

hydrostaticDRIVE

Low fuel consumption

Maximum stability

Ergonomic workstation

Ergonomic and easily adjustable operating concept



DFG/TFG 425s/430s/435s

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

Our diesel and gas forklift trucks with hydrostaticDRIVE have an incredible handling capacity (e.g. for loading 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.

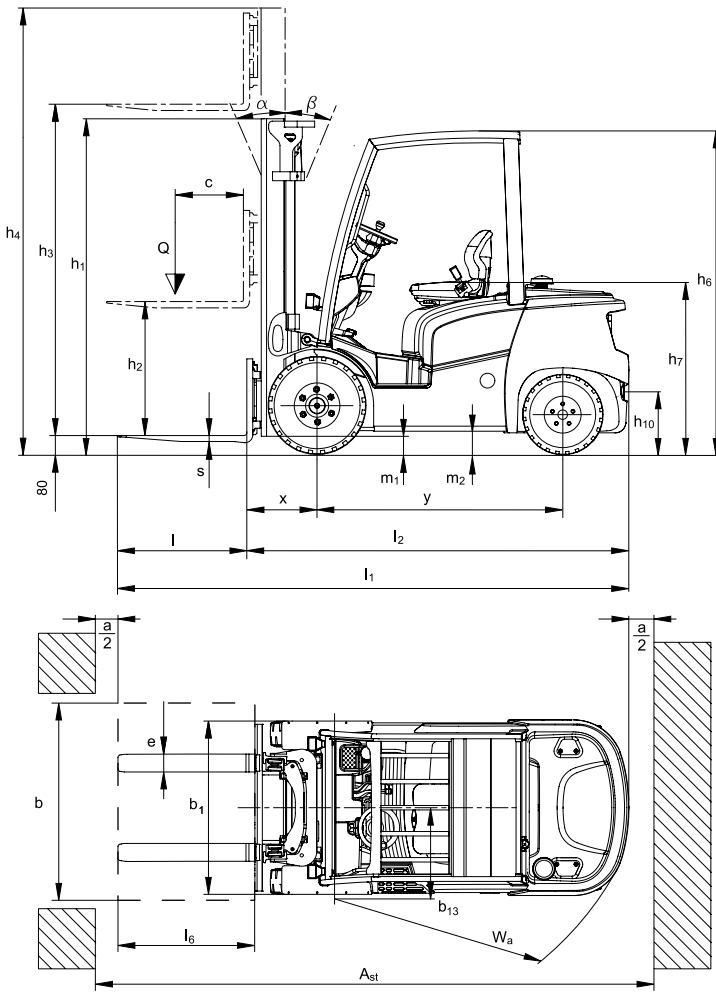
State-of-the-art engines from the automotive industry feature impressive electronic control units. They provide precise operation and optimum productivity combined with low fuel consumption. All the engines are characterised by low emissions, falling significantly below the strict EU directives. The diesel truck is fitted with a diesel particle filter as standard. A 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 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.

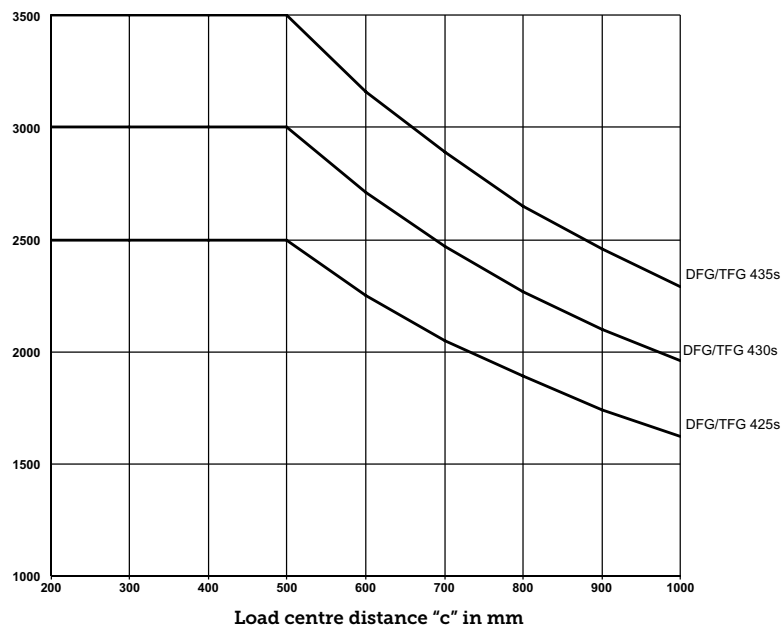
The laminated safety glass roof panel offers protection from the weather and falling items. The increased amount of light in the cabin creates a pleasant working atmosphere contributing to faster and safer stacking and retrieval. These are the best requirements for ensuring maximum productivity throughout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



