

R 70 Technical Data.

Diesel forklift trucks

R 70-60

R 70-70

R 70-80

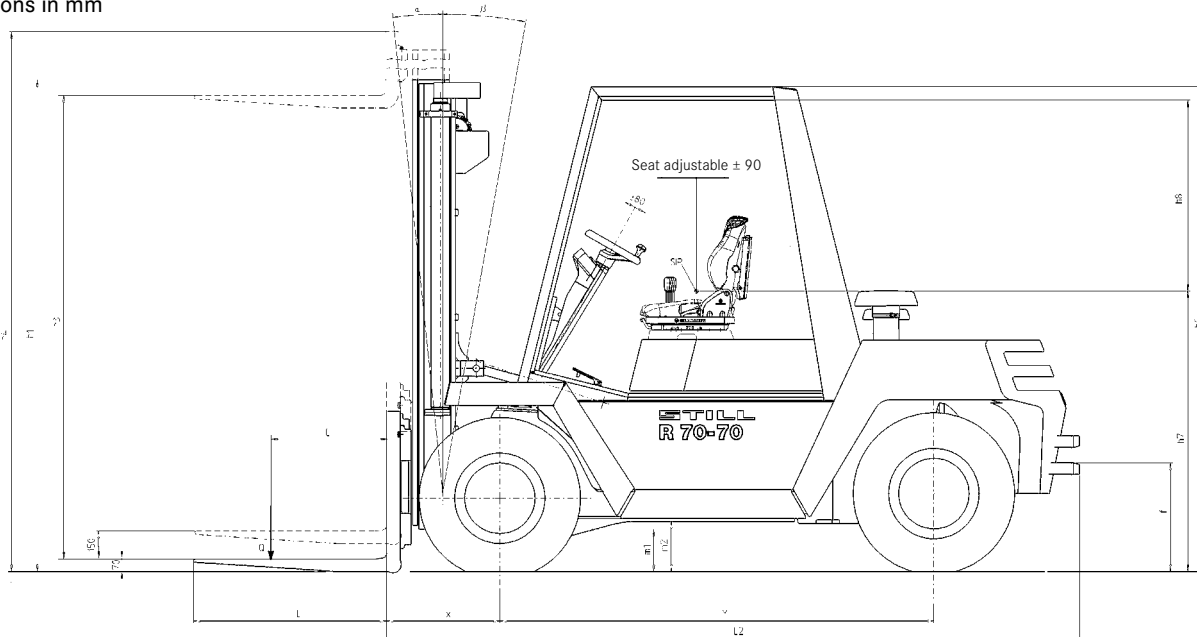


R 70 Technical data.

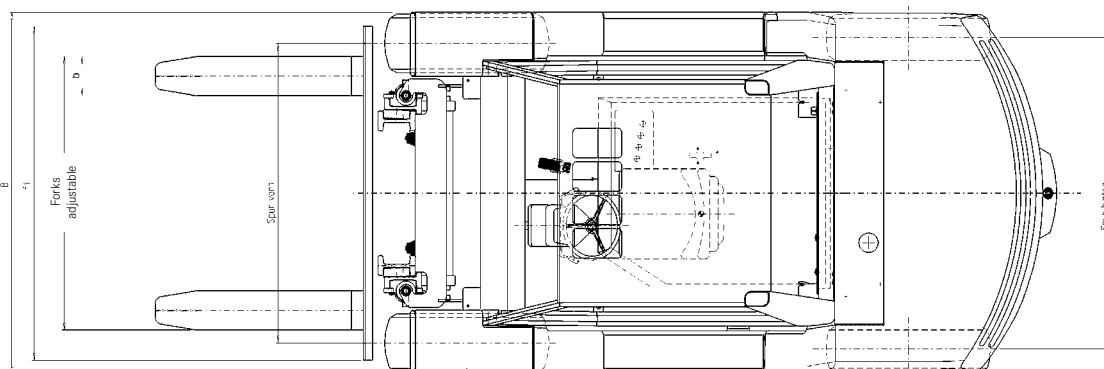
In accordance with VDI guidelines 2198, this specification applies to the standard model only.
Alternative tyres, mast types, ancillary equipment, etc. could result in different values.

