STILL

R 70-60

R 70-70

R 70-80

R 70 Technical Data.

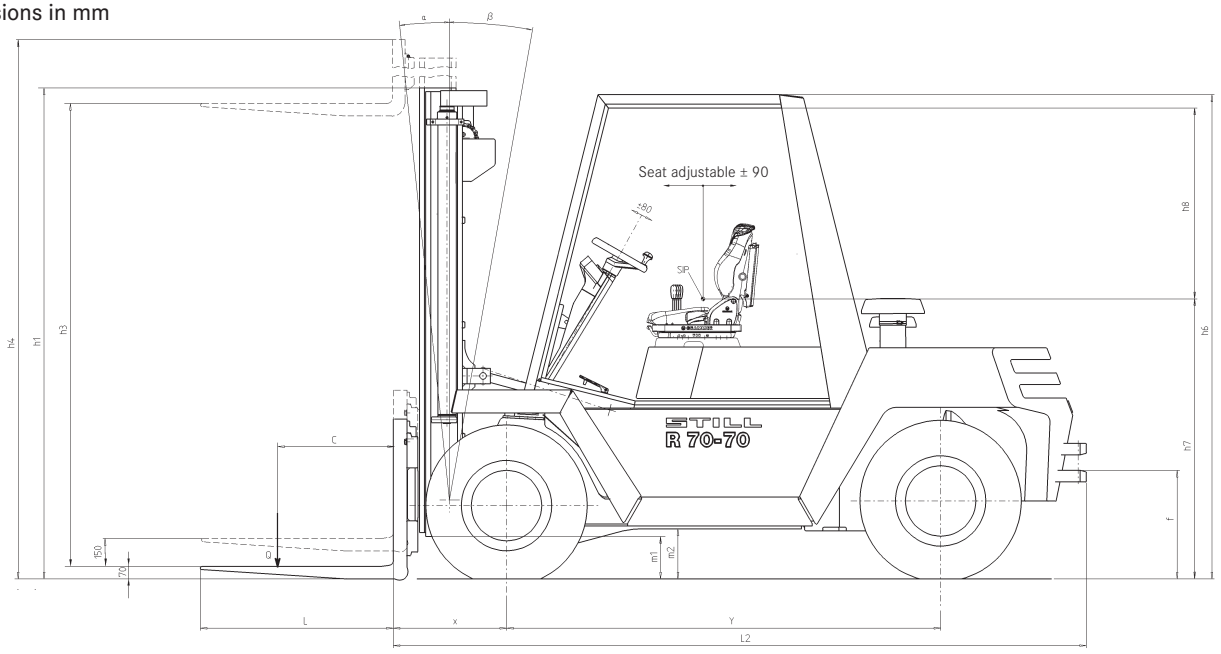
Diesel forklift trucks

first in intralogistics

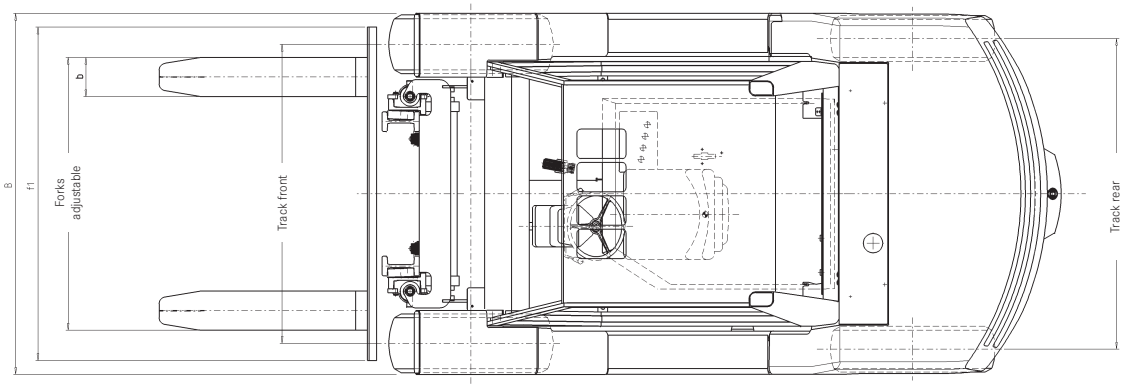
This specification sheet to DIN Guidelines 2198 only gives the technical figures for the standard truck.
Different tyres, other masts, additional equipment etc. could give different figures.

