Hydrostatic drive for excellent drive comfort and productivity

Low fuel consumption

Generously designed operator workplace

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

Driver assistance systems (optional)



DFG/TFG 540s-550s

Diesel and LPG counterbalanced trucks with hydrostatic drive (4000, 4500, 5000 kg)

Jungheinrich Diesel and LPG counterbalanced trucks with hydrostatic drive give a high handling efficiency, particularly in shuttle operations (e.g. trailer and loading bay operations). The power of this drive technology is demonstrated to full advantage: high acceleration, rapid direction changes and precise driving characteristics. With 5 drive modes, the performance characteristics can be adapted to the requirements of numerous varied applications. State-of-the-art engines from the automotive industry facilitate precise operation and optimum productivity combined with low fuel consumption by means of their electronic control systems. All engines have low exhaust emission and comply with at least the current EU regulations. The diesel truck is fitted with a diesel particle filter as standard. A closed-loop three-way catalytic converter is available as an option for the LPG trucks. The workplace is optimally designed with the operator in mind. It provides safety, protects the operator's health and ensures relaxed and concentrated operation – the best pre-requisite for high productivity throughout the shift. The roof panel, made out of safety glass, offers ideal protection against foul weather and small falling objects. The improved lighting level makes for a more pleasant working environment and helps make loading and unloading operations quicker and safer.



DFG/TFG 540s-550s







Mast Table DFG/TFG 540s-550s											
Designation	Lift height	Free lift	Closed height	Extended	Tilt forward/	Lift height	Free lift	Closed height	Extended	Tilt forward/	
	h₃	h ₂	h ₁	height	backward	h₃	h ₂	h ₁	height	backward	
	mm	mm	mm	h ₄ (mm)	α/β (°)	mm	mm	mm	h ₄ (mm)	α/β (°)	
	DFG/TFG 540s/545s					DFG/TFG 550s					
Two-stage	2020	150	1800	2735	6/8	2020	150	1800	2883	6/8	
mast ZT	2750	150	2165	3465	6/8	2750	150	2165	3613	6/8	
	3000	150	2290	3715	6/8	3000	150	2290	3863	6/8	
	3500	150	2540	4215	6/8	3500	150	2540	4363	6/8	
	3750	150	2665	4465	6/8	4000	150	2790	4863	6/8	
	4000	150	2790	4715	6/8	4500	150	3040	5363	6/8	
	4500	150	3040	5215	6/8	5000	150	3290	5863	6/6	
	5000	150	3290	5715	6/6	5500	150	3540	6363	6/6	
	5500	150	3540	6215	6/6	6000	150	3790	6863	6/6	
	6000	150	3790	6715	6/6	6500	150	4040	7363	6/6	
	6500	150	4040	7215	6/6						
Two-stage	2775	1375	2140	3540	6/8	2725	1225	2140	3640	6/8	
mast ZZ	3025	1500	2265	3790	6/8	2975	1350	2265	3890	6/8	
	3525	1750	2515	4290	6/8	3475	1600	2515	4390	6/8	
	4025	2000	2765	4790	6/8	3975	1850	2765	4890	6/8	
	4525	2250	3015	5290	6/8	4475	2100	3015	5390	6/8	
	5025	2500	3265	5790	6/6	4975	2350	3265	5890	6/6	
	5525	2750	3515	6290	6/6	5475	2600	3515	6390	6/6	
Three-stage	4150	1375	2140	4915	6/8	3930	1185	2100	4845	6/8	
mast DZ	4525	1500	2265	5290	6/8	4050	1225	2140	4965	6/8	
	4855	1610	2375	5620	6/6	4425	1350	2265	5340	6/8	
	5275	1750	2515	6040	6/6	5175	1600	2515	6090	6/6	
	5650	1875	2640	6415	6/6	5550	1725	2640	6465	6/6	
	6025	2000	2765	6790	6/6	5925	1850	2765	6840	6/6	
	6400	2125	2890	7165	6/6	6200	1940	2855	7110	6/6	
	6775	2250	3015	7540	6/6	6675	2100	3015	7590	6/6	
	7030	2335	3100	7795	6/6						
	7180	2385	3150	7945	6/6						
										•	

