

15/18/20D-9

Diesel Counterbalance Trucks

HYUNDAI FORKLIFT



Your satisfaction is **our priority!**

Hyundai introduces a new line of 9-series diesel forklift trucks.

The newly designed four-wheel counterbalance trucks provide operator comfort, increased productivity and easy maintenance.



Proven quality and advanced technology

- Maximum performance
- Spacious operator cab
- Switch-type parking brake
- 5.6-inch LCD color monitor
- Truck inclination warning system
- Operator presence sensing system (OPSS) for safe operation (optional)
- Easy serviceability
- Maximum speed limit function
- Hill-start assistance control (HAC)
- Password starting system
- Auto fork leveling system (optional)
- Load weight indicator (optional)



*Photos may include optional equipment.

High efficiency,
optimal performance



*Photos may include optional equipment.



DAEDONG 3F183T engine

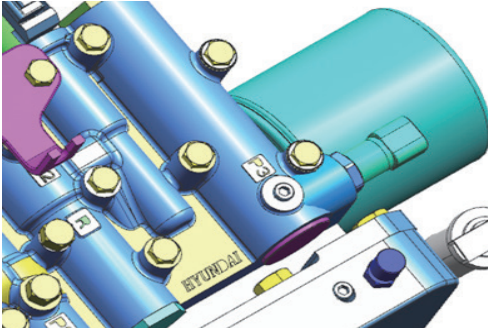
50 hp/300 rpm

High-power DAEDONG 3F183T engine

The engine meets EPA Tier 4 Final and EU Stage III B emissions regulations, and ensures incomparable performance, durability and fuel efficiency.

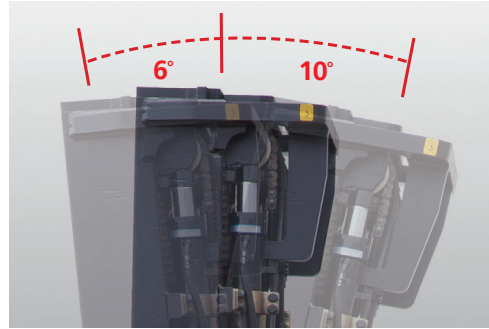
A powerful engine and high-tech systems combine to provide enhanced performance and productivity.

15/18/20D-9



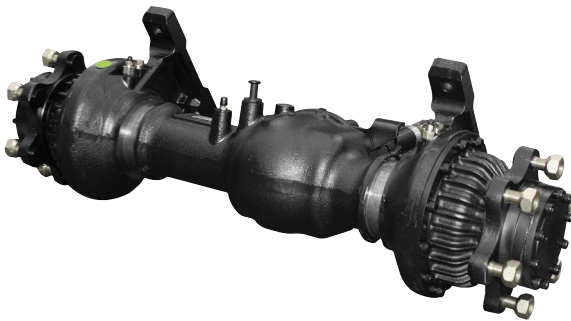
Clutch protection system

The clutch protection system prevents excessive use of inching and minimizes change-impact.



Mast tilt angle

Using the standard mast tilting angle of 6 degrees forward and 10 degrees backward, the operator can load and unload safely and quickly.



Durable drive axle

The strengthened drive axle, separable from the transmission, ensures low vibration and easy maintenance. The maintenance-free wet disc brakes are easy to operate and deliver smooth response.



Fully hydrostatic power steering

The hydraulic steering system ensures smooth and flexible steering, preventing overrun and kick-back.



Maximum travel speed

Model	mph
15D-9	11.4
18D-9	11.4
20D-9	11.4

Maximum gradeability

Model	%
15D-9	42.3
18D-9	37.8
20D-9	35.1

Faster travel speed, improved gradeability

The powerful engine provides greater acceleration, improved gradeability and faster travel speed in the toughest terrain and on the steepest slope.

Unmatched convenience, **optimized ergonomics**



Photos may include optional equipment.

Spacious operator cab

The newly designed cab provides more space, a wider field of view and increased operator comfort.



