



RX 50-10

RX 50-13

RX 50-15

RX 50-16

RX 50 Technical Data.

Electric Forklift Trucks

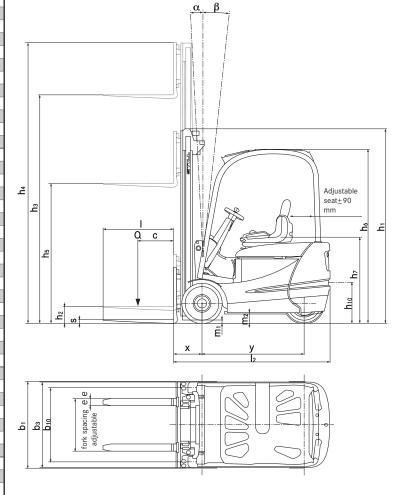


In accordance with VDI guidelines 2198, this specification applies to the standard model only. Alternative tyres, mast types, ancillary equipment, etc. could result in different values.

Weights Characteristics	1.1 1.2 1.3 1.4 1.5	Manufacturer Manufacturer's model designation Manufacturer's model designation Control - hand, pedestrian, stand-on, rider seated			STIL RX 50			STILL RX 50-13				
Weights Characteristics	1.3 1.4 1.5 1.6	Manufacturer's model designation				-10	1	CI-UC AA				
Wheels tyres Weights	1.4 1.5 1.6				elect	rio						
Wheels tyres Weights	1.5				rider se							
Wheels tyres Weights	1.6	Carrying capacity/load	Q	kg	100							
Wheels tyres Weights	4 0	Load centre	С	mm	500							
Wheels tyres Weights	1.8	Load distance	Х	mm	298	}		325				
Wheels tyres Weights	1.9	Wheelbase (Mast Forward/Vertical/Back)	у	mm	997 10	30 1096	1079	1112	1178	1129		
Wheels tyres Weigh	2.1	Weight		kg	2228	2210	2538	2520	2502	2748		
Wheels tyres	2.2	Axle loadings laden front		kg	2847	2805	3279	3265	3251	3697		
Wheels tyres	2.2.1	Axle loadings laden rear		kg		405	509	505	497	551		
Wheels tyres	2.3.1	Axle loadings unladen front Axle loadings unladen rear		kg kg	1072 1156	1060 1150	1102	1090	1074 1424	1132		
Wheels tyres	3.1	Tyres - rubber (V), SE, pneu. (L), poly. (PE)		Ng	V	SE	V	SE	1424	V		
Wheels tyre	3.2	Tyre size - front			16 x 6 x 10 1/2	16 x 6-8	16 x 6 x 10 1/2	18 x 7-8	18 x 7-8/16PR	16 x 7 x 10		
Wheels	3.3	Tyre size - rear			16 x 6 x 10 1/2	16 x 6-8	16 x 6 x 10 1/2	18 x 7-8	<u> </u>	16 x 7 x 10		
Whee	3.5	Wheels - number front (x = drive wheel)			2			2				
- 1	3.5.1	Wheels - number rear (x = drive wheel)			1x			1x 842	870			
	3.6	Track width - front	b ₁₀	mm	848		835	853				
\rightarrow	3.7	Track width - rear	b ₁₁	mm	0 3							
	4.1.1	Tilt angle, mast/fork carriage forwards		0	6							
1 h	4.1.1	Tilt angle, mast/fork carriage backwards Closed height	h ₁	mm	226	0						
	4.3	Free lift	h ₂	mm	150							
	4.4	Lift height	hз	mm	343			150 3430				
	4.5	Height, mast raised	h ₄	mm	408			4080				
	4.7	Height to top of overhead guard (cabin)	h ₆	mm	2065			2080**				
	4.8	Seat height	h ₇	mm	920			935 435				
	4.12	Coupling height	h ₁₀	mm	420							
	4.19	Overall length Length to front face of forks	I ₁	mm mm	242 162			2527 1727				
	4.21	Overall width	b ₁	mm	1006	998	993	996	1043	1037		
ji e	4.22	Fork thickness	S	mm	35		770	35	1010	1007		
i i	4.22.1	Fork width	е	mm	80			80				
ĺ	4.22.2	Fork length	I	mm	800)		800				
1 h	4.23	Fork carriage to DIN 15173 - class/form A or B		ISO II B								
	4.24	Fork carriage width	bз	mm	980			980				
	4.31	Ground clearance beneath mast, laden	m ₁	mm		90		90				
	4.32	Ground clearance at centre of wheelbase Aisle width for pallets 1000 x 1200 wide	M ₂	mm mm		100 2955		3058				
1 h	4.34	Aisle width for pallets 800 x 1200 long	Ast	mm	307			3180				
	4.35	Outer turning radius	Wa	mm	132			1403				
	4.36	Inner turning radius	b13	mm								
1 k	5.1	Speed laden		km/h	11.			12 12.5				
	5.1.1	Speed unladen		km/h	12							
1 1	5.2	Lift speed laden		m/s								
1 1	5.2.1	Lift speed unladen Lowering speed laden		m/s	0.52 0.54			0.52				
1 1	5.3.1	Lowering speed laderi		m/s m/s	0.5							
	5.5	Rated drawbar pull laden		N	165							
ance	5.5.1	Rated drawbar pull unladen	N		1950							
m	5.6	Max. drawbar pull laden	N			2840		3500 7500				
	5.6.1	Max. drawbar pull unladen		N	8200							
1 h	5.7	Gradeability laden		%	6.5			5				
	5.7.1	Gradeability unladen		%	11			8.5 19				
	5.8 5.8.1	Max. gradeability laden Max. gradeability unladen		% %	19 25							
	5.9	Acceleration time laden		/0 S	5.3			25 5.4				
1 k	5.9.1	Acceleration time laden Acceleration time unladen		S		4.7		4.8				
	5.10	Brakes			hydra			hydraulic				
	6.1	Drive motor hourly capacity		kW	4.5			4.5				
	6.2	Hoist motor capacity at 20% duty factor		kW	7.8			7.8				
Sis	6.3	Battery equipment to DIN 43531/35/36 A, B, C, no			DIN 435			DIN 43535 A				
	6.4	Battery voltage	U	V	24			24 805 (500-875)			
1 1	6.4.1	Battery capacity Battery weight	K ₅ Ah		, ,							
	6.5	Energy consumption 60 VDI work cycles/hour		kg kWh/h	3.3			4.0				
-	8.1	Drive control		,11	Stilltronic-		St	illtronic-Impul	se			
i i	8.2	Operating pressure for attachments		bar								
] th	8.3	Oil flow for attachments		I/min	20			20				
ا ۱	8.4	Average noise peak at operator's ears		dB(A)	< 70			< 70				
	8.5	Trailer coupling, type/DIN			pin			pin				

