

## EGV Technical Data.

High Lift Pallet Truck.



**Even better –  
even more manoeuvrable –  
even easier to operate.**

### **Unsurpassed reliability.**

Across the range of EGV models from STILL:

- Damped lowering on all mast types ensures protection of the load.
- Wedge-shaped fork tips are particularly robust, specially shaped for more accurate insertion into the pallets.
- Wider track gives increased capacity with greater stability.
- The drive pulse controller features tried and tested MOSFET power electronics with micro-processor supported control logic. Driving characteristics can be set to suit the application, gentle for delicate items or swift response for more robust loads.
- Automatic braking when the drive switch is released.

The new EGV can operate without modification in cold stores and other applications in temperatures down to  $-30^{\circ}\text{C}$ , thanks to the fitment of specially protected circuitry and components.

### **All with one hand.**

The newly developed tiller offers a high level of safety and comfort. Varying the pressure on the buttons regulates hoist and lower speeds, while symmetrical layout allows comfortable left-handed operation. For safety there is a specially shaped impact plate integrated into the tiller head which, if it touches the operator, instantly reverses travel direction and brings the truck to a stop. The special shape and arrangement of the plate ensures that this function is guaranteed in all normal operating positions of the tiller regardless of the operator's physique. But the new tiller on the EGV still has many more benefits to offer, e.g.:

- Handle manufactured from special material to absorb vibrations and provide safe, fatigue-free steering and control.
- Wear-free switching technology for the travel / hoist and lower motions.

- Generously sized, sturdy handle guard is impact resistant and able to take high loadings.

All in all: a completely new tiller design which is unmatched in its class.

### **Powerful performance in a compact package.**

The re-designed EGV from STILL is a completely new and at the same time functional design: even easier to operate; even more manoeuvrable; an even greater residual capacity; an even greater turn-round of pallets per battery charge. The new EGV is even more robustly built – 25% thicker sheet steel in those areas susceptible to damage. A sturdy cover made from high strength, impact-resistant material gives superb protection while providing easy access for servicing.

### **In summary: an economical and versatile pedestrian high lift pallet truck with high value retention at minimal cost.**

The EGV is available in capacities of 1000 kg to 1200 kg for applications requiring a small to medium turn-round of pallets (e.g. supermarkets) and for industrial requirements with a high turn-round of pallets in 1400 kg to 1600 kg capacities.

### **Designed for practical applications.**

- The load centre located between the drive and load wheels provides high capacity without the need for a counterweight.
- Compact construction guarantees excellent manoeuvrability and the narrowest aisle width on the market.
- Narrow clear-view mast and off-centre tiller give the best visibility both when picking up the load and also when stacking.
- Rocker mounted tandem rollers increase driving comfort and make it easier to travel over uneven floors and sills. And because of the basic lift feature, ground clearance can be increased to 140 mm.

## **High Lift Pallet Truck EGV 10 / 12.**

### **Design.**

- Modern, functional design and the advanced ergonomics of the newly developed tiller (Design Award 1998, Industry Forum Design, Hanover) mean that the EGV range offers a universally acceptable low cost solution to a wide variety of handling applications. Versatility is enhanced by the provision of storage compartments incorporated into the cover which is made of an extremely strong, impact resistant material.

### **Steering.**

- Light operation allows manoeuvring in the tightest space.
- Gas strut for the user-friendly balanced tiller handle returns it quickly to the vertical braking position when it is released.
- Offset drive wheel and auxiliary swivel castor make the high lift pallet truck stable and safe.



## Tiller.

- Tiller head made of impact resistant plastic. Ergonomic layout of the controls. Push buttons for hoist and lower functions and warning horn are designed for one handed operation without changing grip. Wear-free switching technology for travel, hoist and lower motions. Anatomically shaped impact switch in the tiller head prevents the operator getting trapped even when the tiller is near vertical. The EGV will switch automatically from forward to reverse travel when the impact switch touches the operator, causing the truck to automatically move away from the operator and then come safely to a stop.