Optimized pedal position

The pedals are mounted to the console to reduce noise and operator fatigue, and to prevent dust from entering the engine compartment.



Low entrance height

The low entrance height ensures safe, easy access to the operator cab.



Adjustable steering wheel

The angle of the steering wheel can be adjusted by a right-hand lever to set the most comfortable position for the operator.



Comfortable grammer seat

An easily adjustable ergonomic seat provides unmatched comfort and reduces operator fatigue.

- Energy locking retractor (ELR) seat belt
- Heater and headrest (optional)
- Adjustable armrests

The ergonomic cab design and new LCD color monitor provide complete operator support and comfort.

15/18/20D-9

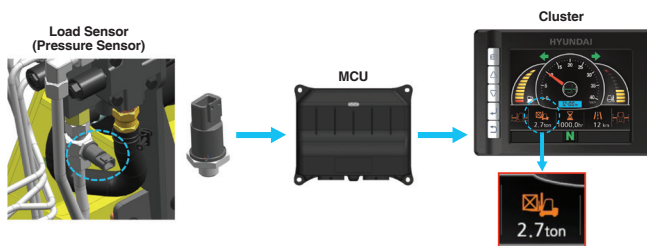
Advanced LCD monitor

With the 5.6-inch wide LCD color monitor, the operator can control the machine with ease, while checking speed, travel direction and battery discharge.



Maximum speed limit system

- Safety feature
- Maximum speed limit range: 5 mph (8 km/h) ~ 12 mph (20 km/h)
- Instrument cluster allows the operator to easily set the maximum speed.
- Very smooth control



Optional load indicator

The optional load indicator alerts the operator when the machine is overloaded.



Optional auto fork leveling system

For improved productivity, the optional auto fork leveling system automatically stops the tilt movement when the mast is in a straight position.

Advanced **safety**



Excellent visibility, safer operation

The optimized lift cylinder arrangement provides the operator with a wider view of the work environment.

*Photos may include optional equipment.



Strong overhead guard

Exceeding CE and ASME/ANSI B56.1 regulations, the overhead guard offers optimal protection and all-around visibility.



Optional steel side cover

The strengthened steel side cover provides enhanced durability.

The operator cab is designed for improved safety and comfort.

15/18/20D-9



Hill Start Assist Control (HAC) System

Fix right line break so lines of text line up closer to the "system" in the subhead.

Fork safety features

When the forks are being lowered, a down-control valve maintains the controlled speed. The down-safety valve prevents forks from dropping down and causing sudden damage to the hydraulic line.

Operator Presence Sensing System (OPSS)

All mast and drive movements stop functioning when the operator is not in the seat.



Photos may include optional equipment.



Safety lamps and rear reflectors

Halogen headlights and rear LED combination lights provide greater visibility in all conditions. Rear reflectors mounted on the counterweight enhance operator and job site safety.

Fast, easy maintenance



Large engine hood

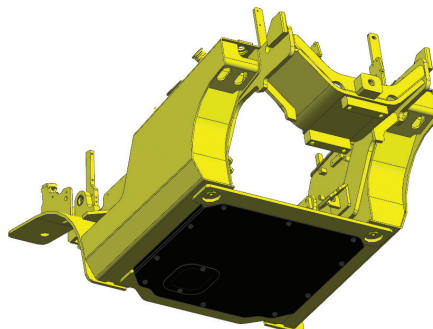
The highly accessible engine compartment assures fast, efficient maintenance.

*Some photos may include optional equipment.



Water- and dust-proof cover

The newly developed water- and dust-proof fuse box and relay box ensure greater ease of maintenance.



Optional under cover

The under cover protects the engine and components from dust and helps extend component life.

Components are arranged for
easy service and maintenance access.

