



EXV 10 Basic

EXV 10

EXV 12

# EXV/EGV Technical Data.

## High lift pallet truck.



first in intralogistics

#### Tough - everywhere.

STILL's EXV range comes in an all-new, up-to-the-minute yet functional design that's even easier to use and more manoeuvrable, with higher load carrying capacity and longer work cycles for each battery charge. The EXV models have increased strength in the areas prone to impact damage and the extremly durable cover is manufactured from high-strength, shock adsorption material and offers excellent accessibility for servicing and maintenance.

A powerful high lift pallet stacker with minimum operating costs, it provides the right solution for industrial, service, wholesale and general trade applications.

The EXV is offered in two load classes - light, of 1t or 1.2 t where pallet turnover is low to moderate, and heavy, of 1.4 and 1.6t, for high pallet turnover.

#### Maximum reliability.

STILL's entire EXV range is characterised by:

- Damped lowering on all lifting unit systems to protect the load.
- Extremely robust fork tips with a round-tipped wedge shape for better pallet insertion.
- Wider track provides greater load-bearing and stability.
- The variable drive controller (a proven MOSFET microprocessor controlled electronic power pack) offers speeds from rapid travel through to very sensitive movement for delicate loads.
- Automatic braking on drive switch release.With special preparation the EXV is fully ready for work in cold stores and the resulting temperature changes to as low as -30°C.

#### Made to work.

- Placing the load's centre of gravity between the drive and the running wheels achieves high carrying capacity without a counterweight.
- The smallest working aisle widths on the market, thanks to compact construction, guarantes good manoeuvrability.
- The wide clear-view lifting mast and offset tiller offer the best visibility for both load transportation and stacking.
- Rocker mounting of the tandem rollers further increases driving comfort and facilitates movement over rough ground and thresholds. Ground clearance can be increased to 130 mm using the initial lift

#### EXV 10/12/12 i Technical Data.

The initial lift function of the EXV 12 i makes it suitable for use on uneven ground conditions or on ramps.

#### Design.

- The modern, functional design and the optimal ergonomics of the tiller make this truck a great all-rounder for a multiplicity of applications.
- Various storage compartments are incorporated in the new, extremely strong polyurethane cover.

#### Steering.

- Smooth manoeuvring achievable in the tightest of spaces.
- A gas-spring strut quickly and smoothly brings the user friendly tiller to the vertical brake position after releasing.
- With an offset drive and castor wheel, the high lift pallet stacker is a safe and stable 4-wheel truck.

#### Tiller.

- Ergonomic layout of the controls means the EXV 12 i is suitable for both right and left handed operators. The push buttons for lifting/lowering and horn are within fingertip reach and allow single handed operation without changing grip. This feature greatly reduces operator fatigue.

- The large buttons have grooves and raised contours to provide a problem free, tactile "Feel the function" response even when working with gloves.
- The arrangement of the electronic controls permits the simultaneous use of the control elements and functions, e.g. Lifting and driving.
- Safety for the hands when on the tiller is achieved by the wrapround protection and the curved shape of the handle.
- The control elements in the tiller are protected to IP 65 and all connectors and wiring harnesses are protected to IP 54; they are therefore well protected against environmental influences such as rain or dust.
- Extremely robust tiller head is achieved by the use of glass-fibre reinforced Polyurethane and a cast aluminium tiller arm.

#### Drive.

- Maintenance and wear-free, the totally enclosed 1.2 kW three-phase alternating current (AC) drive offers high performance to the user for in-plant handling and transportation tasks. The modern AC drive controller provides improved traction control for the user, e.g. noticeably powerful acceleration and drive. The drive characteristics can be easily programmed by STILL Service to suit the user's specific requirements.
- A speed sensor, which is connected to the control unit, provides gentle, progressive acceleration of the EXV 12 i up to maximum speed, independent of the load on the forks.
- Braking is activated in the driving mode by releasing the driving switch. The AC motor acts as a generator and recovers energy during deceleration.
- With the 'Hold on Ramp' feature, when the drive switch is released, the controller monitors truck movement and prevents uncontrolled roll-back by applying the motor brake.

#### Mast.

- STILL offers the 1.2t capacity truck with Tele and full free-lift masts. In addition, the EXV 12 and the EXV 12i can now be fitted with a triple mast allowing configuration to be perfectly matched to the application.
- The newly designed masts and fork carriage are characterised by their extreme rigidity and robustness. Deeper profiles on the external mast (108 mm), the visibly increased width of the mast as well as the strengthened connection of the forks to the fork carriage, minimise the possible deflection of the forks and mast when loaded.

#### Hydraulic System.

- The newly developed pulse control responds sensitively to the lightest touch on the control button to give precise load positioning.
- Electronic control of the hydraulic pump motor gives stepless and proportional response.\*
- An enclosed motor drives a high pressure gear pump.
- Responsive, light-touch buttons control lifting and lowering speeds.
- Maximum pressure relief valve, lowering valve and line break safety devices protect the hydraulic system.

#### Braking System.

- The truck features two independent brake systems:
- Soft braking with energy recovery is activated by releasing the butterfly drive control switch or selecting the opposite direction.
- The dust-protected electromagnetic disk brake acts as a safety and parking brake. Braking takes place automatically when the tiller is positioned horizontally or vertically (dead-man brake).

#### Battery.

- The EXV 12 i can be optionally equipped with an integral battery charger.
- The drive control technology and the low energy requirement resulting from it enable the use of smaller capacity batteries while still providing longer hours of use.
- The battery is easily accessible and can be changed by means of a hoist.
- The EXV 12 i is equipped with a new battery compartment which enables the use of batteries from 165 to 225 AH capacity.

#### Initial lift (optional).

- Increases the ground clearance to 155 mm (130 mm lift) making it possible to drive over uneven floors and changes of gradient.
- Allows the machine to be used as a pallet truck with pallets up to 1200 kg.

#### Options.

- Fork length: Length/Width =1000/180 mm is possible as an option.
- Different tyres: Treaded and/or non-marking tyres are available.
- Combi instrument for battery charge and operating hours which also incorporates a service error code display. (Standard on EXV 10/12)
- Integrated battery charger.
- Load backrest.
- Cold store protection to -30°C for EXV 10/12.
- Colour-coded indicator affixed to the mast to indicate the residual capacity relative to the lift height.
- Mast safety protection screen made from polycarbonate.

## OPTISPEED 3.0 (Optional on EXV 10 / not available on EXV Basic).

With the latest development of the AC controller in combination with a dual safety angle sensor in the tiller, STILL has incorporated an innovative and ergonomic safety function:

 Depending on the angle of the tiller, the speed is automatically controlled. Thus with the tiller almost vertical, slow travel is achieved, which makes manoeuvring in confined areas very simple and safe. Also, the possibility of the machine being driven over the operator's feet is virtually eliminated.