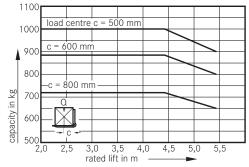
 $^{^{\}star}$ Overhead guard height above 1965 mm available ** Overhead guard height above 1980 mm available

	STILL			STILL					
	RX 50-15			RX 50-16					
	electric rider seated			electric rider seated					
	1500			1600					
	500			500					
	325			330					
	1162	1228	1129	1162	1228				
	2730	2702	2798	2780	2762				
	3685	3673	3878	3875	3854				
	545 1120	539 1108	520 1142	505 1130	508 1118				
	1610	1604	1656	1650	1644				
	SE	L	V	SE	L				
1/2	18 x 7-8	18 x 7-8/16PR	16 x 7 x 10 1/2	18 x 7-8	18 x 7-8/16PR				
1/2	18 x 7-8	18 x 7-8/16PR	16 x 7 x 10 1/2	18 x 7-8	18 x 7-8/16PR				
	2			2					
	1x 842	870	853	1x 842	870				
	0	670	655	0	670				
	3			3					
	6			6					
	2260			2260					
	150			150					
	3430			3430					
	4080 2080**			4080 2080**					
	935			935					
	435			435					
	2577			2582					
	1777			1782					
	996	1043	1037	996	1043				
	35 80			40 80					
	800			800					
	ISO II B			ISO II B					
	980			980					
	90			90					
	100			100					
	3108 3230			3117 3239					
	1453			1458					
	1,00			1 100					
	12			12					
	12.5			12.5					
	0.3			0.3					
	0.52 0.54			0.52					
	0.6			0.6					
	1280			1240					
	1670			1670					
	3770			3470					
	7500 4			7500 4					
	8			7.5					
	16			15					
	25		25						
	5.5			5.6					
	4.9			5					
	hydraulic 4.5			hydraulic 4.5					
	7.8			7.8					
	DIN 43535 A			DIN 43535 A					
	24			24					
ç	20 (700-1000)		(920 (700-1000))				
676			676						
4.4 Stilltronic Impulso			4.5						
Stilltronic-Impulse 230			Stilltronic-Impulse 230						
	20			20					
	< 70			< 70					
	pin			pin					



