

hydrostaticDRIVE

Low fuel consumption

Maximum stability

Maximum visibility

Ergonomic and easily  
adjustable operating concept.



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

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

Our diesel and LPG forklift trucks with hydrostaticDRIVE offer outstanding throughput, particularly when reversing (e.g. during loading of HGVs). This is where their strengths truly come into play: Dynamic acceleration, fast reversing and precision driving. With 5 operating programs, the performance characteristics can be adapted to the requirements of numerous varied applications.

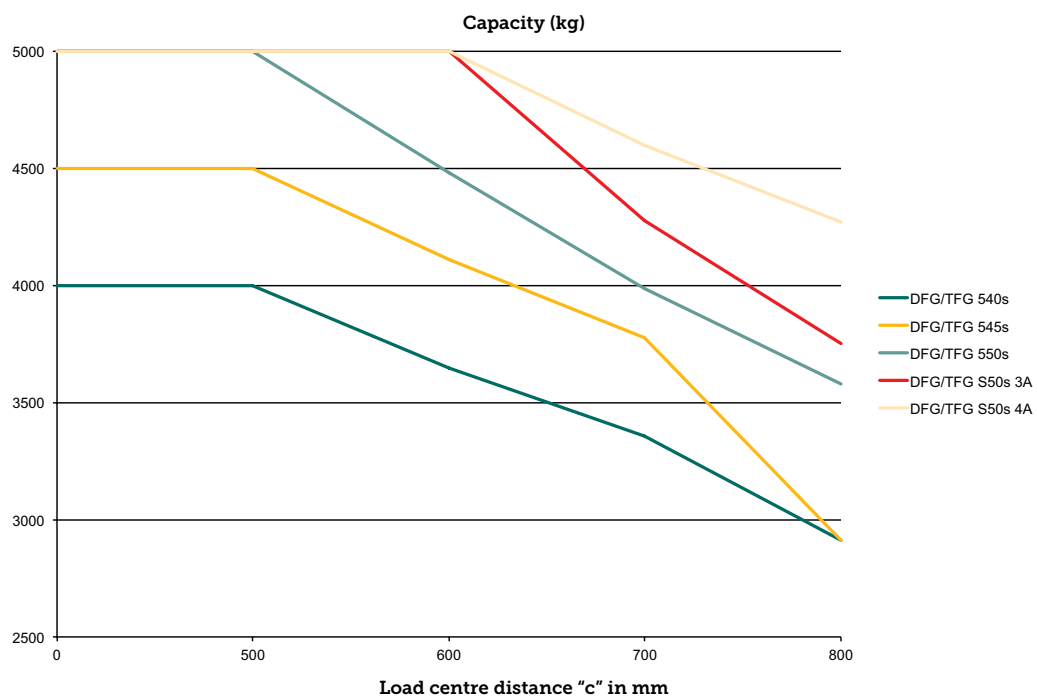
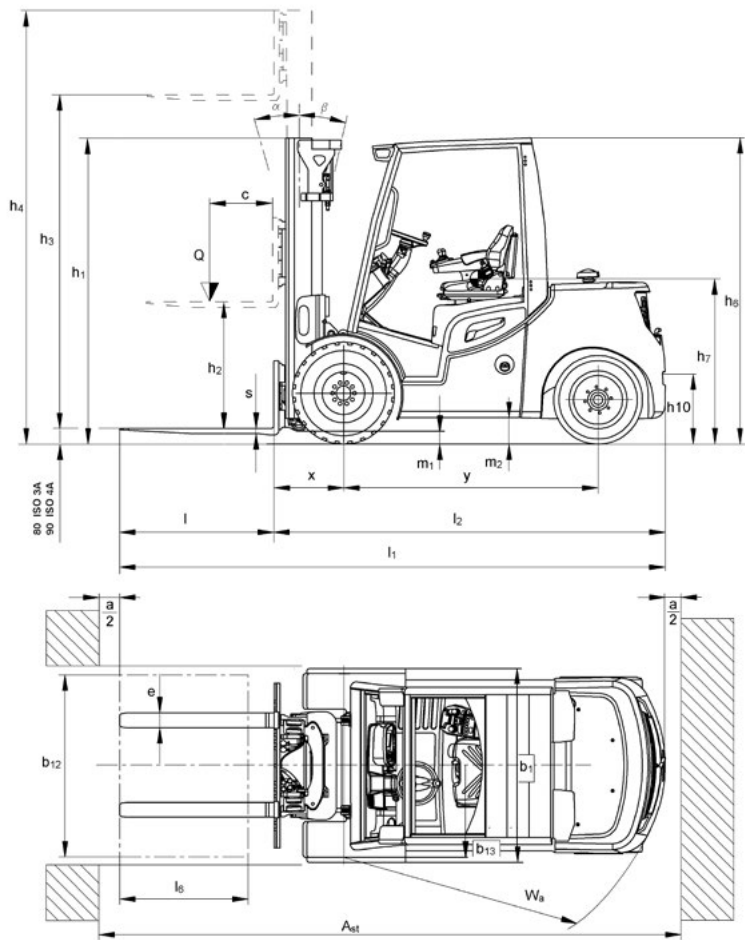
State-of-the-art engines from the automotive industry feature impressive electronic control units. They provide precise operation and optimum productivity combined with low fuel consumption. All the engines are characterised by low emissions, falling significantly below the strict EU directives. The diesel truck is fitted with a diesel particle filter as standard. A regulated 3-way catalyser 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 armrest, allow for adjustment to suit all operator sizes. The single-point adjustment via 2 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 cabin creates a pleasant working atmosphere contributing to faster and safer stacking and retrieval.

