Large capacity industrial engines with high torque and a long service life

Hydrostatic drive unit for fast acceleration and direction changes

VarioControl featuring 5 drive programs

Oil immersed multi-disk parking brake with automatic operation

Comfortable operator's cab featuring exemplary ergonomics

DFG/TFG 20–30 BS

Diesel and gas forklifts with hydrostatic drive units (2000, 2500, 3000 kg)

Jungheinrich diesel and gas forklift trucks with hydrostatic drive units have an incredible handling capacity. Their strengths come particularly to the fore in applications that require lots of direction changes, such as any continual loading and unloading processes. These strengths include dynamic acceleration, fast reversing and precision control. Via VarioControl the truck can be adjusted to various applications.

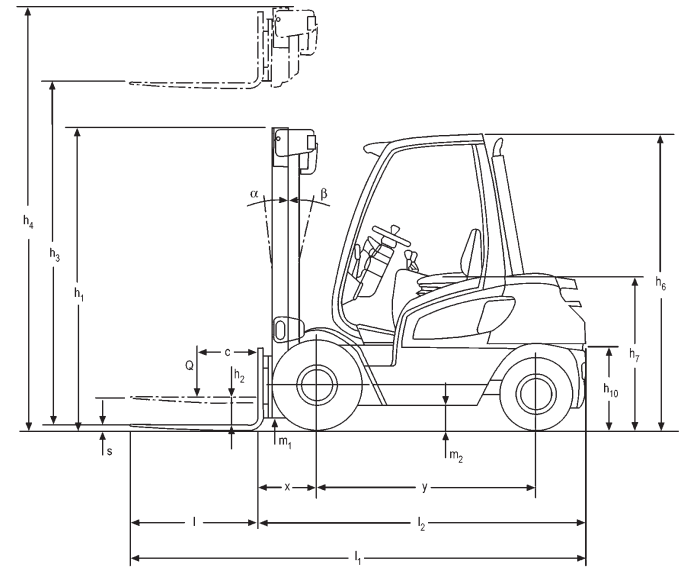
Large capacity industrial engines generate high torque even at low speeds. The benefits of this include lower fuel consumption and noise. These robust engines are specially designed for use in forklift trucks. That ensures high reliability and a long service life even for tough applications.

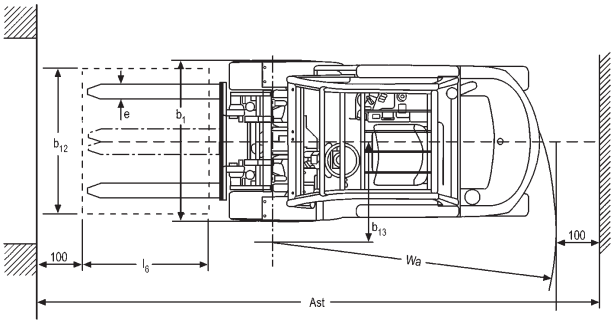
All the engines feature low emissions and comply with the future EU Directives. The gas versions are fitted as standard with a catalytic converter. A closed-loop 3-way catalytic converter (TFG) and various particulate filter systems (DFG) are available as options.

The operator's cab has an ergonomic layout and is designed around the operator. This ensures safety, protects health and enables the operator to concentrate fully on his work whilst being in a relaxed & stress free environment. Overall this ensures maximum productivity for arduous shifts.

