

TECHNICAL SPECIFICATIONS

FD60-100-5

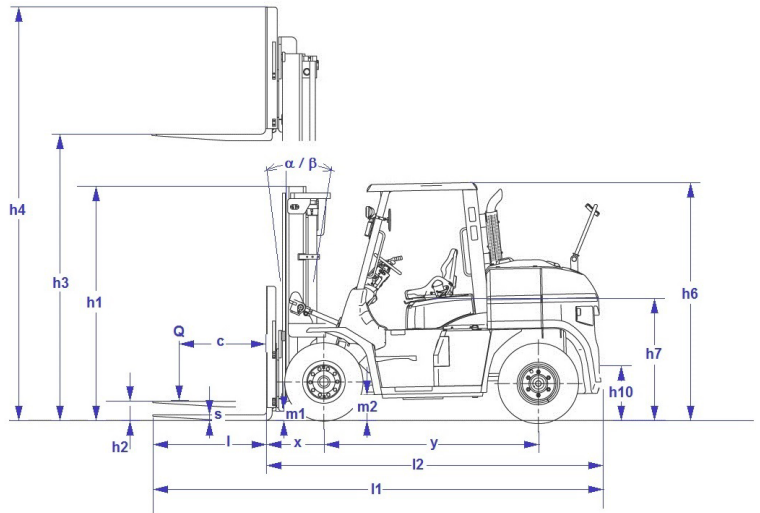
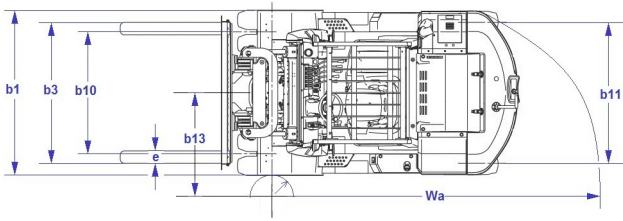


STANDARD SPECIFICATIONS

		Counterbalance trucks Designation according VDI 3586	Data sheet for materials handling equipment - VDI 2198		
		Manufacturers Data and Design Characteristics			
CHARACTERISTICS	1.1	Manufacturer	TCM Forklifts		
	1.2	Model name	FD60	FD70	
		Model variation	FD60-5	FD70-5	
	1.3	Power unit: Electric, Diesel, Gasoline, LPG, others	Diesel		
	1.4	Operation: Sit, Hand, Pedestrian, Standing, Order picking	Sit Down Rider Type		
	1.5	Load capacity	Q (t)	6.0	7.0
	1.6	Load centre	c (mm)	600	600
	1.8	Front overhang	x (mm)	615	625
	1.9	Wheel base	y (mm)	2300	2300
WEIGHTS	2.1	Service weight	kg	8670	9540
	2.2	Axle load with load, front/rear	kg	13030/1640	14640/1900
	2.3	Axle load without load, front/rear	kg	3860/4810	3910/5630
WHEELS & TIRES	3.1	Tyres front/rear (C=Cushion, SE=superelastic, P=pneumatic)	P(SE)/P(SE)		
	3.2	Tyre size, front	8.25-15-14PR	8.25-15-14PR	
	3.3	Tyre size, rear	8.25-15-14PR	8.25-15-14PR	
	3.5	Wheels, number front/rear (x=powered)	4x/2	4x/2	
	3.6	Tread, front	b10 (mm)	1470	1470
	3.7	Tread, rear	b11 (mm)	1700	1700
	DIMENSIONS	4.1	Tilt Mast/carriage, forward/backward	α/β (°)	6/12
4.2		Height mast fully lowered	h_1 (mm)	2500	2500
4.3		Free lift	h_2 (mm)	205	215
4.4		Lift height	h_3 (mm)	3000	3000
4.5		Height mast fully extended	h_4 (mm)	4420	4420
4.7		Overhead guard height	h_6 (mm)	2550	2550
4.8		Seat height/Standing height	h_7 (mm)	1470	1470
4.12		Towing coupler height	h_{10} (mm)	520	520
4.19		Overall length	l_1 (mm)	4805	4875
4.20		Length to fork face	l_2 (mm)	3585	3655
4.21		Overall width ¹	b_1 (mm)	2005	2005
4.22		Fork dimensions	s, e, l (mm)	60x150x1220	70x150x1220
4.23		Carriage DIN 15173, Class / Form A,B		4A	4A
4.24		Carriage width	b_3 (mm)	1845	1845
4.31		Mast underclearance loaded	m_1 (mm)	200	200
4.32		Underclearance centre wheelbase	m_2 (mm)	225	225
4.33		Right angle stacking aisle with pallet 1000x1200 crossways	Ast (mm)	5215	5285
4.34		Right angle stacking aisle with pallet 800x1200 lengthways	Ast (mm)	5415	5485
4.35	Turning radius	Wa (mm)	3400	3460	
4.36	Turning radius, inner	b_{13} (mm)	1255	1255	
PERFORMANCE	5.1	Travelling speed with/without load	km/h	25/28	25/28
	5.2	Lifting speed with/without load	mm/s	530/550	530/550
	5.3	Lowering speed with/without load	mm/s	450/500	450/500
	5.6	Drawbar pull, with/without load	kN	54.9/21.6	54.9/21.6
	5.8	Gradeability with/without load	%	28/20	28/20
	5.10	Service brake		Hydraulic	
DRIVE	7.1	Engine manufacturer/type	KUBOTA-V3800		
	7.2	Engine rated power according ISO 1585	kW	81	81
	7.3	Rated engine revolutions	min ⁻¹	2400	2400
	7.4	Number of cylinders/Displacement	cm ³	4/3769	4/3769
OTHERS	8.1	Type of drive control	Torque converter/1		
	8.2	Working pressure attachments	bar	206	
	8.4	Noise level operator's ear according EN12053* ¹	dB(A)	86	86

