

R 70 Technical Data.

LP Gas Trucks

R 70-35T

R 70-40T

R 70-45T

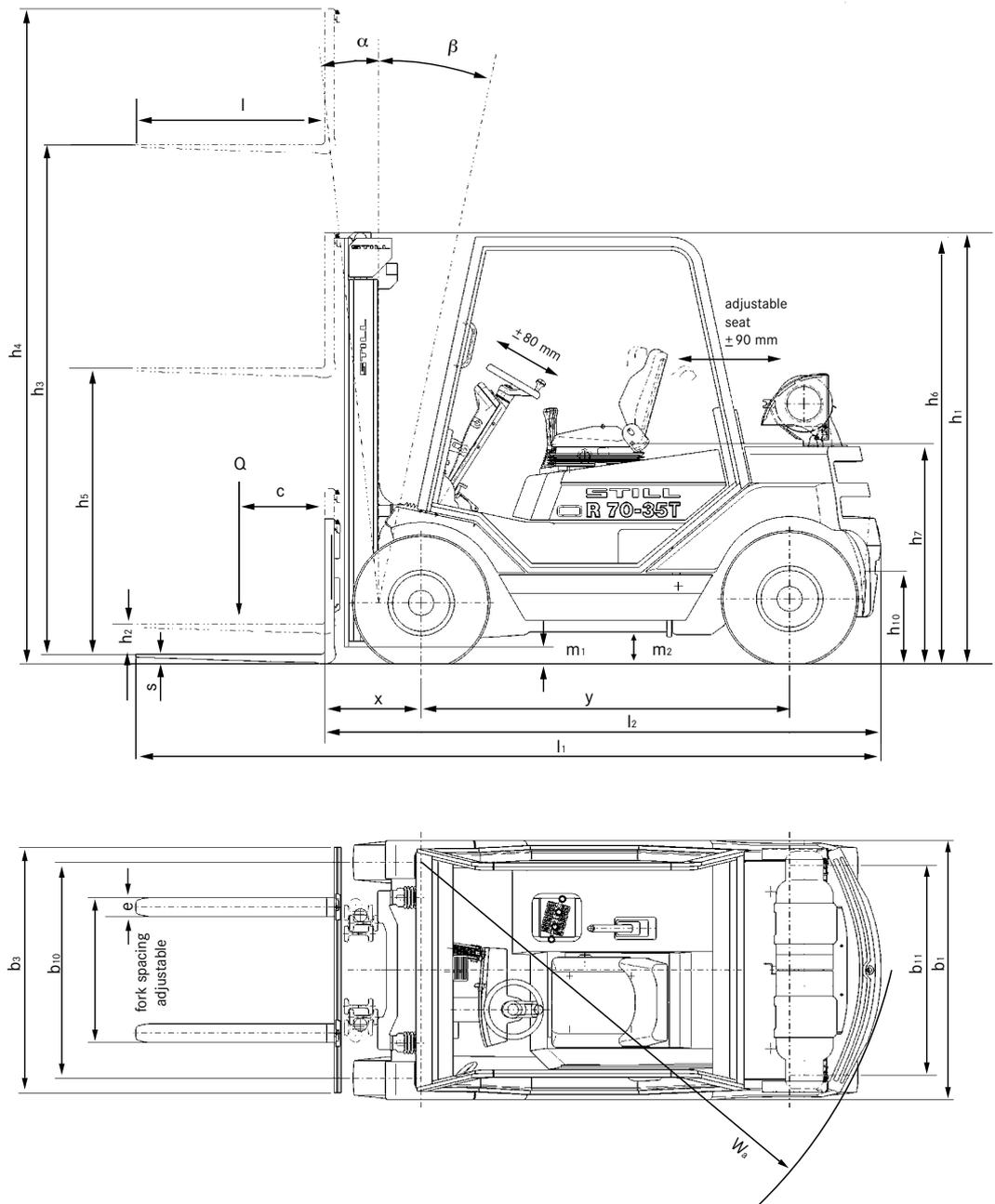


R 70 Technical Data.

