Hydrostatic drive for excellent drive comfort and productivity

Low fuel consumption

Excellent stability during travel due to extremely low centre of gravity and high pivot steer axle

Driver assistance systems (optional)

Ergonomic and easily adjustable operators environment

Driver orientated workplace



DFG/TFG 540s/545s/550s/S50s

Diesel and LPG counterbalanced trucks with hydrostatic drive (4,000/4,500/4,990/5,000 kg)

Our diesel and LPG fork lift trucks with hydrostatic drive offer outstanding throughput, particularly when reversing (e.g. during the loading of HGVs). This is where their strengths truly come into play: Rapid acceleration, fast reversing and precise travel. With five operating programs, the performance characteristics can be optimally adapted to the requirements of numerous applications.

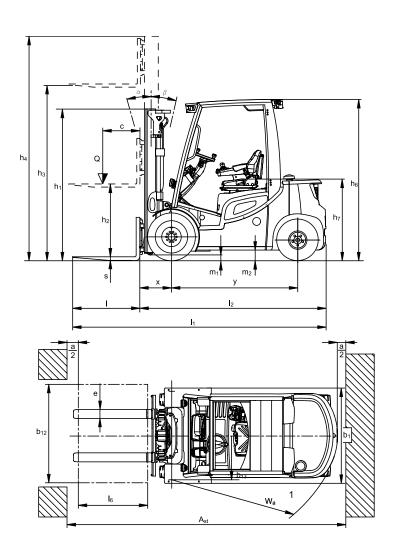
State-of-the-art engines from the automotive industry feature impressive electronic control units. They allow for precise operation and optimum productivity combined with low fuel consumption. All the engines are characterised by low emissions, falling significantly below the strict EU directives. The diesel truck is fitted with a diesel particle filter as standard. A closed-loop 3-way catalytic converter is available as an option for the LPG trucks.

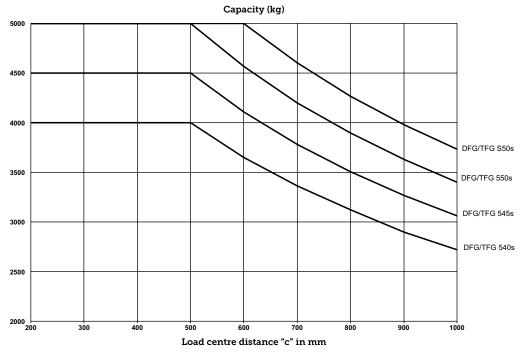
The generously dimensioned workstation is optimally designed with the operator in mind. The infinitely adjustable steering column with memory function and the integral armrest allows full adjustment to suit all operator sizes. The single point adjustment via two adjustable axes enables the primary controls to be quickly and intuitively adjusted. This ensures safety, protects health and enables the operator to concentrate fully on their work whilst being in a relaxed and stress-free environment.

The laminated safety glass roof panel offers protection from the weather and falling items. The increased amount of light in the cab creates a pleasant working atmosphere contributing to faster and safer stacking and retrieval. These are the best requirements for ensuring maximum productivity throughout the shift.



