

Technical sheet :

ES 420 DL



	Technical characteristics		Metric
1.1	Manufacturer		Manitou
1.2	Model Name		ES 420 DL
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	1000 kg
1.52	Nominal capacity in double stacking 1 / 2	Q / Q	1000 kg + 1000 kg
1.6	Load center of gravity	c	600 mm
1.8	Distance from Load backrest to center of rear axle	x	937 mm
1.9	Wheelbase	y	1644 mm
	Weight		
2.1	Service weight		1020 kg
2.2	Weight on front axle (laden) / rear axle (laden)		1460 kg / 1560 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		730 kg / 290 kg
	Wheels		
3.1	Tires type		Polyurethane
3.3	Number of load wheels / Size of load wheels		4 / 82x68
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		2 / 120x50
3.5	Number of front wheels / rear wheels		3 / 4
3.5.2	Number of drive wheels / Size of drive wheels		1/230x75
3.6	Front wheel gauge	b10	435 mm
3.7	Rear wheel gauge	b11	380 mm
	Dimensions		
4.15	Fork height in low position	h13	85 mm
4.19	Overall length	l1	2060 mm
4.20	Length to face of forks	l2	870 mm
4.21	Overall width	b1	688 mm
4.22	Forks section / width / length	s / e / l	160 mm / 180 mm / 1190 mm
4.24	Fork carriage width	b3	650 mm
4.31	Ground clearance below mast	m1	25 mm
4.32	Ground clearance at centre of wheelbase	m2	30 mm
4.35	Turning radius	Wa	1870 mm
4.9	Height tiller min. / max.	h14 / h14	866 mm / 1320 mm
	Performances		
5.1	Travel speed (laden / unladen)		5.50 km/h / 6 km/h
5.2	Lifting speed (laden / unladen)		0.11 m/s / 0.18 m/s
5.3	Lowering speed (laden / unladen)		0.20 m/s / 0.24 m/s
5.8	Max Gradeability (laden / unladen)		10 % / 20 %
5.10	Service brake		Electro magnetic
	Engine		
6.1	Drive motor rating S2 60 min		1.70 kW
6.2	Lift motor rating at S3 15%		2 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		No
6.4	Battery voltage / capacity		24 V / 270 Ah
6.5	Battery weight (+/- 5%)		245 kg
	Miscellaneous		
8.1	Type of drive control		AC
8.4	Sound level at the driver's ear according to DIN 12 053		65 dB

ES 420 DL - Dimensional drawing



Characteristics of masts and residual capacities

Central Cylinder Duplex (CCD)		CCD 17	CCD 21
h1 - Mast lowered height	mm	1365	1560
h3 - Mast lifting height	mm	1725	2125
h4 - Mast extended height	mm	2185	2580
Residual capacity at max height	kg	1000	1000

Central Cylinder Simplex (CCS)		CCS 17
h1 - Mast lowered height	mm	2180
h2 - Mast free lift	mm	1725
h3 - Mast lifting height	mm	1725
h4 - Mast extended height	mm	2180
Residual capacity at max height	kg	1000



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