| | | | | | | |
|------------------|------------------------------------------------------|-------------------------------------------------------|-------------------------|-------------------------|-------------------------|-----------------|
| Characteristics | 1.1 | Manufacturer | | STILL | STILL | STILL |
| | 1.2 | Manufacturer's model designation | | R 70-60 | R 70-70 | R 70-80 |
| | 1.3 | Drive (electric, diesel, petrol LPG, mains) | | Diesel | Diesel | Diesel |
| | 1.4 | Controls (stand on, Seated, etc.) | | Rider seated | Rider seated | Rider seated |
| | 1.5 | Capacity / load | Q kg | 6000 | 7000 | 8000 |
| | 1.6 | Load centre | c mm | 600 | 600 | 600 |
| | 1.8 | Load distance | x mm | 578 | 588 | 588 |
| | 1.9 | Wheelbase | y mm | 2250 | 2250 | 2250 |
| | Weights | 2.1 | Truck weight | kg | 8824 | 10560 |
| 2.2 | | Axle load laden, front | kg | 13417 | 15150 | 16752 |
| 2.2.1 | | Axle load laden, rear | kg | 1407 | 2410 | 1915 |
| 2.3 | | Axle load unladen, front | kg | 4283 | 4450 | 4500 |
| 2.3.1 | | Axle load unladen, rear | kg | 4541 | 6110 | 6167 |
| Wheels / chassis | 3.1 | Tyres (rubber, SE pneu., polyurethane) | | L/SE | L/SE | L/SE |
| | 3.2 | Tyre size, front | | 300-15 / 22 PR | 355 / 65-15 / 24 PR | 8.25-15 / 18 PR |
| | 3.3 | Tyre size, rear | | 8.25-15 / 18 PR | 8.25-15 / 18 PR | 8.25-15 / 18 PR |
| | 3.5 | Number of wheels, front (x=drive) | | 2x | 2x | 4x |
| | 3.5.1 | Number of wheels, rear (x=drive) | | 2 | 2 | 2 |
| | 3.6 | Track width, front | b ₁₀ mm | 1524 | 1524 | 1708 |
| | 3.7 | Track width, rear | b ₁₁ mm | 1584 | 1584 | 1584 |
| Basic dimensions | 4.1 | Tilt mast / fork carriage, forwards | Grad | 6 | 6 | 6 |
| | 4.1.1 | Tilt mast / fork carriage, backwards | Grad | 11 | 11 | 11 |
| | 4.2 | Height, mast lowered | h ₁ mm | 2730 | 2730 | 2730 |
| | 4.3 | Free lift | h ₂ mm | 150 | 150 | 150 |
| | 4.4 | Lift | h ₃ mm | 3500 | 3100 | 3100 |
| | 4.5 | Height, mast raised | h ₄ mm | 4440 | 4240 | 4240 |
| | 4.7 | Height over overhead guard (cab) | h ₆ mm | 2514 | 2514 | 2514 |
| | 4.8 | Seat height / Standing height | h ₇ mm | 1443 | 1443 | 1443 |
| | 4.12 | Coupling height | h ₁₀ mm | 549 | 563 | 563 |
| | 4.19 | Overall length | l ₁ mm | 4484 | 4593 | 4593 |
| | 4.20 | Länge einschl. Gabelrücken | l ₂ mm | 3448 | 3593 | 3593 |
| | 4.21 | Length including fork backs | b ₁ mm | 1853 | 1874 | 2222 |