DFG/TFG 425s/430s/435s



Capacity (kg)



DFG/TFG 425s/430s/435s

| Standard mast designs DFG 425s/DFG 430s/DFG 435s/TFG 425s/TFG 430s/TFG 435s | | | | | | | | | | | | |
|---|--------------------------------|---|------------------------|------------------------|-------------------------------------|------------------------|------------------------|--|------------------------|------------------------|--|------------------------|
| | Lift h ₃ (mm) | Lowered mast height h ₁ (mm) | | | Free lift h ₂ (mm) | | | Extended mast height h ₄ (mm) | | | Mast tilt forward/back α/β (°) | |
| | | 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 | DFG 425s / TFG 425s / DFG 430s / TFG 430s | DFG 435s / TFG 435s |
| Duplex ZT | 2900 | 2121 | 2125 | 2205 | 150 | 150 | 150 | 3651 | 3660 | 3689 | 6/6 | 6/6 |
| | 3100 | 2221 | 2225 | 2305 | 150 | 150 | 150 | 3851 | 3860 | 3889 | 6/8 | 6/8 |
| | 3300 | 2321 | 2325 | 2405 | 150 | 150 | 150 | 4051 | 4060 | 4089 | 6/8 | 6/8 |
| | 3500 | 2421 | 2425 | 2505 | 150 | 150 | 150 | 4251 | 4260 | 4289 | 6/8 | 6/8 |
| | 3700 | 2521 | 2525 | 2605 | 150 | 150 | 150 | 4451 | 4460 | 4489 | 6/8 | 6/8 |
| | 4000 | 2671 | 2675 | 2755 | 150 | 150 | 150 | 4751 | 4760 | 4789 | 6/8 | 6/8 |
| | 4300 | 2871 | 2875 | 2955 | 150 | 150 | 150 | 5051 | 5060 | 5089 | 6/8 | 6/8 |
| | 4500 | 2971 | 2975 | 3055 | 150 | 150 | 150 | 5251 | 5260 | 5289 | 6/8 | 6/8 |
| | 4700 | 3071 | 3075 | 3155 | 150 | 150 | 150 | 5451 | 5460 | 5489 | 6/6 | 6/6 |
| | 5000 | 3221 | 3225 | 3305 | 150 | 150 | 150 | 5751 | 5760 | 5789 | 6/6 | 6/6 |
| | 5500 | 3521 | 3525 | 3605 | 150 | 150 | 150 | 6251 | 6260 | 6289 | 6/6 | 6/6 |
| 5800 | 3671 | 3675 | 3755 | 150 | 150 | 150 | 6551 | 6560 | 6589 | 6/6 | 6/6 | |
| 6000 | 3771 | 3775 | 3855 | 150 | 150 | 150 | 6751 | 6760 | 6789 | 6/6 | 6/6 | |
| Duplex ZZ | 2900 | - | - | 2170 | - | - | 1400 | - | - | 3670 | - | 6/8 |
| | 3100 | 2186 | 2190 | 2270 | 1600 | 1450 | 1501 | 3686 | 3840 | 3869 | 6/8 | 6/8 |
| | 3300 | 2286 | 2290 | 2370 | 1700 | 1550 | 1601 | 3886 | 4040 | 4069 | 6/8 | 6/8 |
| | 3500 | 2386 | 2390 | 2470 | 1800 | 1650 | 1701 | 4086 | 4240 | 4269 | 6/8 | 6/8 |
| | 3700 | 2486 | 2490 | 2570 | 1900 | 1750 | 1801 | 4286 | 4440 | 4469 | 6/8 | 6/8 |
| | 4000 | 2636 | 2640 | 2720 | 2050 | 1900 | 1951 | 4586 | 4740 | 4769 | 6/8 | 6/8 |
| Triplex DZ | 4250 | - | - | 2120 | - | - | 1350 | - | - | 5020 | - | 6/6 |
| | 4400 | 2086 | 2090 | 2170 | 1500 | 1350 | 1401 | 4986 | 5140 | 5169 | 6/8 | 6/8 |
| | 4700 | 2186 | 2190 | 2270 | 1600 | 1450 | 1501 | 5286 | 5440 | 5469 | 6/8 | 6/8 |
| | 5000 | 2286 | 2290 | 2370 | 1700 | 1550 | 1601 | 5586 | 5740 | 5769 | 6/6 | 6/6 |
| | 5500 | 2486 | 2490 | 2570 | 1900 | 1750 | 1801 | 6086 | 6240 | 6269 | 6/6 | 6/6 |
| | 6000 | 2686 | 2690 | 2770 | 2100 | 1950 | 2001 | 6586 | 6740 | 6769 | 6/6 | 6/6 |
| | 6500 | 2886 | 2890 | 2970 | 2300 | 2150 | 2201 | 7086 | 7240 | 7269 | 6/6 | 6/6 |
| | 7000 | 3086 | 3090 | 3170 | 2500 | 2350 | 2401 | 7586 | 7740 | 7769 | 6/6 | 6/6 |
| | 7500 | 3286 | 3290 | 3370 | 2700 | 2550 | 2601 | 8086 | 8240 | 8269 | 6/6 | 6/6 |