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 70-35 T	R 70-40 T	R 70-45 T	
	1.3	Power supply - electric, diesel, petrol, gas, mains electric		gas	gas	gas	
	1.4	Type of control - hand, pedestrian, stand-on, rider seated		rider seated	rider seated	rider seated	
	1.5	Carrying capacity / load	Q	kg	3500	4000	4500
	1.6	Load centre	c	mm	500	500	500
	1.8	Load distance	x	mm	510	510	510
	1.9	Wheelbase	y	mm	2030	2030	2030
	Weight	2.1	Weight		kg	6160	6160
2.2		Axle loadings laden front		kg	8200	8950	9640
2.2.1		Axle loadings laden rear		kg	1420	1220	1310
2.3		Axle loadings unladen front		kg	2950	2950	2895
2.3.1		Axle loadings unladen rear		kg	3210	3210	3645
Wheels tyres	3.1	Tyres - rubber (V), superelastic (SE), pneumatic (L), polyurethane (PE)		L / SE	L / SE	L / SE	
	3.2	Tyre size - front		250-15 / 18 PR	250-15 / 18 PR	250-15 / 18 PR	
	3.3	Tyre size - rear		250-15 / 18 PR	250-15 / 18 PR	250-15 / 18 PR	
	3.5	Wheels - number front (x = drive wheel)		2x (4x)	2x (4x)	2x (4x)	
	3.5.1	Wheels - number rear (x = drive wheel)		2	2	2	
	3.6	Track width - front	b ₁₀	mm	1150 (1336)	1150 (1336)	1150 (1336)
Dimensions	3.7	Track width - rear	b ₁₁	mm	1120	1120	1120
	4.1	Tilt angle, mast / fork carriage forwards		degrees	6	6	6
	4.1.1	Tilt angle, mast / fork carriage backwards		degrees	12	12	12
	4.2	Closed height	h ₁	mm	2400	2400	2400
	4.3	Free lift	h ₂	mm	160	160	160
	4.4	Lift height	h ₃	mm	3320	3320	3320
	4.5	Height, mast raised	h ₄	mm	4130	4130	4183
	4.7	Height to top of overhead guard (cabin)	h ₆	mm	2320	2320	2320
	4.8	Seat height	h ₇	mm	1196	1196	1196
	4.12	Coupling height	h ₁₀	mm	493	493	493
	4.19	Overall length	l ₁	mm	4022	4022	4080
	4.20	Length to front face of forks	l ₂	mm	3022	3022	3080
	4.21	Overall width	b ₁	mm	1380 (1769)	1380 (1769)	1380 (1769)
	4.22	Fork thickness	s	mm	50	50	50
	4.22.1	Fork width	e	mm	100	120	120
	4.22.2	Fork length	l	mm	1000	1000	1000
	4.23	Fork carriage to DIN 15173 - class / form A or B			ISO III B	ISO III B	ISO III B
	4.24	Fork carriage width	b ₃	mm	1310	1310	1310
	Performance	4.31	Ground clearance beneath mast, laden	m ₁	mm	120	120
4.32		Ground clearance at centre of wheelbase	m ₂	mm	165	165	165
4.33		Aisle width for pallets 1000 x 1200 wide	A _{st}	mm	4460	4460	4610
4.34		Aisle width for pallets 800 x 1200 long	A _{st}	mm	4460	4460	4810
4.35		Outer turning radius	W _a	mm	2750	2750	2900
4.36		Inner turning radius	b ₁₃	mm			
5.1		Speed laden		km / h	24	24	24
5.1.1		Speed unladen		km / h	24	24	24
5.2		Lift speed laden		m / s	0.43	0.41	0.4
5.2.1		Lift speed unladen		m / s	0.43	0.41	0.4
5.3		Lowering speed laden		m / s	0.5	0.5	0.53
5.3.1		Lowering speed unladen		m / s	0.4	0.4	0.4
5.5		Rated drawbar pull laden		N	24000	24000	22600
5.5.1	Rated drawbar pull unladen		N	14900	14900	14900	
5.7	Gradeability laden		%	25	24	22	
5.7.1	Gradeability unladen		%	27	26	26	
5.9	Acceleration time laden		s	5.4	5.5	5.7	
5.9.1	Acceleration time unladen		s	4.4	4.6	4.7	
5.10	Brakes			electr. / hydr.	electr. / hydr.	electr. / hydr.	
Engine	7.1	Engine manufacturer		Perkins	Perkins	Perkins	
	7.1.1	Type		1004.40 S	1004.40 S	1004.40 S	
	7.2	Engine rated power to ISO 1585		kW	51	51	51
	7.3	Rated rpm		1 / min	2100	2100	2100
	7.4	No. of cylinders			4	4	4
	7.4.1	Displacement		cm ³	3990	3990	3990
7.5	Fuel consumption		l / h				
Other	8.1	Drive control		Stilltronic	Stilltronic	Stilltronic	
	8.2	Operating pressure for attachments		bar	210	210	210
	8.3	Oil flow for attachments		l / min			
	8.4	Average noise peak at operator's ears		dB(A)	76	76	76
	8.5	Trailer coupling, type / DIN			pin	pin	pin