#### EXV 10 Basic Technical Data.

The entry model EXV 10 basic is particularly suitable for load handling to the first beam height, and thus offers sound and proven technology which is easy to operate.

#### Design.

- The EXV 10 Basic features modern and user-friendly design, as well as the ergonomic STILL tiller.
- Various storage compartments are incorporated in the strong plastic cover

#### Steering.

- With an offset drive and castor wheel, the high lift pallet stacker is a safe and stable 4-wheel truck.

#### Tiller.

- The EXV 10 Basic is equipped with the ergonomic and IP54 protected STILL tiller.

#### Drive.

 The EXV uses a wear and maintenance-free, totally enclosed
1.2 kW three-phase alternating current (AC) drive motor which provides excellent driving characteristics.

#### Mast.

- The EXV 10 Basic can be equipped with two alternative mast heights.
- The sound and proven technology permits storage up to the first beam level, supported by an easy to operate hydraulic system.

#### Options.

- Combi instrument for battery charge and operating hours, which also incorporates a service error code display.
- Integrated battery charger.
- Load backrest.
- Cold store protection to -30°C for EXV 10/12.

#### Safety.

- The vehicles conform to the Machine Directive 98/37/EG and carry the CE mark. STILL is certified to ISO 9001.

In accordance with VDI guidelines 2198 resp. 3597, this specification applies to the standard model only. Alternative tyres, mast types, ancillary equipment, etc. could result in different values.

	1 1	March factories		STILL	STILL
	1.1	Manufacturer			
	1.2	Manufacturer's model designation		EXV 10 Basic	EXV 10
ics	1.0			Single	Tele HiLo
erist	1.3	Drive: (electric, diesel, petrol, LPG, mains electric)		Electric	Electric
ract	1.4	Operation (Hand, pedestrian, stand-on, sit-on , order picker)		Pedestrian	Pedestrian
Characteristics	1.5	Capacity/load	Q kg	1000	1000
-	1.6	Load centre	c mm	600	600
	1.8		x mm	711	695
	1.9	Wheel base	y mm	1157	1157
hts	2.1	Truck weight (inc. battery)	kg	708	788
Weights	2.2	Axle load laden drive end/load end	kg	670/1038	695/1093
>	2.3	Axle load unladen drive end/load end	kg	518/190	572/216
	3.1	Tyres		Solid rubber	Polyurethane
ssis	3.2	Tyre size drive end	mm	Ø 230x75	Ø 230x75
cha	3.3	Tyre size load end	mm	1x Ø 85x100	1x Ø 85x100
s l	3.4	Support castor size	mm	Ø 140x54	Ø 140x54
Wheels   chassis	3.5	Number of wheels (x=driven) drive end/load end		1x-1/2	1x-1/2
≥	3.6	Track width drive end		518	518
	3.7	Track width load end		380	380
	4.2	<u> </u>	h₁ mm	See mast table	See mast table
	4.3		h2 mm	See mast table	See mast table
	4.4	5	h₃ mm	See mast table	See mast table
	4.5		h4 mm	See mast table	See mast table
	4.6		h₅ mm	-	-
s	4.9	Height - tiller in drive position min./max.	h14 mm	740/1230	740/1230
Basic dimensions	4.15	6	h13 mm	85	85
men	4.19		lı mm	1772	1788
c di	4.20	0	l2 mm	622	638
Basi	4.21		b1 mm	800	800
	4.22		s/e/l mm	65/180/1150	65/180/1150
			b₃ mm	534	534
	4.25		b₅ mm	560	560
	4.32	,	m <sub>2</sub> mm	30	30
	4.34		A <sub>st</sub> mm	2125	2125
	4.35	Turning radius	Wa mm	1420	1420
, and the second se	5.1	Travel speed laden/unladen	km/h	6,0/6,0	6,0/6,0
dat	5.2	Hoist speed laden/unladen	S	0,12/0,16	0,11/0,23 0,11/0,2
ance	5.3	Lowering speed laden/unladen	S	0,23/0,23	0,3/0,28 0,31/0,25
J mi	5.8	Max. gradeability kB 5 laden/unladen	%	5/10	5/10
Performance data	5.9	Acceleration time (over 10 m) laden/unladen	S	8/7	8/7
	5.10	Service brake		electromagnetic	electromagnetic
	6.1	Drive motor, Rating S2 = 60 min	kW	1,2	1,2
	6.2	Hoist motor, Rating at S3 = 15%	kW	2,2/5%	1,5/7%
E-Motor	6.3	Battery to DIN 43531/35/36; A, B, C, No		No	No
E-M	6.4	Battery voltage, Rated capacity C <sub>5</sub>	V/Ah	24V/180Ah	24V/180Ah
	6.5	Battery weight ± 5% (depends on make)	kg	195	195
	6.6	Energy consumption to VDI cycle	kWh/h	0,72	0,75
	8.1	Drive control		AC control	AC control
Misc.	8.4	Sound level at driver's ear	dB (A)	65	65

<sup>1)</sup> Suffix in model type = Initial lift incorporated

### Mast Types

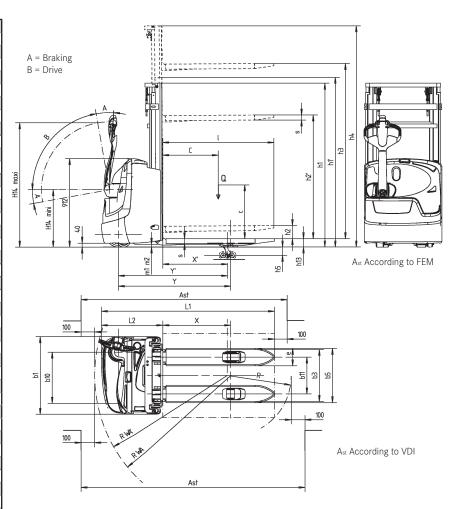
	SX/Single DX/Tele										DXLL	ſ/HiLo			
	EXV 10	) Basic		EXV 10 - EXV 12 - EXV 12 i							EXV 10 - EXV 12 - EXV 12 i				
h1	1940	2390 1490 1690 1940 2140 2390 2590						2590	1490	1690	1940	2140	239		
h1	-	-	1565	1765	2015	2215	2465	2665	-	-	-	-	-		
h2	1462	1912	150	150	150	150	150	150	-	-	-	-	-		
h2	-	-	-	-	-	-	-	-	1012	1212	1462	1662	191		
h₃	1462	1912	2024	2424	2924	3324	3824	4224	2024	2424	2924	3324	382		
h4	-	-	2502	2902	3402	3802	4302	4702	2502	2902	3402	3802	430		

 $h_1$  Initial lift =  $h_1$  (Standard) + 6 mm

		77-	
600	500 400		h
<u></u>			`` <u>∎⊫</u> ⊒
575	625	700	4309
650	725	800	3909
780	860	980	3409
930	1060	1200	3009
1200	1200	1200	2530
			50024390062

Load carrying vs. lift height relationship shown by colour code on the mast (Option).

