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 425s/430s/435s

Diesel and LPG counterbalanced trucks with hydrostatic drive (2,500/3,500/3,000 kg)

Our diesel and LPG fork lift trucks with hydrostatic drive offer outstanding throughput, particularly when reversing (e.g. during 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.

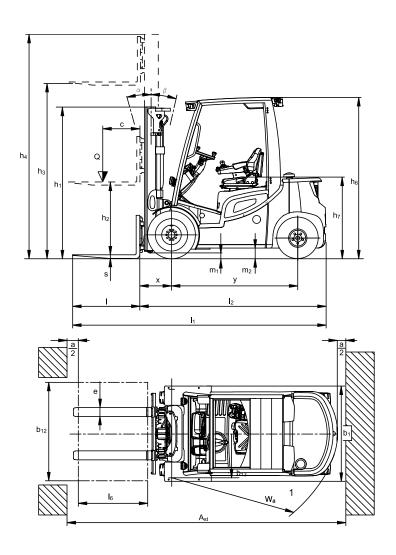
State-of-the-art engines from the automotive industry feature impressive electronic control units. They allow for precise operation and optimum productivity combined with low fuel consumption. All the engines are characterised by low emissions, falling significantly below the strict EU directives. The 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 $\boldsymbol{\theta}$ stress-free environment.

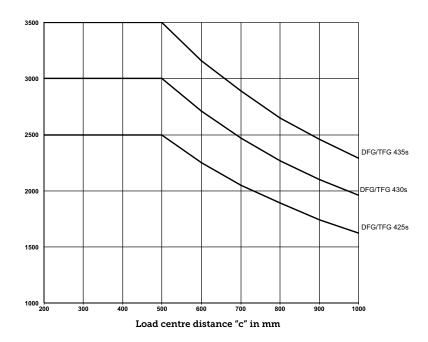
The laminated safety glass roof panel offers protection from the weather and falling items. The increased amount of light in the cab creates a pleasant working atmosphere contributing to faster and safer stacking and retrieval. These are the best requirements for ensuring maximum productivity throughout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



DFG/TFG 425s/430s/435s



Capacity (kg)



DFG/TFG 425s/430s/435s

		Stand	ard mast ty	pes DFG 425	s/DFG 435s	/DFG 430s/	TFG 425s/T	FG 430s/TF	G 435s		
	Lift h ₃	Lowered mast height h ₁			Free lift h ₂			Extended mast height h ₄			Mast tilt forward / back α/β
	(mm)		(mm)		(mm)			(mm)			(°)
		DFG 425s / TFG 425s	DFG 430s / TFG 430s	DFG 435s / TFG 435s	DFG 425s / TFG 425s	DFG 430s / TFG 430s	DFG 435s / TFG 435s	DFG 425s / TFG 425s	DFG 430s / TFG 430s	DFG 435s / TFG 435s	
Duplex ZT	2900	2121	2125	2205	150	150	150	3494	3662	3693	6/6
Suprem 21	3100	2221	2225	2305	150	150	150	3694	3862	3893	6/8
	3300	2321	2325	2405	150	150	150	3894	4062	4093	6/8
	3500	2421	2425	2505	150	150	150	4094	4262	4293	6/8
	3700	2521	2525	2605	150	150	150	4294	4462	4493	6/8
	4000	2671	2675	2755	150	150	150	4594	4762	4793	6/8
	4300	2871	2875	2955	150	150	150	4894	5062	5093	6/8
	4500	2971	2975	3055	150	150	150	5094	5262	5293	6/8
Duplex ZZ	3100	2186	2190	2270	1606	1451	1501	3672	3842	3873	6/8
	3300	2286	2290	2370	1706	1551	1601	3872	4042	4073	6/8
	3500	2386	2390	2470	1806	1651	1701	4072	4242	4273	6/8
	3700	2486	2490	2570	1906	1751	1801	4272	4442	4473	6/8
	4000	2636	2640	2720	2056	1901	1951	4572	4742	4773	6/8
Triplex DZ	4400	2086	2090	2170	1512	1351	1401	4972	5142	5173	6/8
	4700	2186	2190	2270	1612	1451	1501	5272	5442	5473	6/8
	5000	2277	2290	2370	1714	1551	1601	5563	5742	5773	6/6
	5500	2477	2490	2570	1914	1751	1801	6063	6242	6273	6/6
	6000	2677	2690	2770	2114	1951	2001	6563	6742	6773	6/6
	6500	2877	2890	2970	2314	2151	2201	7063	7242	7273	6/6
	7000	3077	3090	3170	2514	2351	2401	7563	7742	7770	6/6
	7500	3277	3290	3370	2714	2551	2601	8063	8240	8273	6/6

