









Powerful and economical **KUBOTA V3800 Engine!**

(Complies with Tier-4 exhaust gas regulation)

No Adblue required due to adoption of device for postprocessing DOC exhaust gas

The electronic turbo KUBOTA engine guarantees optimized work efficiency under any working conditions. Fuel efficiency is enhanced and high capacity with low noise is realized by direct injection and optimized driving system. In particular, there's no need to inject Adblue due to adoption of the Diesel Oxidation Catalyst (DOC) as an exhaust gas postprocessing device.

It is possible to reduce maintenance costs and maintain easily.

55.4kW/2,200rpm 31.6kgf · m/1,500rpm

Highly durable two-speed transmission

Powershift transmission of forward 2 stages and reverse 2 stages provides fast travel speed under any working environments. And the clutch protection system prevents excessive use of inching as well as minimized change-impact.



Powerful drive axle and wet brake

The drive axle has excellent efficiency and long durability and the wet disc brake can be used semipermanently.



Economical transmission (OPT)

Transmission which has the torque converter with the dual-state type guarantees uniform driving performance and durability.



The master cylinder and wet disk brake system make strong and reliable braking power with a simple operation.

Excellent gradeability and travel speed

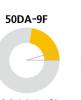
Equipped with the most powerful engine in its class, the 9F-series can perform stable operations and provides excellent gradeability and fast travel speed on any tough terrain or slope.



40D-9F

















The hydraulic steering system guarantees simple and quick operation, perventing kick-back.



The integrated wheel rim provides significantly increased service life.

34.6% (19.1 °) **31.4%** (17.4 °) **28.9%** (16.1 °)

Max. Gradeability (Loaded)

Max. Travel Speed (Unloaded)



Ergonomically designed operating space

The ergonomically designed operating space will further enhance the operator's work efficiency. The elevated seat with back rest and a handle with a reduced diameter enlarge the frontal view while reducing the operator's fatigue. The adoption of an A4-sized tray increases the convenience of document storage, while the 12V power socket (optional) facilitates the use of small electronic products.





When accelerating at 5 km/h or faster, the gear shifts automatically from first to second; and when decelerating at 3 km/h or slower, it shifts from second to first. So it enhances the operator's convenience.



The steering column on the right can be easily adjusted by a lever.



Grammer seat (STD)

Easily adjustable suspension seat, based on a human engineering design, reduces operator fatigue and provides greater comfort.

- ELR (Emergency Locking Retractor) type seat belt as a standard
- Heating (STD) and head rest (OPT)



Open footplate

A larger safety footplate with antislip provides convenience and safe access for the operator.

5.6-inch large screen LCD monitor

The TFT LCD color monitor with 5.6-inch large screen allow the operator to identify speed, driving direction, and operating hours at a glance and control the vehicle efficiently. Fault diagnosis is possible without any additional diagnostic apparatus due to the message delivery function.



Speed limit setting

As the vehicle's speed limit can be set up between 8 and 20km/h at 1km/h, operator can comply with the speed limit.

Load weight indicator (OPT)

The precise load sensor reduces the time taken to measure a carriage load, and a warning is given at the time of overload.

Machine inclination indication

The grade and slope sensors are built into the MCU and provide the machine's inclination in real time.

A warning alarm is triggered if the KS STD limit is exceeded.

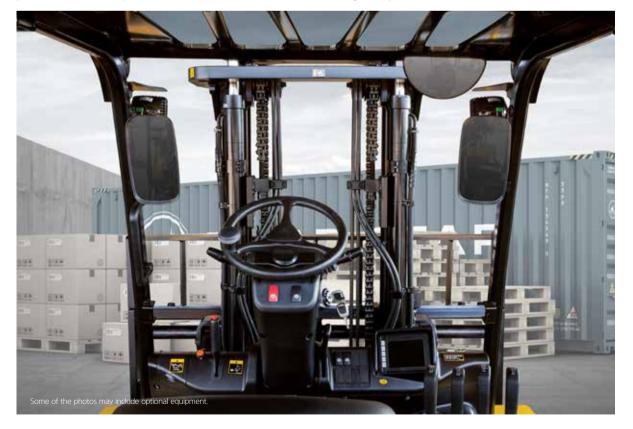
Main monitoring features

- Driving speed gauge
- Hour-meterFuel gauge
- Engine temperature gauge
- Gear status indicator
- Other indicator lights / warning lights