15/18/20D-9



Parking brake system

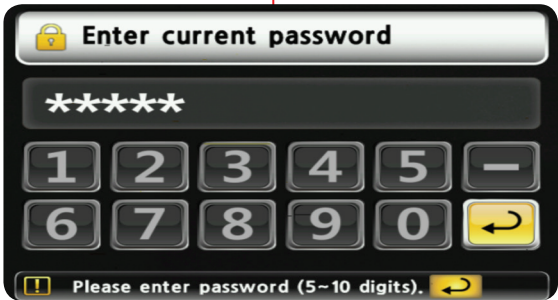


Optional emergency switch

Photos may include optional equipment.



Convenient switch



Password-protected starting system

New 9 Series

Mast specifications (15D-9)

Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle	Load Capacity Without Side Shift		Load Capacity With Side Shift		Truck Weight Unloaded	
						With Load Backrest		Without Load Backrest			500 mm LC		500 mm LC			
		in	mm	in	mm	in	mm	in	mm		deg	lb	kg	lb	kg	lb
2-stage limited free lift	V250	99.4	2525	69.1	1755	1.4	35	1.4	35	6/10	3000	1500	2900	1425	6070	2759
	V270	107.3	2725	73.0	1855					6/10	3000	1500	2900	1425	6098	2772
	V300	119.1	3025	78.9	2005					6/10	3000	1500	2900	1425	6142	2792
	V330	130.9	3325	84.8	2155					6/10	3000	1500	2900	1425	6184	2811
	V350	138.8	3525	88.8	2255					6/10	3000	1500	2900	1425	6215	2825
	V370	146.7	3725	92.7	2355					6/10	3000	1500	2900	1425	6244	2838
	V400	158.5	4025	98.6	2505					6/10	3000	1500	2900	1425	6296	2862
	V450	178.1	4525	112.4	2855					6/6	2900	1425	2770	1350	6468	2940
	V500	197.8	5025	122.2	3105					6/6	2750	1350	2640	1275	6545	2975
V550	217.5	5525	132.1	3355	6/5	2150	1050	2040	1000	6611	3005					
2-stage full free lift	VF300	119.1	3025	78.9	2005	39.6	1007	60.6	1539	6/6	3000	1500	2900	1425	6244	2838
	VF330	130.9	3325	84.8	2155	45.6	1157	66.5	1689	6/6	3000	1500	2900	1425	6318	2872
	VF350	138.8	3525	88.8	2255	49.5	1257	70.4	1789	6/6	3000	1500	2900	1425	6349	2886
3-stage full free lift	TF/TS370	147.0	3735	71.1	1805	31.8	807	51.0	1295	6/6	3000	1500	2900	1425	6382	2901
	TF/TS400	158.9	4035	75.0	1905	35.7	907	54.9	1395	6/6	2990	1475	2880	1400	6424	2920
	TF/TS430	170.7	4335	78.9	2005	39.6	1007	58.9	1495	6/6	2900	1425	2790	1350	6466	2939
	TF/TS450	178.5	4535	82.9	2105	43.6	1107	66.7	1695	6/6	2830	1400	2720	1325	6512	2960
	TF/TS470	186.4	4735	84.8	2155	45.6	1157	64.8	1645	6/6	2790	1375	2600	1300	6536	2971
	TF/TS500	198.2	5035	88.8	2255	49.5	1257	68.7	1745	6/6	2750	1350	2610	1275	6576	2989
	TF/TS550	217.9	5535	96.7	2455	57.4	1457	76.6	1945	6/5	2310	1125	2220	1075	6666	3030
	TF/TS600	237.6	6035	104.5	2655	65.2	1657	84.4	2145	6/5	1650	800	1580	750	6765	3075
	TF/TS650	257.3	6535	112.4	2855	73.1	1857	92.3	2345	3/3	1250	600	1180	550	6866	3121
TF/TS700	277.0	7035	120.3	3055	81.0	2057	100.2	2545	3/3	830	400	770	350	6970	3168	

Mast specifications (18D-9)

Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle	Load Capacity Without Side Shift		Load Capacity With Side Shift		Truck Weight Unloaded	
						With Load Backrest		Without Load Backrest			500 mm LC		500 mm LC			
		in	mm	in	mm	in	mm	in	mm		deg	lb	kg	lb	kg	lb
2-stage limited free lift	V250	99.4	2525	69.1	1755	1.4	35	1.4	35	6/10	3500	1800	3390	1675	6422	2919
	V270	107.3	2725	73.0	1855					6/10	3500	1800	3390	1675	6448	2931
	V300	119.1	3025	78.9	2005					6/10	3500	1800	3390	1675	6492	2951
	V330	130.9	3325	84.8	2155					6/10	3500	1800	3390	1675	6536	2971
	V350	138.8	3525	88.8	2255					6/10	3500	1770	3390	1675	6565	2984
	V370	146.7	3725	92.7	2355					6/10	3500	1750	3390	1675	6593	2997
	V400	158.5	4025	98.6	2505					6/10	3450	1700	3320	1625	6646	3021
	V450	178.1	4525	112.4	2855					6/6	3300	1625	3170	1550	6818	3099
	V500	197.8	5025	122.2	3105					6/6	2860	1400	2750	1325	6895	3134
	V550	217.5	5525	132.1	3355					6/5	2060	1050	1960	1000	6963	3165
2-stage full free lift	VF300	119.1	3025	78.9	2005	39.6	1007	60.6	1539	6/6	3500	1800	3390	1675	6593	2997
	VF330	130.9	3325	84.8	2155	45.6	1157	66.5	1689	6/6	3500	1750	3390	1675	6668	3031
	VF350	138.8	3525	88.8	2255	49.5	1257	70.4	1789	6/6	3500	1750	3390	1675	6699	3045
3-stage full free lift	TF/TS370	147.0	3735	71.1	1805	31.8	807	51.0	1295	6/6	3500	1725	3370	1650	6732	3060
	TF/TS400	158.9	4035	75.0	1905	35.7	907	54.9	1395	6/6	3410	1675	3280	1600	6774	3079
	TF/TS430	170.7	4335	78.9	2005	39.6	1007	58.9	1495	6/6	3320	1625	3190	1500	6816	3098
	TF/TS450	178.5	4535	82.9	2105	43.6	1107	66.7	1695	6/6	3260	1600	3120	1525	6864	3120
	TF/TS470	186.4	4735	84.8	2155	45.6	1157	64.8	1645	6/6	3060	1500	2950	1425	6886	3130
	TF/TS500	198.2	5035	88.8	2255	49.5	1257	68.7	1745	6/6	2970	1450	2860	1375	6926	3148
	TF/TS550	217.9	5535	96.7	2455	57.4	1457	76.6	1945	6/5	2380	1150	2310	1100	7016	3189
	TF/TS600	237.6	6035	104.5	2655	65.2	1657	84.4	2145	6/5	1650	800	1580	750	7115	3234
	TF/TS650	257.3	6535	112.4	2855	73.1	1857	92.3	2345	3/3	1250	600	1190	550	7216	3280
	TF/TS700	277.0	7035	120.3	3055	81.0	2057	100.2	2545	3/3	950	450	880	400	7319	3327

Mast Specification (20D-9)