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.)			Seated	Seated	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	10667
	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		°	6	6	6
	4.1.1	Tilt mast/fork carriage, backwards		°	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	Length including fork backs	l_2	mm	3448	3593	3593
	4.21	Overall width	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	190	190	195
	4.32	Floor clearance, centre of wheel-base	m_2	mm	250	250	260
	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	24	24	24
	5.1.1	Travel speed unladen		km/h	24	24	24
	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	5.4	5.6
	5.9.1	Acceleration time unladen		s	4.2	4.7	5.0
	5.10	Service brake			electr. /hydr.	electr. /hydr.	electr. /hydr.
Engines	7.1	Engine manufacturer			Deutz	Deutz	Deutz
	7.1.1	Model			TCD 2012 L04	TCD 2012 L04	TCD 2012 L04
	7.2	Engine rating to ISO 1585		kW	74.9	74.9	74.9
	7.3	Rated speed		1/min	2400	2400	2400
	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	5.6	6.6	7.4
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

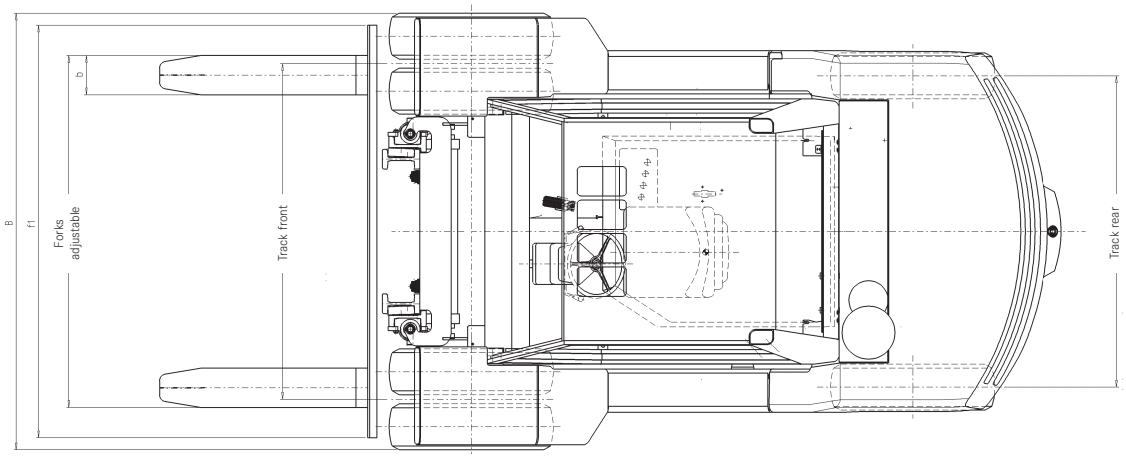
Dimensions in mm



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



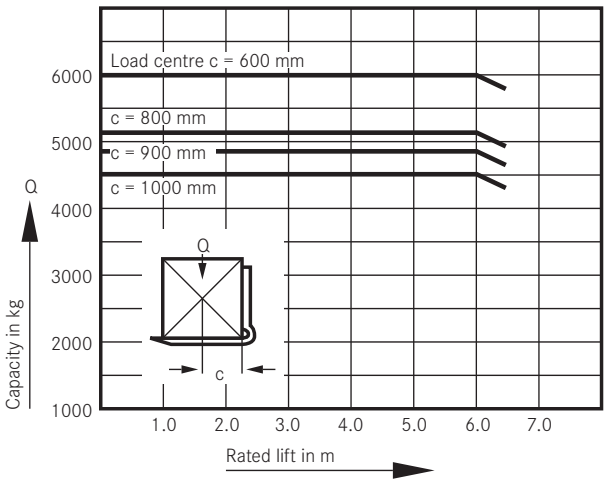
R 70-80 (Twin tyres)