Wide visibility for Safe Operation

The optimized lift cylinder array design provides a clear, wide field of vision for the operator. The adoption of a panorama mirror improves the rear side view, further enhancing safety.





The strong head guard meets the ANSI regulations and provides wide visibility by increasing the opening in the ceiling.



The rear-view camera and monitor interoperated with the reverse gear ensure a safer rear-side work environment.



The adoption of the panoramic mirror eliminates blind spots at the rear and ensures a wider rear view.

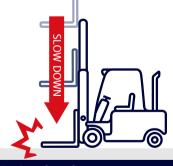
Various Safety System

The adoption of a high-sensitivity sensor and advanced safety system eliminates the risk of safety accidents.



Auto parking brake (OPT)

If the operator leaves the seat while the gear lever is in neutral, the parking brake is automatically engaged to secure safety, and released upon the operator's return to the seat.



Fork safety features

The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



Operator Presence Sensing System

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



Mast Accumulator for load cushioning (OPT)

The accumulator installed at the side of mast prevents the lift cylinder from moving up and down when driving on an uneven road surface.



Large Engine Hood

An ideal arragement of components ensures easy access and convenience for maintenance. The enlarged air cleaner (8") has extended service time of engine and durability has been improved with the adoption of a bonnet gas spring (left/right).

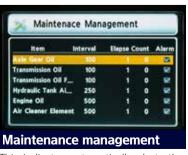




Newly developed waterproof and dustproof fuse box and relay box for ease of maintenance.



Details of engine fault diagnosed by the engine control unit (ECU) can be checked on the dashboard.



This indicator automatically alerts the operator of the replacement cycle of key consumable items.

Various convenience devices

Various functions provide safety and convenience for operator.



A button-type switch enables to notify of emergency situations quickly.



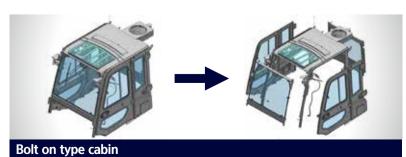
The equipment can be managed safely and protected from theft by designating operator's right.



A wide cabin can be selected (60 mm wide and 125 mm long) for wider indoor space.



people from stealing fuel.



The bolt on type cabin consists of front side, door front, door rear, and rear side. It is easy to assemble by bolt and mount parts. Also, cabin can be selected by module or parts and air conditioner and heater are separately available for driver's convenience.

