



**TECHNICAL CHARACTERISTICS  
OF COUNTERBALANCED ENGINE DRIVEN FORK LIFT TRUCKS  
Series VRD with diesel engine / VRG with LPG-engine**

CHARACTERISTICS	1	Type	Manufacture designation		VRD20/25	VRD30	VRD35	VRD40	VRD45	VRD50	
	2	Useful load	Q	Load capacity	kg	2000/2500	3000	3500	4000	4500	5000
	3	Distance from the center of gravity/Load center	c	Distance from the center of gravity to the fork face	mm	500					
	4	Drive unit		Engine diesel/LPG		Diesel, LPG					
	5	Type of operation		Driver (standing, sitting, etc.)		Sitting					
	6	Tyres		L-pneumatic, V-solid front/rear		L/L or V/V					
	7	Wheels (x-driven)		Number front/rear	pce	2x / 2			4x / 2		
DIMENSIONS	8	Lifting by two-masts lifting equipment	$h_3$	Maximum lift height	mm	3300					
	9		$h_2$	Normal free lift	mm	60	110			60	
	10		$h_5$	Special (full) free lift	mm	-					
	11	Fork carriage		According to DIN15173 A/B/no		2A	3A			4A	
	12	Fork length		l	mm	from 950 to 1500					
	13	Mast tilt angle		$\alpha$ - forward / $\beta$ - backward	Grad	5 / 12			5 / 10		
	14	Overall dimensions	$L_2$	Length, incl. fork face	mm	2510	2690	2785	2795	2945	3045
	15		B	Width	mm	1189	1218		1705		
	16		$h_1$	Height, mast lowered	mm	2230	2240			2480	
	17		$h_4$	Height, maximum mast raised	mm	3840	3885		4010		4090
	18		$h_6$	Height to overhead guard	mm	2195	2205		2210		
	19	$h_7$	Height of seat		mm	1120					
	20	Turning radius		$W_a$	mm	2240	2400	2440	2600	2640	2740
21	Load distance		x	mm	465	495		505		540	
22	Working aisle width		$A_{st}$	mm	3980	4150		4800		4940	
PERFORMANCE	23	Speed		Travel loaded/unloaded	km/h	24	22			17	
	24			Lifting loaded/unloaded	m/s	0,5 max / 0,3 min					
	25			Lowering loaded/unloaded	m/s	0,6 / 0,6	0,5 / 0,5		0,4 / 0,4		

	26	Gradient performance		loaded/unloaded	%	17 min					
	27	Acceleration time		By running loaded/unloaded	s	22,5	20	18,5	16		
WEIGHT	28	Dead weight			kg	3760	4520	4800	5450	5600	6000
	29	Axle load		With load front/rear	kg	5900 max/500 min	7200 max/500 min	7900 max/650 min	8690 max/730 min	9460 max/840 min	10620 max/980 min
	1	Type		Manufacture designation		<b>VRD20/25</b>	<b>VRD30</b>	<b>VRD35</b>	<b>VRD40</b>	<b>VRD45</b>	<b>VRD50</b>
	30			Number front/rear	pce	2 / 2			4 / 2		
CHASSIS	31	Tyres		Tyre size front	"mm	7x12	8,15-15				
	32			Tyre size rear	"mm	6x9	6,50-10				
	33	Wheelbase	y		mm	1650	1800		1950	2050	
	34	Track		front / rear	mm	964 / 961	991 / 961		1240 / 961	1240 / 965	
	35	Ground clearance	m <sub>1</sub>	At lowest point with load	mm	120	135				
	36		m <sub>2</sub>	At wheelbase center with load	mm	125	145		170		
	37	Service foot brake		(mech.,hydr.,electr.,pneum.)		Hydraulic					
38	Parking brake		Hand/Foot/Safety		Hand						
DRIVE	39	Internal combustion engine		Manufacture, model		D3900; G3900; Deutz; D243, etc.					
	40	Transmission		Type, speeds forward/backward		Hydrodynamic transmission 6860 1/1					
	41	Gear (clutch)		Type		Hydraulic torque converter					

Model	Load capacity	Lifting height	Lifting masts	Designation /type of lifting mast/
VRD20/25 VRD30 VRD35 VRD40	2,0 t/2.5t 3,0 t 3,5 t 4,0 t	.33 (h <sub>3</sub> =3300 mm) .40 (h <sub>3</sub> =4000 mm) .45 (h <sub>3</sub> =4500 mm)	SIMPLEX – two masts and one centrally located hydraulic cylinder, normal free lift (h <sub>2</sub> =150 mm)	.21
VRD20/25 VRD30 VRD35 VRD40 VRD45 VRD50	2,0 t/2.5t 3,0 t 3,5 t 4,0 t 4,5 t 5,0 t	.33 (h <sub>3</sub> =3300 mm) .40 (h <sub>3</sub> =4000 mm) .45 (h <sub>3</sub> =4500 mm)	SIMPLEX – high-visibility with two masts and two hydraulic cylinders, normal free lift (h <sub>2</sub> = 60/110 mm).	.22
VRD20/25 VRD30 VRD35 VRD40	2,0 t/2,5 t 3,0 t 3,5 t 4,0 t	.40 (h <sub>3</sub> =4000 mm) .45 (h <sub>3</sub> =4500 mm)	TRIPLEX – with tree masts, special (full) free lift 2000/2250 mm	.33