			07111						
	STILL			STILL					
	EXV 12			EXV 12	2 i				
Tele	HiLo	Triplex	Tele	HiLo	Triplex				
	Electric			Electric					
P	edestrian			Pedestr	ian				
	1200			1200	)				
	600			600					
695		638	78	30	723				
1157	7	1157	13	62	1362				
788		935	90	)9	1056				
720/12	268	770/1365	759/	1350	814/1442				
572/2	16	651/284	643/	/266	710/346				
Pol	lyurethan	e		Polyureth	nane				
Ø	230x75			Ø 230x	:75				
1x	Ø 85x10	0		1x Ø 85	x80				
Ø	140x54			Ø 140x	:54				
	1x-1/2			1x-1/	2				
	518			518					
	380			380					
See	mast tab	le		See mast	table				
See	mast tab	le		See mast	table				
See	mast tab	le		See mast	table				
See	mast tab	le	See mast table						
	-			130					
7.	40/1230			740/12	230				
	. 85		86 86						
1788	3	1845	1902 1959						
638		695		52	809				
	800			800					
65/	180/115	50		65/180/	1150				
		710	53		710				
	560			560					
	30			25					
2125		2182	2249 (		2306 (2305) <sup>1)</sup>				
	1420			1629 (15					
	6,0/6,0			6,0/6					
0,15/0,3	0,15,	/0,26	0,15/0,3		,15/0,26				
0,4/0,3	0,29,	/0,31	0,4/0,3		,29/0,31				
	5/10		, , , , , ,	7/15					
	8,3/7			8,4/7					
elec	tromagne	tic		electroma					
	1,2			1,2	0				
3	3,2/10%			3,2/10	0%				
	No			No					
	V/180Ał	1	24V/225Ah						
	195		200						
	1		1						
A	C control		AC control						
	65		65						



		TX/T	riplex				
		EXV 12 - EXV 12 i					
0	2590	1690 1940					
	-	-	-				
	-	-	-				
2	2112	1212	1462				
4	4224	3636 4386					
2	4702	4118	4868				

#### High Lift Pallet Truck EGV 14/16.

#### Design.

- With functional design and optimal ergonomics, these trucks are good all-rounders for a multiplicity of applications.
- Storage compartments are incorporated into the cover, which is made of extremely strong polyurethane.
- Sturdy chassis made of thick walled sheet steel is a match for the hardest of applications.

#### Steering.

- Lighter steering and ergonomically weighted tiller makes for easy manoeuvring in the tightest spaces.
- A gas spring takes the user friendly balanced tiller handle quickly into the vertical braking position when it is released.
- The offset drive wheel and auxiliary swivel castor mean that this high lift pallet truck is a stable 4-wheel vehicle.

#### Tiller.

- Tiller head made of extremely strong, impact resistant plastic.
- Ergonomic layout of the controls, suitable for right or left handed operators. The push buttons for the signal horn, hoisting, lowering and initial lift can be operated using one hand without changing grip.
- Wear free switching technology for the travel, hoist and lower functions, plus installation of components and wiring harnesses to enclosure class IP 65, guarantee years of reliability.
- The anatomically shaped impact switch in the tiller head prevents the operator getting trapped even when the tiller is almost vertical. The EGV will switch immediately from forward to reverse travel if the impact plate touches the operator. In this way the truck automatically moves away from the operator and then comes to a stop.

#### Drive.

- Comfortable, economical and hence cost saving operation, thanks to an electronic controller with MOSFET technology.
- Sensitive driving, independent of load, by virtue of the remotely excited shunt wound motor.
- The trucks will start smoothly and accelerate evenly up to maximum travel speed.
- Braking whilst travelling is achieved by releasing the drive switch or by plugging. The remotely excited motor acts as a generator and is used to recover energy when braking.
- When starting on a gradient the controller and the drive come immediately into effect to prevent uncontrolled rolling back.

#### Mast.

- Clear view mast in telescopic, telescopic with special free lift and Triplex versions.
- Narrow mast design gives clear visibility past the mast which means greater safety when stacking and destacking, even with very high loads.
- Nested I-beam mast sections are fitted with inclined mast rollers and the lift chains run behind them, to give a clear view onto the roadway and the load.

#### Hydraulic system.

- Enclosed motor drives a high pressure gear pump.
- Hoist and lowering speeds are regulated by depressing the corresponding button.
- Fully proportional hydraulics are achieved by electronic control of the pump motor speed.
- Maximum pressure valve, lowering control valve and hose burst safety valve protect the hydraulics.

#### Initial lift.

- Increases the floor clearance to 140 mm (115 mm lift) making it possible to drive over uneven floors and changes of gradient.
- Makes use as a low lift pallet truck possible for an open pallet up to a maximum weight of 2000 kg.

#### Brake system.

 The electromagnetic disc brake system is protected from dirt and acts both as a safety braking system and a parking brake. The drive controller takes control of the brake, operating on the motor shaft, with simultaneous actuation of the electromagnet and shut off of the drive current. Braking is automatic when the tiller is horizontal or vertical (deadman braking).

#### Battery.

- Mounted on a roller track, the battery can be changed by pulling out to one side or lifting with a hoist.
- The battery hood, manufactured from extremely strong, impact-resistant polyurethane, can be removed without tools, facilitating battery inspection and maintenance.
- Combi-instrument displaying battery state of charge and operating hours is fitted as standard.

#### Auxiliary equipment.

- Initial lift available on the long chassis version.
- Load backrest.
- On-board charger.
- Travel speed limit from  $h_3 = 2000$  mm.
- Cold store version to -30°C.
- Intermediate lift limit.
- Lift height gauge.

#### Safety.

- Trucks are built to the Machinery Guidelines 98/37/EC and carry the CE symbol.
- STILL is certified to ISO 9001.





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EGV 20.

EGV-S.



In accordance with VDI guidelines 2198 or 3597, this specification applies to the standard model only. Alternative tyres, mast types, ancillary equipment, etc. could result in different values.