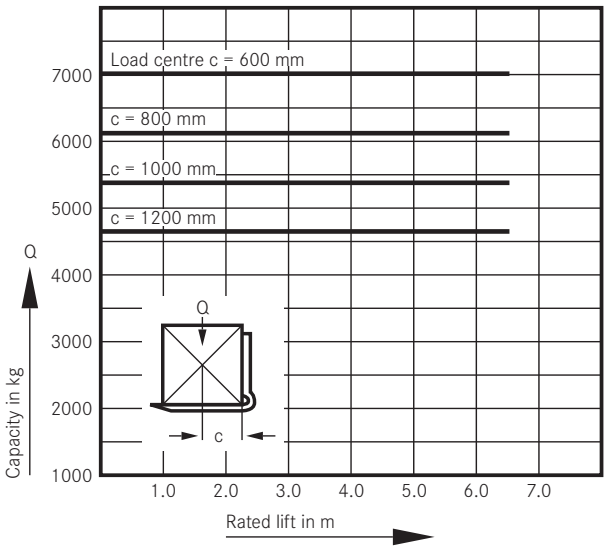
The trucks shown in this brochure may include special equipment which is not included in the standard delivery specification.

Basic capacities

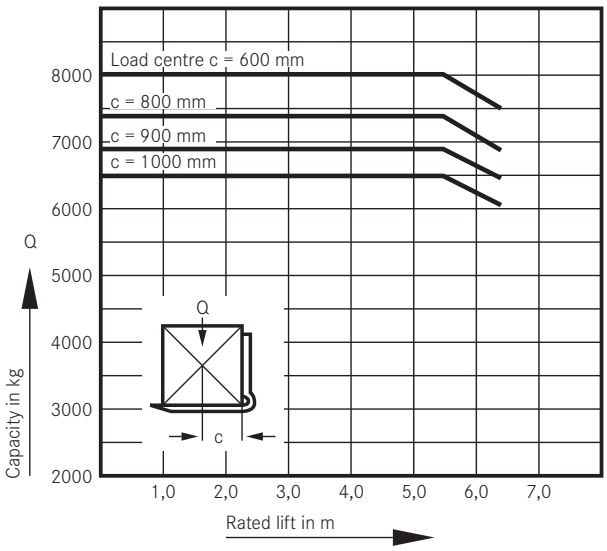
Capacities R 70-60



Capacities R 70-70



Capacities R 70-80



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 (Lm = average level) to DIN EN 12053 Part 36 with cab.

Drive.

The R 70 operates with a diesel-electric drive unit using hybrid-technology components. The generator coupled to the engine generates current and feeds the electric drive motors 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. This makes for safe driving and simplifies operation.
- Fast hoisting and slow driving (inching) can take place at the same time without further operation of the pedal because the travel speed is controlled independently of the lift speed. 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 means a higher turnover of goods and greater safety.
- High reliability, long life and low maintenance costs.

Engine.

Water cooled four cylinder DEUTZ engine with turbocharger. It features a special injection process for good fuel consumption figures and a low proportion of contaminants in the exhaust. Option: Particulate filters prevent the emission of soot particles. Efficiency up to 96%. A choice of internal and external regeneration, 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 (Controller Area Network) 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 up-to-date driving characteristics of the R 70 allow the truck to be held on a gradient or on uneven roadways without touching the hand or foot brakes. This means, for example, less damage when loading or unloading lorries.
- Roomy footwell 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 plus 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;
  - driver's compartment fitted using resilient rubber mounts;
  - damped seat, adjustable to the driver's weight.
- Automotive-style foot pedal arrangement.* No need for familiarisation.
- Wear-free braking down to a standstill through the drive and holding the truck in position when at rest. Even when the floor is far from level the R 70 will remain stationary if the driver is not pressing the drive pedal. Holding it with the brake pedal is not necessary. This simplification of operation takes the strain off the driver, who can therefore concentrate on positioning the fork tips or the load.

Mast.

STILL clear view masts of telescopic and triplex design.
The nested I-beam mast sections with the integral hoist cylinders and in-line rear-mounted lift chains give the slimmest possible mast section for the best clear visibility. Other special designs on request.

Steering.

The free-moving, fully hydraulic servo steering provides great manoeuvrability and thus a high turn round of goods. The hydraulic oil for the steering is diverted from the general hydraulic circuit by a priority valve. A variable displacement hydraulic pump supplies the hoist and steering systems. This reduces the fuel consumption.

Overhead guard.

So that the R 70 is adaptable to the widest variety of applications and drivers' requirements the overhead guard is available in different designs.
Even retro-fitting a cab to the R 70 is easily possible.

Safety.

The STILL clear view mast and the good all round visibility right up to the R 70 itself give the driver the best security against running into people and objects.

* available with dual pedal control if required.