DFG/TFG 540s/545s/550s/S50s





DFG/TFG 540s/545s/550s/S50s

т	Standar			T		T		T	
	Lift		nast height		e lift		nast height		ward / back
	h_3		1_1		1_2	h ₄		α/β	
	(mm)	(mm)		(m	.m)	(mm)		(°)	
		DFG 540s /	DFG 550s /	DFG 540s /	DFG 550s /	DFG 540s /	DFG 550s /	DFG 540s /	DFG 550s /
		TFG 540s / DFG 545s /	TFG 550s / DFG S50s /	TFG 540s / DFG 545s /	TFG 550s / DFG S50s /	TFG 540s / DFG 545s /	TFG 550s / DFG S50s /	TFG 540s / DFG 545s /	DFG S50s /
		TFG 545s /	TFG S50s /	TFG 545s /	TFG S50s /	TFG 545s /	TFG S50s /	TFG 545s /	TFG S50s /
Dunlay 7T	2020	1800	1800	150	150	2735	2883	6/8	6/8
Duplex ZT	2750	2165	2165	150	150	3465	3613	6/8	6/8
	3000	2290	2290	150	150	3715	3863	6/8	6/8
	3500	2540	2540	150	150	4215	4363	6/8	6/8
	4000	2790	2790	150	150	4715	4863	6/8	6/8
	4500	3040	3040	150	150	5215	5363	6/8	6/8
	5000	3290	3290	150	150	5715	5863	6/6	6/6
	5500	3540	3540	150	150	6215	6363	6/6	6/6
	6000	3790	3790	150	150	6715	6863	6/6	6/6
	6500	4040	4040	150	150	7215	7363	6/6	6/6
Duplex ZZ	2725	-	2140	-	1225	-	3640	-	6/8
Duplex 22	2775	2140	-	1375	-	3540	-	6/8	-
	2975	-	2265	-	1350	-	3890	-	6/8
	3025	2265	-	1500	-	3790	-	6/8	-
	3475	-	2515	-	1600	-	4390	-	6/8
	3525	2515	-	1750	-	4290	-	6/8	-
	3975	-	2765	-	1850	-	4890	-	6/8
	4025	2765	-	2000	-	4790	-	6/8	-
	4475	-	3015	-	2100	-	5390	-	6/8
	4525	3015	-	2250	-	5290	-	6/8	-
	4975	-	3265	-	2350	-	5890	-	6/6
	5025	3265	-	2500	-	5790	-	6/6	-
	5475	-	3515	-	2600	-	6390	-	6/6
	5525	3515	-	2750	-	6290	-	6/6	-
Triplex DZ	4050	-	2140	-	1225	-	4965	-	6/8
·	4150	2140	-	1375	-	4915	-	6/8	-
	4425	-	2265	-	1350	-	5340	-	6/8
	4525	2265	-	1500	-	5290	-	6/8	-
	4855	2375	-	1610	-	5620	-	6/6	-
	5175	-	2515	-	1600	-	6090	-	6/6
	5275	2515	-	1750	-	6040	-	6/6	-
	5550	-	2640	-	1725	-	6465	-	6/6
	5650	2640	-	1875	-	6415	-	6/6	-
	5925	-	2765	-	1850	-	6840	-	6/6
	6025	2765	-	2000	-	6790	-	6/6	-
	6200	-	2855	-	1940	-	7110	-	6/6
	6400	2890	-	2125	-	7165	-	6/6	-
	6675	-	3015	-	2100	-	7590	-	6/6
	6775	3015	-	2250	-	7540	-	6/6	-
	7030	3100	-	2335	-	7795	-	6/6	-
	7180	3150	_	2385	_	7945	_	6/6	_