<u> </u>	4.4	Maria Galakara					OT			
1	1.1	Manufacturer					ST	ILL / 14		
	1.2	Manufacturer's model designation		01 .					1	1 11 110
ŝ	_			Chassis	short	short	long	long	Initial lift	Initial lift
istic	1.0	Drive (electric discal restrict LDC reside electric)		Mast	Tele/HiLo	Triplex	Tele/HiLo	Triplex	Tele/HiLo	Triplex
Characteristics	1.3	Drive (electric, diesel, petrol, LPG, mains electric)						otric		
Jara	1.4	Operation (hand, pedestrian, stand, sit, order picker)	0				pede			
ō	1.5	Capacity/load	Q	kg				00		
	1.6	Load centre	С	mm	(00	(70	60		(00 ((47)1)	(70 ((07)1)
	1.8	Load distance	X	mm	690	670	690	670	690 (647) <sup>1)</sup>	670 (627) <sup>1)</sup>
	1.9	Wheel base	у	mm		23		73		(1288)1)
ghts	2.1	Truck weight (including battery)		kg	815	950	825	960	925	1060
Weights	2.2	Axle load laden drive end/load end Axle load unladen drive end/load end		kg	831/1607	886/1687	890/1645	944/1726 864/406	897/1791	948/1875
		,		kg	724/314	803/370	790/345	,	801/487	872/551
	3.1	Tyres						ethane		
res	3.2	Tyre size drive end		mm	85x102	85x80	Ø 230 85x102			85x80
- T	3.3 3.4	Tyre size load end		mm	85X102	083268		85x80		85X80
Wheels   tyres		Support castor		mm	1,1 /0	1,1/4	1	) x 50	1	1.1.1.1.1
Å	3.5 3.6	Number of wheels (x = drive wheel)     drive end/load end       drive end/load end     drive end/load		mm	1x1/2	1x1/4	1x1/2	1x1/4 30		1x1/4
	3.7	Track width load end	-	mm mm						
	4.2	Height, mast lowered	h1	mm			383 (for see ma			
	4.2	Free lift	h <sub>2</sub>	mm			see ma			
	4.4	Lift	ha	mm			see ma			
	4.4	Height, mast raised	h4	mm			see ma			
	4.6	Initial lift	h5	mm			5ee 111a			115
	4.9	Height, tiller in drive position min/max.	h <sub>14</sub>	mm	-	-	765/	1285	_	115
	4.15	Height lowered	h13	mm	765/1285 86					
su	4.19	Overall length without load	l1	mm	1890	1910	1940	1960	1990	2010
Dimensions	4.20	Length including fork backs	12	mm	700	720	750	770	810	830
lime	4.21	Overall width	b1	mm	,00	,20	88		010	000
	4.22	Fork dimensions	s/e/l	mm			56/184			
	4.24	Fork carriage width	b3	mm				30		
	4.25	Overall fork width	b5	mm				54		
	4.31	Floor clearance under mast, laden	m1	mm		25			25 (140) <sup>1)</sup>	
	4.33	Working aisle width with 1000 x 1200 wide pallet	Ast	mm	2010	2030	2060	2080	2120 (2118)1	2140 (2138)1)
	4.34	Working aisle width with 800 x 1200 pallet lengthways (b12 x l6)	Ast	mm	2210	2230	2260	2280		2140 (2338)1)
	4.35	Turning radius	Wa	mm	15	00	15	50		(1565)1)
	5.1	Travel speed laden/unladen		km/h			5,	/6		
	5.2	Hoist speed laden/unladen		m/s			0.12,	/0.25		
Performance	5.3	Lowering speed laden/unladen		m/s			0.34,	/0.20		
orm	5.7	Gradeability laden/unladen		%			2.5,	/7.5		
Perf	5.8	Max gradeability kB 5 laden/unladen		%			7/	15		
	5.9	Acceleration time over 10 m laden/unladen		S			8/	6.5		
	5.10	Service brake					electron			
	6.1	Drive motor, rating S2 = 60 min		kW				.2		
)tor:	6.2	Hoist motor, rating		kW			3.0/			
Electric Motors	6.3	Battery to DIN 43531/35/36 A, B, C, No					DIN 43			
ctric	6.4	Battery voltage, rated capacity C <sub>5</sub>		V/Ah		4 V/200-240 A			24 V/240-360	
E	6.5	Battery weight ± 5% (depending on make)		kg		tray 102 = 222			3 =298, tray 14	43 = 211
	6.6	Energy consumption to VDI cycle		kWh/h			1.			
er	8.1	Type of drive control		15 11			pulse of			
Other	8.4	Sound level at driver's ear		dB (A)			64	.3		

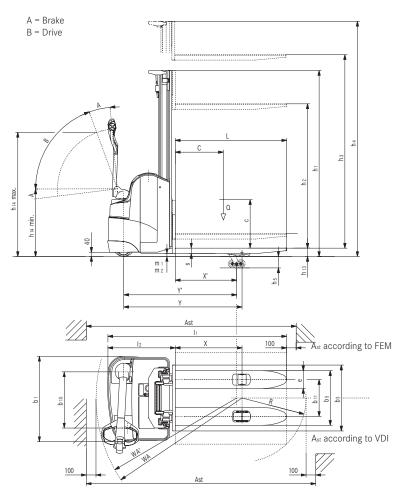
<sup>1)</sup> Figures in brackets = Initial lift raised

### Mast table - capacity 1400 and 1600 kg.

					Teles	copic					HiLo with		
h₃	1844	2344	2744	2844	3044	3244	3544	3744	4144	4644	1844	2344	2844
h1	1420	1670	1870	1920	2020	2120	2270	2370	2570	2820	1420	1670	1920
h2	150	150	150	150	150	150	150	150	150	150	890	1140	1390
h4	2375	2875	3275	3375	3575	3775	4075	4275	4675	5175	2375	2875	3375