New 9 Series Mast Specifications



35D-	9F													
Mas	Mast Type		Max- imum Fork Overall Heigh (Lowered)		Free Back rest	e lift Back rest	Tilt A	Angle	Load Capacity (600mm LC) w/o side shift		Load Capacity (600mm LC) with side shift		Truck weight (unloaded)	
		Heigh	Single wheel		included	excluded			Single wheel				Single wheel	
		mm	mm	mm	mm	mm	deg	_	kg	kg	kg	kg	kg	kg
	V270	2,720	2,085	2,070	120	120	8	10	3,500	3,500	3,500	3,500	5,864	6,013
	*V300	3,020	2,235	2,220	120	120	8	10	3,500	3,500	3,500	3,500	5,894	6,043
	V330	3,320	2,385	2,370	120	120	8	10	3,500	3,500	3,500	3,500	5,932	6,081
2-Stage	V350	3,520	2,535	2,520	120	120	8	10	3,500	3,500	3,500	3,500	5,955	6,104
Limited	V370	3,720	2,635	2,620	120	120	8	10	3,500	3,500	3,500	3,500	5,975	6,124
free lift	V400	4,020	2,845	2,830	120	120	8	10	3,500	3,500	3,400	3,450	6,017	6,166
	V430	4,320	2,995	2,980	120	120	8	10	3,500	3,500	3,350	3,400	6,047	6,196
	V450	4,520	3,095	3,080	120	120	8	6	3,500	3,500	3,300	3,350	6,130	6,279
	V500	5,020	3,345	3,330	120	120	8	6	3,400	3,500	3,200	3,250	6,181	6,330
2-Stage	VF280	2,805	2,135	2,120	931	1,258	8	8	3,500	3,500	3,500	3,500	5,922	6,073
full free	VF300	3,005	2,235	2,220	1,031	1,358	8	8	3,500	3,500	3,500	3,500	5,948	6,099
lift	VF315	3,155	2,325	2,310	1,121	1,448	8	8	3,500	3,500	3,500	3,500	5,967	6,119
	TF/TS370	3,730	2,035	2,020	822	1,149	8	8	3,500	3,500	3,350	3,450	6,108	6,257
	TF/TS400	4,030	2,135	2,120	922	1,249	8	8	3,500	3,500	3,300	3,400	6,138	6,287
	TF/TS430	4,330	2,235	2,220	1,022	1,349	8	8	3,500	3,500	3,250	3,350	6,196	6,318
2 Chang	TF/TS450	4,510	2,295	2,280	1,082	1,409	8	8	3,500	3,500	3,200	3,300	6,188	6,337
3-Stage full free	TF/TS470	4,720	2,385	2,370	1,172	1,499	8	8	3,400	3,500	3,150	3,250	6,224	6,373
lift	TF/TS500	5,020	2,485	2,470	1,272	1,599	8	6	3,300	3,400	3,100	3,200	6,247	6,396
	TF/TS550	5,520	2,665	2,650	1,452	1,779	8	6	3,200	3,300	2,850	3,100	6,309	6,458
	TF/TS600	6,030	2,845	2,830	1,632	1,959	8	6	3,100	3,200	2,450	3,000	6,347	6,523
	TF/TS650	6,540	3,025	3,010	1,812	2,139	8	6	3,000	3,000	2,350	2,900	6,461	6,610