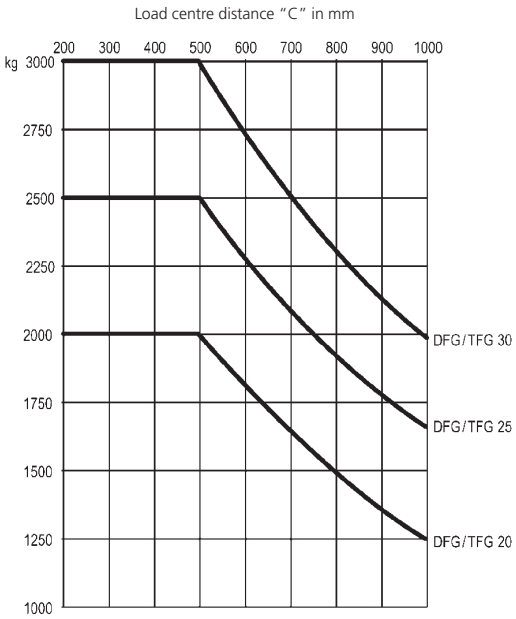
JUNGHEINRICH

DFG/TFG 20–30 BS





Capacity



Mast table DFG/TFG 20–30 BS							Capacity table (kg) c = 500 mm		
Designation	Lift	Free lift h_2 mm		Closed mast height	Max. height	Tilt forward/ backward	without sideshift, single Solid tyres		
	h_3 mm	DFG/TFG 20–25 BS	DFG/TFG 30 BS	h_1 mm	h_4 mm	α/β (°)	DFG/TFG 20 BS	DFG/TFG 25 BS	DFG/TFG 30 BS
Two-stage ZT	2900	150	150	2100	3496	6/6	2000	2500	3000
	3100	150	150	2200	3696	6/6	2000	2500	3000
	3300	150	150	2300	3896	6/6	2000	2500	3000
	3500	150	150	2400	4096	6/10	2000	2500	3000
	3700	150	150	2500	4296	6/10	2000	2500	3000
	4000	150	150	2650	4596	6/6	2000	2500	3000
	4300	150	150	2850	4925	6/6	2000	2500	3000
	4500	150	150	2950	5125	6/6	2000	2500	3000
	4700	150	150	3050	5325	6/6	2000	2500	3000
	5000	150	150	3200	5625	6/6	2000	2500	3000
	5500	150	150	3500	6175	6/6	1900	2500	2950
	5800	150	150	3650	6475	6/6	1850	2300	2700
	6000	150	150	3750	6675	6/6	1800	2100	2450
Two-stage ZZ	2900	1479	1379	2065	3486	6/6	2000	2500	3000
	3100	1579	1479	2165	3686	6/6	2000	2500	3000
	3300	1679	1579	2265	3886	6/6	2000	2500	3000
	3500	1779	1679	2365	4086	6/10	2000	2500	3000
	3700	1879	1779	2465	4286	6/10	2000	2500	3000
	4000	2029	1929	2615	4586	6/6	2000	2500	3000
	4300	2229	2129	2815	4915	6/6	2000	2500	3000
	4500	2329	2229	2915	5115	6/6	2000	2500	3000
Three-stage DZ	4400	1479	1379	2065	4986	6/6	2000	2500	3000
	4700	1579	1479	2165	5286	6/6	2000	2500	3000
	5000	1679	1579	2265	5586	6/6	2000	2300	3000
	5500	1879	1779	2465	6086	6/6	1900	2100	3000
	6000	2079	1979	2665	6586	6/6	1800	1980	2600
	6500	2279	2179	2865	7086	6/6	1700	1190	1700
	7000	2479	2379	3065	7586	6/6	1650	830	1450

