm)	148.0" (3,760 mm)/227.2" (5,770 mm)	148.4" (3,770 mm)/227.6" (5,780 mm)	149.2" (3,790 mm)/228.3" (5,800 mm)
177.2" (4,500 mm)	147.2" (3,740 mm)/236.2" (6,000 mm)	157.9" (4,010 mm)/246.9" (6,270 mm)	158.3" (4,020 mm)/247.2" (6,280 mm)	159.1" (4,040 mm)/248.0" (6,300 mm)
196.9" (5,000 mm)	163.0" (4,140 mm)/261.8" (6,650 mm)	175.6" (4,460 mm)/274.4" (6,970 mm)	176.0" (4,470 mm)/274.8" (6,980 mm)	176.8" (4,490 mm)/275.6" (7,000 mm)
216.5" (5,500 mm)	174.8" (4,440 mm)/283.5" (7,200 mm)	185.4" (4,710 mm)/294.1" (7,470 mm)	185.8" (4,720 mm)/294.5" (7,480 mm)	186.6" (4,740 mm)/295.3" (7,500 mm)
236.2" (6,000 mm)	184.6" (4,690 mm)/303.1" (7,700 mm)	195.3" (4,960 mm)/313.8" (7,970 mm)	195.7" (4,970 mm)/314.2" (7,980 mm)	196.5" (4,990 mm)/315.0" (8,000 mm)

Dimensions

	FH100-1	FH120-1	FH135-1	FH160-1
a/b Tilting angle (forward/backward)	6/12 deg.	6/12 deg.	6/12 deg.	6/12 deg.
h1 Mast height, lowered	133.5 in. (3,390 mm)	148.0 in. (3,760 mm)	148.4 in. (3,770 mm)	149.2 in. (3,790 mm)
h2 Std. free lift	0	0	0	0
h3 Std. lift height	157.5 in. (4,000 mm)	157.5 in. (4,000 mm)	157.5 in. (4,000 mm)	157.5 in. (4,000 mm)
h4 Mast height, extended	212.6 in. (5,400 mm)	227.2 in. (5,770 mm)	227.6 in. (5,780 mm)	228.3 in. (5,800 mm)
h6 Height, overhead guard	113.4 in. (2,880 mm)	114.2 in. (2,900 mm)	114.6 in. (2,910 mm)	115.4 in. (2,930 mm)
L1 Length, with std. forks	231.3 in. (5,875 mm)	231.3 in. (5,875 mm)	242.1 in. (6,150 mm)	242.3 in. (6,155 mm)
L2 Length, to fork face	177.4 in. (4,505 mm)	177.4 in. (4,505 mm)	188.2 in. (4,780 mm)	188.4 in. (4,785 mm)
b1 Width, at tire	95.7 in. (2,430 mm)	95.7 in. (2,430 mm)	95.7 in. (2,430 mm)	97.6 in. (2,480 mm)
Forks	3.0 x 6.7 x 53.9 in. (75 x 170 x 1370 mm)	3.0 x 7.3 x 53.9 in. (75 x 185 x 1370 mm)	3.1 x 7.3 x 53.9 in. (80 x 185 x 1370 mm)	3.5 x 8.3 x 53.9 in. (90 x 210 x 1370 mm)
Fork carriage class	Pin mount	Pin mount	Pin mount	Pin mount
b3 Width, fork carriage	84.0 in. (2,134 mm)	83.9 in. (2,130 mm)	87.0 in. (2,210 mm)	87.0 in. (2,210 mm)
m1 Ground clearance	Under mast	Under mast	Under mast	Under mast
m2 Ground clearance	Center of wheelbase	Center of wheelbase	Center of wheelbase	Center of wheelbase
Wa Turning radius	165.4 in. (4,200 mm)	165.4 in. (4,200 mm)	173.6 in. (4,410 mm)	173.6 in. (4,410 mm)

Standard and optional features

Komatsu SAA4D107E-3-A diesel engine	●	Overspeed alarm	●
EPA Tier 4 Final emission compliant	●	Arm rest	●
U.L. Type "D" Certified	●	Front handrails	●
Electronically controlled Hydro-Static (HST) drive system	●	Rubber floor mat	●
Cyclone double element air cleaner	●	LED headlights and rear combination lights	●
Electronic engine control system with:	●	Vertical exhaust pipe (right side)	●
• Overheat prevention function		Komtrax® wireless fleet management system	●
• Auto engine warm-up function		Dual drive with pneumatic tires	●
• Auto air preheat function		Pneumatic steer tires	●
Adjustable auto engine shutdown function	●	Fuel cap with key	●
Variable engine output control function	●	Plastic overhead guard cover	●
Variable displacement pump with Closed-center Load Sensing System (CLSS) hydraulics	●	Load scale with overload alarm	●
2-Stage Free View mast	●	BioDiesel Fuel B20 compliant	●
O-ring seals on critical hydraulic connections	●	Tool kit	●
4-Way hydraulic control valve	●	Steel cab with heater, defroster, AC, rearview camera & monitor, and high mount air pre-cleaner	○
Wet multi-disc brakes	●	Tilt cylinder boots	○
Adjustable toggle type parking brake with release button	●	Steer cylinder boots	○
Inside rearview mirror	●	5-Way hydraulic control valve	○
Outside mounted rearview mirrors	●	Sideshifter with hydraulic fork positioner	○
Rear under mirror	●	Hydraulic fork positioner	○
Neutral start function	●	Fork positioner with sideshift function	○
Anti-restart ignition switch	●	Cyclone double element air cleaner with pre-cleaner (high mount)	○
Travel speed limiter "turtle" function	●	Back-up alarm	○
Operator presence sensing system	●	Rear LED work light on counterweight	○
Key-off lift lock	●	Front LED work light on fender	○
Grammer full suspension seat	●	Rotating yellow LED light on overhead guard	○
Operator restraint system with retractable orange seat belt	●	Seat belt interlock	○
Fully hydrostatic power steering	●	Solid pneumatic drive and steer tires	○
Tilting steering column	●	Optional fork lengths	○
Small diameter steering wheel with spinner knob	●		
Steering knob synchronizer function	●		
Large LCD full color display with:	●		
• Engine coolant temperature gauge			
• Fuel gauge			
• Fuel consumption gauge			
• Hour meter (SMR)			
• Speedometer			
• Directional lever position indicator			
• Parking brake warning indicator			
• Seat belt warning indicator			

Further equipment on request

- standard equipment
- optional equipment

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