Issue: 08/2014

Technical data in line with VDI 2198

	1.1	Manufacturer (short form)				Jungh	einrich			
_	1.2	Model			DFG 540s	DFG 545s	DFG 550s	DFG S50s		
ntificatior	1.3	Drive				Diesel				
	1.4	Manual, pedestrian, stand-on, seated, order picker operation				SE	eat			
	1.5	Load capacity/rated load	Q	t	4	4.5	4.99	5		
	1.6	Load centre distance	С	mm	500	500	500	600		
<u> </u>	1.8	Load distance	x	mm	5641)	5641)	5641)	579 ¹⁾		
	1.9	Wheelbase	y	mm	1,970	1,970	1,970	2,000		
	2.1	Service weight	У	kg	6,310	6,550	7,200	7,400		
Weights	2.2	Axle load, w. load, front / rear		kg	9,050 / 1,260	9,660 / 1,390	10,940 / 1,260	10,900 / 1,500		
š	2.3	Axle load, w.o. load, front / rear		kg	2,920 / 3,390	2,730 / 3,820	3,240 / 3,960	3,000 / 4,40		
.v	3.1	Tyres		9	SE					
SSE	3.2	Tyre size, at front		mm	8.25-15	300-15	300-15	300-15		
cha	3.3	Tyre size, at rear		mm	0.23 13		9-15	300 13		
/ s	3.5	Wheels, number front/rear (x = driven wheels)		******			(/2			
Wheels / chassis	3.6	Track width, front	h	mm	1,195	1,160	1,160	1,160		
	3.7	Track width, rear	b ₁₀		1,193	1	.50	1,100		
_	-	+ ***	b ₁₁	mm •						
	4.1	Tilt of mast/fork carriage forward/backward	α/β				/8			
	4.2	Mast height (lowered)	h ₁	mm			540			
	4.3	Free lift	h ₂	mm			50			
	4.4	Lift	h ₃	mm			500			
	4.5	Extended mast height	h ₄	mm	4,215	4,215	4,365	4,365		
	4.7	Height of overhead guard	h ₆	mm		·	105			
	4.8	Seat height/stand height	h ₇	mm		1,2	230			
us	4.12	Coupling height	h ₁₀	mm	510					
sior	4.19	Overall length	l ₁	mm	4,145	4,220	4,240	4,310		
eu	4.20	Length incl. back of forks	l ₂	mm	2,995	3,070	3,090	3,160		
<u>=</u>	4.21	Total width	b ₁ /b ₂	mm	1,450					
Basic dimensions	4.22	Fork dimensions	s/e/l	mm	50 / 125 / 1,150	50 / 150 / 1,150	50 / 150 / 1,150	60 / 150 / 1,150		
Φ	4.23	Fork carriage ISO 2328, class/type A, B			3A	3A	3A	4A		
	4.24	Fork carriage width	b ₃	mm	1,260					
	4.31	Floor clearance with load under mast	m ₁	mm	175					
	4.32	Floor clearance centre wheelbase	m ₂	mm	200					
	4.33	Aisle width for pallets 1000×1200 sideways	Ast	mm	4,405	4,465	4,475	4,530		
	4.34	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4,605	4,665	4,675	4,730		
	4.35	Turning radius	Wa	mm	2,640	2,700	2,710	2,750		
	4.36	Smallest pivot point distance	b ₁₃	mm		7:	30	'		
	5.1	Travel speed, w. / w.o. load	15	km/h	21 / 21					
ţ	5.2	Lift speed, w. / w.o. load		m/s	0.53 / 0.56	0.51 / 0.55	0.49 / 0.53	0.49 / 0.53		
ď	5.3	Lower speed, w. / w.o. load		m/s	0.57 / 0.54					
)Ce	5.5	Drawbar pull w. / w.o. load		N	23,000	22,000	22,000	22,000		
nar	5.7	Gradeability laden/unladen		%	25 / 27	23 / 26	22 / 26	21 / 25		
orn	5.9.2	Acceleration laden/unladen to 15 m		S	5.7 / 5	6 / 5.2	6 / 5.2	6.2 / 5.5		
Performance data	5.10	Service brake		3	3.7 7 3			J.L J.J		
ď	5.11					hydrostatic				
	-	Parking brake			Automatic parking brake VW / CPYA					
Ξ	7.1	Engine manufacturer / type		LAM						
Combusti engine	7.2	Engine output according to ISO 1585		kW /rasira	55					
	7.5	Rated revolutions per minute		/min	2,700					
	7.4	No. of cylinders		7	4 1,968					
	7.4.1	Cubic capacity		cm³						
	7.5	Fuel consumption acc. to VDI cycle		l/h	4.3	4.5	4.7	4.9		
	8.1	Type of drive control				hydrostatic				
. <u>,</u>	8.2	Working pressure for attachments		bar	170					
Σ	8.3	Oil flow for attachments		l/min	50					
	8.4	Sound pressure level at operator's ear according to EN 12053		dB (A)		7	7			