*1) Noise level at operator's ear in ECO-mode

DIMENSIONS



MAST SPECIFICATIONS & RATED CAPACITIES: FD60-5

Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
				mm ¹	mm ¹				
TWO STAGE WIDE VIEW	VM300	3000	2500	3950	4420	205	205	6-12 (6-10)	6000
	VM330	3300	2650	4250	4720				
	VM350	3500	2750	4450	4920				
	VM400	4000	3050	4975	5420			6-6	5700
	VM450	4500	3300	5475	5920				
	VM500	5000	3550	5975	6420				
	VM550	5500	3850	6525	6920				
VM600	6000	4100	7025	7420	3-6	5400			
TWO STAGE FULL FREE	VFM300	3000	2625	4095	4420	1580	1255	6-12 (6-10)	6000
	VFM330	3300	2775	4395	4720	1730	1405		
	VFM350	3500	2875	4595	4920	1830	1505		
	VFM400	4000	3175	5095	5420	2130	1805		
	VFM450	4500	3425	5595	5920	2380	2055		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2500	5075	5400	1455	1130	6-10 (6-6)	5800
	VFHM435	4350	2625	5425	5750	1580	1255		
	VFHM480	4800	2775	5875	6200	1730	1405		
	VFHM500	5000	2875	6075	6400	1830	1505	6-10	5700
	VFHM550	5500	3130	6575	6900	2085	1760		
	VFHM600	6000	3300	7075	7400	2255	1930	3-6	5500
	VFHM700	7000	3675	8075	8400	2630	2305		5000
	VFHM800	8000	4100	9075	9400	3055	2730		4000

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with pneumatic tyres unless indicated