## Drive.

- Comfortable, economical and hence cost saving operation, thanks to the electronic pulse controller with MOSFET technology.
- The truck starts smoothly and will accelerate evenly up to maximum speed.
- Stepless operation protects the motor, transmission and, of course, the load.
- When the drive switch is released the truck switches automatically into "plugging" mode, and thus will brake. This braking effect is adjustable.
- In driving mode, plugging is used to brake the truck.
- When starting on a gradient the controller and the drive operate simultaneously to prevent uncontrolled rolling back.
- Vertical drive unit with helical toothed spur and bevel gear transmission gives optimal power transmission at a high level of efficiency.

## Mast.

- Telescopic mast, and telescopic mast with special free lift.
- Compact and very narrow mast design gives clear visibility past the mast which means greater safety when stacking and de-stacking, even with very high loads.
- Nested I-beam mast sections with integral hoist cylinder give a robust and very stable mast construction.
- Hydraulic system
- Enclosed motor drives a high pressure gear pump.
- Hoist and lower speeds are regulated by depressing the corresponding button.
- Maximum pressure valve, lowering control valve and hose burst safety valve protect the hydraulics.
- Patented automatic lowering damper system slows the lowering speed to give a smooth and gentle transition of the mast and setting down of the load - even if the operator has the button fully depressed.

## Brake system.

- The electromagnetic disc brake operates on the motor shaft and features simultaneous cut-off of the drive current, acting as a safety braking system and also as a parking brake. It is protected from the ingress of dirt and dust.
- Braking is automatic when the tiller is horizontal or vertical (deadman braking).

## Battery.

- Locating the battery centrally in the truck ensures a very low centre of gravity to give the EGV class-leading stability.
- The EGV 10 model is equipped with an on-board charger.

## Optional equipment.

- Combi-instrument displays operating hours and battery state of charge
- On-board charger for EGV 12
- Cold store version -30 °C for EGV 12
- Load backrest

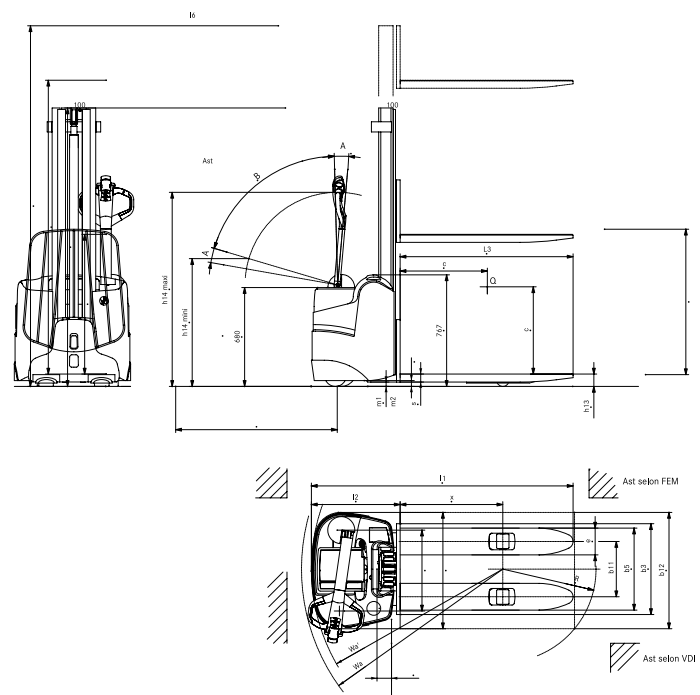
## Safety.

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

orange	700	750	800	3725
orange	775	825	875	3500
orange	825	875	925	3325
yellow	900	950	1025	3100
yellow	1000	1050	1100	2925
yellow	1100	1125	1175	2700
green	1200	1200	1200	2425
				1995

Display of the capacity in relation to the lift height, read off as a colour code on the mast. (Option)

A = Brake  
B = Travel



# EGV 10 / 12.

In accordance with VDI guidelines 2198 or 3579, this specification applies to the standard model only.  
Alternative tyres, mast types, ancillary equipment, etc. could result in different values.