The models depicted in this brochure may contain special parts or attachments which are not supplied as standard.



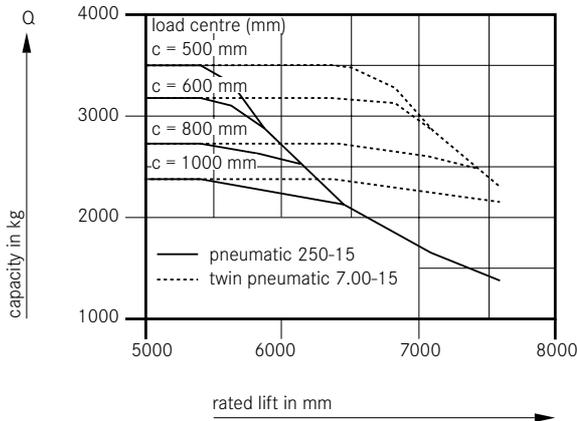
Mast types in use with pneumatic or superelastic tyres.

			Telescopic				Full free lift (HiLo)				Triple		
	Width (single front wheel)	b ₁ mm	1380				1380				1380		
	Width (twin front wheels)	b ₁ mm	1769				1769				1769		
	Load distance	x mm	510				510				537		
	Angle of tilt	α β °	6	8*	6	8*	3	8*	6	8*	3	8*	
R 70-35/40 T	Rated lift	h ₃ mm	3220-3420	3520-4020	4120-5020	2370-3570	3670-4170	4270-4770	3330-7530				
	Height, mast lowered	h ₁ mm	2350-2450	2500-2750	2800-3250	1850-2450	2500-2750	2800-3050	1850-3250				
	Height, mast raised	h ₄ mm	4030-4230	4330-4830	4930-5830	3280-4380	4480-4980	5080-5580	4155-8355				
	Free lift	h ₂ /h ₅ mm	160				1070-1670	1720-1970	2020-2270	1070-2470			
	Overall length	l ₂ mm	3022				3022				3049		
	Working aisle width Ast	A _{st} mm	4460 / 4660				4460 / 4660				4487 / 4687		
Pallet 1000 x 1200 wide 800 x 1200 long													
R 70-45 T	Rated lift	h ₃ mm	3220-3420	3520-4020	4120-5020	2270-3470	3570-4070	4170-4470	3180-7380				
	Height, mast lowered	h ₁ mm	1850-2450	2500-2750	2800-3250	1850-2450	2500-2750	2800-2950	1850-3250				
	Height, mast raised	h ₄ mm	3083-4283	4383-4883	4983-5883	3080-4280	4380-4880	4980-5280	4005-8205				
	Free lift	h ₂ /h ₅ mm	160				1070-1670	1720-1970	2020-2170	1070-2470			
	Overall length	l ₂ mm	3080				3080				3107		
	Working aisle width Ast	A _{st} mm	4610 / 4810				4610 / 4810				4637 / 4837		
Pallet 1000 x 1200 wide 800 x 1200 long													