Mast Type		Max- imum (Lowered)		Free lift Back rest Back rest		Tilt Angle		Load Capacity (600mm LC) w/o side shift		Load Capacity (600mm LC) with side shift		Truck weight (unloaded)		
		Heigh	Single wheel	Dual wheel	included	excluded	Fwd	Bwd	Single wheel	Dual wheel	Single wheel	Dual wheel	Single wheel	Dual whe
		mm	mm	mm	mm	mm	deg	deg	kg	kg	kg	kg	kg	kg
	V270	2,720	2,085	2,070	120	120	8	10	4,000	4,000	4,000	4,000	6,292	6,408
	*V300	3,020	2,235	2,220	120	120	8	10	4,000	4,000	4,000	4,000	6,322	6,438
	V330	3,320	2,385	2,370	120	120	8	10	4,000	4,000	4,000	4,000	6,360	6,476
2-Stage	V350	3,520	2,535	2,520	120	120	8	10	4,000	4,000	4,000	4,000	6,383	6,499
Limited	V370	3,720	2,635	2,620	120	120	8	10	4,000	4,000	3,950	3,950	6,403	6,519
free lift	V400	4,020	2,845	2,830	120	120	8	10	4,000	4,000	3,900	3,900	6,446	6,562
	V430	4,320	2,995	2,980	120	120	8	10	4,000	4,000	3,850	3,850	6,475	6,591
	V450	4,520	3,095	3,080	120	120	8	6	4,000	4,000	3,800	3,800	6,558	6,674
	V500	5,020	3,345	3,330	120	120	8	6	3,900	4,000	3,700	3,700	6,609	6,725
2-Stage	VF280	2,805	2,135	2,120	916	1,243	8	8	4,000	4,000	4,000	4,000	6,350	6,446
full free	VF300	3,005	2,235	2,220	1,016	1,343	8	8	4,000	4,000	4,000	4,000	6,376	6,472
lift	VF315	3,155	2,325	2,310	1,106	1,433	8	8	4,000	4,000	4,000	4,000	6,395	6,491
	TF/TS370	3,730	2,035	2,020	807	1,134	8	8	4,000	4,000	3,900	3,950	6,536	6,595
	TF/TS400	4,030	2,135	2,120	907	1,234	8	8	4,000	4,000	3,850	3,850	6,566	6,625
	TF/TS430	4,330	2,235	2,220	1,007	1,334	8	8	4,000	4,000	3,800	3,800	6,597	6,656
3-Stage	TF/TS450	4,510	2,295	2,280	1,067	1,394	8	8	4,000	4,000	3,800	3,800	6,616	6,675
full free lift	TF/TS470	4,720	2,385	2,370	1,157	1,484	8	8	4,000	4,000	3,700	3,750	6,653	6,711
	TF/TS500	5,020	2,485	2,470	1,257	1,584	8	6	3,900	3,900	3,600	3,650	6,676	6,734
	TF/TS550	5,520	2,665	2,650	1,437	1,764	8	6	3,700	3,800	3,350	3,500	6,737	6,796
	TF/TS600	6,030	2,845	2,830	1,617	1,944	8	6	3,600	3,600	2,950	3,400	6,803	6,861
	TF/TS650	6,540	3,025	3,010	1,797	2,124	8	6	3,500	3,500	2,850	3,300	6,889	6,948

*: Standard

New 9 Series Mast Specifications

45D-	-9F													
		Max-	Overall Height (Lowered)		Free	Free lift		ngle	(600mm LC)		Load Capacity (600mm LC)		Truck weight (unloaded)	
Mas	t Type	Fork Heigh	Single wheel	Dual whool	Back rest included	Back rest excluded	Fwd	Bwd	w/o sic			de shift	Single wheel	
		mm	mm	mm	mm	mm	deg	deg	kg	kg	kg	kg	kg	kg
	V270	2,720	2,085	2,070	120	120	8	10	4,500	4,500	4,500	4,500	6,702	6,864
	₩V300	3,020	2,235	2,220	120	120	8	10	4,500	4,500	4,500	4,500	6,732	6,894
	V330	3,320	2,385	2,370	120	120	8	10	4,500	4,500	4,500	4,500	6,770	6,932
2-Stage	V350	3,520	2,535	2,520	120	120	8	10	4,500	4,500	4,500	4,500	6,793	6,955
Limited	V370	3,720	2,635	2,620	120	120	8	10	4,500	4,500	4,400	4,400	6,813	6,975
free lift	V400	4,020	2,845	2,830	120	120	8	10	4,500	4,500	4,350	4,350	6,855	7,017
	V430	4,320	2,945	2,980	120	120	8	10	4,500	4,500	4,300	4,300	6,885	7,047
	V450	4,520	3,095	3,080	120	120	8	6	4,500	4,500	4,200	4,200	6,968	7,130
	V500	5,020	3,345	3,330	120	120	8	6	4,400	4,400	4,050	4,050	7,019	7,181
2-Stage	VF280	2,805	2,135	2,120	853	1,442	8	8	4,500	4,500	4,500	4,500	6,739	6,875
full free	VF300	3,005	2,235	2,220	953	1,542	8	8	4,500	4,500	4,500	4,500	6,765	6,901
lift	VF315	3,155	2,325	2,310	1,043	1,602	8	8	4,500	4,500	4,500	4,500	6,784	6,920
	TF/TS370	3,730	2,035	2,020	796	1,114	8	8	4,500	4,500	4,350	4,350	6,931	7,067
	TF/TS400	4,030	2,135	2,120	896	1,214	8	8	4,500	4,500	4,300	4,300	6,961	7,097
	TF/TS430	4,330	2,235	2,220	996	1,314	8	8	4,500	4,500	4,200	4,200	6,992	7,128
3-Stage	TF/TS450	4,510	2,295	2,280	1,056	1,374	8	8	4,500	4,500	4,150	4,150	7,011	7,147
full free	TF/TS470	4,720	2,385	2,370	1,145	1,484	8	8	4,400	4,400	4,100	4,100	7,047	7,183
lift	TF/TS500	5,020	2,485	2,470	1,246	1,564	8	6	4,300	4,300	4,000	4,000	7,070	7,206
	TF/TS550	5,520	2,665	2,650	1,426	1,744	8	6	4,200	4,200	3,850	3,850	7,132	7,268
	TF/TS600	6,030	2,845	2,830	1,606	1,924	8	6	4,000	4,000	3,250	3,750	7,197	7,333
	TF/TS650	6,540	3,025	3,010	1,786	2,104	8	6	3,900	3,900	3,150	3,650	7,284	7,420