		STI								
		EGV								
short	short	long	long	Initial lift	Initial lift					
Tele/HiLo	Triplex	Tele/HiLo	Triplex	Tele/HiLo	Triplex					
		elec								
		pedes								
		16								
(00										
690	670	690	670	690 (647) <sup>1)</sup>	670 (627) <sup>1)</sup>					
12 815	23 950	825	960	925	1288) <sup>1)</sup>					
		825 905/1830	960	925	1060 959/2064					
846/1792 724/314	896/1877	790/345	864/406	801/487	872/551					
/24/314	803/370	Polyure	· · · ·	001/40/	072/001					
		Ø 230								
		85x								
		Ø 15								
		1x-1								
		58	,							
		383 (for b								
		see ma	,							
		see ma								
		see ma								
		see ma								
-	-		-	-	115					
		765/	1285							
		8								
1890	1910	1940	1960	1990	2010					
700	720	750	770	810	830					
		88	0							
		55/184	/1190							
		68	0							
		56	4							
	25			25 (140) <sup>1)</sup>						
2010	2030	2060	2080	2120 (2118)1)	2140 (2138)1)					
2210	2230	2260	2280	2320 (2318)1)	2340 (2338)1)					
15	00	15	50	1610 (	1565) <sup>1)</sup>					
		5/								
		0.10/								
		0.34/								
		2.0/								
		6/								
		8/0								
		electrom								
		1.								
		3.0/								
		DIN 43								
2	4 V/200-240 Al	1		4 V/240-360 A						
	tray 102 = 222			3 = 298, tray 14	3 = 211					
		1.3								
		pulse c								
		64	.3							

ull free lift			Triplex with full free lift						
3244	3744	4144	4116	4266	4716	5466			
2120	2370	2570	1870	1920	2070	2320			
1590	1840	2040	1340	1390	1540	1790			
3775	4275	4675	4647	4797	5247	5997			
3775	4275	4675	4647	4797	5247	5997			



#### Pedestrian high lift pallet truck EGV 20.

#### Model.

The EGV has been specially developed for arduous workloads involving putting goods into and taking them out of stock at medium lift heights.

#### Chassis.

- The construction, with four support points and the tiller fitted at the side, guarantees high stability with a perfect view of the load when picking up and placing a pallet at height.
- The drive unit and the support wheel remain within the truck frame, so that the driver's feet are better protected.
- The battery compartment is protected all round by steel sheets and designed for DIN batteries. As standard the battery is pulled out from the side.
- The covers are made of impact-resistant heavy duty polyurethane and possess high strength and elasticity enabling them to absorb heavy impacts without deformation.

#### Tiller.

- Comprises a new tiller head made as a single high-strength plastic moulding, and tiller arm in oval profile tube.
- The shape and fixing of the tiller are designed so that it can be operated comfortably by any size of person.
- The lightness of the tiller and its ease of operation enable the pallet truck to be used over a long period without operator fatigue.
  When the tiller is released it returns to the rest position without impact or kick-back, making for a safe working environment.
- Proportional control of the hoist and lowering movement, using a control on the tiller is provided as standard.

#### Drive.

- Shunt wound drive motor with a rating of 1 kW.
- The support wheel has a simple adjustment mechanism, guaranteeing optimal tyre grip and stability of the pallet truck under all conditions.

#### Mast.

- Duplex and Triplex masts are available, giving the best all-round vision; lift heights over 4300 mm.
- The masts are available with limited free lift, or full free lift of the forks.
- The hydraulics use a powerful 3 kW motor.

#### Initial lift.

- Increases the floor clearance to 135 mm making it possible to drive over uneven floors and changes of gradient.
- At the same time allows a pallet with a maximum weight of 2000 kg to be handled.

#### Brakes.

- The high lift pallet truck has two independent braking systems:
- Service brake: generator brake operating on the drive motor (with energy feedback) and triggered electronically by releasing the driveswitch.
- Parking brake: electromagnetic brake disc.

#### Electronic system.

- 24 volt DC supply.
- Electronic MOSFET combi-controller for drive and pump motor.
- The work hour meter incorporates an error message display.
- The new electronic system guarantees low energy consumption and quiet operation of the pallet truck. The control system prevents current peaks and thus protects the motors and the battery from premature wear.
- All electrical systems and cabling are to Enclosure Class IP 54 and protected against water splashes and the ingress of dust, guaranteeing years of reliability. Components from the automotive trade with an Enclosure Class of IP 67 are used for the connecting plugs.

#### Options.

- Cold store version: -30°C.
- Integral 50 A charger.
- Adjustable forks in L shape.
- Load backrest.

#### Safety.

Trucks are built to the Machinery Guidelines 98/37/EC and carry the CE symbol. STILL is certified to ISO 9001.

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

	1.1	Manufacturer				STILL	STILL	STILL
	1.1					OTILL	OTILL	STILL
(0)	1.2	Manufacturer's model designation				EGV 20 DUPLEX <sup>1)</sup>	EGV 20 TRIPLEX 2)	EGV 20 LB
Characteristics	1.3	Drive: electric, diesel, petrol, LPG, mains electric				Electric	Electric	Electric
cter	1.4	Steering: Tiller, pedestrian, stand-on, sit-on, automatic				Tiller	Tiller	Tiller
hara	1.5	Capacity/load		Q.	t	2.0	2.0	2.0
Ö	1.6	Load centre		С	mm	600	600	600
	1.8	Load distance from centre of front axle with forks extended		х	mm	706	685	637 <sup>9) 12)</sup>
	1.9	Wheel base		v	mm	1323	1323	1359 12)
ŝ	2.1	Truck weight (without. battery)	ĺ		kg	877 <sup>7)</sup>	967 <sup>6)</sup>	1039 10)
Weights	2.2	Axle load laden (from	nt/rear)		kg	941/2231 <sup>8)</sup>	941/2298 <sup>8)</sup>	1092/2235 10) 11)
We	2.3	· · · · · · · · · · · · · · · · · · ·	nt/rear)		kg	787/385 <sup>8)</sup>	840/422 8)	904/423 10) 11)
	3.1	Tyres	.,,			Polyurethane	Polyurethane	Polyurethane
ssis	3.2	Tyre size, front			mm	230/120	230/120	230/120
cha	3.3	Tyre size, rear			mm	85 x 70	85 x 70	85 x 70
Wheels   chassis	3.5	Number of wheels front/rear ( $x = driven$ )				1 x -1/4	1 x -1/4	1 x -1/4
/hee	3.6	Track width, front		b10	mm	574	574	574
>	3.7	Track width, rear		b11	mm	380	380	380
	4.2	Height, mast lowered		h1		-	-	2332
	4.3	Free lift		h <sub>2</sub>		-	-	90
	4.4	Lift height		h₃	mm	-	-	3580
	4.5	Height, mast raised		h4	mm	-	-	4092 <sup>3)</sup>
	4.6	Initial lift		h₅	mm	-	-	135
	4.9	Height - tiller in drive position (min./max.)		h14	mm	762/1232	760/1232	762/1232
ns	4.15	Height forks lowered		h13	mm	85	85	91
nsio	4.19	Overall length		1	mm	1956	1977	2053
Basic dimensions	4.20	Length inc. fork backs		12	mm	794 <sup>4)</sup>	815 <sup>4)</sup>	903
sic d	4.21	Overall width, chassis		b1	mm	860	860	860
Bas	4.22	Fork dimensions		s/e/l	mm	61/200/1150	61/200/1150	61/200/1150
		Fork carriage width		bз	mm	680	680	680
	4.25	Overall fork width		b₅	mm	570	570	570
	4.32	Floor clearance, centre of wheel-base		m <sub>2</sub>	mm	29	29	-
	4.33	Working aisle width for 1000x1200 pallet crossways		Ast		2454 4)	2463 4)	2559 <sup>4)</sup>
	4.34	Working aisle width for 800x1200 pallet lengthways		Ast	mm	2421 4)	2438 4)	2550 <sup>4)</sup>
	4.35	Turning radius		Wa	mm	1585	1585	1655 4) 12)
ata	5.1	Travel speed laden/	unladen		km/h	5/6	5/6	5/6
Performance data	5.2	Hoist speed laden/	unladen		m/s	0.10 7)/0.17 7)	0.10 6)/0.17 6)	0.10/0.17
nan	5.3	Lowering speed laden/	unladen		m/s	0.30 7)/0.23 7)	0.28 6)/0.23 6)	0.30/0.23
rforr	5.8		unladen		%	2.8 <sup>7) 8)</sup> /9.0 <sup>5) 7) 8)</sup>	2.6 6) 8) / 9.0 5) 6)	2.4 10)/10.6 10) 11)
Pei	5.10	Service brake				Electromagnetic	Electromagnetic	Electromagnetic
	6.1	Drive motor, rating KB 60' min			kW	1	1	1
or.	6.2	Hoist motor, rating 15% ED			kW	3	3	3
E-motor	6.3	Battery to BS/DIN 43531/35/36 A, B, C				DIN elements	DIN elements	DIN 43535 B
ய்	6.4	Voltage, rated capacity			V/Ah	24/315 (375)	24/315 (375)	24/330 (375)
	6.5	Battery weight ± 5%			kg	295 (302)	295 (302)	288 (305)
ы	8.1	Drive control				Electronic	Electronic	Electronic
Misc	8.4	Sound level at driver's ear			dB (A)	< 70	< 70	< 70