MAST SPECIFICATIONS & RATED CAPACITIES: FD70-5

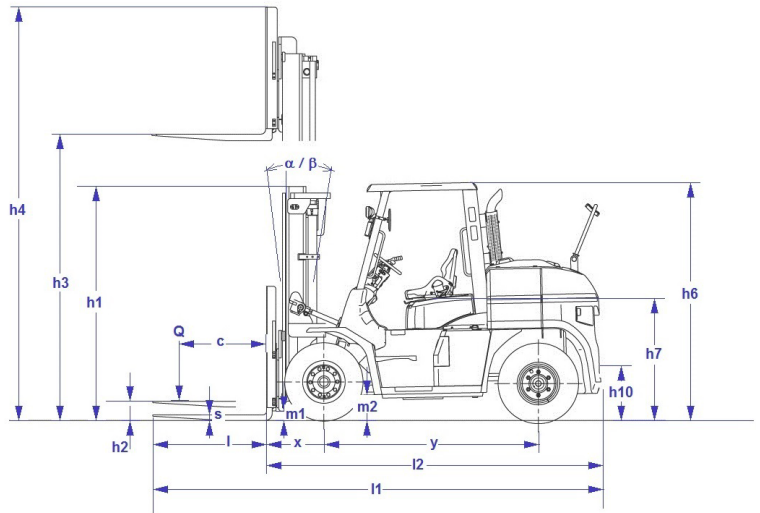
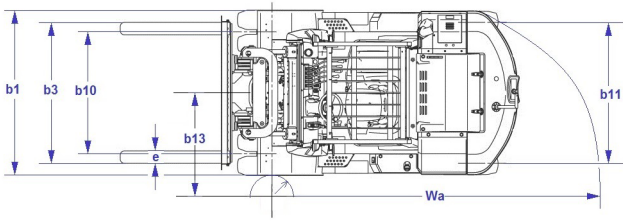
Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
				mm ¹	mm ¹				
TWO STAGE WIDE VIEW	VM300	3000	2500	4105	4420	215	215	6-12 (6-10)	7000
	VM330	3300	2650	4405	4720				
	VM350	3500	2750	4605	4920				
	VM400	4000	3050	5105	5420			6-6	6600
	VM450	4500	3300	5605	5920				
	VM500	5000	3550	6105	6420				
	VM550	5500	3850	6605	6920				
VM600	6000	4100	7105	7420	3-6	6400			
TWO STAGE FULL FREE	VFM300	3000	2625	4095	4420	1590	1265	6-12 (6-10)	7000
	VFM330	3300	2775	4395	4720	1740	1415		
	VFM350	3500	2875	4595	4920	1840	1515		
	VFM400	4000	3175	5095	5420	2140	1815		
	VFM450	4500	3425	5595	5920	2390	2065		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2500	5075	5400	1465	1140	6-10 (6-6)	6800
	VFHM435	4350	2625	5425	5750	1590	1265		
	VFHM480	4800	2775	5875	6200	1740	1415		
	VFHM500	5000	2875	6075	6400	1840	1515	6-10	6700
	VFHM550	5500	3130	6575	6900	2095	1770		
	VFHM600	6000	3300	7075	7400	2265	1940	3-6	6400
	VFHM700	7000	3675	8075	8400	2640	2315		6000
	VFHM800	8000	4100	9075	9400	3065	2740		4500

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb ² Capacity with pneumatic tyres unless indicated

STANDARD SPECIFICATIONS

		Counterbalance trucks Designation according VDI 3586	Data sheet for materials handling equipment - VD1 2198		
		Manufacturers Data and Design Characteristics			
CHARACTERISTICS	1.1	Manufacturer	TCM Forklifts		
	1.2	Model name	FD80	FD100	
		Model variation	FD80-5	FD100-5	
	1.3	Power unit: Electric, Diesel, Gasoline, LPG, others	Diesel		
	1.4	Operation: Sit, Hand, Pedestrian, Standing, Order picking	Sit Down Rider Type		
	1.5	Load capacity	Q (t)	8.0	10.0
	1.6	Load centre	c (mm)	600	600
	1.8	Front overhang	x (mm)	720	715
1.9	Wheel base	y (mm)	2500	2800	
WEIGHTS	2.1	Service weight	kg	11510	12910
	2.2	Axle load with load, front/rear	kg	17360/2150	20660/2250
	2.3	Axle load without load, front/rear	kg	5140/6370	5980/6930
WHEELS & TIRES	3.1	Tyres front/rear (C=Cushion, SE=superelastic, P=pneumatic)	P(SE)/P(SE)		
	3.2	Tyre size, front	9.00-20-14PR	9.00-20-14PR	
	3.3	Tyre size, rear	9.00-20-14PR	9.00-20-14PR	
	3.5	Wheels, number front/rear (x=powered)	4x/2	4x/2	
	3.6	Tread, front	b10 (mm)	1600	1600
	3.7	Tread, rear	b11 (mm)	1700	1700
	DIMENSIONS	4.1	Tilt Mast/carriage, forward/backward	α/β (°)	6/12
4.2		Height mast fully lowered	h_1 (mm)	2800	2850
4.3		Free lift	h_2 (mm)	205	205
4.4		Lift height	h_3 (mm)	3000	3000
4.5		Height mast fully extended	h_4 (mm)	4420	4330
4.7		Overhead guard height	h_5 (mm)	2660	2660
4.8		Seat height/Standing height	h_7 (mm)	1570	1570
4.12		Towing coupler height	h_{10} (mm)	600	590
4.19		Overall length	l_1 (mm)	5245	5485
4.20		Length to fork face	l_2 (mm)	4025	4265
4.21		Overall width ¹	b_1 (mm)	2175	2245
4.22		Fork dimensions	s,e,l (mm)	75x180x1220	75x180x1220
4.23		Carriage DIN 15173, Class / Form A,B		4A	-
4.24		Carriage width	b_3 (mm)	2015	2208
4.31		Mast underclearance loaded	m_1 (mm)	240	240
4.32		Underclearance centre wheelbase	m_2 (mm)	290	290
4.33		Right angle stacking aisle with pallet 1000x1200 crossways	A_{st} (mm)	5630	5865
4.34		Right angle stacking aisle with pallet 800x1200 lengthways	A_{st} (mm)	5830	6065
4.35	Turning radius	W_a (mm)	3710	3950	
4.36	Turning radius, inner	b_{13} (mm)	1290	1475	
PERFORMANCE	5.1	Travelling speed with/without load	km/h	24/28	24/27
	5.2	Lifting speed with/without load	mm/s	440/460	350/370
	5.3	Lowering speed with/without load	mm/s	450/450	450/350
	5.6	Drawbar pull, with/without load	kN	59.8/27.5	63.7/31.4
	5.8	Gradeability with/without load	%	25/20	21/20
	5.10	Service brake		Hydraulic	
DRIVE	7.1	Engine manufacturer/type	KUBOTA/V3800		
	7.2	Engine rated power according ISO 1585	kW	81	
	7.3	Rated engine revolutions	min ⁻¹	2400	
	7.4	Number of cylinders/Displacement	cm ³	4/3769	
OTHERS	8.1	Type of drive control	Torque converter/1		
	8.2	Working pressure attachments	bar	206	
	8.4	Noise level operator's ear according EN12053* ¹	dB(A)	86	