Our Series 5s DFG/TFG trucks with hydrostatic drive offer the best design for consistent high productivity and efficiency throughout the entire shift.



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



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

Standard mast designs DFG 540s/DFG 545s/DFG 550s/DFG S50s/TFG 540s/TFG 545s/TFG 550s/TFG S50s											
	Lift h <sub>3</sub> (mm)	Lowered mast height h <sub>1</sub> (mm)		Free lift h <sub>2</sub> (mm)			Extended mast height h <sub>4</sub> (mm)			Mast tilt forward / back α/β (°)	
		DFG 540s / DFG 545s / DFG 550s / TFG 540s / TFG 545s / TFG 550s	DFG S50s / TFG S50s	DFG 540s / DFG 545s / TFG 540s / TFG 545s	DFG 550s / TFG 550s	DFG S50s / TFG S50s	DFG 540s / DFG 545s / TFG 540s / TFG 545s	DFG 550s / TFG 550s	DFG S50s / TFG S50s	DFG 540s / DFG 545s / DFG 550s / TFG 540s / TFG 545s / TFG 550s	DFG S50s / TFG S50s
Duplex ZT	3030	-	2440	-	-	150	-	-	4003	-	6/8
	3100	2348	-	150	150	-	3823	3958	-	6/8	-
	3430	-	2640	-	-	150	-	-	4403	-	6/8
	3500	2548	-	150	150	-	4223	4358	-	6/8	-
	4000	2795	-	150	150	-	4720	4858	-	6/8	-
	4030	-	2940	-	-	150	-	-	5003	-	6/8
	4230	-	3040	-	-	150	-	-	5203	-	6/8
	4500	3040	-	150	150	-	5215	5358	-	6/8	-
	4730	-	3290	-	-	150	-	-	5703	-	6/8
	5000	3290	-	150	150	-	5715	5858	-	6/6	-
	5230	-	3540	-	-	150	-	-	6203	-	6/6
	5500	3540	-	150	150	-	6215	6358	-	6/6	-
	5730	-	3790	-	-	150	-	-	6703	-	6/6
	6000	3790	-	150	150	-	6715	6858	-	6/6	-
	6230	-	4040	-	-	150	-	-	7203	-	6/6
	6500	4040	-	150	150	-	7215	7358	-	6/6	-
Duplex ZZ	2932	-	2323	-	-	1300	-	-	3955	-	6/8
	3142	2323	-	1565	1415	-	3900	4050	-	6/8	-
	3332	-	2523	-	-	1500	-	-	4355	-	6/8
	3542	2523	-	1765	1615	-	4300	4450	-	6/8	-
	3825	-	2770	-	-	1747	-	-	4848	-	6/8
	4035	2770	-	2012	1862	-	4793	4943	-	6/8	-
	4185	-	2950	-	-	1927	-	-	5208	-	6/8
	4395	2950	-	2192	2042	-	5153	5303	-	6/8	-
	4885	-	3300	-	-	2277	-	-	5908	-	6/6
	5095	3300	-	2542	2392	-	5853	6003	-	6/6	-
	5314	-	3515	-	-	2492	-	-	6337	-	6/6
	5524	3515	-	2757	2607	-	6282	6432	-	6/6	-
	4400	2223	-	1465	1315	-	5158	5308	-	6/8	-
	4420	-	2323	-	-	1300	-	-	5443	-	6/8
	4720	-	2423	-	-	1400	-	-	5743	-	6/6
	5000	2423	-	1665	1515	-	5758	5908	-	6/6	-
Triplex DZ	5220	-	2590	-	-	1567	-	-	6243	-	6/6
	5500	2590	-	1832	1682	-	6258	6408	-	6/6	-
	5750	-	2770	-	-	1747	-	-	6773	-	6/6
	6000	2770	-	2012	1862	-	6758	6908	-	6/6	-
	6280	-	2950	-	-	1927	-	-	7303	-	6/6
	6500	2950	-	2170	2042	-	7280	7408	-	6/6	-
	6780	-	3120	-	-	2097	-	-	7803	-	6/6
	7000	3120	-	2350	2212	-	7770	7908	-	6/6	-
	7320	-	3300	-	-	2277	-	-	8343	-	6/6
	7500	3300	-	2490	2392	-	8310	8408	-	6/6	-