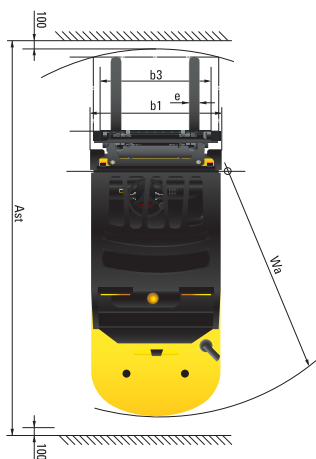
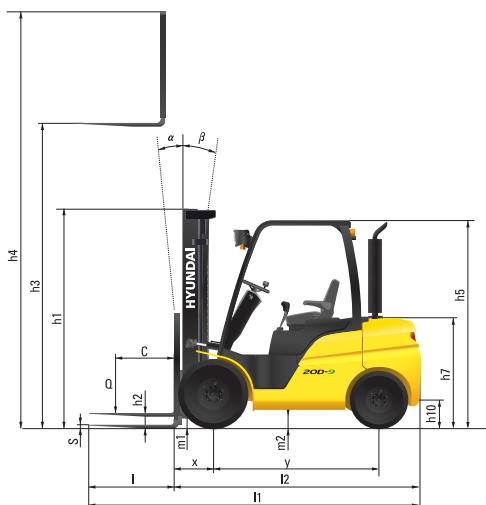
Mast Type		Maximum Fork Height		Overall Height (Lowered)		Free Lift Height				Tilt Angle	Load Capacity Without Side Shift		Load Capacity With Side Shift		Truck Weight Unloaded	
						With Load Backrest		Without Load Backrest								
		in	mm	in	mm	in	mm	in	mm		deg	lb	kg	lb	kg	lb
2- Stage Limited free lift	V250	99.6	2530	69.1	1755	1.6	40	1.6	40	6/10	4000	2000	3870	1900	6730	3059
	V270	107.5	2730	73.0	1855					6/10	4000	2000	3870	1900	6758	3072
	V300	119.3	3030	78.9	2005					6/10	4000	2000	3870	1900	6802	3092
	V330	131.1	3330	84.8	2155					6/10	4000	2000	3870	1900	6844	3111
	V350	139.0	3530	88.8	2255					6/10	4000	2000	3870	1900	6875	3125
	V370	146.9	3730	92.7	2355					6/10	3960	1950	3810	1875	6904	3138
	V400	158.7	4030	98.6	2505					6/10	3370	1650	3230	1575	6959	3162
	V450	178.3	4530	112.4	2855					6/6	3320	1625	3190	1550	7128	3240
	V500	198.0	5030	122.2	3105					6/6	2880	1400	2750	1325	7205	3275
	V550	217.7	5530	132.1	3355					6/5	2180	1050	2090	1000	7273	3306
2- Stage full free lift	VF300	119.3	3030	78.9	2005	39.8	1012	60.8	1544	6/6	4000	2000	3870	1900	6904	3138
	VF330	131.1	3330	84.8	2155	45.7	1162	66.7	1694	6/6	4000	1975	3830	1875	6978	3172
	VF350	139.0	3530	88.8	2255	49.7	1262	70.6	1794	6/6	3960	1950	3780	1850	7009	3186
3- Stage full free lift	TF/TS370	147.2	3740	71.1	1805	32.0	812	51.2	1300	6/6	3850	1900	3720	1825	7042	3201
	TF/TS400	159.1	4040	75.0	1905	35.9	912	55.1	1400	6/6	3760	1850	3630	1775	7084	3220
	TF/TS430	170.9	4340	78.9	2005	39.8	1012	59.1	1500	6/6	3670	1800	3540	1725	7126	3239
	TF/TS450	178.7	4540	82.9	2105	43.8	1112	63.0	1600	6/6	3590	1750	3450	1675	7172	3260
	TF/TS470	186.6	4740	84.8	2155	45.7	1162	65.0	1650	6/6	3370	1650	3260	1575	7196	3271
	TF/TS500	198.4	5040	88.8	2255	49.7	1262	68.9	1750	6/6	2990	1450	2880	1400	7236	3289
	TF/TS550	218.1	5540	96.7	2455	57.6	1462	76.8	1950	6/5	2380	1150	2290	1100	7326	3330
	TF/TS600	237.8	6040	104.5	2655	65.4	1662	84.6	2150	6/5	1670	800	1580	750	7425	3375
	TF/TS650	257.5	6540	112.4	2855	73.3	1862	92.5	2350	3/3	1300	625	1230	575	7526	3421
	TF/TS700	277.2	7040	120.3	3055	81.2	2062	100.4	2550	3/3	950	450	880	400	7630	3468