| | 4.22 | Fork thickness | s mm | 70 | 70 | 70 |
| | 4.22.1 | Fork width | e mm | 150 | 150 | 150 |
| | 4.22.2 | Fork length | l mm | 1000 | 1000 | 1000 |
| | 4.23 | Fork carriage DIN 15173 Class / Form A.B | | ISO IV A | ISO IV A | ISO IV A |
| | 4.24 | Fork carriage width | b ₃ mm | 1800 | 1800 | 1800 |
| | 4.31 | Floor clearance under mast, laden | m ₁ mm | | | |
| | 4.32 | Floor clearance, centre of wheel-base | m ₂ mm | 250 | 250 | 250 |
| | 4.33 | Working aisle width with 1000 x 1200 pallet crossways | A _{st} mm | 4896 | 5018 | 5018 |
| 4.34 | Working aisle width with 800 x 1200 pallet crossways | A _{st} mm | 4696 | 4818 | 5218 | |
| 4.35 | Turning radius | W _a mm | 3118 | 3230 | 3230 | |
| 4.36 | Smallest pivot point distance | b ₁₃ mm | | | | |
| Performance | 5.1 | Travel speed laden | km/h | 25 | 25 | 25 |
| | 5.1.1 | Travel speed unladen | km/h | 25 | 25 | 25 |
| | 5.2 | Hoist speed laden | m/s | 0.50 | 0.40 | 0.40 |
| | 5.2.1 | Hoist speed unladen | m/s | 0.50 | 0.40 | 0.40 |
| | 5.3 | Lowering speed laden | m/s | 0.50 | 0.50 | 0.50 |
| | 5.3.1 | Lowering speed unladen | m/s | 0.40 | 0.40 | 0.50 |
| | 5.5 | Drawbar pull laden | N | 45230 | 45230 | 45230 |
| | 5.5.1 | Drawbar pull unladen | N | 31600 | 31600 | 31600 |
| | 5.7 | Gradeability laden | % | 31 | 24 | 24 |
| | 5.7.1 | Gradeability unladen | % | 32.5 | 27.5 | 27.5 |
| 5.9 | Acceleration time laden | s | 5.2 | 5.7 | 5.7 | |
| 5.9.1 | Acceleration time unladen | s | 4.2 | 4.7 | 4.7 | |
| 5.10 | Service brake | | Electrical / hydraulic. | Electrical / hydraulic. | Electrical / hydraulic. | |
| Engines | 7.1 | Engine manufacturer | | Deutz | Deutz | Deutz |
| | 7.1.1 | Model | | BF 04 M 2012 C | BF 04 M 2012 C | BF 04 M 2012 C |
| | 7.2 | Engine rating to ISO 1585 | kW | 74.9 | 74.9 | 74.9 |
| | 7.3 | Rated speed | 1/min | 2500 | 2500 | 2500 |
| | 7.4 | Number of cylinders | | 4 | 4 | 4 |
| | 7.4.1 | Cubic capacity | cm ³ | 4038 | 4038 | 4038 |
| 7.5 | Fuel consumption to VDI cycle | l/h | | | | |
| Miscellaneous | 8.1 | Drive control | | Stilltronic | Stilltronic | Stilltronic |
| | 8.2 | Working pressure for attachments | bar | 230 | 230 | 230 |
| | 8.3 | Oil flow for attachments | l / min | | | |
| | 8.4 | Sound level at driver's ear | dB(A) | 76.6 | 76.6 | 76.6 |
| | 8.5 | Towing coupler, Type / Model DIN | | Pin | Pin | Pin |