Technical data in line with VDI 2198 as at: 02/2012

	1.1	Manufacturer (abbreviation)	Jungheinrich	Jungheinrich	Jungheinrich	Jungheinrich	Jungheinrich	Jungheinrich	1.1	
	1.2	Manufacturer's type designation	DFG 540s	DFG 545s	DFG 550s	TFG 540s	TFG 545s	TFG 550s	1.2	
5	1.3	Drive	Diesel	Diesel	Diesel	LPG	LPG	LPG	1.3	
atio	14	Operator type	seat	seat	seat	seat	seat	seat	14	
Ĕ	15	Load capacity/rated load O (t)		4	4 5	5	4	4 5	5	15
den	1.6	Load centre distance	c (mm)	500	500	600	500	500	600	1.6
-	1.8	Load distance (Centre of load axle to fork fa	ce) x (mm)	564 ¹)	564 ¹)	579 ¹)	564 ¹)	5641)	5791)	1.8
	1.0	Wheelbase	v (mm)	1970	1970	2000	1970	1970	2000	1.0
N	2.1	Service weight	, () ka	6310	6550	7400	6360	6600	7450	2.1
ight	2.2	Axle loading laden front/rear	ka	9050/1260	9660/1390	10900/1500	9070/1290	9680/1420	10920/1530	2.1
Ne N	2.3	Axle loading, unladen front/rear	ka	2920/3390	2730/3820	3000/4400	2950/3410	2760/3840	3030/4420	2.3
-	3.1	Tyres		SE	SE	SE	SE	SE	SE	3.1
ssis	3.2	Tyre size, front	mm	8.25-15	300-15	300-15	8.25-15	300-15	300-15	3.2
Cha	3.3	Tyre size, rear	mm	28x9-15	28x9-15	28x9-15	28x9-15	28x9-15	28x9-15	3.3
ls,	3 5	Wheels number front rear ($x = driven w$	2x/2	2x/2	2x/2	2x/2	2x/2	2x/2	35	
hee	3.6	Track width, front b_{10} (mm)		1195	1160	1160	1195	1160	1160	3.6
≥	3.7	Track width, rear	b ₁₁ (mm)	1150	1150	1150	1150	1150	1150	3.7
	4 1	Tilt of mast/fork carriage forward/backwa	and α/β (°)	6/8	6/8	6/8	6/8	6/8	6/8	4 1
	4.2	Closed mast height	h, (mm)	2540	2540	2540	2540	2540	2540	4.2
	4 3	Eree lift	h ₂ (mm)	150	150	150	150	150	150	4 3
	4.4	Lift (standard mast)	h ₂ (mm)	3500	3500	3500	3500	3500	3500	4.4
	45	Height mast extended	h. (mm)	4215	4215	4365	4215	4215	4365	45
	4.7	Height of overhead guard (cabin)	h _€ (mm)	2405	2405	2405	2405	2405	2405	4.7
	4.8	Seat height/stand height	h ₇ (mm)	1230	1230	1230	1230	1230	1230	4.8
Dimensions	4.12	Coupling height	h ₁₀ (mm)	510	510	510	510	510	510	4.12
	4.19	Overall length	l, (mm)	4145	4220	4310	4145	4220	4310	4.19
	4.20	Length to face of forks	l _a (mm)	2995	3070	3160	2995	3070	3160	4.20
	4.21	Overall width k	b_1/b_2 (mm)	1450/-	1450/-	1450/-	1450/-	1450/-	1450/-	4.21
sic	4.22	Fork dimensions	s/e/l (mm)	50/125/1150	50/150/1150	60/150/1150	50/125/1150	50/150/1150	60/150/1150	4.22
Ba	4.23	Fork carriage ISO 2328, class/type A, B		3A	3A	4A	3A	3A	4A	4.23
	4.24	Fork-carriage width	b ₃ (mm)	1260	1260	1260	1260	1260	1260	4.24
	4.31	Ground clearance, laden, below mast	m1 (mm)	175	175	175	175	175	175	4.31
	4.32	Ground clearance, centre of wheelbase	m, (mm)	200	200	200	200	200	200	4.32
	4.33	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	4405	4465	4530	4405	4465	4530	4.33
	4.34	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	4605	4665	4730	4605	4665	4730	4.34
	4.35	Turning radius	Wa (mm)	2640	2700	2750	2640	2700	2750	4.35
	4.36	Internal turning radius	b ₁₃ (mm)	730	730	730	730	730	730	4.36
	5.1	Travel speed, laden/unladen	km/h	21	21	21	21	21	21	5.1
ata	5.2	Lift speed, laden/unladen	m/s	0.53/0.56	0.51/0.55	0.49/0.53	0.53/0.56	0.51/0.55	0.49/0.53	5.2
e B D	5.3	Lowering speed, laden/unladen	m/s	0.57/0.54	0.57/0.54	0.57/0.54	0.57/0.54	0.57/0.54	0.57/0.54	5.3
and	5.5	Drawbar pull, laden/unladen	Ν	23000	22000	22000	23000	22000	22000	5.5
orn	5.7	Gradeability, laden/unladen	%	25/27	23/26	21/25	25/27	23/26	21/25	5.7
Perf	5.9	Acceleration time, laden/unladen	S	5.7/5.0	6.0/5.2	6.2/5.5	5.7/5.0	6.0/5.2	6.2/5.5	5.9
-	5.10	Service brake		hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	5.10
Combustion Engine	7.1	Engine manufacturer/type		VW/2.0CR	VW/2.0CR	VW/2.0CR	VW/3.6VR6	VW/3.6VR6	VW/3.6VR6	7.1
	7.2	Engine power acc. to ISO 1585	kW	55	55	55	59	59	59	7.2
	7.3	Rated speed	min ⁻¹	2700	2700	2700	2700	2700	2700	7.3
	7.4	No. of cylinders/displacement	anz/cm³	4/1968	4/1968	4/1968	6/3597	6/3597	6/3597	7.4
	7.5	Fuel consumption acc. to VDI cycle	l/h	4.4	4.8	5.2				7.5
		Fuel consumption acc. to VDI cycle	kg/h				4.3	4.5	4.8	
	8.1	Type of drive control		hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	hydrostatic	8.1
2	8.2	Operating pressure for attachments	bar	170	170	170	170	170	170	8.2
the	8.3	Oil volume for attachments		48	48	48	48	48	48	8.3
0	8.4	Sound level at the driver's ear according to EN 12	053 dB(A)	77	77	77	78	78	78	8.4
	8.5	Towing coupling, type DIN								8.5