Options

- Fork (mm)
15 / 18D-9: 750, 850, 900 (standard), 1050, 1200, 1350, 1500
20D-9: 900, 950, 1000 (standard), 1050, 1150, 1200, 1350, 1500, 1600
- Overshoe (mm)
1300, 1500, 1700
- Side-shift, integral side-shift
- Tire: Pneumatic (standard) / solid / non-marking
- • MCV: 2-spool, 3-spool (standard), 4-spool
- Under cover
- Load indicator
- Rear work lamp
- Beacon lamp LED (Blue, Red, Amber)
- Auto fork leveling system
- Seat : Armrest, Heat, Backrest Ext, Buckle SW
- Hydraulic pump temperature / pressure monitor
- Battery disconnect switch (master switch)
- OPSS (travel, mast)
- Emergency switch
- Fire extinguisher
- Pre-cleaner

New 9 Series

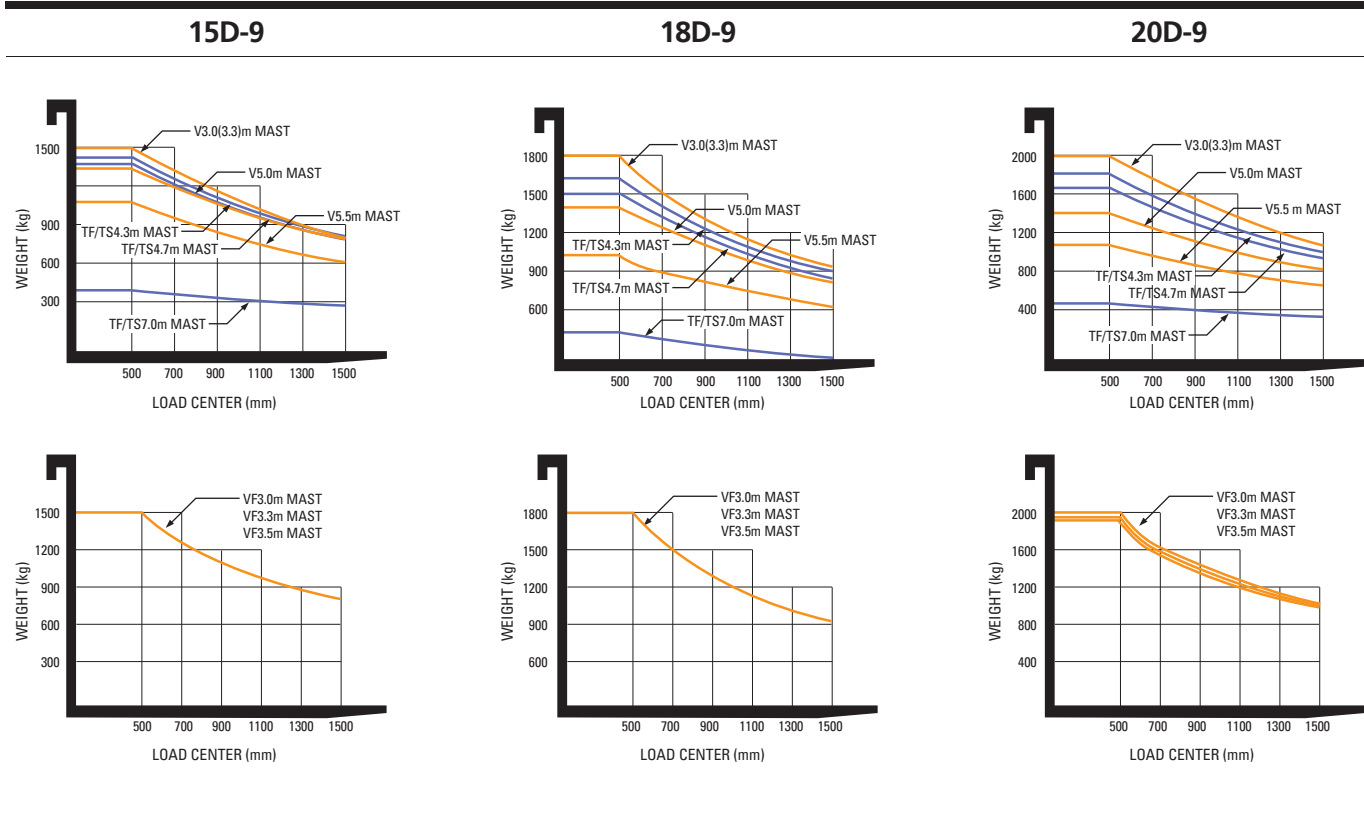
Dimensions



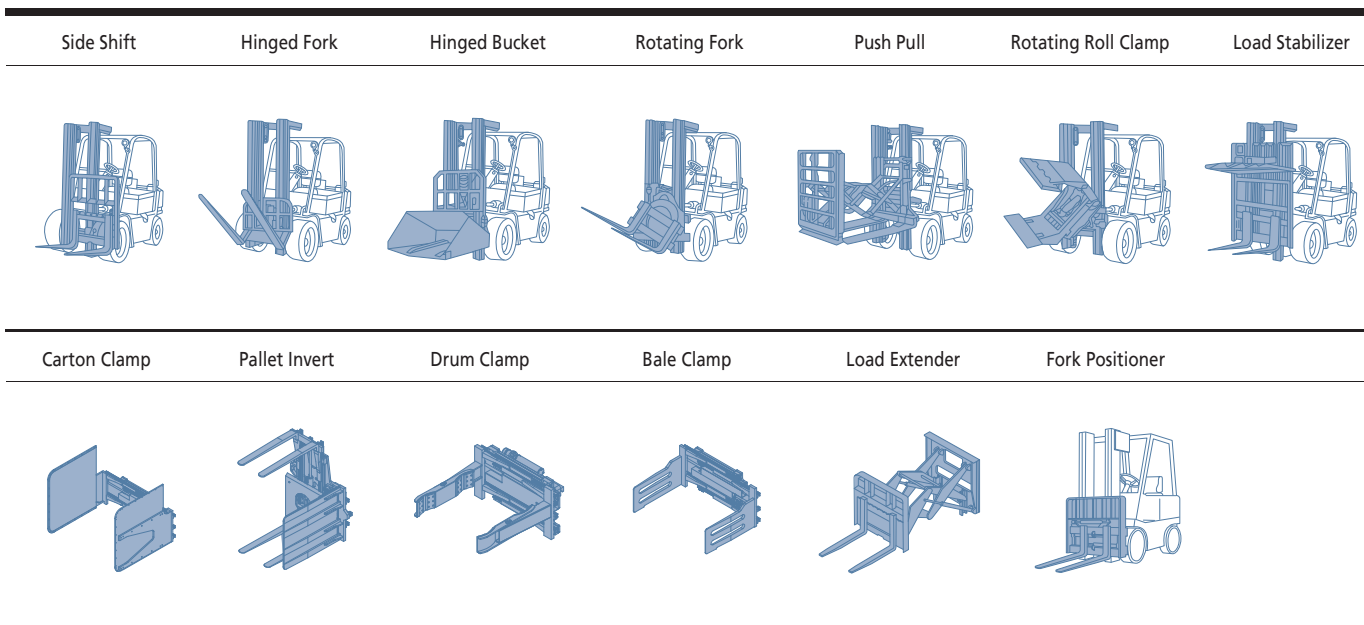
Specifications

Identification					
1.1	Manufacturer	Hyundai	Hyundai	Hyundai	
1.2	Manufacturer's model designation	15D-9	18D-9	20D-9	
1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas>manual	DIESEL	DIESEL	DIESEL	
1.4	Type of operation:hand,pedestrian,standing,seated,order-picker	Seated	Seated	Seated	
1.5	Load capacity / Rated load	lb	3,000	3,500	4,000
1.6	Load center distance	c in	24	24	24
1.8	Load distance, center of drive axle to fork	x in	15.5	15.5	15.7
1.9	Wheelbase	y in	55.5	55.5	55.5
Weights					
2.1	Service weight	lb	6197.2	6549.9	6858.6