Technical data in line with VDI 2198

| | | | Jungheinrich | | | |
|--------------------------|---|--|---|-------------------|-------------------|-------------------|
| | | | DFG 425s | DFG 430s | DFG 435s | |
| Identification | 1.1 | Manufacturer (abbreviation) | Jungheinrich | | | |
| | 1.2 | Model | DFG 425s | DFG 430s | DFG 435s | |
| | 1.3 | Drive | Diesel | | | |
| | 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 | c mm | 500 | | |
| | 1.8 | Load distance | x mm | 473 ¹⁾ | 493 ²⁾ | 498 ²⁾ |
| | 1.9 | Wheelbase | y mm | 1,750 | 1,820 | 1,880 |
| | Weights | 2.1 | Net weight | kg | 3,960 | 4,440 |
| 2.2 | | Axle loading, laden front/rear | kg | 5,630 / 830 | 6,520 / 920 | 7,305 / 1,005 |
| 2.3 | | Axle loading, unladen front/rear | kg | 1,740 / 2,220 | 1,909 / 2,530 | 1,975 / 2,896 |
| Wheels / frame | 3.1 | Tyres | SE | | | |
| | 3.2 | Tyre size, front | mm | 7.00-12 | 27x10-12 | 27x10-12 |
| | 3.3 | Tyre size, rear | mm | 6.50-10 | | |
| | 3.5 | Wheels, number front/rear (x = driven wheels) | | 2x/2 | | |
| | 3.6 | Tread width, front | b ₁₀ mm | 1,000 | 1,060 | 1,060 |
| | 3.7 | Tread width, rear | b ₁₁ mm | 942 | | |
| | Basic dimensions | 4.1 | Tilt of mast/fork carriage forward/backward | α/β ° | 6/8 | |
| 4.2 | | Mast height (lowered) | h ₁ mm | 2,321 | 2,325 | 2,405 |
| 4.3 | | Free lift | h ₂ mm | 150 | | |
| 4.4 | | Lift | h ₃ mm | 3,300 | | |
| 4.5 | | Extended mast height | h ₄ mm | 4,051 | 4,060 | 4,089 |
| 4.7 | | Height of overhead guard | h ₆ mm | 2,220 | 2,238 | 2,238 |
| 4.8 | | Seat height/standing height | h ₇ mm | 1,058 | 1,076 | 1,076 |
| 4.12 | | Coupling height | h ₁₀ mm | 377 | 387 | 387 |
| 4.19 | | Overall length | l ₁ mm | 3,763 | 3,873 | 3,963 |
| 4.20 | | Length to face of forks | l ₂ mm | 2,613 | 2,723 | 2,813 |
| 4.21 | | Overall width | b ₁ /b ₂ mm | 1,184 | 1,320 | 1,320 |
| 4.22 | | Fork dimensions | s/e/l mm | 40 / 120 / 1,150 | 45 / 125 / 1,150 | 50 / 125 / 1,150 |
| 4.23 | | Fork carriage ISO 2328, class/type A, B | | 2A | 3A | 3A |
| 4.24 | | Fork carriage width | b ₃ mm | 1,120 | | |
| 4.31 | | Floor clearance with load under mast | m ₁ mm | 112 | 118 | 147 |
| 4.32 | | Ground clearance, centre of wheelbase | m ₂ mm | 130 | 148 | 148 |
| 4.33 | Aisle width for pallets 1000 x 1200 crossways | Ast mm | 3,958 | 4,075 | 4,153 | |
| 4.34 | Aisle width for pallets 800 x 1200 lengthways | Ast mm | 4,158 | 4,275 | 4,353 | |
| 4.35 | Turning radius | W _a mm | 2,285 | 2,377 | 2,455 | |
| 4.36 | Smallest turning radius | b ₁₃ mm | 640 | | | |
| Performance data | 5.1 | Travel speed, laden/unladen | km/h | 19.6 / 19.6 | 20.8 / 20.8 | 20.8 / 20.8 |
| | 5.2 | Lift speed, laden/unladen | m/s | 0.56 / 0.56 | 0.56 / 0.56 | 0.48 / 0.48 |
| | 5.3 | Lowering speed, laden/unladen | m/s | 0.56 / 0.56 | | |
| | 5.5 | Drawbar pull, laden/unladen | N | 19,160 | 18,100 | 18,100 |
| | 5.7 | Gradeability, laden/unladen | % | 27 | 24 | 21 |
| | 5.9.2 | Acceleration time laden/unladen to 15 m | S | 4.9 / 4.4 | 5.4 / 4.6 | 5.7 / 4.7 |
| | 5.10 | Service brake | | hydrostatic | | |
| 5.11 | Parking brake | | Automatic parking brake | | | |
| Combustion engine | 7.1 | Motor manufacturer/type | VW 2.0 CR / CPYB (IIIB) | | | |
| | 7.2 | Engine output according to ISO 1585 | kW | 44 | | |
| | 7.3 | Rated speed | /min | 2,700 | | |
| | 7.4 | No. of cylinders | | 4 | | |
| | 7.4.1 | Cubic capacity | cm ³ | 1,968 | | |
| | 7.5.1 | Fuel consumption as per EN 16796 | l/h | 2.9 | 3.1 | 3.3 |
| | | CO- Equivalent as per EN 16796 | kg/h | 9.2 | 9.8 | 10.5 |
| Misc. | 8.1 | Type of drive control | hydrostatic | | | |
| | 8.2 | Working pressure for attachments | bar | 215 | | |
| | 8.3 | Oil flow for attachments | l/min | 32 | | |
| | 8.4 | Sound pressure level at operator's ear as per EN 12053 | dB (A) | 75 | | |
| | 8.5 | Trailer coupling, model/type DIN | | DIN 15170 type H | | |