# Technical data in line with VDI 2198

Identification	1.1	Manufacturer (abbreviation)		Jungheinrich					
	1.2	Model		DFG 540s	DFG 545s	DFG 550s	DFG 550s		
	1.3	Drive		Diesel					
	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
Weights	1.6	Load centre distance		c	mm	500	500	500	600
	1.8	Load distance		x	mm	564	564	564	579
	1.9	Wheelbase		y	mm	1,970	1,970	1,970	2,000
	2.1	Net weight			kg	6,150	6,450	6,700	7,300
Weights	2.2	Axle loading, laden front/rear			kg	8,900 / 1,250	9,600 / 1,350	10,300 / 1,400	10,750 / 1,550
	2.3	Axle loading, unladen front/rear			kg	2,850 / 3,300	2,800 / 3,650	2,750 / 3,950	2,950 / 4,350
Wheels / frame	3.1	Tyres				SE			
	3.2	Tyre size, front			mm	8.25-15	300-15	300-15	300-15
	3.3	Tyre size, rear			mm	28x9-15			
	3.5	Wheels, number front/rear (x = driven wheels)				2x/2			
	3.6	Tread width, front		b <sub>10</sub>	mm	1,195	1,160	1,160	1,160
Wheels / frame	3.7	Tread width, rear		b <sub>11</sub>	mm	1,150			
	4.1	Tilt of mast/fork carriage forward/backward		$\alpha/\beta$	°	6/8			
	4.2	Mast height (lowered)		h <sub>1</sub>	mm	2,548	2,548	2,548	2,640
	4.3	Free lift		h <sub>2</sub>	mm	150			
	4.4	Lift		h <sub>3</sub>	mm	3,500	3,500	3,500	3,430
Basic dimensions	4.5	Extended mast height		h <sub>4</sub>	mm	4,223	4,223	4,358	4,403
	4.7	Height of overhead guard		h <sub>6</sub>	mm	2,405			
	4.8	Seat height/standing height		h <sub>7</sub>	mm	1,230			
	4.12	Coupling height		h <sub>10</sub>	mm	510			
	4.19	Overall length		l <sub>1</sub>	mm	4,145	4,220	4,240	4,310
	4.20	Length to face of forks		l <sub>2</sub>	mm	2,995	3,070	3,090	3,160
	4.21	Overall width		b <sub>1</sub> /b <sub>2</sub>	mm	1,450			
	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 <sub>3</sub>	mm	1,260			
	4.31	Floor clearance with load under mast		m <sub>1</sub>	mm	190			
	4.32	Ground clearance, centre of wheelbase		m <sub>2</sub>	mm	200			
	4.33	Aisle width for pallets 1000 × 1200 crossways		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		W <sub>a</sub>	mm	2,640	2,700	2,710	2,750
Performance data	4.36	Smallest turning radius		b <sub>13</sub>	mm	730			
	5.1	Travel speed, laden/unladen			km/h	21 / 21			
	5.2	Lift speed, laden/unladen			m/s	0.53 / 0.56	0.51 / 0.55	0.49 / 0.53	0.49 / 0.53
	5.3	Lowering speed, laden/unladen			m/s	0.57 / 0.54			
	5.5	Drawbar pull, laden/unladen		N		23,000	22,000	22,000	22,000
	5.7	Gradeability, laden/unladen		%		25 / 27	23 / 26	22 / 26	21 / 25
	5.9.2	Acceleration time laden/unladen to 15 m		S		5.7 / 5	6 / 5.2	6 / 5.2	6.2 / 5.5
	5.10	Service brake				hydrostatic			
	5.11	Parking brake				Automatic parking brake			
	Combustion engine	7.1	Engine manufacturer / type				VW / CPYA		
7.2		Engine output according to ISO 1585			kW	55			
7.3		Rated speed			/min	2,700			
7.4		No. of cylinders				4			
7.4.1		Cubic capacity			cm <sup>3</sup>	1,968			
7.5.1		Fuel consumption as per EN 16796			l/h	4.2	4.4	4.6	4.8
		CO- Equivalent as per EN 16796			kg/h	13.3	14	14.6	15.3
Misc.	8.1	Type of drive control				hydrostatic			
	8.2	Working pressure for attachments			bar	170			
	8.3	Oil flow for attachments			l/min	50			
	8.4	Sound pressure level at operator's ear as per EN 12053			dB (A)	77			