2.2	Axle loading, loaded front / rear	lb	8108.6 / 1395.5	8920.0 / 1488.1	9746.6 / 1521.2
2.3	Axle loading, unloaded front / rear	lb	2707.3 / 3489.9	2616.9 / 3933.0	2528.7 / 4329.9
Wheels, Chassis					
3.1	Tires ; Pneumatic (P), Solid (S), Non-marking (N)	P	P	P	
3.2	Tires size, front	6.50 x 10 -14PR	6.50 x 10 -14PR	6.50 x 10 -14PR	
3.3	Tires size, rear	5.00 x 8 -8PR	5.00 x 8 -8PR	5.00 x 8 -8PR	
3.5	Number of wheels front / rear (x = driven wheels)	2 X / 2	2 X / 2	2 X / 2	
3.6	Track width, front	in	35.0	35.0	35.0
3.7	Track width, rear	in	35.8	35.8	35.8
Basic Dimensions					
4.1	Mast / fork carriage tilt forward / backward (α / β)	degrees	6 / 10	6 / 10	6 / 10
4.2	Lowered mast height	h1 in	84.8	84.8	84.8
4.3	Free lift	h2 in	1.4	1.4	1.6
4.4	Lift height	h3 in	131.1	131.1	131.3
4.5	Extended mast height	h4 in	170.1	170.1	170.1
4.7	Overhead guard height (cabin)	h5 in	83.1	83.1	83.1
4.8	Seat height / standing height rel. to SIP	h7 in	45.4	45.4	45.4
4.12	Coupling height	h10 in	10.2	10.2	10.2
4.19	Overall length	l1 in	123.0	124.2	125.6
4.20	Length to face of forks	l2 in	87.6	88.7	90.1
4.21	Overall width	b1 in	42.1	42.1	42.1
4.22	Fork dimensions(hook type)	l / e / s in	1.4 x 3.9 x 35.4	1.4 x 3.9 x 35.4	1.6 x 3.9 x 35.4
4.23	Fork carriage ISO 2328, class / type A,B		2A	2A	2A