1) With limited free lift.

2) With full free lift.

3) With load backrest + 490 mm.

4) With tiller vertical - 45 mm.

5) Maximum gradeability related to truck geometry unladen.

6) Data related to mast with  $h_3 = 4380$  mm. 7) Data related to mast with  $h_3 = 3580$  mm.

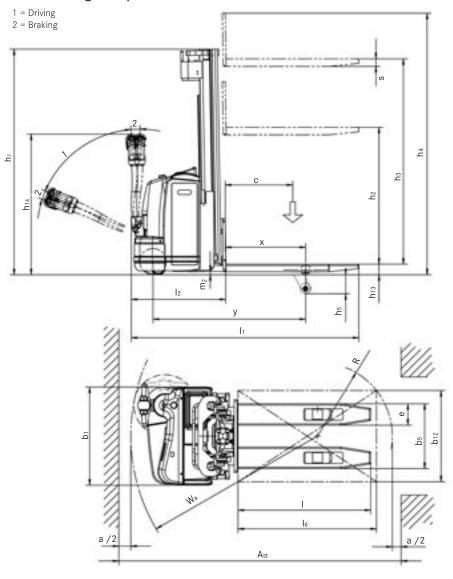
8) With 315 Ah battery.

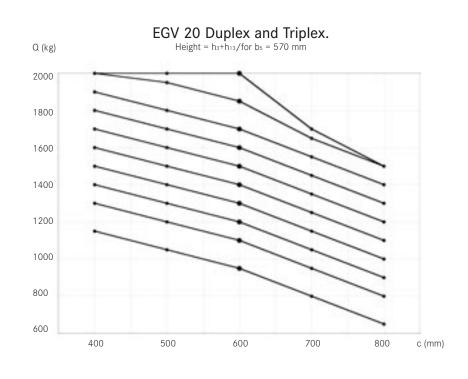
9) - 20 mm with Triplex mast and full free lift.

10) With Duplex mast  $h_3 = 3580$  mm and min. rated battery capacity (see battery weight Line 6.5). 11) Data related to wheel arms not raised ( $h_5 = 0$  mm). 12) Data related to wheel arms raised ( $h_5 = 135$  mm).

		DX/Tele			DXLLT,	TX/triple			
		EGV 20			EG\	EGV 20			
h1	1977	2177	2327	1807	1977	2177	2327	1907	1977
h2	90	90	90	1299	1299 1469 1630			1399	1469
h₃	2900	3280	3580	2590	2590 2930 3270			4170	4380
h4	3408	3786	4088	3098 3438 3778 4078				4678	4888
		EGV 20 LB			EGV		EGV 20 LB		
h1	1982	2182	2332	1982	2182	2332		1982	
h2	90	90	90	1469	1630	1780		1469	
h₃	2900	3280	3580	2930	3270	3570		4380	
h4	3413	3793	4093	3443	3783	4083		4893	

Pedestrian high lift pallet truck.





#### Pedestrian high lift pallet truck with hinged platform.

The new high lift pallet truck, with hinged driver's platform and side protection arms, has been developed with the objective of achieving the best possible safety and ergonomics. Thanks to the use of reliable and proven technical solutions, the new EGV-S is an extremely reliable and productive machine, especially under difficult application conditions.

#### Chassis.

The EGV-S has 4-point wheel support: the rigidly mounted drive unit, arranged to one side, with a castor wheel. This configuration guarantees the stability and high residual capacity that are essential properties of a high lift pallet truck. The motor compartment is fitted with a strong and resilient polyurethane cover, with very high impact resistance. The same material is used for the battery compartment cover, which features an integral storage tray and a document clip. The battery is changed with a hoist, but can also be removed from the side. Both options are included in standard specifications. Batteries with a capacity of up to 360 Ah can be used.

#### Mast.

Two capacities are offered: 1400 kg and 2000 kg. There is a wide range of masts to choose from: SIMPLEX, DUPLEX

(with and without full free lift) and TRIPLEX (full free lift) masts, all offering excellent visibility. Masts are available with lift heights over 5300 mm (EGV-S 14) or over 4300 mm (EGV-S 20).

#### Tiller.

Two butterfly switches integrated into the tiller head control the lift and lower functions. They operate a proportional valve and thus guarantee sensitive lifting and lowering.

The tiller is manufactured as one lightweight, high strength plastic moulding. Thanks to the ergonomic handle design and the optimised arrangement of the controls, the high lift pallet truck can be accurately steered and safely operated under all conditions. The switchgear uses proven and reliable membrane technology, which does away with mechanical contacts.

#### Driver's stand-on platform.

The platform surface is fitted with a soft rubber material with a non-slip surface, which guarantees the highest comfort and best possible safety. The platform step height is a very low 170 mm. Safety is built in to the design: as soon as the operator steps off the platform, it lifts, the truck goes into standby mode and cannot be driven.