Technical Data in line with VDI 2198 as at: 09/2003

Identification	1.1	Manufacturer (abbreviation)	Jungheinrich		Jungheinrich		Jungheinrich		1.1
	1.2	Manufacturer's type designation	**DFG 20 BS**	**TFG 20 BS**	**DFG 25 BS**	**TFG 25 BS**	**DFG 30 BS**	**TFG 30 BS**	1.2
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas, manual	diesel	fuel gas	diesel	fuel gas	diesel	fuel gas	1.3
	1.4	Type of operation: hand, pedestrian, standing, seated, order-picker	seated		seated		seated		1.4
	1.5	Load capacity/rated load Q (t)	2		2,5		3		1.5
	1.6	Load centre distance c (mm)	500		500		500		1.6
	1.8	Load distance, centre of drive axle to fork x (mm)	450		450		480		1.8
	1.9	Wheelbase y (mm)	1685		1685		1685		1.9
Weights	2.1	Service weight kg	3740	3710	4170	4140	4680	4650	2.1
	2.2	Axle loading, laden front/rear kg	5200/540	5180/530	5800/870	5780/860	7000/680	6980/670	2.2
	2.3	Axle loading, unladen front/rear kg	1980/1760	1960/1750	1820/2350	1800/2340	2050/2630	2030/2620	2.3
Wheels, Chassis	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane	SE(L)/SE(L)		SE(L)/SE(L)		SE(L)/SE(L)		3.1
	3.2	Tyre size, front (∅ x width)	7.00-12 (16PR)		7.00-12 (16PR)		27x10-12 (14PR)		3.2
	3.3	Tyre size, rear (∅ x width)	6.50-10 (10PR)		6.50-10 (10PR)		6.50-10 (10PR)		3.3
	3.5	Wheels, number front rear (x = driven wheels)	2x/2		2x/2		2x/2		3.5
	3.6	Track width, front b_{10} (mm)	990		990		1045		3.6
	3.7	Track width, rear b_{11} (mm)	938		938		938		3.7
Basic Dimensions	4.1	Mast/fork carriage tilt forward/backward degrees	6/6		6/6		6/6		4.1
	4.2	Lowered mast height h_1 (mm)	2300		2300		2300		4.2
	4.3	Free lift h_2 (mm)	150		150		150		4.3
	4.4	Lift height h_3 (mm)	3300		3300		3300		4.4
	4.5	Extended mast height h_4 (mm)	3896		3896		3896		4.5
	4.7	Overhead load guard (cab) height h_6 (mm)	2220		2220		2220		4.7
	4.8	Seat height/standing height h_7 (mm)	1095		1095		1095		4.8
	4.12	Coupling height h_{10} (mm)	440/615		440/615		440/615		4.12
	4.19	Overall length l_1 (mm)	3515		3525		3640		4.19
	4.20	Length to face of forks l_2 (mm)	2515		2525		2640		4.20
	4.21	Overall width b_1/b_2 (mm)	1170		1170		1285		4.21
	4.22	Fork dimensions s/e/l (mm)	40x100x1000		40x100x1000		50x125x1000		4.22
	4.23	Fork carriage ISO 2328, class/type A, B	2A		2A		3A		4.23
	4.24	Fork-carriage width b_3 (mm)	1120		1120		1200		4.24
	4.31	Ground clearance, laden, under mast m_1 (mm)	95		95		100		4.31
	4.32	Ground clearance, centre of wheelbase m_2 (mm)	132		132		142		4.32
	4.33	Aisle width for pallets 1000 x 1200 crossways Ast (mm)	3925		3935		4050		4.33
	4.34	Aisle width for pallets 800 x 1200 lengthways Ast (mm)	4125		4135		4250		4.34
	4.35	Turning radius Wa (mm)	2265		2275		2360		4.35
	4.36	Smallest pivot point distance b_{13} (mm)	785		785		785		4.36
Performance Data	5.1	Travel speed, laden/unladen km/h	19.5/19.8		19.3/19.6		20.0/20.3		5.1
	5.2	Lift speed, laden/unladen m/s	0.53/0.56		0.53/0.55		0.52/0.55		5.2
	5.3	Lowering speed, laden/unladen m/s	0.55/0.52		0.55/0.52		0.55/0.52		5.3
	5.5	Drawbar pull, laden/unladen S_2 60 min N	21000/11830	18600/10500	23570/11830	19500/10800	21000/12800	19000/11700	5.5
	5.6	Max. drawbar pull, laden/unladen S_2 5 min N							5.6
	5.7	Gradient performance, laden/unladen S_2 30 min %	35/29	33/28	33/26	30/26	26/25,5	26/26	5.7
	5.8	Max. gradient performance, laden/unladen S_2 5 min %							5.8
	5.9	Acceleration time, laden/unladen 10 m s	4.9/4.5	4.9/4.7	5/4.65	5.1/4.75	5.1/4.7	5.3/4.9	5.9
	5.10	Service brake	hydrostatic		hydrostatic		hydrostatic		5.10
Engine	7.1	Engine manufacturer/type	Perkins 704.26	GM 3.0LL4	Perkins 704.26	GM 3.0LL4	Perkins 704.26	GM 3.0LL4	7.1
	7.2	Engine power acc. to ISO 1585 kW	43	44	43	44	43	44	7.2
	7.3	Rated speed 1/min	2600	2200	2600	2200	2600	2200	7.3
	7.4	No. of cylinders/cubic capacity /cm³	4/2606	4/2966	4/2606	4/2966	4/2606	4/2966	7.4
	7.5	Fuel consumption acc. to VDI cycle l/h, kg/h	3.4	3	3.5	3.1	3.6	3.26	7.5
Other Details	8.1	Type of drive control	hydrostatic		hydrostatic		hydrostatic		8.1
	8.2	Operating pressure for attachments bar	160		160		160		8.2
	8.3	Oil volume for attachments l/min	60		60		60		8.3
	8.4	Sound level at driver's ear db(A)	75		75		75		8.4
	8.5	Tow coupling, type DIN	15170/type H		15170/type H		15170/type H		8.5

This specification sheet according to VDI regulations 2198 only provides technical values for the standard truck. Non-standard tyres, different masts, additional equipment, etc. could produce other values.