4.24	Fork carriage width	b3 in	39.6	39.6	39.6
4.31	Ground clearance, loaded, under mast	m1 in	4.7	4.7	4.7
4.32	Ground clearance, center of wheelbase	m2 in	4.3	4.2	4.1
4.33	Aisle width for pallets 40 x 48 crossways (L x W)	Ast in	141.7	142.7	144.3
4.34	Aisle width for pallets 32 x148 lengthways (W x L)	Ast in	149.6	150.6	152.1
4.35	Turning radius	Wa in	78.9	79.9	81.3
Performance Data					
5.1	Travel speed, unloaded	mph	11.4	11.4	11.4
5.2	Lift speed, loaded / unloaded	ft / min	118.1 / 124.0	118.1 / 124.0	118.1 / 124.0
5.3	Lowering speed, loaded / unloaded	ft / min	98.4 / 88.6	98.4 / 88.6	98.4 / 88.6
5.5	Drawbar pull, loaded	lb	4149.1	4162.3	4180
5.7	Gradient performance, loaded	%	42.3	37.8	35.1
5.10	Service brake		Foot / Wet	Foot / Wet	Foot / Wet
Engine					
6.1	Engine manufacturer / type		Daedong / 3F183T	Daedong / 3F183T	Daedong / 3F183T
6.2	Engine power acc. to ISO 1585	hp /rpm	50.3 / 2300	50.3 / 2300	50.3 / 2300
6.3	Maximum Torque	lbf-ft / rpm	120.1 / 1700	120.1 / 1700	120.1 / 1700
6.4	No. of cylinders / cubic capacity	EA / cc	3 / 1,826	3 / 1,826	3 / 1,826
6.5	Fuel Tank Volume	l / h	45	45	45
Other Details					
8.2	Operating pressure, system / attach	psi	2697.7 / 2132.1	2697.7 / 2132.1	2697.7 / 2132.1

Load capacity



Attachments





www.hceamericas.com

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