¹⁾ + 12 mm with integrated sideshift

²⁾ + 15 mm with integrated sideshift

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

| | | Jungheinrich | | | | | | | |
|-------------------|---|--|---|--------------------------------|-------------------|-------------------|-------------------|------------------|----|
| | | | | TFG 425s | TFG 430s | TFG 435s | | | |
| Identification | 1.1 | Manufacturer (abbreviation) | | | | | | | |
| | 1.2 | Model | | | | | | | |
| | 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 | c | mm | 500 | | | | |
| | 1.8 | Load distance | x | mm | 473 ¹⁾ | 493 ²⁾ | 498 ²⁾ | | |
| | 1.9 | Wheelbase | y | mm | 1,750 | 1,820 | 1,880 | | |
| | Weights | 2.1 | Net weight | | kg | 3,960 | 4,440 | 4,815 | |
| 2.2 | | Axle loading, laden front/rear | | kg | 5,630 / 830 | 6,520 / 920 | 7,305 / 1,005 | | |
| 2.3 | | Axle loading, unladen front/rear | | kg | 1,740 / 2,220 | 1,909 / 2,530 | 1,975 / 2,896 | | |
| Wheels / frame | 3.1 | Tyres | | SE | | | | | |
| | 3.2 | Tyre size, front | | mm | 7.00-12 | 27x10-12 | 27x10-12 | | |
| | 3.3 | Tyre size, rear | | mm | 6.50-10 | | | | |
| | 3.5 | Wheels, number front/rear (x = driven wheels) | | 2x/2 | | | | | |
| | 3.6 | Tread width, front | b ₁₀ | mm | 1,000 | 1,060 | 1,060 | | |
| | 3.7 | Tread width, rear | b ₁₁ | mm | 942 | | | | |
| | Basic dimensions | 4.1 | Tilt of mast/fork carriage forward/backward | | α/β | ° | | | |
| 4.2 | | Mast height (lowered) | | h ₁ | mm | 2,321 | 2,325 | 2,405 | |
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| 4.12 | | Coupling height | | h ₁₀ | mm | 377 | 387 | 387 | |
| 4.19 | | Overall length | | l ₁ | mm | 3,763 | 3,873 | 3,963 | |
| 4.20 | | Length to face of forks | | l ₂ | mm | 2,613 | 2,723 | 2,813 | |
| 4.21 | | Overall width | | b ₁ /b ₂ | mm | 1,184 | 1,320 | 1,320 | |
| 4.22 | | Fork dimensions | | s/e/l | mm | 40 / 120 / 1,150 | 45 / 125 / 1,150 | 50 / 125 / 1,150 | |
| 4.23 | | Fork carriage ISO 2328, class/type A, B | | 2A | | | | 3A | 3A |
| 4.24 | | Fork carriage width | | b ₃ | mm | 1,120 | | | |
| 4.31 | | Floor clearance with load under mast | | m ₁ | mm | 112 | 118 | 147 | |
| 4.32 | | Ground clearance, centre of wheelbase | | m ₂ | mm | 130 | 148 | 148 | |
| 4.33 | Aisle width for pallets 1000 x 1200 crossways | | Ast | mm | 3,958 | 4,075 | 4,153 | | |
| 4.34 | Aisle width for pallets 800 x 1200 lengthways | | Ast | mm | 4,158 | 4,275 | 4,353 | | |
| 4.35 | Turning radius | | W _a | mm | 2,285 | 2,377 | 2,455 | | |
| 4.36 | Smallest turning radius | | b ₁₃ | mm | 640 | | | | |
| Performance data | 5.1 | Travel speed, laden/unladen | | km/h | 19.6 / 19.6 | 20.8 / 20.8 | 20.8 / 20.8 | | |
| | 5.2 | Lift speed, laden/unladen | | m/s | 0.56 / 0.56 | 0.56 / 0.56 | 0.48 / 0.48 | | |