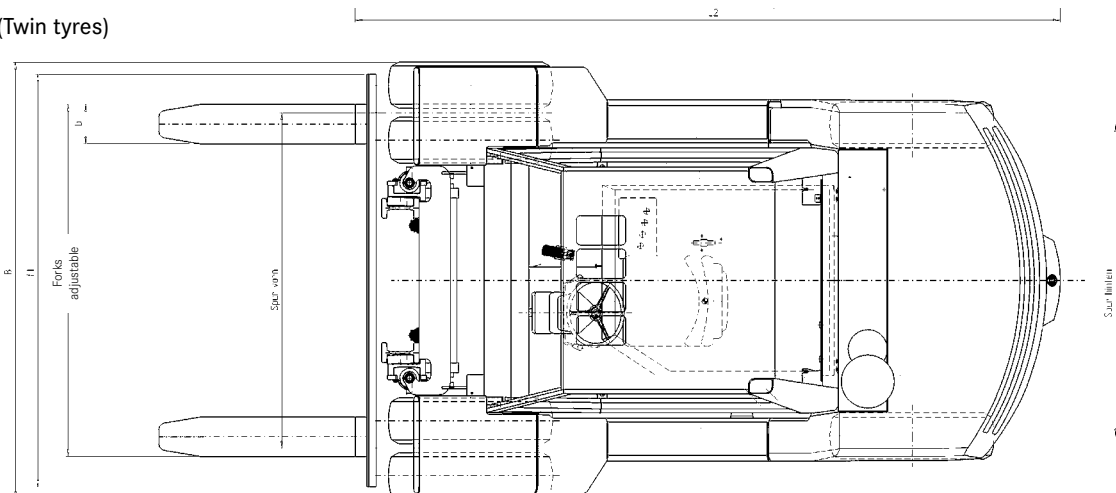
Dimensions in mm



R 70-60 / 70-70 (Single tyres)

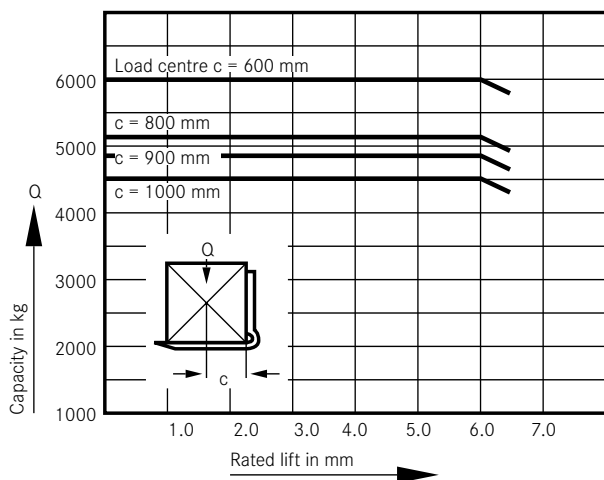


R 70-80 (Twin tyres)



The trucks shown in this brochure may include special equipment which is not included in the standard delivery specification.

Capacities R 70-60



Explanations

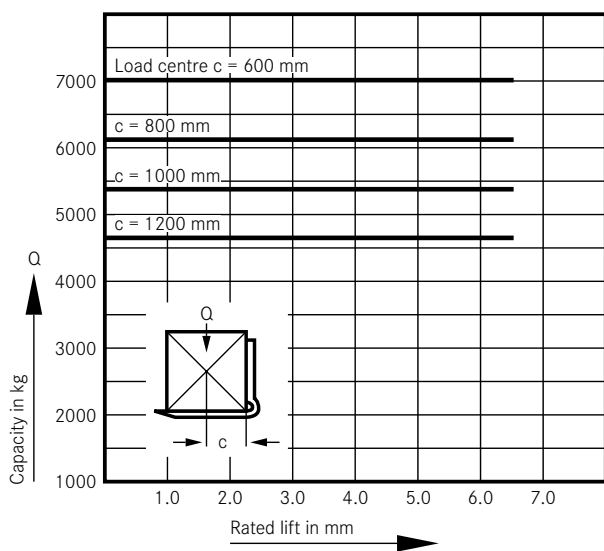
To line 5.9 Acceleration time:

Time for travel accelerating from rest, on a dry, level roadway 15 m long.

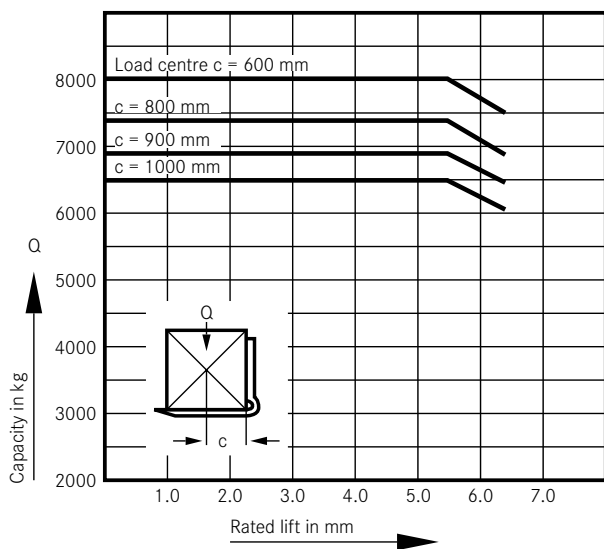
To line 8.4 Sound level:

Mean value at the driver's ear (L_m = average level) to DIN EN 12053 Part 36 with cab.