			STILL	STILL	STILL		
			EGV 10 Simplex	EGV 10 Telescopic	EGV 12 Telescopic		
Characteristics	1.1	Manufacturer					
	1.2	Manufacturer's model designation					
	1.3	Power supply (electric, diesel, petrol, gas, mains electric)		electric	electric		
	1.4	Type of control		pedestrian	pedestrian		
	1.5	Capacity / load	Q kg	1000	1000	1200	
	1.6	Load centre	c mm	600	600	600	
	1.8	Load distance	x mm	690	690	690	
	1.9	Wheelbase	y mm	1112	1112	1112	
	Weights	2.1	Weight (inc. battery)		600	680	700
2.2		Axle loadings laden	drive end / load end	kg	555 / 1045	605 / 1075	665 / 1235
2.3		Axle loadings unladen	drive end / load end	kg	475 / 125	525 / 155	540 / 160
Wheels / tyres	3.1	Tyres (rubber, Vulkollan, pneumatic, polyurethane)		rubber / polyurethane	rubber / polyurethane	rubber / polyurethane	
	3.2	Tyre size	drive end	mm	Ø 200x80	Ø 200x80	Ø 200x80
	3.3	Tyre size	load end	mm	Ø 85x102	Ø 85x102	Ø 85x80
	3.4	Castor wheels (dimensions)		mm	Ø 150x50	Ø 150x50	Ø 150x50
	3.5	Wheels, number (x=drive wheel)	drive end / load end		1x-1 / 2	1x-1 / 2	1x-1 / 4
	3.6	Track width (front)	drive end	b <sub>10</sub> mm	545	545	545
	3.7	Track width (rear)	load end	b <sub>11</sub> mm	383	383	383
Dimensions	4.2	Closed height	h <sub>1</sub> mm	1915	see mast table	see mast table	
	4.3	Free lift	h <sub>2</sub> mm	-	see mast table	see mast table	
	4.4	Lift height	h <sub>3</sub> mm	1460	see mast table	see mast table	
	4.5	Overall height, mast raised	h <sub>4</sub> mm	1915	see mast table	see mast table	
	4.6	Initial lift	h <sub>5</sub> mm	-	-	-	
	4.9	Height of tiller in drive position	min. / max.	h <sub>14</sub> mm	820 / 1335	820 / 1335	820 / 1335
	4.15	Height lowered		h <sub>13</sub> mm	85	85	85
	4.19	Overall length		l <sub>1</sub> mm	1817	1817	1817
	4.20	Length to front face of fork		l <sub>2</sub> mm	627	627	627
	4.21	Overall width		b <sub>1</sub> mm	800	800	800
	4.22	Fork dimensions		s / e / l mm	55 / 184 / 1190	55 / 184 / 1190	55 / 184 / 1190
	4.24	Fork carriage width		b <sub>3</sub> mm	655	655	655
	4.25	Overall fork width		b <sub>5</sub> mm	564	564	564
4.31	Floor clearance under mast, laden		m <sub>1</sub> mm	25	25	25	
4.34	Working aisle width, with 800 x 1200 lengthwise (b <sub>12</sub> x l <sub>6</sub> )		A <sub>st</sub> mm	2095	2095	2095	
4.35	Outer turning radius		Wa mm	1385	1385	1385	
Performance	5.1	Speed	laden / unladen	km / h	5.1 / 6	5.1 / 6	5.0 / 6
	5.2	Lifting speed (main lift)	laden / unladen	m / s	0.12 / 0.23	0.13 / 0.24	0.13 / 0.26
	5.3	Lowering speed (main lift)	laden / unladen	m / s	0.33 / 0.21	0.34 / 0.24	0.37 / 0.27
	5.7	Gradeability 4) kB 30	laden / unladen	%	2.5 / 7.5	2.5 / 7.5	2.5 / 7.5
	5.8	Max. gradeability 4) kB 5	laden / unladen	%	5 / 10	5 / 10	5 / 10
	5.9	Acceleration time (over 10 m)	laden / unladen	s	9.3 / 7.9	9.3 / 7.9	9.5 / 7.9
5.10	Brakes				Counter current	Counter current	Counter current
Electric Motors	6.1	Drive motor, rating S2 = 60 min.		kW	0.85	0.85	0.85
	6.2	Hoist motor, rating S3 = 15%		kW	2.5	2.5	3
	6.3	Battery to IEC 254-2; A, B, C, no			IEC 254-2 B	IEC 254-2 B	IEC 254-2 B
	6.4	Battery voltage, capacity C <sub>5</sub>		V / Ah	24 / 160	24 / 160	24 / 180
	6.5	Battery weight + / - 5% (dependent on manufacturer)		kg	160	160	180
	6.6	Energy consumption according to VDI cycle		kWh / h	0.78	0.89	1.04
Other	8.1	Drive control			electronic	electronic	electronic
	8.4	Noise peak at operator's ears		dB (A)	65.2 ± 2.5	65.2 ± 2.5	65.2 ± 2.5