1) + 10 mm for DZ mast

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

Ergonomic operator workplace

Comfortable and helping maximise productivity with exemplary ergonomics:

- Easy and safe access due to a large step easily visible from above.
- Floating Cab: vibration isolation with damped power train mountings and operator workplace module.
- Height and rake adjustable, slim steering column with memory function.
- Easy entry to the cab: the steering column tilts forward by means of a simple pull on the memory function lever.
- The special roof and scuttle designs including a strut-free safety glass roof panel ensure excellent all-round visibility.
- SOLO-PILOT, Comfort Display and operating console are integrated into the right armrest and are particularly easy to operate and read. The armrest is both vertically and horizontally adjustable.
- Comfortable working environment in any weather due to comfort cabs in various designs (optional).



Comfortable and productivity inspiring workplace

Assistance systems

The new Hydrostatic already offers an extensive safety package as standard:

- Deactivation of 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.

A range of additional options provide even more safety for the operator, the forklift and the load:

- Access Control: The access control system allows operation of the forklift only if "seat occupied" and "safety belt locked" recognition are activated in a defined sequence.
- Drive Control: Automatic travel speed reduction when cornering (analogue to Jungheinrich Curve Control). Additional travel speed reduction occurs with lift heights in excess of approx. 1500 mm.
- Lift Control (includes "Drive Control"): Automatic mast tilt speed reduction occurs with lift heights in excess of approx.
 1500 mm. Tilt angle is displayed via an individual display unit. Sideshift centre position selection via push button.

Handling efficiency and drive characteristics

Key advantages of hydrostatic drive:

- Electronic control for precise adjustment of drive and hydraulic functions.
- Optimum handling performance particularly in shuttle operation.
- Stepless power transmission and high starting torques.
- 5 electronically selectable drive modes ensure optimum performance parameters for every application.
- Automatic engine speed increase during lifting and lowering.
- Very precise control of travel speed.
- Optional double pedal operation.
- Low maintenance costs due to direct drive without wearing parts, such as clutch, differential and gears.

Intelligent electronics

- Splash-proof electronic controllers (IP 64) connected to the CAN-Bus system for drive and hydraulic functions.
- Electronically controlled motors.
- TFG with maintenance-free electronic ignition system.
- Sensitive adjustment of hydraulic functions via electromagnetic valves.

Tyres

Superelastic tyres as standard; choices of nonmarking SE and pneumatic tyres also available.

Brakes

The hydrostatic drive facilitates completely wearfree braking:

- Frequent brake pedal operation is no longer necessary.
- In addition, sprung-loaded laminated parking brake in oil bath as a maintenance-free, enclosed system.
- Safety on ramps: The parking brake is activated automatically when the truck stands still or the engine is switched off.

Hydraulics

The high performance filter system ensures clean hydraulic oil and a long service life of all components.

- Combined suction and return flow filter system for optimum cold running.
- Hydraulic tank integrated in chassis.
- Ventilation of hydraulic tank via the filter.
 Pressure relief valves protect against excess pressure and overloading.

Mast

All mast components are designed for optimum visibility, maximum stability and long service life:

- Slender mast profiles and lift cylinders positioned at the rear for maximum visibility.
- End cushioning on mast and tilt cylinders for increased handling safety.

Additional equipment

Various options and attachments are available to suit different application requirements.

Jungheinrich UK Ltd.

Head Office:

Sherbourne House · Sherbourne Drive Tilbrook · Milton Keynes MK7 8HX Phone 01908 363100 Fax 01908 363180

info@jungheinrich.co.uk www.jungheinrich.co.uk



Jungheinrich Plants, Sales and Services Europe ISO 9001/ISO 14001

SGS

Jungheinrich trucks conform to the European Safety Requirements.