In accordance with VDI Guideline 2198, this data sheet provides details of the standard truck only. Non-standard tyres, different masts, optional equipment, etc. may result in different values.



# Technical data in line with VDI 2198

Identification	1.1	Manufacturer (abbreviation)		Jungheinrich					
	1.2	Model		TFG 540s	TFG 545s	TFG 550s	TFG S50s		
	1.3	Drive		LPG					
	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	
Weights	1.6	Load centre distance	c	mm	500	500	500	600	
	1.8	Load distance	x	mm	564	564	564	579	
	1.9	Wheelbase	y	mm	1,970	1,970	1,970	2,000	
	2.1	Net weight		kg	6,200	6,500	6,750	7,350	
Wheels / frame	2.2	Axle loading, laden front/rear		kg	8,925 / 1,275	9,625 / 1,375	10,325 / 1,425	10,775 / 1,575	
	2.3	Axle loading, unladen front/rear		kg	2,875 / 3,325	2,850 / 3,650	2,775 / 3,975	2,975 / 4,375	
	3.1	Tyres			SE				
	3.2	Tyre size, front		mm	8.25-15	300-15	300-15	300-15	
	3.3	Tyre size, rear		mm	28x9-15				
	3.5	Wheels, number front/rear (x = driven wheels)			2x/2				
	3.6	Tread width, front	b <sub>10</sub>	mm	1,195	1,160	1,160	1,160	
Basic dimensions	3.7	Tread width, rear	b <sub>11</sub>	mm	1,150				
	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	6/8				
	4.2	Mast height (lowered)	h <sub>1</sub>	mm	2,548	2,548	2,548	2,640	
	4.3	Free lift	h <sub>2</sub>	mm	150				
	4.4	Lift	h <sub>3</sub>	mm	3,500	3,500	3,500	3,430	
	4.5	Extended mast height	h <sub>4</sub>	mm	4,223	4,223	4,358	4,403	
	4.7	Height of overhead guard	h <sub>6</sub>	mm	2,405				
	4.8	Seat height/standing height	h <sub>7</sub>	mm	1,230				
	4.12	Coupling height	h <sub>10</sub>	mm	510				
	4.19	Overall length	l <sub>1</sub>	mm	4,145	4,220	4,240	4,310	
	4.20	Length to face of forks	l <sub>2</sub>	mm	2,995	3,070	3,090	3,160	
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub>	mm	1,450				
	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 <sub>3</sub>	mm	1,260				
	4.31	Floor clearance with load under mast	m <sub>1</sub>	mm	190				
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub>	mm	200				
	Performance data	4.33	Aisle width for pallets 1000 × 1200 crossways	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	W <sub>a</sub>	mm	2,640	2,700	2,710	2,750	
4.36		Smallest turning radius	b <sub>13</sub>	mm	730				
5.1		Travel speed, laden/unladen		km/h	21 / 21				
5.2		Lift speed, laden/unladen		m/s	0.53 / 0.56	0.51 / 0.55	0.49 / 0.53	0.49 / 0.53	
5.3		Lowering speed, laden/unladen		m/s	0.57 / 0.54				
5.5		Drawbar pull, laden/unladen		N	23,000	22,000	22,000	22,000	
Combustion engine	5.7	Gradeability, laden/unladen		%	25 / 27	23 / 26	22 / 26	21 / 25	
	5.9.2	Acceleration time laden/unladen to 15 m		S	5.7 / 5	6 / 5.2	6 / 5.2	6.2 / 5.5	
	5.10	Service brake			hydrostatic				
	5.11	Parking brake			Automatic parking brake				
Misc.	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 speed		/min	2,700				
	7.4	No. of cylinders			6				
	7.4.1	Cubic capacity		cm <sup>3</sup>	3,597				
	7.5	Fuel consumption as per EN 16796		kg/h	4.1	4.3	4.5	4.6	
		CO- Equivalent as per EN 16796		kg/h	13.9	14.6	15.3	15.6	
Misc.	8.1	Type of drive control			hydrostatic				
	8.2	Working pressure for attachments		bar	170				
	8.3	Oil flow for attachments		l/min	50				
	8.4	Sound pressure level at operator's ear as per EN 12053		dB (A)	78				