Ж	: Standard

⋇:Standard

		Max- imum Fork		Overall Height (Lowered)				Angle	Load Capacity (600mm LC) w/o side shift		Load Capacity (600mm LC) with side shift		Truck weight (unloaded)	
Mas	Mast Type		Dack rest Dack	Back rest excluded	Fwd	Bwd	Single wheel				Single wheel	Dual whee		
		mm	mm	mm	mm	mm	deg	deg	kg	kg	kg	kg	kg	kg
	V260	2,630	2,085	2,070	120	120	8	10	5,000	5,000	5,000	5,000	7,152	7,273
	*V290	2,930	2,235	2,220	120	120	8	10	5,000	5,000	5,000	5,000	7,177	7,298
	V320	3,230	2,385	2,370	120	120	8	10	5,000	5,000	5,000	5,000	7,202	7,323
2-Stage	V340	3,430	2,535	2,520	120	120	8	10	5,000	5,000	4,950	4,950	7,227	7,348
Limited free lift	V360	3,630	2,635	2,620	120	120	8	10	5,000	5,000	4,900	4,900	7,243	7,364
	V390	3,930	2,845	2,830	120	120	8	10	5,000	5,000	4,800	4,800	7,279	7,400
	V440	4,430	3,095	3,080	120	120	8	6	4,900	5,000	4,650	4,650	7,382	7,503
	V490	4,930	3,345	3,330	120	120	8	6	4,800	4,900	4,500	4,500	7,424	7,545
2-Stage	VF270	2,702	2,135	2,120	905	1,223	8	8	5,000	5,000	4,700	4,750	7,117	7,238
full free	VF290	2,902	2,235	2,220	1,005	1,323	8	8	5,000	5,000	4,650	4,700	7,143	7,264
lift	VF305	3,052	2,325	2,310	1,095	1,413	8	8	5,000	5,000	4,550	4,600	7,162	7,283
	TF/TS360	3,672	2,035	2,020	807	1,074	8	8	5,000	5,000	4,700	4,800	7,348	7,469
	TF/TS390	3,972	2,135	2,120	907	1,174	8	8	5,000	5,000	4,650	4,700	7,374	7,495
	TF/TS420	4,272	2,235	2,220	1,007	1,274	8	8	4,900	5,000	4,550	4,600	7,399	7,520
3-Stage	TF/TS440	4,452	2,295	2,280	1,067	1,334	8	8	4,800	5,000	4,500	4,550	7,415	7,536
full free	TF/TS460	4,662	2,385	2,370	1,157	1,424	8	8	4,700	4,900	4,450	4,500	7,439	7,560
lift	TF/TS490	4,962	2,485	2,470	1,257	1,524	8	6	4,600	4,800	4,350	4,450	7,464	7,585
	TF/TS540	5,462	2,665	2,650	1,437	1,704	8	6	4,500	4,700	4,250	4,300	7,516	7,637
	TF/TS590	5,972	2,845	2,830	1,617	1,884	8	6	4,400	4,600	4,100	4,200	7,556	7,677
	TF/TS640	6,482	3,025	3,010	1,797	2,064	8	6	4,300	4,500	4,000	4,100	7,642	7,763