*1) Noise level at operator's ear in ECO-mode



MAST SPECIFICATIONS & RATED CAPACITIES: FD80-5

Mast type	Mast name	Maximum fork height	Overall height			Free lift		Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended		Without backrest	With Std backrest		
				Without backrest	With Std backrest				
mm ¹	mm ¹	mm ¹	mm ¹	mm ¹	mm ¹	mm ¹	degrees	kg ¹	
TWO STAGE WIDE VIEW	VM300	3000	2800	4230	4420	205	205	6-12	8000
	VM330	3300	2950	4445	4720				
	VM350	3500	3050	4645	4920				
	VM400	4000	3350	5145	5420				
	VM450	4500	3600	5645	5920				
	VM500	5000	3850	6145	6420				
	VM550	5500	4150	6645	6920				
	VM600	6000	4400	7145	7420				
TWO STAGE FULL FREE	VFM300	3000	2700	4210	4420	1580	1345	6-12	8000
	VFM330	3300	2850	4510	4720	1730	1495		
	VFM350	3500	2950	4710	4920	1830	1595		
	VFM400	4000	3250	5210	5420	2130	1895		
	VFM450	4500	3500	5710	5920	2380	2145		
THREE STAGE FULL FREE WIDE VIEW	VFHM400	4000	2575	5165	5400	1455	1220	6-10	7700
	VFHM435	4350	2700	5515	5750	1580	1345		
	VFHM480	4800	2850	5965	6200	1730	1495		
	VFHM500	5000	2950	6165	6400	1830	1595		
	VFHM550	5500	3205	6665	6900	2085	1850	3-6	7300
	VFHM600	6000	3375	7165	7400	2255	2020		6700
	VFHM700	7000	3750	8165	8400	2630	2395		5400
	VFHM800	8000	4175	9165	9400	3055	2820		3500

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb

² Capacity with pneumatic tyres unless indicated

MAST SPECIFICATIONS & RATED CAPACITIES: FD100-5

Mast type	Mast name	Maximum fork height	Overall height		Free lift	Tilt angle Forward/backward	Load capacity ² Load center 600 mm
			Fully lowered	Fully extended with Std backrest ³			
					mm ¹		
TWO STAGE WIDE VIEW	VM300	3000	2850	4330	205	6-12	10000
	VM330	3300	3000	4630			
	VM350	3500	3100	4830			
	VM400	4000	3400	5330			
	VM450	4500	3650	5830			
	VM500	5000	3900	6330			
	VM550	5500	4200	6830			
	VM600	6000	4450	7330			
						6-6	9000
						3-6	8000

¹ 1 inch = 25.4 mm 1 kg = 0.4536 lb

² Capacity with pneumatic tyres unless indicated

³ Backrest is not adopted.

FD60-100-5



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