

Technical sheet :

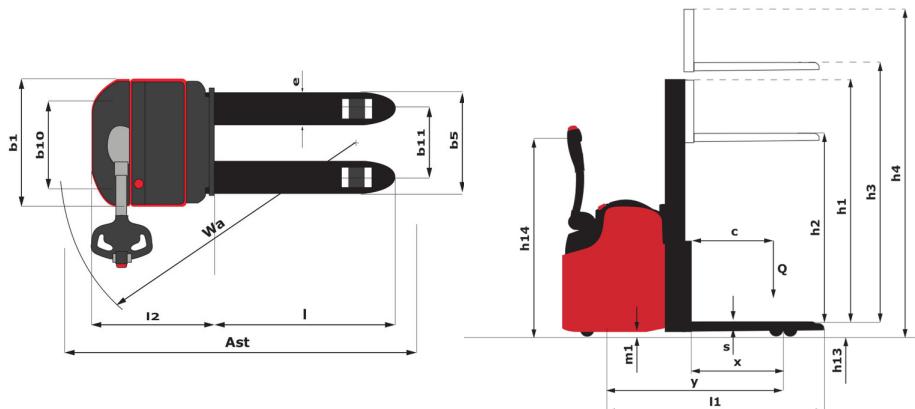
# ES 616 LI



 **MANITOU**  
HANDLING YOUR WORLD

Technical characteristics		Metric	
1.1	Manufacturer	Manitou	
1.2	Model Name	ES 616 LI	
1.3	Power source	Electrical - Lead	
1.4	Operator type	Pedestrian	
1.5	Max. capacity	1600 kg	
1.6	Load center of gravity	600 mm	
1.8	Distance from Load backrest to center of rear axle	848 mm	
1.9	Wheelbase	1492 mm	
<b>Weight</b>			
2.1	Service weight	1283 kg	
2.2	Weight on front axle (laden) / rear axle (laden)	1216 kg / 1660 kg	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	1033 kg / 280 kg	
<b>Wheels</b>			
3.1	Tires type	Polyurethane cushion	
3.3	Number of load wheels / Size of load wheels	4 / 82 x 68	
3.4	Number of stabilizer wheels / Size of the stabilizer wheels	1 / 120 x 54	
3.5	Number of front wheels / rear wheels	2 / 4	
3.5.2	Number of drive wheels / Size of drive wheels	1/230x70	
3.6	Front wheel gauge	529 mm	
3.7	Rear wheel gauge	380 mm	
<b>Dimensions</b>			
4.15	Fork height in low position	86 mm	
4.19	Overall length	2035 mm	
4.20	Length to face of forks	846 mm	
4.21	Overall width	800 mm	
4.22	Forks section / width / length	60 mm / 185 mm / 1190 mm	
4.24	Fork carriage width	700 m	
4.32	Ground clearance at centre of wheelbase	30 mm	
4.33	Aisle Width for pallets 1000 x 1200 crossways	2520 mm	
4.34	Aisle width for 800 x 1200 pallet lengthways	2435 mm	
4.6	Initial lift	110 mm	
4.35	Turning radius	1716 mm	
4.9	Height tiller min. / max.	750 mm / 1250 mm	
<b>Performances</b>			
5.1	Travel speed (laden / unladen)	6 km/h / 6 km/h	
5.2	Lifting speed (laden / unladen)	0.18 m/s / 0.30 m/s	
5.3	Lowering speed (laden / unladen)	0.27 m/s / 0.22 m/s	
5.8	Max Gradeability (laden / unladen)	7 % / 10 %	
5.10	Service brake	Electro magnetic	
<b>Engine</b>			
6.1	Drive motor rating S2 60 min	1.50 kW	
6.2	Lift motor rating at S3 15%	3 kW	
6.3	Battery according to DIN 43531/35/36 A, B, C	DIN 43535-B	
6.4	Battery voltage / capacity	24 V / 180 Ah	
6.5	Battery weight (+/- 5%)	220 kg	
<b>Miscellaneous</b>			
8.1	Type of drive control	AC	
8.4	Sound level at the driver's ear according to DIN 12 053	65 dB	

## ES 616 LI - Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Simplex (CCS)	
h1 - Mast lowered height	mm
1953	2203
h2 - Mast free lift	mm
1506	1756
h3 - Mast lifting height	mm
1506	1756
h4 - Mast extended height	mm
1960	2210
Residual capacity at max height	kg
1600	1600

CCS 15	CCS 17
1953	2203
1506	1756
1506	1756
1960	2210
1600	1600

Full Visibility Duplex (FVD)	
h1 - Mast lowered height	mm
1953	2203
h3 - Mast lifting height	mm
2936	3436
h4 - Mast extended height	mm
3390	3890
Residual capacity at max height	kg
1350	1100
850	

FVD 29	FVD 34	FVD 38
1953	2203	2403
1506	1756	
2936	3436	3836
3390	3890	4290
1350	1100	
850		

Free Lift Duplex (FLD)	
h1 - Mast lowered height	mm
1953	2203
h2 - Mast free lift	mm
1506	1756
h3 - Mast lifting height	mm
2931	3431
h4 - Mast extended height	mm
3385	3885
Residual capacity at max height	kg
1350	1100

FLD 29	FLD 34
1953	2203
1506	1756
2931	3431
3385	3885
1350	1100

Free Lift Triplex (FLT)	
h1 - Mast lowered height	mm
1911	2071
h2 - Mast free lift	mm
1466	1626
h3 - Mast lifting height	mm
4246	4726
h4 - Mast extended height	mm
4723	5203
Residual capacity at max height	kg
670	500
450	

FLT 42	FLT 47	FLT 54
1911	2071	2315
1466	1626	1880
4246	4726	5460
4723	5203	5895
670	500	
450		

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