Issue: 08/2014

Technical data in line with VDI 2198

	1.1	Manufacturer (short form)				Jungheinrich				
_	1.2	Model			TFG 540s	TFG 545s	TFG 550s	TFG S50s		
ö	1.3	Drive					PG			
ntificat	1.4	Manual, pedestrian, stand-on, seated, order picker operation				seat				
	1.5	Load capacity/rated load	Q	t	4	4.5	4.99	5		
	1.6	Load centre distance	С	mm	500	500	500	600		
ᅙ	1.8	Load distance	x	mm	5641)	5641)	5641)	5791)		
	1.9	Wheelbase	у	mm	1,970	1,970	1,970	2,000		
Weights	2.1	Service weight	,	kg	6,360	6,600	7,250	7,450		
	2.2	Axle load, w. load, front / rear		kg	9,070 / 1,290	9,680 / 1,420	10,960 / 1,290	10,920 / 1,530		
	2.3	Axle load, w.o. load, front / rear		kg	2,950 / 3,410	2,760 / 3,840	3,270 / 3,980	3,030 / 4,420		
Wheels / chassis	3.1	Tyres			SE					
	3.2	Tyre size, at front		mm	8.25-15 300-15 300-15 300-15					
	3.3	Tyre size, at rear		mm	28x9-15					
s/	3.5	Wheels, number front/rear (x = driven wheels)			2x/2					
ee	3.6	Track width, front	b ₁₀	mm	1,195	1,160	1,160	1,160		
₹	3.7	Track width, rear	b ₁₁	mm	=,===		.50	_,		
_	4.1	Tilt of mast/fork carriage forward/backward	α/β	•						
	4.2	Mast height (lowered)	h ₁	mm	6/8 2,540					
	4.3	Free lift	h ₂	mm	150					
	4.4	Lift	h ₃	mm	3,500					
	4.5	Extended mast height	h ₄	mm	4,215	4,215	4,365	4,365		
	4.7	Height of overhead guard	h ₆	mm	7,213		105	4,505		
	4.8	Seat height/stand height	h ₇	mm		·	30			
	4.12						10			
Suc	4.19	Coupling height	h ₁₀	mm	4 1 4 E	1	4,240	4,310		
ışi		Overall length	l ₁	mm	4,145	4,220				
ner	4.20	Length incl. back of forks	l ₂	mm	2,995	3,070	3,090	3,160		
gi	4.21	Total width	b ₁ /b ₂	mm	1,450					
Basic dimensions	4.22	Fork dimensions	s/e/l	mm	50 / 125 / 1,150	50 / 150 / 1,150	50 / 150 / 1,150	60 / 150 / 1,150		
	4.23	Fork carriage ISO 2328, class/type A, B			3A	3A	3A	4A		
	4.24	Fork carriage width	b ₃	mm	1,260					
	4.31	Floor clearance with load under mast	m ₁	mm	175					
	4.32	Floor clearance centre wheelbase	m ₂	mm	200					
	4.33	Aisle width for pallets 1000×1200 sideways	Ast	mm	4,405	4,465	4,475	4,530		
	4.34	Aisle width for pallets 800 x 1200 lengthways	Ast	mm	4,605	4,665	4,675	4,730		
	4.35	Turning radius	W _a	mm	2,640	2,700	2,710	2,750		
	4.36	Smallest pivot point distance	b ₁₃	mm	730					
_	5.1	Travel speed, w. / w.o. load		km/h	21 / 21					
<u>ate</u>	5.2	Lift speed, w. / w.o. load		m/s	0.53 / 0.56	0.51 / 0.55	0.49 / 0.53	0.49 / 0.53		
e O	5.3	Lower speed, w. / w.o. load		m/s		0.57	0.54			
ũ	5.5	Drawbar pull w. / w.o. load		N	23,000	22,000	22,000	22,000		
Ĕ	5.7	Gradeability laden/unladen		%	25 / 27	23 / 26	22 / 26	21 / 25		
Performance data	5.9.2	Acceleration laden/unladen to 15 m		S	5.7 / 5	6 / 5.2	6 / 5.2	6.2 / 5.5		
Per	5.10	Service brake			hydrostatic					
	5.11	Parking brake			Automatic parking brake					
	7.1	Engine manufacturer / type			VW / CKPA	VW / CKPA	VW / CKPA	VW / CKPA 3.6		
	7.2	Engine output according to ISO 1585		kW	59					
	7.3	Rated revolutions per minute		/min	2,700					
	7.4	No. of cylinders			6					
	7.4.1	Cubic capacity		cm³			597			
	7.5.1	Fuel consumption acc. to VDI cycle		kg/h	4.2	4.4	4.6	4.7		
	8.1	Type of drive control		٠				,		
SC.	8.2	Working pressure for attachments		bar	hydrostatic 170					
		1			50					
√ isc	8.3	Oil flow for attachments		l/min		_	()			