The specially shaped protective side arms are encased in polyurethane foam and positioned at an ideal height to provide the operator with safe, comfortable and effective support when standing on the platform. Opening and closing the arms is quick and easy while being very safe and secure – thus providing an uncomplicated transition from stand-on to pedestrian mode and increasing the versatility of the truck.

#### Steering.

To keep the steering as light as possible, the tiller is power assisted. The force required for steering increases in proportion to the speed of the truck. When travelling round bends, the travel speed is automatically reduced – improving safety and maintaining lateral stability.

#### Drive.

The drive is provided by a motor with a rating of 1.2 kW. The motor is of the shunt-wound design and special software allows it to be controlled in such a way that the benefits of shunt wound technology are harnessed to maximum effect:

- Effective and safe control of the speed, whether laden, unladen or on ramps.
- Energy recovery, leading to reduced energy consumption.

#### Initial lift.

- Increases the floor clearance to 135 mm making it possible to drive over uneven floors and changes of gradient.
- At the same time allows a pallet with a maximum weight of 2000 kilogrammes to be carried.

#### Brakes.

The high lift pallet truck has two independent brake systems:

- Service brake: generator brake operating on the drive motor (with energy feedback) and triggered electronically by releasing the driveswitch.
- Parking brake: electromagnetic brake disc.

#### Combi-controller for driving and hoisting.

The high lift pallet truck is equipped with a combi-controller with MOSFET technology, which is responsible for the control of both drive and pump motors. Thanks to the serial data transfer of the electrical signals, the reduced wiring and the use of automotive-style plugs, very high reliability levels are achieved. Proximity switches are used instead of mechanically operated micro-switches and this, together with the low number of switching contactors, completes a technical configuration designed to provide a dramatic reduction in operating costs. The steering motor control uses MOSFET technology.

#### Options.

- Various mast variants.
- Cold store version: -30°C.
- Drive wheel in smooth rubber (EGV-S 14 only).
- Adjustable forks (L shape) (EGV-S 14 only).
- Tandem load rollers (EGV-S 14 only).
- Load backrest.
- Integral 50 A charger.

#### Safety.

Trucks are built to the Machinery Guidelines 98/37/EC and carry the CE symbol. STILL is certified to ISO 9001.

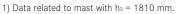
This specification sheet to VDI Guidelines 2198 only gives the technical figures for the standard truck. Different tyres, other masts, additional equipment etc. could give different figures.

	1 1	Manufacturor				STILL	STILL	STILL
	1.1	Manufacturer				STILL	SIILL	STILL
cs	1.2	Manufacturer's model designation				EGV-S 14 SIMPLEX	EGV-S 14 DUPLEX	EGV-S 20 TRIPLEX <sup>8)</sup>
Characteristics	1.3	Drive: electric, diesel, petrol, LPG, mains electric				Electric	Electric	Electric
acte	1.4	Steering: Tiller, pedestrian, stand-on, sit-on, automatic				Tiller	Tiller	Tiller
han	1.5	Capacity/load		Q	kg	1400	1400	2000
	1.6	Load centre		c r	mm	600	600	600
	1.8	Load distance from centre of front axle		x r	mm	711	711	706
	1.9	Wheel base		y r	mm	1320	1320	1320
ts	2.1	Truck weight (without. battery)			kg	785 <sup>1)</sup>	1013 <sup>5) 8)</sup> /1027 <sup>9)</sup>	960 <sup>6)</sup>
Weights	2.2	Axle load laden	(front/rear)		kg	1578/867 <sup>2)</sup>	1655/1018 <sup>2)8)</sup> /1662/1025 <sup>2)9)</sup>	2209/1011 <sup>2)</sup>
Š	2.3	Axle load unladen	(front/rear)		kg	286/759 <sup>2)</sup>	364/909 <sup>2)8)</sup> /370/917 <sup>2)9)</sup>	356/864 <sup>3)</sup>
	3.1	Tyres				Polyurethane	Polyurethane	Polyurethane
assis	3.2	Tyre size, front		r	mm	85 x 90	85 x 90	85 x 70
ch	3.3	Tyre size, rear		r	mm	230/140	230/140	230/140
Wheels   chassis	3.5	Number of wheels front/rear (x = driven)				2/1x-1	2/1x-1	4/1x-1
Vhee	3.6	Track width, front		b10 r	mm	380	380	380
2	3.7	Track width, rear		b11 r	mm	578	578	578
	4.2	Height - mast lowered		h1 r	mm			See mast table
	4.3	Free lift		h <sub>2</sub> r	mm			See mast table
	4.4	Lift height		h₃ r	mm			See mast table
	4.5	Height - mast raised		h4 r	nm			See mast table <sup>11)</sup>
	4.6	Initial lift		h₅ r	mm	-	-	-
	4.9	Height - tiller in drive position (min./max.)		h <sub>14</sub> r	mm	1145/1342	1145/1342	1145/1342
su	4.15	Height - forks lowered		h13 r	mm	85	85	85
ensio	4.19	Overall length (driver's platform up/down)		lı r	mm	2022/2355	2037/2370	2058/2391
line l	4.20	Length inc. fork backs (driver's platform up/down)		l <sub>2</sub> r	mm	877/1221	877/1221	902/1226
Basic dimensions	4.21	Overall width		bı r	mm	860	860	860
Ba	4.22	Fork dimensions		s/e/l r	mm	66/188/1150	66/188/1150	61/200/1150
	4.24	Fork carriage width		b3		640	640	640
	4.25	Overall fork width		b₅ r	mm	568	568	580
		Floor clearance, centre of wheel-base		m <sub>2</sub>		29	29	29
	4.33	Working aisle width for 1000 x 1200 pallet crossways		Ast		2487 4)/2798 4)	2487/2798 <sup>4)</sup> /2487/2764 <sup>4)</sup>	2490 4)/2801 4)
		Working aisle width for 800 x 1200 pallet lengthways			nm	2453/2764	2453/2764	2457/2768
		Turning radius			mm	1621/1932	1621/1932	1621/1932
Performance data	5.1	Travel speed	laden/unladen		1/h	6.5/8	6.5/8	5/8
ice c	5.2	Hoist speed	laden/unladen		n/s	0.15/0.26	0.16/0.26 5) 8)/0.15/0.23 1) 9)	0.10 6)/0.17 6)
man	5.3	Lowering speed	laden/unladen	n	n/s	0.33/0.19	0.40/0.36 5) 8)/0.35/0.26 1)	0.30 6)/0.23 6)
rfor	5.8	Gradeability KB5 ´	laden/unladen		%	5.5/9	5.5/9	3.9/9
Pe		Service brake				Electric	Electric	Electric
	6.1	Drive motor, rating KB 60 min			kW	1.2	1.2	1.2
for	6.2	Hoist motor, rating 15% ED			kW	2.2	2.2 <sup>7) 8)</sup> /3.3 <sup>8)</sup> /3 <sup>9)</sup>	2.2/3.3
E-motor	6.3	Battery to BS/DIN 43531/35/36 A, B, C				DIN cells	DIN cells	DIN cells
	6.4	Voltage, rated capacity		V/	/Ah	24/240 (315-375)	24/240 (315-375)	24/240 (315-375)
	6.5	Battery weight ± 5%			kg	260 (295-304)	260 (295-302)	260 (295-302)
0	8.1	Drive control				Electronic	Electronic	Electronic
Misc	8.4	Sound level at driver's ear		dB	(A)	< 70	< 70	< 70