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



## Ergonomic workstation

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

- Comfortable and safe access and exit thanks to a large entry step clearly visible from above.
- Height and rake adjustable, slim steering column with memory function.
- Outstanding all-round visibility.
- Clear view of the load thanks to optimised chain and hose layout.
- Compact nested profile package with excellent visibility.
- Integration of all main controls into the armrest which moves with the movement of the operator.
- Operator-oriented storage concept for intuitive operation.
- High-resolution, contrast-rich full-colour TFT display with intuitive user interface.
- Optional USB power supply port for e.g. MP3 players.
- Limited vibration as the cab is not directly connected to the frame (floating cab).

## Ergonomic and easily adjustable operating concept.

- Selection from 5 freely adjustable travel programs.
- Stepless single-point adjustment of the armrest in 2 axial directions.
- Large armrest with adjustable tilt with a spacious storage compartment.
- A choice of 3 different controls: soloPILOT, multiPILOT, duoPILOT.
- Single or double pedal operation.
- Adjustable lever and axis assignment of the controls.



# Benefit from the advantages



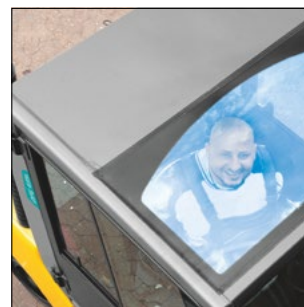
Maximum throughput



Workstation is comfortable and helps to maximise productivity



VW engines with low energy consumption



Outstanding all-round visibility

## Performance and drive characteristics

hydrostaticDRIVE offers the best energy efficiency coupled with maximum throughput performance – particularly when reversing:

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

## Safety and assistance systems

Comprehensive safety equipment for high drive dynamics and performance. Trucks with hydrostaticDRIVE offer 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 centre of gravity and high pivot steer axle.
- Damping on mast and tilt cylinders for increased handling safety.

Additional safety for the operator, truck and load due to a range of optional operator assistance systems:

- accessCONTROL: The access control system allows operation of the fork lift only if the 'seat occupied' and belt lock detection systems have been activated in a defined sequence.
- driveCONTROL: Speed control, which automatically reduces the speed both when cornering and from a defined lift height.
- liftCONTROL (includes driveCONTROL): The tilt speed of the mast is automatically reduced from a defined lift height and the tilt angle is shown on a separate display.

## Hydraulics

Optimised efficiency due to variable displacement pump supplying oil as required. The high-performance filter system ensures cleaner oil and a long

service life for all components:

- Full-flow hydraulic oil filtration with suction and return filter 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

Completely wear-free braking due to hydrostatic drive:

- 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 yet low-consumption engines.