Technical data in line with VDI 2198

	1.1	Manufacturer (short form)				Junghoinrich		
	1.1	Model			DFG 425s	Jungheinrich DFG 430s	DFG 435s	
- G	1.3	Drive			DFG 4238	Diesel	DFG 4338	
Identification	1.4							
ij	1.5	Manual, pedestrian, stand-on, seated, order picker operation	Q	t	2.5	seat 3	3.5	
ä	1	Load capacity/rated load Load centre distance			2.5	500	3.5	
<u> </u>	1.6		С	mm	4771)		40.02)	
	1.8	Load distance	X	mm	4731)	4932)	4982)	
v	1.9	Wheelbase	У	mm	1750	1820	1880	
) jt	2.1	Service weight		kg	3960	4440	4815	
Weights	2.2	Axle load, w. load, front / rear		kg	5630 / 830	6520 / 920	7305 / 1005	
	2.3	Axle load, w.o. load, front / rear		kg	1740 / 2220 1909 / 2530 SE		1975 / 2896	
SSi	3.1	Tyres			700.40			
Wheels / chassis	3.2	Tyre size, at front		mm	7.00-12	27x10-12	27x10-12	
~	3.3	Tyre size, at rear		mm	6.50-10 2x/2			
els	3.5	Wheels, number front/rear (x = driven wheels)						
/he	3.6	Track width, front	b ₁₀	mm	1000	1060	1060	
_ <	3.7	Track width, rear	b ₁₁	mm		942		
	4.1	Tilt of mast/fork carriage forward/backward	α/β	•		6/8		
	4.2	Mast height (lowered)	h ₁	mm	2321	2325	2405	
	4.3	Free lift	h ₂	mm		150		
	4.4	Lift	h ₃	mm		3300		
	4.5	Extended mast height	h ₄	mm	3894	4062	4093	
	4.7	Height of overhead guard	h ₆	mm	2220	2238	2238	
	4.8	Seat height/stand height	h ₇	mm	1058	1076	1076	
Basic dimensions	4.12	Coupling height	h ₁₀	mm	377	387	387	
ışi	4.19	Overall length	l ₁	mm	3763	3873	3963	
Je	4.20	Length incl. back of forks	l ₂	mm	2613	2723	2813	
흥	4.21	Total width	b ₁ /b ₂	mm	1184	1320	1320	
Sic	4.22	Fork dimensions	s/e/l	mm	40 / 120 / 1150	45 / 125 / 1150	50 / 125 / 1150	
Ва	4.23	Fork carriage ISO 2328, class/type A, B			2A	3A	3A	
	4.24	Fork carriage width	b ₃	mm		1120		
	4.31	Floor clearance with load under mast	m ₁	mm	112	118	147	
	4.32	Floor clearance centre wheelbase	m ₂	mm	130	148	148	
	4.33	Aisle width for pallets 1000×1200 sideways	Ast	mm	3958	4075	4153	
	4.34	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4158	4275	4353	
	4.35	Turning radius	W _a	mm	2285	2377	2455	
	4.36	Smallest pivot point distance	b ₁₃	mm		640		
_	5.1	Travel speed, w. / w.o. load		km/h	19.6 / 19.6	20.8 / 20.8	20.8 / 20.8	
data	5.2	Lift speed, w. / w.o. load		m/s	0.56 / 0.56	0.56 / 0.56	0.48 / 0.48	
e G	5.3	Lower speed, w. / w.o. load		m/s		0.56 / 0.56		
2	5.5	Drawbar pull w. / w.o. load		N	19160	18100	18100	
Performan	5.7	Gradeability laden/unladen		%	27	24	21	
وً	5.9.2	Acceleration laden/unladen to 15 m		S	4.9 / 4.4	5.4 / 4.6	5.7 / 4.7	
Pe	5.10	Service brake				hydrostatic		
	5.11	Parking brake			Automatic parking brake			
	7.1	Engine manufacturer / type			VW 2.0 CR / CPYB (IIIB)			
<u>.</u>	7.2	Engine output according to ISO 1585		kW				
ust	7.3	Rated revolutions per minute		/min	2700			
Combustion engine	7.2 7.3 7.4	No. of cylinders			4			
ြဲဂွဲ	7.4.1	Cubic capacity		cm³		1968		
	7.5	Fuel consumption acc. to VDI cycle		l/h	3	3.2	3.4	
	8.1	Type of drive control				hydrostatic		
	8.2	Working pressure for attachments		bar		215		
Misc.	8.3	Oil flow for attachments		l/min		32		
Σ	8.4	Sound pressure level at operator's ear according to EN 12053		dB (A)		75		
	8.5	Trailer coupling, model/type DIN				DIN 15170 Type H		