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

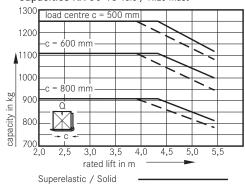
Capacities RX 50-10 Tele / HiLo mast



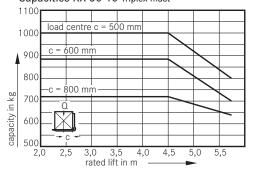
Superelastic / Solid

Pneumatic — —

Capacities RX 50-13 Tele / HiLo mast

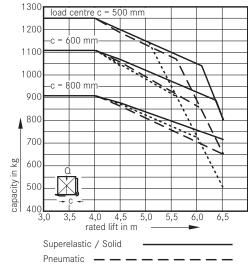


Capacities RX 50-10 Triplex mast



Superelastic / Solid

Capacities RX 50-13 Triplex mast

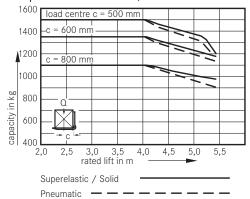


Triplex, narrow; SE -----

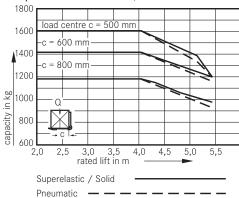
<u></u>											
Ma	ast Types.	Telescopic-Mast				HiLo	-Mast	Triplex-Mast			
	Lift Height	h₃	2630-3430	3530-4430	4530-4830	4930-5430	2775-3475	3575-4075	4020-4470	4620-4920	5070-5520
	Closed Height	h ₁	1860-2260	2310-2760	2810-2960	3010-3260	1860-2210	2260-2510	1860-2010	2060-2160	2210-2360
	Free Lift	h ₂	150			1230-1580	1630-1880	1230-1380	1430-1530	1580-1730	
	Overall Height Raised	h ₄	3280-4080	4180-5080	5180-5480	5580-6080	3425-4125	4225-4725	4670-5120	5270-5570	5720-6170
	Angle of Tilt	α β	3/6				3,	/6	3/5		
	Wheelbase*	у		997/100	30/1096		997/1030/1096		1017/1050/110		
50-10	Overall Width	b ₁ SE	998				998		1062		
20		V	1006				10	06	1098		
≊	Load Distance	Х	298				2'	98	298		
	Aisle Width Pallet 1000 x 1200 across 800 x 1200 long	A_{st}	2955/3075				2960	/3080	2980/3100		
	Angle of Tilt	α β	3/6				3,	/6	3/5		
	Wheelbase*	у		1079/11	12/1178		1079/11	12/1178	1099/1132/118		
_	Overall Width	b ₁ SE	996			996		1186			
50-13		V	993			993		1127			
RX 5		L	1043 1205				1043		1205		
"	Load Distance	Х	325				3:	25	325		
	Aisle Width Pallet 1000 x 1200 accross 800 x 1200 long	A _{st}	3058/3180				3058	/3180	3082/3199		
	Angle of Tilt	α β	3/6				3,	/6	3/5		
	Wheelbase*	у		1129/11	62/1228		1129/11	62/1228	1149/1182/123		
ا ۱ ا	Overall Width	b ₁ SE	996				91	96	1186		
50-15		V	1037				10	37	1139		
RX 5		L	10	43	12	205	10	143			1205
"	Load Distance	Х	325			325				325	
	Aisle Width	A _{st}	3108/3230			3108/3230		3128/3249			
	Pallet 1000 x 1200 accross 800 x 1200 long	Ast	<u>'</u>			3108	/ 5230			3120/3249	
	Angle of Tilt	α β	3/6				3/6				3/5
	Wheelbase*	у	1129/1162/1228			1129/1162/1228		1149/1182/123			
。	Overall Width	b ₁ SE	996			91	96	1186			
50-16		V	1037		1037		1139		1139		
X 5		L	10	43	12	205	10	143			1205
"	Load Distance	Х	330			3:	30	330			
	Aisle Width Pallet 1000 x 1200 accross 800 x 1200 long	A _{st}	3108/3230				3317/3239				3117/3239