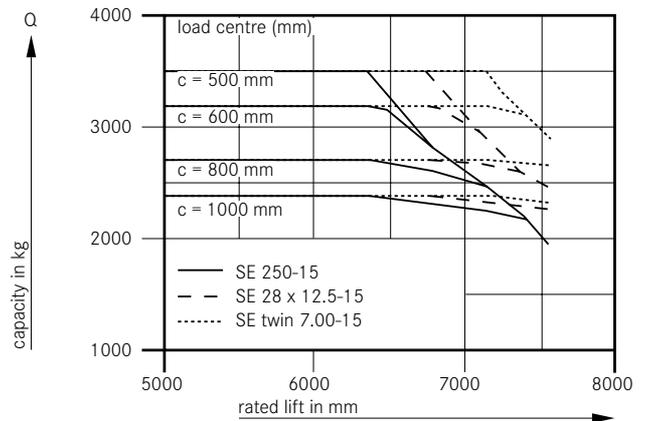
** with front screen 6° max. backward tilt

** with front screen up to 2550 mm closed height 6° max. backward tilt

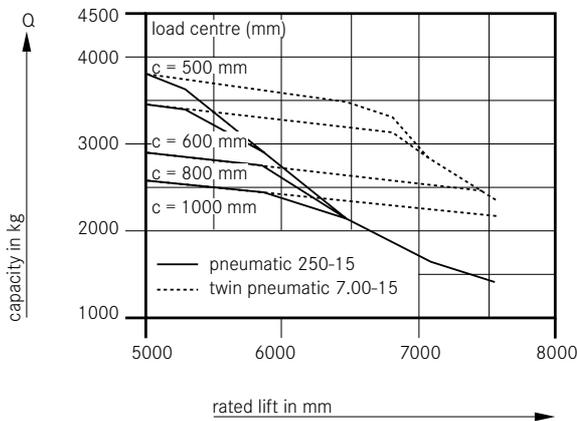
Capacity Chart R 70-35 T Telescopic, HiLo, and Triple mast



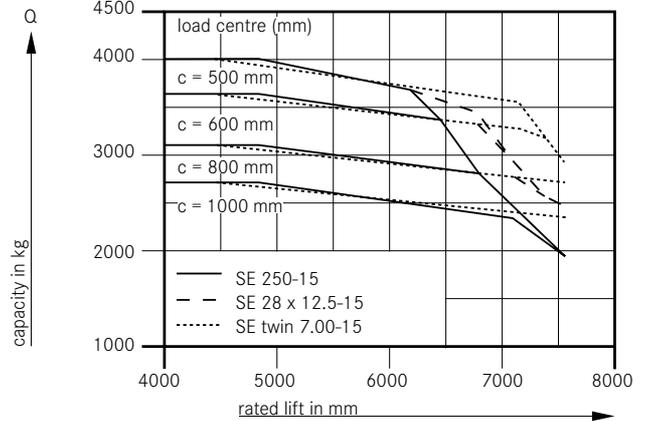
Capacity Chart R 70-35 T Telescopic, HiLo, and Triple mast



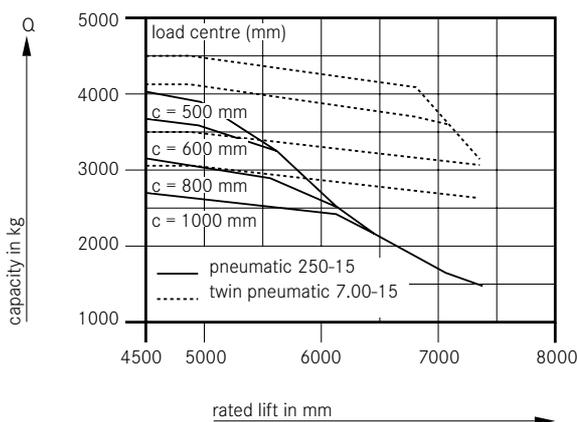
Capacity Chart R 70-40 T Telescopic, HiLo, and Triple mast