| | 5.3 | Lowering speed, laden/unladen | | m/s | 0.56 / 0.56 | | | | |
| | 5.5 | Drawbar pull, laden/unladen | | N | 19,160 | 18,100 | 18,100 | | |
| | 5.7 | Gradeability, laden/unladen | | % | 27 | 24 | 21 | | |
| | 5.9.2 | Acceleration time laden/unladen to 15 m | | S | 5.7 / 5 | 5.9 / 5.1 | 6.1 / 5.2 | | |
| | 5.10 | Service brake | | hydrostatic | | | | | |
| 5.11 | Parking brake | | Automatic parking brake | | | | | | |
| Combustion engine | 7.1 | Motor manufacturer/type | | VW / BEF | | | | | |
| | 7.2 | Engine output according to ISO 1585 | | kW | 38 | | | | |
| | 7.3 | Rated speed | | /min | 2,700 | | | | |
| | 7.4 | No. of cylinders | | 4 | | | | | |
| | 7.4.1 | Cubic capacity | | cm ³ | 1,980 | | | | |
| | 7.5 | Fuel consumption as per EN 16796 | | kg/h | 2.5 | 2.6 | 2.8 | | |
| | CO- Equivalent as per EN 16796 | | kg/h | 8.5 | 8.8 | 9.5 | | | |
| Misc. | 8.1 | Type of drive control | | hydrostatic | | | | | |
| | 8.2 | Working pressure for attachments | | bar | 215 | | | | |
| | 8.3 | Oil flow for attachments | | l/min | 32 | | | | |
| | 8.4 | Sound pressure level at operator's ear as per EN 12053 | | dB (A) | 75 | | | | |
| | 8.5 | Trailer coupling, model/type DIN | | DIN 15170 type H | | | | | |

¹⁾ + 12 mm with integrated sideshift

²⁾ + 15 mm with integrated sideshift

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DFG/TFG 425s/430s/435s



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 easily 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 self-explanatory user interface.
- 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.

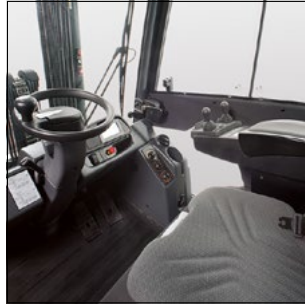
- Selection from 5 freely adjustable travel programs.
- Stepless single-point adjustment of the armrest in 2 axial directions.
- Large armrest with adjustable tilt with a spacious storage compartment.
- 3 different controls can be chosen.
- Single or double pedal operation.
- Adjustable lever and axis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



Benefit from the advantages



Maximum throughput



Workstation is comfortable and helps to maximise productivity



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.
- 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 inherent 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): Automatic mast tilt speed reduction occurs from a defined lift height, tilt angle shown on separate display.

Hydraulics

A variable displacement pump for the operating hydraulics guarantees optimised efficiency and the supply of 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 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 for completely wear-free 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.