 ${\bf *}: {\sf Standard}$

New 9 Series



35D-9F 40D-9F 45D-9F 50DA-9F V MAST TF MAST 3.0 m 4.0 m 3.0 m 4.0 m 3.0 m 4.0 m 3.0 m 4.0 m 4.0 m 6.0 m 6.0 m 4.0 m 6.0 m 6.0

Side shift Hinged fork Hinged bucket Rotating fork Push pull Rotating roll clamp Load stabilizer Carton clamp Pallet inverter Drum clamp Veil clamp Load extender Fork positioner

* All specifications and photos in this catalog are subject to change for quality improvement.

Optional Items

- Fork(mm)
- 35D-9F: 1,070(Std)/1,220/1,370/1,520/1,670/1,820/1,970/2,120/2,400 40/45D-9F: 1,070/1,220(Std)/1,370/1,520/1,670/1,820/1,970/2,200/2,400 50DA-9F: 1,200(Std)/1,350/1,500/1,800/2,000/2,400
- Tire: pneumatic pressure (standard feature) (Solid, Non-marking / Front wheel single or Double tire)
- M.C.V: 3-spool, 4-spool (standard feature)
- · Load weight indicator
- Rear view camera

- Cabin
- Seat: Head Rest, Hot wire / Under cover
- Air-conditioner / Heater-integrated heater
- Pneumatic temperature / Pressure monitoring system
- Master switch
- Under cover
- Rear Horn
- LED Work Lamp

