Technical sheet :



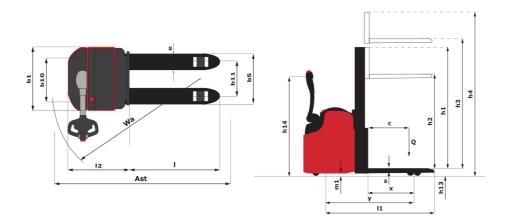




		,,
	Technical characteristics	
1.1	Manufacturer	
1.2	Model Name	
1.3	Power source	
1.4	Operator type	
1.5	Max. capacity	
1.6	Load center of gravity	
1.8	Distance from Load backrest to center of rear axle	
1.9	Wheelbase	
	Weight	
2.1	Service weight	
2.2	Weight on front axle (laden) / rear axle (laden)	
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 8:00 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					
11	1875 mm					
12	724 mm					
b1	832 mm					
s / e / l	180 mm / 60 mm / 1150 mm					
b3	680 m					
m1	35 mm					
m2	30 mm					
Wa	1470 mm					
	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					
	4.0					
	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



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



This publication provides a description of the configuration versions and options for Manitou products, which may differ for equipment. The equipment presented in this brochure may be part of a series, as an option, or it may not be available, depending on the versions. Manitou reserves the right, at any time and without notice, to amend the specifications described and represented. The specifications provided do not bind the manufacturer. For more details, please contact your Manitou agent. This is not a contractually binding document. The presentation of the products is not contractually binding. List of specifications non-exhaustive. The logos as well as the visual identity of the company are owned by Manitou and cannot be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are only provided for consultation and information purposes.

MANITOU BF SA - Limited company with board of directors - Share capital: 39,668,399 euros - 857 802 508 RCS Nantes