^{*} Mast Forward/Vertical/Backward

Capacities RX 50-15 Tele / HiLo mast

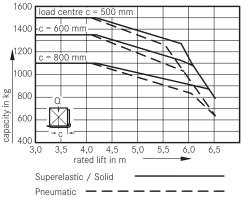


Capacities RX 50-15 Tele / HiLo mast

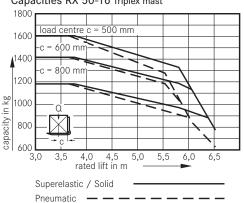


Triplex-Mast, Narrow 5620-5920 | 6070-6370 | 4020-4320 | 4470-4770 | 4920-5220 | 5370-5770 | 5920-6370 2610-2710 1860-1960 2010-2110 2260-2260 2310-2510 2460-2560 1230-1330 | 1380-1480 | 1530-1630 | 1680-1880 | 1930-2080 1830-1930 | 1980-2080 6270-6570 | 6720-7020 | 4670-4970 | 5120-5420 | 5570-5870 | 6020-6420 | 6570-7020 3/5 1099/1132/1187 1073 1005 325 3082/3199 3/5 3/4 1149/1182/1237 1149/1182/1225 1073 1049 325 3128/3249 3/5 3/4 1149/1182/1237 1149/1182/1225 1073 1049 330 3137/3259

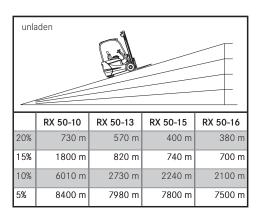
Capacities RX 50-15 Triplex mast



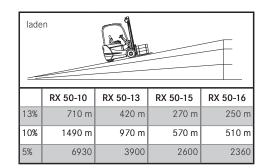
Capacities RX 50-16 Triplex mast



Gradients (dry rough concrete surface - coefficient of friction = 0.8, SE tyres). Permissible travel distance per hour in metres.



Example RX 50-13 (laden and with SE tyres). Gradient 10%, 10 m long. This gradient can be negotiated 97 times an hour.



Drive.

The 24 volt 3-phase drive motor acts directly on the steered rear wheel of the RX 50 and ensures high performance capability and driving dynamics. The 3-phase drive (ASM Technology) provides rapid acceleration and high gradeability. Because it is totally enclosed and there are no carbon brushes, the drive motor is maintenance-free. The drive motor acts directly on the rear steered wheel where there is a long turning radius, providing optimum drive efficiency. For frequent and tight curves, depending on the work cycle, up to 30% less energy is consumed than with twin-motor frontwheel drives. The drive is also suitable for freeing tightly wedged pallets in containers, wagons or lorries. Thanks to its electrical regenerative braking the motor can feed back up to 15% of the energy into the battery when the accelerator pedal is released, depending on the application, and thus increases the useful work from a battery charge by up to 1.5 hrs. This means that intermediate charging or changing of the battery is often not needed, or the use of a smaller battery might be possible.

Wear free electrical braking also leads to 90% less wear on the brake linings and further reduces the maintenance costs. Sensitive driving with optimal energy utilisation is guaranteed by the STILL controller. This also makes it possible to hold the truck on a ramp without using the brakes, providing greater safety and driving convenience. The drive controller is protected within the counterweight on which it is directly mounted. The heat from the controller is dissipated by the large area of the counter weight. This arrangement gives very good cooling without additional fans and makes work agreeably quiet and reliable.

Electrical system.

The electrical system of the RX 50 is digital in operation with information exchange between the electrical assemblies through a CAN bus system which is already used successfully in the automobile industry. The reduction in the number of cables and plug connectors improves the operational reliability and allows other electrical equipment to be retrofitted easily using pre-installed terminals.

Mast.

The STILL clear view mast is supported high on the frame and connected to the front axle at the bottom. Due to the wide spacing of these points the mast retains high rigidity with no twisting of the mast section. Depending on the application, Telescopic, HiLo or Triplex designs are available.

- Telescopic suitable for many applications, economical and gives a clear-view through the mast.
- HiLo supplements the Telescopic mast with an additional central full free lift cylinder for high stacking under low ceilings, to utilise the space right up to the roof.
- Triplex for applications with low doorways but high stacking heights to utilise the space right up to the roof.

