

Technical sheet :

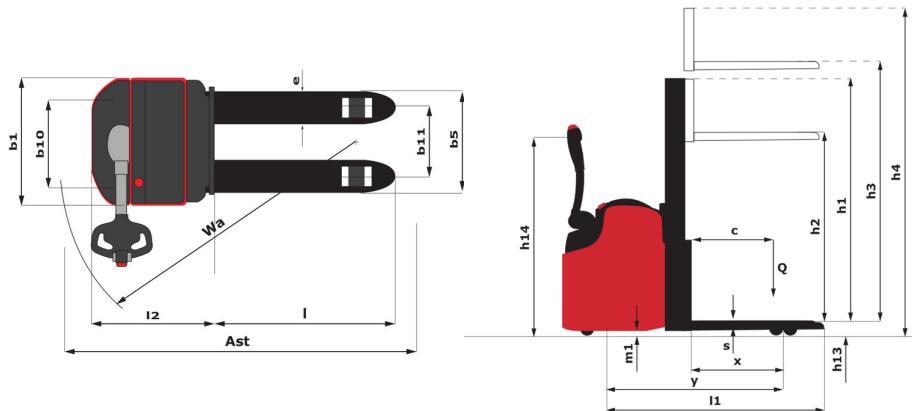
# ES 820 LI



 **MANITOU**  
HANDLING YOUR WORLD

Technical characteristics		Metric	
1.1	Manufacturer	Manitou	
1.2	Model Name	ES 820 LI	
1.3	Power source	Electrical - Lead	
1.4	Operator type	Pedestrian	
1.5	Max. capacity	2000 kg	
1.51	Nominal capacity on wrapover forks	2000 kg	
1.6	Load center of gravity	600 mm	
1.8	Distance from Load backrest to center of rear axle	716 mm	
1.9	Wheelbase	1509 mm	
<b>Weight</b>			
2.1	Service weight	1800 kg	
2.2	Weight on front axle (laden) / rear axle (laden)	1360 kg / 2500 kg	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	1250 kg / 550 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 castor wheels	1	
3.4	Number of stabilizer wheels / Size of the stabilizer wheels	2 / 120 x 50	
3.5	Number of front wheels / rear wheels	3 / 4	
3.5.2	Number of drive wheels / Size of drive wheels	1/254x100	
3.6	Front wheel gauge	664 mm	
3.7	Rear wheel gauge	375 mm	
<b>Dimensions</b>			
4.15	Fork height in low position	86 mm	
4.19	Overall length	2123 mm	
4.20	Length to face of forks	973 mm	
4.21	Overall width	890 mm	
4.22	Forks section / width / length	70 mm / 200 mm / 1150 mm	
4.24	Fork carriage width	700 mm	
4.31	Ground clearance below mast	20 mm	
4.32	Ground clearance at centre of wheelbase	21 mm	
4.33	Aisle Width for pallets 1000 x 1200 crossways	2572 mm	
4.34	Aisle width for 800 x 1200 pallet lengthways	2531 mm	
4.6	Initial lift	110 mm	
4.35	Turning radius	1719 mm	
4.9	Height tiller min. / max.	900 mm / 1400 mm	
<b>Performances</b>			
5.1	Travel speed (laden / unladen)	6 km/h / 6 km/h	
5.2	Lifting speed (laden / unladen)	0.11 m/s / 0.20 m/s	
5.3	Lowering speed (laden / unladen)	0.21 m/s / 0.22 m/s	
5.8	Max Gradeability (laden / unladen)	6 % / 10 %	
5.10	Service brake	Electro magnetic	
<b>Engine</b>			
6.1	Drive motor rating S2 60 min	2 kW	
6.2	Lift motor rating at S3 15%	4 kW	
6.3	Battery according to DIN 43531/35/36 A, B, C	Traction	
6.4	Battery voltage / capacity	24 V / 315 Ah	
6.5	Battery weight (+/- 5%)	273 kg	
<b>Miscellaneous</b>			
8.1	Type of drive control	DC	
8.4	Sound level at the driver's ear according to DIN 12 053	65 dB	

## ES 820 LI - Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Simplex (CCS)	CCS 15	CCS 17
h1 - Mast lowered height mm	1955	2205
h2 - Mast free lift mm	1510	1760
h3 - Mast lifting height mm	1510	1760
h4 - Mast extended height mm	1965	2215
Residual capacity at max height kg	2000	2000

Full Visibility Duplex (FVD)	FVD 29	FVD 34
h1 - Mast lowered height mm	1955	2205
h3 - Mast lifting height mm	2940	3440
h4 - Mast extended height mm	3400	3900
Residual capacity at max height kg	1600	1300

Free Lift Duplex (FLD)	FLD 29	FLD 34
h1 - Mast lowered height mm	2205	2205
h2 - Mast free lift mm	1510	1760
h3 - Mast lifting height mm	2935	3435
h4 - Mast extended height mm	3895	3895
Residual capacity at max height kg	1600	1300

Free Lift Triplex (FLT)	FLT 42	FLT 47	FLT 54
h1 - Mast lowered height mm	1915	2075	2315
h2 - Mast free lift mm	1470	1630	1880
h3 - Mast lifting height mm	4250	4730	5460
h4 - Mast extended height mm	4725	5205	5895
Residual capacity at max height kg	750	550	450



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## Head Office

B.P. 249 - 430 rue de l'Aubinière

44150 Ancenis Cedex - France

Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97

[www.manitou.com](http://www.manitou.com)



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