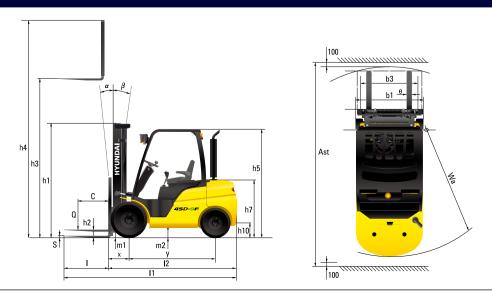
New 9 Series

Specification

Distir	nguishing mark					
1.1	Manufacturer			Hyu	ndai	
1.2	Manufacturer's type designation		35D-9F	40D-9F	45D-9F	50DA-9F
1.3	Drive		Diesel	Diesel	Diesel	Diesel
1.4	Type of operation		Seated	Seated	Seated	Seated
1.5	Load capacity	kg	3,500	4,000	4,500	5,000
1.6	Load center distance	c mm	600	600	600	600
1.8	Load distance, center of drive axle to fork	x mm	561	561	561	576
1.9	Wheelbase	y mm	2,000	2,000	2,000	2,000
Weig	ht					
2.1	Service weight	kg	5,894	6,438	6,894	7,298
2.2	Axle loading, loaded front/rear	kg	8,202 / 1,192	9,109 / 1,329	9,869 / 1,525	10,686 / 1,612
2.3	Axle loading, unloaded front/rear	kg	2,672 / 3,222	2,789 / 3,649	2,759 / 4,135	2,786 / 4,512
Tires	, chassis					
3.1	Tires : pneumatic, solid rubber, no	n marking	Р	Р	Р	Р
3.2	Tire size, front		8.25-15-14PR	7.50-16-12PR	7.50-16-12PR	7.50-16-12PR
3.3	Tire size, rear		7.00-12-14PR	7.00-12-14 PR	7.00-12-14PR	7.00-12-14PR
3.5	Wheels, number front / rear (x = driven wheels)		2 x 2	4 x 2	4 x 2	4 x 2
3.6	Tread, front	mm	1,132	1,282	1,282	1,282
3.7	Tread, rear	mm	1,140	1,140	1,140	1,140
Dime	nsion					
4.1	Tilt of mast/fork carriage forward/backrward	Degree	8 / 10	8 / 10	8 / 10	8 / 10
4.2	Height, mast lowered	h1 (mm)	2,235	2,220	2,220	2,220
4.3	Free lift	h2 (mm)	120	120	120	120
4.4	Lift height	h3 (mm)	3,020	3,020	3,020	2,930
4.5	Height, mast extended	h4 (mm)	4,234	4,234	4,234	4,147
4.7	Height of overhead guard (cabin)	h5 (mm)	2,230	2,220	2,220	2,220
4.8	Seat height / stand height rel. to sip	h7 (mm)	1,311	1,299	1,300	1,299
4.12	Coupling height	h10 (mm)	373	373	373	372
4.19	Overall length	I1 (mm)	4,180	4,235	4,455	4,500
4.20	Length to face of forks	12 (mm)	3,110	3,165	3,235	3,300
4.21	Overall width	b1 (mm)	1,370	1,746	1,746	1,746
4.22	Fork dimensions	lxexs (mm)	1,070 × 122 × 50	1,070 x 150 x 50	1,220 x 150 x 50	1,200 x 150 x 60
4.23	Fork carriage ISO 2328		III / A	III / A	IV / A	IV / A
4.24	Fork-carriage(Hook) width	b3 (mm)	1,300	1,600	1,600	1,600
4.31	Ground clearance, below mast, loaded	m1 (mm)	170	155	155	155
4.32	Ground clearance, center of wheelbase	m2 (mm)	211	209	206	204
4.33	Minimum intersecting angle for pallets	Ast (mm)	4,628	4,677	4,725	4,785
4.34	Aisle width for pallets	Ast (mm)	4,828	4,877	4,925	4,985
4.35	Turning radius	Wa (mm)	2,867	2,916	2,964	3,009
4.36	Smallest pivot point distance		1,009	1,009	1,009	1,009

Perfo	ormance data									
5.1	Travel speed, unloaded	km/h	26.6	25.7	25.6	25.6				
5.2	Lift speed, loaded / unloaded	mm/s	480 / 490	470 / 490	460 / 490	400 / 420				
5.3	Lowering speed, loaded / unloaded	mm/s	500 / 500	500 / 500	500 / 500	500 / 500				
5.6	Max. drawbar pull, loaded / unloaded	N	36,957 / 35,258	37,258 / 36,186	37,281 / 36,065	37,342 / 35,976				
5.7	Max. gradeability, loaded / unloaded	%	38.6 / 24.7	34.6 / 23.8	31.4/22.0	28.9				
5.9	Acceleration time, loaded / unloaded (10m)	sec	-	-	-	-				
5.10	Service brake		Hydraulic type	Hydraulic type	Hydraulic type	Hydraulic type				
Comb	oustion-engine									
7.1	Engine manufacturer / type		KUBOTA V3800 - TIER 4							
7.2	Engine power	kW/rpm	55.4 / 2,200							
7.3	Maximum torque	kgf,m / rpm	31.6 / 1,500							
7.4	No. of cylinders / displacement	EA / cc	4 / 3,769							
7.5	Fuel consumption Acc. To VDI cycle	ℓ/h		4.8						
Addit	tion data									
8.1	Type of drive control		Power shift 2/2	Power shift 2/2	Power shift 2/2	Power shift 2/2				
8.2	Operating pressure, system / attachments	kgf/cm ²	210 / 140	210 / 140	210 / 140	210 / 140				
8.3	Attachment oil capacity	ℓ / min	60	60	60	60				
8.5	Trailer coupling, type din PIN									

Dimension



^{*} All specifications in this catalog are subject to change according to the optional items.