## Mast table.

	EGV 10 Telescopic				EGV 12 Telescopic					EGV 12 Telescopic with special free lift							
	h <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>4</sub>	1995	2425	2925	3325	1995	2425	2925	3325	3725	2425	2925	3325	2315
h <sub>3</sub>	1995	2425	2925	3325	1995	2425	2925	3325	3725	2425	2925	3325	2315				
h <sub>1</sub>	1525	1740	1990	2190	1525	1740	1990	2190	2390	1665	1950	2115	2315				
h <sub>2</sub>	150	150	150	150	150	150	150	150	150	1215	1436	1663	1863				
h <sub>4</sub>	2470	2900	3400	3800	2470	2900	3400	3800	4200	2900	3400	3800	4200				

## High Lift Pallet Truck EGV 14 / 16.



### Design.

- With modern, 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 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 with 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 switch 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 large 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 h3 = 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.

# EGV 14 / 16.

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.

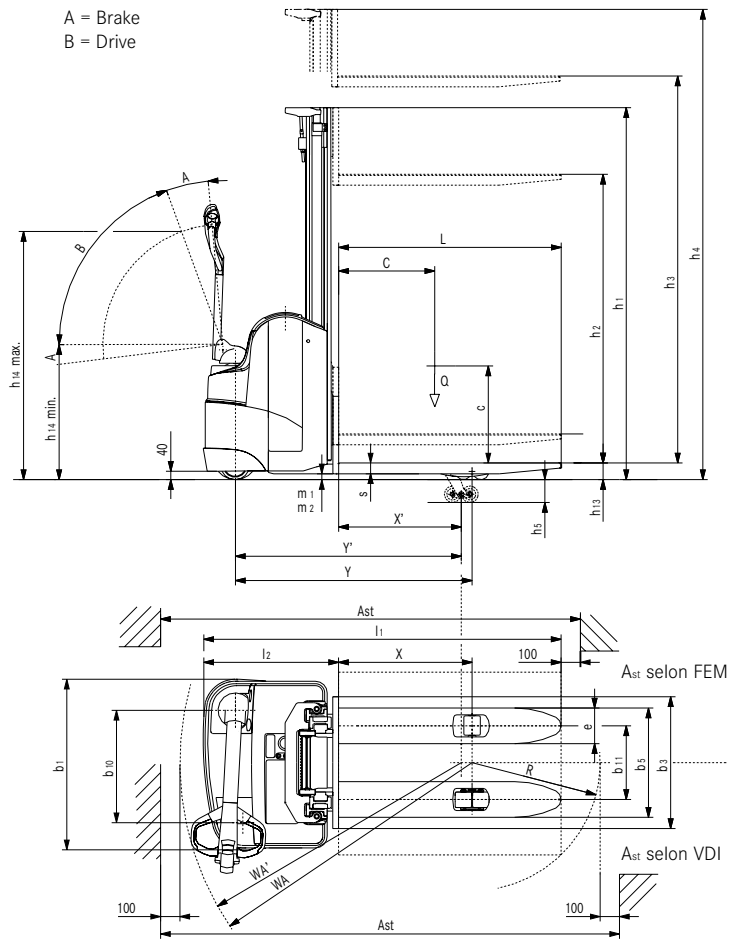
Characteristics	1.1 Manufacturer		STILL							
	1.2 Manufacturer's model designation		EGV 14							
	Chassis		short	short	long	long	Initialhub	Initialhub		
	Mast		Tele / NiHo	Triplex	Tele / NiHo	Triplex	Tele / NiHo	Triplex		
1.3	Drive (electric, diesel, petrol, LPG, mains electric)		electric							
1.4	Operation (hand, pedestrian, stand, sit, order picker)		pedestrian							
1.5	Capacity / load	Q kg	1400							
1.6	Load centre	c mm	600							
1.8	Load distance	x mm	690	670	690	670	690 (647) <sup>1)</sup>	670 (627) <sup>1)</sup>		
1.9	Wheel base	y mm	1223		1273		1333 (1288) <sup>1)</sup>			
Weights	2.1 Truck weight (including battery)		kg		815	950	825	960	925	1060
	2.2 Axle load laden drive end / load end		kg		831 / 1607	886 / 1687	890 / 1645	944 / 1726	897 / 1791	948 / 1875
	2.3 Axle load unladen drive end / load end		kg		724 / 314	803 / 370	790 / 345	864 / 406	801 / 487	872 / 551
Wheels   tyres	3.1 Tyres (rubber, Vulkollan, pneumatic, polyurethane)		Vulkollan							
	3.2 Tyre size drive end		Ø 230 x 75							
	3.3 Tyre size load end		mm		85x102	85x80	85x102	85x80		85x80
	3.4 Support castor		mm		Ø 150 x 50					
	3.5 Number of wheels (x=drive wheel) drive end / load end				1x1 / 2	1x1 / 4	1x1 / 2	1x1 / 4		1x1 / 4