¹⁾ integreated Sideshifter + 12 mm

²⁾ integreated Sideshifter + 15 mm

Technical data in line with VDI 2198

	1.1	Manufacturer (short form)				Jungheinrich			
	1.2	Model			TFG 425s	TFG 430s	TFG 435s		
ntificatior	1.3	Drive				LPG			
	1.4	Manual, pedestrian, stand-on, seated, order picker operation				seat			
	1.5	Load capacity/rated load	Q	t	2.5	3	3.5		
	1.6	Load centre distance	С	mm	2.0	500	3.3		
	1.8	Load distance	x	mm	4731)	4932)	4982)		
	1.9	Wheelbase	y	mm	1750	1820	1880		
	2.1	Service weight	У		3960	4440	4815		
ä		, ,		kg	5630 / 830	6520 / 920	7305 / 1005		
Weights	2.2	Axle load, w. load, front / rear		kg					
	2.3	Axle load, w.o. load, front / rear		kg	1740 / 2220	1909 / 2530	1975 / 2896		
Wheels / chassis	3.1	Tyres			SE 27:40 42 27:40 6				
ha	3.2	Tyre size, at front		mm	7.00-12	27x10-12	27x10-12		
~	3.3	Tyre size, at rear		mm		6.50-10			
els	3.5	Wheels, number front/rear (x = driven wheels)				2x/2			
,he	3.6	Track width, front	b ₁₀	mm	1000	1060	1060		
>	3.7	Track width, rear	b ₁₁	mm		942			
	4.1	Tilt of mast/fork carriage forward/backward	α/β	0		6/8			
	4.2	Mast height (lowered)	h ₁	mm	2321	2325	2405		
	4.3	Free lift	h ₂	mm		150			
	4.4	Lift	h ₃	mm		3300			
	4.5	Extended mast height	h ₄	mm	3894	4062	4093		
	4.7	Height of overhead guard	h ₆	mm	2220	2238	2238		
	4.8	Seat height/stand height	h ₇	mm	1058	1076	1076		
ns	4.12	Coupling height	h ₁₀	mm	377	387	387		
Si Si	4.19	Overall length	l ₁	mm	3763	3873	3963		
ĕ	4.20	Length incl. back of forks	l ₂	mm	2613	2723	2813		
Basic dimensions	4.21	Total width	b ₁ /b ₂	mm	1184	1320	1320		
	4.22	Fork dimensions	s/e/l		40 / 120 / 1150	45 / 125 / 1150	50 / 125 / 1150		
3as	4.23	Fork carriage ISO 2328, class/type A, B			2A	3A	3A		
	4.24	Fork carriage width	b ₃	mm		1120			
	4.31	Floor clearance with load under mast	m ₁	mm	112	118	147		
	4.32	Floor clearance centre wheelbase	m ₂	mm	130	148	148		
	4.33	Aisle width for pallets 1000×1200 sideways	Ast	mm	3958	4075	4153		
	4.34	Aisle width for pallets 800 × 1200 lengthways	Ast	mm	4158	4275	4353		
	4.35	Turning radius	W _a	mm	2285	2377	2455		
	4.36	Smallest pivot point distance	b ₁₃	mm	2203	640	2 133		
	5.1	Travel speed, w. / w.o. load	D ₁₃	km/h	19.6 / 19.6	20.8 / 20.8	20.8 / 20.8		
Ę	5.2	Lift speed, w. / w.o. load		m/s	0.56 / 0.56	0.56 / 0.56	0.48 / 0.48		
ce data	5.3	Lower speed, w. / w.o. load		m/s	0.30 / 0.30	0.56 / 0.56	0.40 / 0.40		
Ö	5.5	Drawbar pull w. / w.o. load		N	19160	18100	18100		
Performan	5.7	Gradeability laden/unladen		%	27	24	21		
ř		1		S					
ärfe	5.9.2	Acceleration laden/unladen to 15 m		5	5.7 / 5	5.9 / 5.1	6.1 / 5.2		
ď	5.10	Service brake				hydrostatic			
	5.11	Parking brake			Automatic parking brake				
_	7.1	Engine manufacturer / type			VW / BEF				
Combustion engine	7.2	Engine output according to ISO 1585		kW	38				
	7.3 7.4	Rated revolutions per minute		/min	2700				
E E	7.4	No. of cylinders		-		4			
	7.4.1	Cubic capacity		cm ³		1980			
	7.5.1	Fuel consumption acc. to VDI cycle		kg/h	2.6	2.7	2.9		
	8.1	Type of drive control				hydrostatic 215			
ຜ່	8.2	Working pressure for attachments		bar					
Misc.	8.3	Oil flow for attachments		l/min		32			
~	8.4	Sound pressure level at operator's ear according to EN 12053		dB (A)	75				
	8.5	Trailer coupling, model/type DIN				DIN 15170 Type H			

¹⁾ integreated Sideshifter + 12 mm

²⁾ integreated Sideshifter + 15 mm

DFG/TFG 425s/430s/435s



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 operator's 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 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

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.

Hydraulics

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 yet low-consumption engines.

Jungheinrich UK Ltd.

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info@jungheinrich.co.uk www.jungheinrich.co.uk The German production facilities in Norderstedt and Moosburg are certified. ISO 14001

Jungheinrich fork lift trucks meet European safety requirements.