DFG/TFG 540s/545s/550s/S50s



Operator-oriented workstation

The ergonomics of the generously configured operator's workstation guarantee relaxed, fatigue free work:

- Comfortable and safe access and exit thanks to a large entry step easily visible from above.
- Height and rake adjustable, slim steering column with memory function for maximum knee and legroom: The steering column can be tilted forward simply by pulling on the steering wheel lever
- Excellent all-round visibility thanks to special roof and panel design as well as unobstructed roof window made from laminated safety glass.

- Clear view of the load thanks to optimised chain and hose configuration.
- Compact nested profile package with outstanding visibility.
- Particularly comfortable operation due to the integration of all controls into the armrest which moves with the operator.
- Operator-oriented storage concept for intuitive operation.
- High resolution, contrast-rich colour TFT display with self explanatory symbols
- USB power supply port for e.g. MP3 players.

 Limited vibrations experienced by the operator as the cab is not directly connected to the frame (floating cab)

Ergonomic and easily adjustable operators environment

- A choice of five parametrised travel programs
- Stepless single-point adjustment of the armrest in two axis directions.
- Large armrest with adjustable tilt, available in different upholstery fabrics and with a spacious storage compartment.
- A choice of three different controls.
- Single or double pedal operation.
- Adjustable lever and angle of the controls

Benefit from the advantages



Maximum throughput



Workstation is comfortable and helps to maximise productivity



VW engines with low energy consumption



Outstanding all-round visibility

Performance and drive characteristics

A hydrostatic drive gives you the best energy efficiency coupled with maximum throughput – particularly when reversing.

- Stepless power transmission and high starting torques.
- Electronic control for precise adjustment of drive and hydraulic functions.
- The five electronically selectable operating/travel programs ensure optimum performance parameters for every application.
- Automatic increase in rpm during lifting and lowering.
- Very precise control of travel speed the truck is very responsive.
- Low maintenance costs due to direct drive without wearing parts, such as clutch, differential and gears.
- Hydrostatic steering ensures steering is effortless and very precise.

Safety

Outstanding travel dynamics and performance levels require a high level of safety. Our hydrostatic drive trucks already offer you a comprehensive safety package as standard:

• Deactivation of the hydraulic functions if seat is unoccupied.

- No uncontrolled roll-back on ramps or inclines due to the automatic parking brake, even with the engine switched off.
- Excellent stability due to extremely low inherent centre of gravity and high pivot steer axle in the newest generation
- Damping on mast and tilt cylinders for increased handling safety.

A range of additional operator assistance options provides even more safety for the operator, truck and load:

- Access Control: The access control system allows operation of the fork lift only if the 'seat occupied' and belt lock detection systems have been activated in turn
- Drive Control: The speed control which automatically reduces the speed of travel when cornering and from a defined lift height.
- Lift Control (includes Drive Control): Automatically reduces the tilt speed of the mast from a defined lift height. Tilt angle shown on separate display.

Hvdraulics

A variable displacement pump for the operating hydraulics optimises efficiency with the appropriate supply of oil. The high performance filter system

ensures cleaner oil and a long service life for all components:

- Full-flow hydraulic oil filtration with combined suction and return filtering for maximum oil purity.
- Hydraulic tank integrated in frame.
- · Ventilation of hydraulic tank via filter.
- Pressure relief valves protect against excess pressure and overloading.

Brakes

The hydrostatic drive allows completely wearfree braking:

- Frequent brake pedal operation is no longer necessary.
- Parking brake: Sprung-loaded laminated oil immersed parking brake as a maintenance-free, enclosed system.

Intelligent controls and electronics

- Software and hardware for controls developed and produced in-house.
- Sensitive adjustment of hydraulic functions via electromagnetic valves.
- Splash-proof electronic drive and hydraulic controls in CAN-Bus design.

Engines

- State-of-the-art engines with performance figures falling far within the strict statutory limit values.
- Powerful with low fuel consumption engines.

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