Capacities R 70-70



Capacities R 70-80



R 70 Technical data.

Drive.

The generator coupled to the engine generates current and feeds the electric drive motor through an electronic speed and power regulator.

The drive has the following advantages:

- The truck constantly holds the travel speed set by the foot pedal. It makes no difference whether it's going up hill or down, for safer driving and simplified operation.
- The travel speed is controlled independently of the lift speed. Therefore fast hoisting and slow driving (inching) can take place at the same time without special equipment or undue driver skill. This is completely free of wear, saves on operating costs and simplifies operation.
- The driver can adjust the driving characteristics to changing load or application conditions or to suit safety requirements at any time, e.g. for the transport of pallets of drinks. This gives a higher turnover of goods with greater safety.
- High reliability, long life and low maintenance costs.

Engine.

Turbocharged, water cooled, four cylinder DEUTZ engine. With a special injection process for improved fuel consumption and lower exhaust contaminants.

Optional particulate filters prevent the emission of nearly all soot particles. A choice of internal and external regeneration is available depending on the truck application.

Electrics.

The modern electrical system works digitally. The exchange of information between electrical assemblies e.g. between the drive controller and the cockpit is achieved using the CAN bus system already used successfully in road vehicles. The number of cables and plug connectors is reduced and the reliability increased. In addition to this it is easy to implement variants to the electrical equipment.

Driver's compartment.

Constant research and development have benefited the driver's compartment in the R 70:

- Low, wide step for greater safety on entry and exit.
- The cockpit has an LCD display and a pre-selection facility for the drive characteristics by the driver. He can select the best acceleration or braking and travel speeds for himself from 5 pre-set options. Other adjustments to the drive parameters to suit the application conditions and the turnover of goods can be made by simple changes to the software.
- The modern driving characteristics of the R 70 allow the truck to be held on a gradient or uneven roadway without touching the hand or foot brakes.
- Roomy foot well with inclined floor plate and non-slip rubber matting.
- Operation made simpler and easier for the driver because he can drive and brake using just the drive pedal.
- Automotive style hand brake to the right of the driver's seat.
- Adjustable steering column and longitudinal and rake adjustment of the seat provide an extremely comfortable working position for any physique.

- The driver is protected from vibrations which could damage his health, by:
 - resiliently mounted drive unit,
 - rubber mounting for driver's compartment,
 - hydraulically damped seat, adjustable to the driver's weight.
- Foot pedals arranged as they are in a car*. No driver learning curve.
- Wear free braking is achieved through the drive system: both to a standstill and then holding the truck in position. Even on a gradient, the R 70 will remain stationary until the drive pedal is depressed - holding it with the brake pedal is not necessary. This simplified operation takes the pressure off the driver when positioning the forks or the load.

Mast.

STILL clear view masts of Telescopic and Triplex design:

Nested I-beam mast sections with integral hoist cylinders and in-line rear mounted lift chains give the slimmest possible mast section for the clearest visibility. Other designs on request.

Steering.

Light, fully hydraulic servo-steering provides great manoeuvrability and thus a high throughput of goods. A single hydraulic pump supplies the hoist and steering systems. Hydraulic oil for the steering is diverted from the general hydraulic circuit by a priority valve. This reduces fuel consumption.

Overhead guard.

The overhead guard is available in different designs so that the R 70 can be adapted to a wide range of individual applications and driver requirements. Retro-fitting a cab to the R 70 can be done with ease.

Safety.

The R 70 complies with all applicable EC safety standards and carries the CE symbol.

*available with dual pedal control if required.



For further information on the R 70
please visit: www.still.de/R70

STILL GmbH
Berzeliusstraße 10
D-22113 Hamburg
Telephone: +49 (0)40/73 39-0
Telefax: +49 (0)40/73 39-16 22
info@still.de
www.still.de

Achieve more.