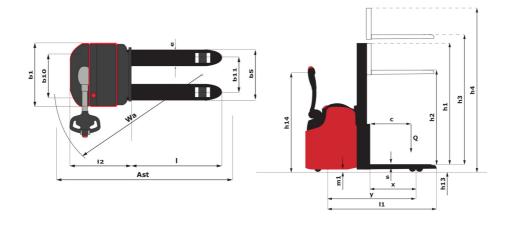
Technical sheet:

ES 820 LI



	ES 820 LI Created on August		
	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	Q	2000 kg
1.51	Nominal capacity on wrapover forks	Q	2000 kg
1.6	Load center of gravity	С	600 mm
1.8	Distance from Load backrest to center of rear axle	X	716 mm
1.9	Wheelbase	٧	1509 mm
	Weight		
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
	Wheels		
3.1	Tires type		Polyurethane
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	b10	664 mm
3.7	Rear wheel gauge	b11	375 mm
3.7	Dimensions	811	373 11111
4.6	Initial lift	h5	110 mm
4.15	Fork height in low position	h13	86 mm
4.19	Overall length	11	2123 mm
4.19	Length to face of forks	12	973 mm
4.21	Overall width	b1	890 mm
4.22	Forks section / width / length	s / e / l	70 mm / 200 mm / 1150 mm
4.24	Fork carriage width	b3	70 mm
4.24	Ground clearance below mast		20 mm
4.32	Ground clearance at centre of wheelbase	m1 m2	20 mm
4.32		Ast	2572 mm
	Aisle Width for pallets 1000 x 1200 crossways		2572 IIIII 2531 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	
4.35 4.9	Turning radius	Wa h14 / h14	1719 mm 900 mm / 1400 mm
4.9	Height tiller min. / max.	1114 / 1114	900 Milit / 1400 Milit
5.1	Performances Traval anneal (lader (unleder)		6 km/h / 6 km/h
	Travel speed (laden / unladen)		
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
	Engine		21111
6.1	Drive motor rating S2 60 min		2 kW
6.2	Lift motor rating at \$3.15%		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
2.1	Miscellaneous		200
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	ka	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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