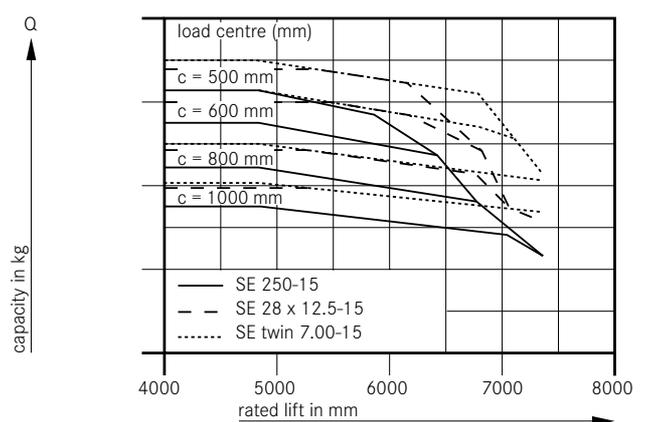
Capacity Chart R 70-40 T Telescopic, HiLo, and Triple mast



Capacity Chart R 70-45 T Telescopic, HiLo, and Triple mast



Capacity Chart R 70-45 T Telescopic, HiLo, and Triple mast



Drive.

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

The drive has the following advantages:

- The truck constantly holds the speed set by the foot pedal regardless of gradient. This makes for safe driving and simplifies 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.

This is completely free of wear, saves on operating costs and simplifies operation.

- 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.

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- The driver can electronically adjust the performance characteristics at any time to suit the job in hand. Thus, he can adapt his truck to all working conditions and thereby achieve maximum productivity.
- The R 70 enjoys the high reliability, long life and low maintenance costs of an electric drive.

Cruise Control (Tempomat):

Optionally, the STILL R 70 can be supplied with Cruise Control. For travel speeds of 6 kph and above, by pressing a key on the control console, the truck will maintain a constant driving speed. For travel distances of 20 metres and above, the Cruise Control offers enormous advantages. The truck runs more smoothly and quietly and the travelling comfort for the driver is improved.

Economy:

Diesel-electric drives are particularly economical for many reasons.

- The fuel usage is minimised even with the engine working in partial load ranges. This gives the optimum fuel consumption, particularly in the typical short work cycle applications (start, accelerate, reverse, brake, stop).

Electrics.

The digital electrical system allows simple adaptation to altered operating conditions. 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 other types of vehicle. The number of cables and plug connectors is reduced in comparison to the previous system and thus reliability is increased. In addition, it is easy to implement variants to the electrical equipment.

Driver's compartment.

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

- The cockpit has an LCD display and a facility for the driver to select from a range of pre-set drive performance levels. He can select the most suitable acceleration or braking and travel speeds from 5 pre-set options. Further adjustments of the drive parameters to suit the application conditions can be made by simply altering the software.
- Automotive style pedal arrangement*, no driver learning curve.
- Roomy footwell with inclined floor plate and non-slip rubber matting.
- Automotive style handbrake to the right of the driver's seat.
- Drive and braking regulated by the drive pedal position make it simple and easy for the driver.
- Adjustable steering column plus reach and rake adjustment for the seat provide an extremely comfortable working position for any physique.
- The driver is protected from vibrations which could cause injury by the
 - resiliently mounted drive unit
 - rubber mounting for driver's compartment
 - hydraulically damped seat, adjustable to the driver's weight.



Driver's compartment.

Mast.

STILL clear view masts in telescopic, HiLo and triplex designs for every application:

- Telescopic: Suitable for most applications. Economical mast design. The hoist chains are run in protective guide rails. This prevents noise and increases chain life.
- HiLo: For high stacking under low ceilings. Utilises the space right up to the roof.
- Triplex: For applications with low doorways and greater stacking heights.

Nested I-beam mast sections with integral hoist cylinders and in-line rear mounted lift chains give the best clear visibility. Attachment hoses do not obstruct the driver's vision and with no hose reels, are virtually wear-free in operation.

Overhead guard.

The overhead guard is available in different designs so that the R 70 can be adapted to a wide range of applications and driver requirements.

Safety.

The STILL clear view mast and good all round visibility ensure the highest possible safety levels. The new R 70 complies with all applicable EC safety requirements and regulations. It thus carries the "CE" symbol.

* available with twin pedal control if required



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

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