The nested I-beam mast sections with integral hoist cylinders and in-line rear mounted lift chains, in conjunction with the slim profile of the fork carriage, give excellent visibility. The hydraulic hoses are run in the dead visibility area of the mast sections - with no hose reels - for optimum visibility and wear-free operation, even with attachments.

Moving front axle.

The length of the wheelbase is altered by around 100 mm by means of a centrally located cylinder acting on the front axle. This variable wheelbase gives the following advantages when extended:

- More driving comfort due to fewer rocking movements and greater safety when transporting loads.
- Reliable transfer of the driving force to the floor due to up to 56% greater contact pressure on the rear wheel because of the longer lever arm of the front axle. This is particularly helpful when driving on ramps.
- Saves unnecessary extra weight on the rear wheel by redistribution of weight and a larger radius of action for lower energy consumption from one battery charge.
 Benefits of a shorter wheelbase:
- Greater manoeuvrability for better utilisation of storage space and less shunting.

Hydraulic system.

Thanks to the STILL controller, the speed of the pump motor is regulated exactly, according to demand, by the position of the valve lever or the steering wheel. This allows longer use from one battery charge.

Sensitive operation of the hydraulics increases the working safety due to highly accurate lifting. The pump draws the oil from the tank through a filter, so that all hydraulic units are supplied with clean oil. This reduces the wear to a minimum. The hydraulics themselves also improve energy consumption by:

- The high efficiency of the hydraulic pump even at low speeds (e.g. when steering). Bronze coated wear discs with very low friction properties seal the gears against the housing and guarantee a loss-free oil flow within the pump.
- By replacing the pressure relief type anti-cavitation valve with a load retaining valve, the pump does not have to overcome a pre-set valve preload with a specific hydraulic pressure. For example, when tilting without a load.
- The priority valve is directly connected to the pump so that hydraulic interfaces and hoses are not needed. Leakage is avoided and a safer, cleaner operation guaranteed. The same applies to a pressure relief valve for attachments which are located directly on the valve block.

Driver's compartment.

- The low entry height, large footwell and inclined floor plate with anti-slip lining, ensure fast convenient entry and exit, plus a relaxed leg position when driving.
- The smoothly adjustable steering column with its small steering wheel offers ergonomic adjustment for the driver, and reduced steering movements.
- The pedal layout, like that in a car, can be replaced with a dual pedal arrangement if required, in order to adapt the RX 50 to the personal driving habits of the driver for maximum turnaround of goods.
- The Forward Neutral Reverse switch on the valve lever (lift and lower) allows a quick and comfortable change of driving direction without changing the grip, making for fatigue-free operation even over long shifts.
- The heated display with clock, service and battery indicator and error messages, ensures a constant display of the condition of the vehicle even when changing from cold to warm areas of use.

- With 5 selectable driving programmes the driver can change the driving characteristics of the RX 50 at any time to match the application or his own driving preferences. Each programme can be adapted precisely to the application profile in order to achieve an optimum level of economy and turnaround of goods.
- The overhead guard on the RX 50 gives generous headroom even for tall drivers. Innovative design of the guard optimises the allround vision by presenting the slimmest profiles to the driver's line of vision.

Safety.

The RX 50 complies with all applicable EC safety requirements and regulations.

It thus carries the "CE" symbol.

Quality.

All forklift trucks from STILL comply with the ISO 9001 quality standard. They are carefully constructed and manufactured. The materials used are checked to stringent standards.

Service.

The maintenance interval of the RX 50 is 1000 hours or 12 months. These intervals save on maintenance costs, especially in single shift operation where 1000 hours corresponds roughly to the annual number of operating hours.

Quick diagnosis is achieved via a laptop computer. All components requiring maintenance are readily accessible and quick availability of all necessary spares ensures maximum uptime.





Your contact

STILL GmbH

Berzeliusstraße 10

D-22113 Hamburg

Telephone: +49 (0)40/73 39-2000

Telefax: +49 (0)40/73 39-2001

info@still.de

For further information please visit:

www.still.de

STILL Materials Handling Ltd.

Aston Way, Leyland

Lancashire PR26 7UX

Telephone: +44 (0)1772 644300

Telefax: +44 (0)1772 644303

info@still.co.uk

For further information please visit:

www.still.co.uk