Technical sheet :



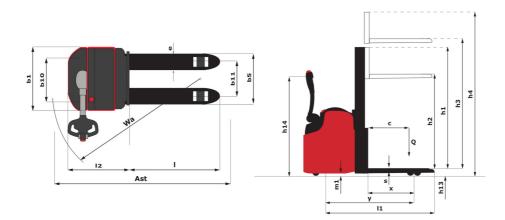




		,,
	Technical characteristics	
1.1	Manufacturer	
1.2	Model Name	
1.3	Power source	
1.4	Operator type	
1.5	Max. capacity	
1.6	Load center of gravity	
1.8	Distance from Load backrest to center of rear axle	
1.9	Wheelbase	
	Weight	
2.1	Service weight	
2.2	Weight on front axle (laden) / rear axle (laden)	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	
2.0	Wheels	
3.1	Tires type	
3.3	Number of load wheels / Size of load wheels	
3.4	Number of stabilizer wheels / Size of the stabilizer wheels	
3.4	Number of stabilizer wheels / size of the stabilizer wheels	
3.5.2	Number of drive wheels / Size of drive wheels	
3.6	Front wheel gauge	
3.7	Rear wheel gauge	
	Dimensions	
4.15	Fork height in low position	
4.19	Overall length	
4.20	Length to face of forks	
4.21	Overall width	
4.22	Forks section / width / length	
4.24	Fork carriage width	
4.31	Ground clearance below mast	
4.32	Ground clearance at centre of wheelbase	
4.35	Turning radius	
	Performances	
5.1	Travel speed (laden / unladen)	
5.2	Lifting speed (laden / unladen)	
5.3	Lowering speed (laden / unladen)	
5.8	Max Gradeability (laden / unladen)	
5.10	Service brake	
	Engine	
6.1	Drive motor rating S2 60 min	
6.2	Lift motor rating at S3 15%	
6.3	Battery according to DIN 43531/35/36 A, B, C	
6.4	Battery voltage / capacity	
6.5	Battery weight (+/- 5%)	
	Miscellaneous	
8.1	Type of drive control	
8.4	Sound level at the driver's ear according to DIN 12 053	

ES 412 ET	- Created on August 30, 2025 at 8:01 PM UTC					
	Metric					
	Manitou					
	ES 412 ET					
	Electrical - Lead					
	Pedestrian					
Q	1200 kg					
С	600 mm					
x	684 mm					
у	1246 mm					
	874 kg					
	729 kg / 1342 kg					
	612 kg / 262 kg					
	Polyurethane					
	2 / 82x68					
	1 / 125x70					
	2/2					
	1/230x75					
b10	517 mm					
b11	380 mm					
h13	86 mm					
1	1875 mm					
12	724 mm					
b1	832 mm					
s / e / l	180 mm / 60 mm / 1150 mm					
b3	680 m					
m1	35 mm					
m2 Wa	30 mm 1470 mm					
wa	14/0 1111					
	6 km/h / 6 km/h					
	0.10 m/s / 0.16 m/s					
	0.14 m/s / 0.12 m/s					
	8 % / 10 %					
	Electro magnetic					
	1 kW					
	2 kW					
	DIN 43535-B					
	24 V / 160 Ah					
	165 kg					
	AC					
	65 dB					

## ES 412 ET - Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Duplex (CCD)	CCD 26	CCD 29	CCD 34	
h1 - Mast lowered height	mm	1780	1930	2180
h2 - Mast free lift	mm	140	140	140
h3 - Mast lifting height	mm	2630	2930	3430
h4 - Mast extended height	mm	3065	3365	3865
Residual capacity at max height	kg	1200	1200	1000

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
h1 - Mast lowered height	mm	1930	2180
h2 - Mast free lift	mm	1500	1750
h3 - Mast lifting height	mm	1500	1750
h4 - Mast extended height	mm	1930	2180
Residual capacity at max height	kg	1200	1200



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