	3.6 drive end / load end		b <sub>10</sub> mm		580					
	3.7 Track width load end		b <sub>11</sub> mm		383 (für b <sub>5</sub> = 564)					
Dimensions	4.2 Track width		h <sub>1</sub> mm		see mast table					
	4.3 Height, mast lowered		h <sub>2</sub> mm		see mast table					
	4.4 Free lift		h <sub>3</sub> mm		see mast table					
	4.5 Lift		h <sub>4</sub> mm		see mast table					
	4.6 Height, mast raised		h <sub>5</sub> mm		-	-	-	-		115
	4.9 Height, tiller in drive position min / max.		h <sub>14</sub> mm		765 / 1285					
	4.15 Height lowered		h <sub>13</sub> mm		86					
	4.19 Overall length without load		l <sub>1</sub> mm		1890	1910	1940	1960	1990	2010
	4.20 Length including fork backs		l <sub>2</sub> mm		700	720	750	770	810	830
	4.21 Overall width		b <sub>1</sub> mm		880					
	4.22 Fork dimensions		s / e / l mm		56 / 184 / 1190					
	4.24 Fork carriage width		b <sub>3</sub> mm		680					
	4.25 Overall fork width		b <sub>5</sub> mm		564					
4.31 Floor clearance under mast, laden		m <sub>1</sub> mm		25				25 (140) <sup>1)</sup>		
4.33 Working aisle width with 1000 x 1200 wide pallet		A <sub>st</sub> mm		2010	2030	2060	2080	2120(2118) <sup>1)</sup>	2140(2138) <sup>1)</sup>	
4.34 Working aisle width with 800 x 1200 pallet lengthways (b <sub>12</sub> x l <sub>6</sub> )		A <sub>st</sub> mm		2210	2230	2260	2280	2320(2318) <sup>1)</sup>	2140(2338) <sup>1)</sup>	
4.35 Turning radius		Wa mm		1500		1550		1610 (1565) <sup>1)</sup>		
Performance	5.1 Travel speed laden / unladen		km / h		5 / 6					
	5.2 Hoist speed laden / unladen		m / s		0.12 / 0.25					
	5.3 Lowering speed laden / unladen		m / s		0.34 / 0.20					
	5.7 Gradeability laden / unladen		%		2.5 / 7.5					
	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				electro-magnetic						
Electric Motors	6.1 Drive motor, rating S2 = 60 min		kW		1.2					
	6.2 Hoist motor, rating at S3 = 15%		kW		3.0					
	6.3 Battery to DIN 43531 / 35 / 36 A, B, C, No				DIN 43535 A					
	6.4 Battery voltage, rated capacity C <sub>5</sub>		V / Ah		24V / 200-240 Ah			24V / 240-360 Ah		
	6.5 Battery weight + / - 5% (depending on make)		kg		Trog 102 = 222			Trog 103 = 298, Trog 143 = 211		
	6.6 Energy consumption to VDI cycle		kWh / h		1.36					
Other	8.1 Type of drive control				electronic					
	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.