Mast	Capacity	h₃ mm	h₁ mm	h₄ mm	h₂ mm
SIMPLEX	1,4T	1510	1977	1996	1491
	1,4T	1660	2132	2146	1646
	1,4T	1810	1810	2282	1796
DUPLEX <sup>8)</sup>	1,4T	2480	1777	2966	140
	1,4T	2900	1977	3386	140
	2,0T	2900	1977	3408	90
	1,4T	3280	2177	3766	140
	2,0T	3280	2177	3786	90
	1,4T	3580	2327	4066	140
	2,0T	3580	2327	4088	90
	1,4T	3980	2527	4466	140
	1,4T	4480	2777	4966	140

Mast	Capacity	h₃ mm	h₁ mm	h4 mm	h₂ mm
DXLLT/HiLo 9)	1,4T	2590	1777	3076	1291
	2,0T	2590	1807	3098	1299
	2,0T	2930	1977	3438	1469
	1,4T	2990	1977	3476	1491
	2,0T	3270	2177	3778	1630
	1,4T	3300	2177	3786	1660
	2,0T	3570	2327	4078	1780
	1,4T	3600	2327	4086	1810
TRIPLEX 9)	1,4T	3870	1777	4356	1291
	1,4T	4170	1877	4656	1391
	2,0T	4170	1907	4678	1399
	2,0T	4380	1977	4888	1469
	1,4T	4470	1977	4956	1491
	1,4T	4940	2177	5426	1660
	1,4T	5390	2327	5876	1810

	STILL	STILL	STILL	STILL
	STILL	STILL	STILL	JILL
	EGV-S 14 TRIPLEX 9)	EGV-S 20 TRIPLEX 14)	EGV-S 14 LB	EGV-S 20 LB
	Electric	Electric	Electric	Electric
	Tiller	Tiller	Tiller	Tiller
	1400	2000	1400/2000	2000/2000
	600	600	600	600
	690	685	645 10) 17)	640 10) 17)
_	1320	1320	1359 17)	1359 17)
	1045 <sup>5)</sup>	1113 <sup>13)</sup>	1062 14)	1105 14)
_	1695/1010 <sup>2)</sup>	2301/1072 10)	1619/1222 14) 16)	2194/1289 14) 16)
	381/924 2)	417/956 10)	358/1083 14) 16)	382/1101 14) 16)
_	Polyurethane	Polyurethane	Polyurethane	Polyurethane
	85 x 90	85 x 70	85 x 70	85 x 70
_	230/140	230/140	230/140	230/140
	2/1x-1	4/1x-1	4/1x-1	4/1x-1
_	380	380	380	380
	578	578	578	578
_			2332	2332
			140	90
			3580	3580
			4070	4092
	-	-	135	135
	1145/1342	1145/1342	1145/1342	1145/1342
	85	85	91	91
	2060/2393	2065/2398	2161/2485	2168/2492
	908/1242	914/1252	1007/1330	1012/1335
	860	860	860	860
	66/188/1150	61/200/1150	66/190/1150	61/200/1150
	640	640	680	680
	568	580	570	570
	29	29		
	2497 <sup>4)</sup> /2808 <sup>4)</sup>	2499 12)/2810 12)	2572/2870 <sup>17)</sup>	25/160 17)
	2470/2781	2474/2785	2559/2857 <sup>17)</sup>	2575/2873 <sup>17)</sup>
	1621/1932	1621/1932	1675/1973 <sup>17)</sup>	1675/1973 <sup>17)</sup>
	6.5/8	5/8	6.5/8	5/8
	0.15 5)/0.23 5)	0.10 13)/0.17 13)	0.16/0.26	0.10/0.17
	0.39 5)/0.29 5)	0.28 13)/0.23 13)	0.40/0.36	0.30/0.23
	5.5/9	3.9/9	3.6/8 14) 15)	2.7/8 14) 15)
	Electric	Electric	Electric	Electric
	1.2	1.2	1.2	1.2
	3	3	3	3
	DIN cells	DIN cells	DIN cells	DIN cells
	24/240 (315-375)	24/240 (315-375)	24/330 (375)	24/330 (375)
	260 (295-302)	260 (295-302)	288 (305)	288 (305)
	Electronic	Electronic	Electronic	Electronic
	< 70	< 70	< 70	< 70



2) With 240 Ah battery.
3) With load backrest + 490 mm.

4) With forks I = 1000 mm.

5) Data related to mast with  $h_3 = 4480$  mm. 6) Data related to mast with  $h_3 = 3580$  mm.

7) For h<sub>3</sub> <= 3580 mm

8) With small free lift.

9) With large free lift.

10) With 240 Ah battery.11) With load backrest +490 mm.

12) With forks I = 1000 mm.

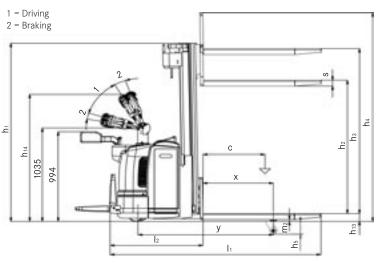
13) Data related to mast with  $h_3 = 4380$  mm.

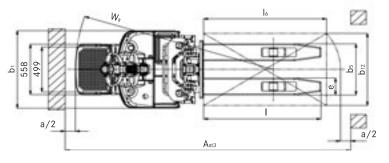
14) With Duplex mast  $h_3$  = 3580 mm and min. rated battery capacity (see battery weight Line 6.5).

15) Maximum gradeability dependent on the overall dimension 18.3%.

16) Data related to wheel arms not raised ( $h_5 = 0$  mm).

17) Data related to wheel arms raised ( $h_5 = 135$  mm).









#### Your contact

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