	Telescopic										HiLo with						
	h <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>4</sub>	1844	2344	2744	2844	3044	3244	3544	3744	4144	4644	1844	2344	2844
h <sub>3</sub>	1844	2344	2744	2844	3044	3244	3544	3744	4144	4644	1844	2344	2844				
h <sub>1</sub>	1420	1670	1870	1920	2020	2120	2270	2370	2570	2820	1420	1670	1920				
h <sub>2</sub>	150	150	150	150	150	150	150	150	150	150	890	1140	1390				
h <sub>4</sub>	2375	2875	3275	3375	3575	3775	4075	4275	4675	5175	2375	2875	3375				

STILL					
EGV 16					
short	short	long	long	Initialhub	Initialhub
Tele / NiHo	Triplex	Tele / NiHo	Triplex	Tele / NiHo	Triplex
electric					
pedestrian					
1600					
600					
690	670	690	670	690 (647) <sup>1)</sup>	670 (627) <sup>1)</sup>
1223		1273		1333 (1288) <sup>1)</sup>	
815	950	825	960	925	1060
846 / 1792	896 / 1877	905 / 1830	954 / 1916	912 / 1976	959 / 2064
724 / 314	803 / 370	790 / 345	864 / 406	801 / 487	872 / 551
Vulkollan					
Ø 230 x 75					
85x80					
Ø 150x50					
1x-1 / 4					
580					
383 (für b <sub>5</sub> = 564)					
see mast table					
see mast table					
see mast table					
see mast table					
-	-	-	-	-	115
765 / 1285					
86					
1890	1910	1940	1960	1990	2010
700	720	750	770	810	830
880					
55 / 184 / 1190					
680					
564					
25			25(140) <sup>1)</sup>		
2010	2030	2060	2080	2120(2118) <sup>1)</sup>	2140(2138) <sup>1)</sup>
2210	2230	2260	2280	2320(2318) <sup>1)</sup>	2340(2338) <sup>1)</sup>
1500		1550		1610(1565) <sup>1)</sup>	
5 / 6					
0.10 / 0.25					
0.34 / 0.20					
2.0 / 7.5					
6 / 15					
8 / 6.5					
electro-magnetic					
1.2					
3.0					
DIN 43535 A					
24V / 200-240 Ah			24V / 240-360 Ah		
Trog 102 = 222			Trog 103 = 298, Trog 143 = 211		
1.36					
electronic					
64.3					



full 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



For further information on the EGV  
please visit: [www.still.de/EGV](http://www.still.de/EGV)

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](mailto:info@still.de)  
[www.still.de](http://www.still.de)

Achieve more.