Technical sheet :







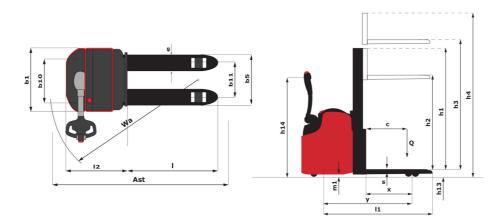
	Technical characteristics	
1.1	Manufacturer	
1.2	Model Name	
1.3	Power source	
1.4	Operator type	
1.5	Max. capacity	
1.6	Load center of gravity	
1.8	Distance from Load backrest to center of rear axle	
1.9	Wheelbase	
	Weight	
2.1	Service weight	
2.2	Weight on front axle (laden) / rear axle (laden)	
2.3	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 front wheels / size of the stabilizer wheels	
3.5.2	Number of drive wheels / Size of drive wheels	
		t
3.6 3.7	Front wheel gauge	
3.7	Rear wheel gauge Dimensions	t
4.15		
4.15	Fork height in low position	h
4.19	Overall length	
4.20	Length to face of forks	
4.21	Overall width	
4.22	Forks section / width / length	s /
4.24	Fork carriage width	
4.31	Ground clearance below mast	1
4.32	Ground clearance at centre of wheelbase	I N
4.35	Tuming radius	N N
	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 \$3 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	

<b>ES 412 ET</b> Created on 6 May 2024 at 7:14:59 AM UTC							
Metric							
	Manitou						
	ES 412 ET						
	Electrical						
	Pedestrian						
Q	1200 kg						
С	600 mm						
х	683 mm						
у	1245 mm						
	874 kg						
	729 kg / 1342 kg						
	612 kg / 262 kg						
	Polyurethane						
	2 / 82x50						
	1 / 125x70						
	2/2						
	1/230x75						
b10	517 mm						
b11	380 mm						
h13	85 mm						
11	1870 mm						
12	720 mm						
b1	800 mm						
s / e / l	180 mm / 60 mm / 1150 mm						
b3	680 m						
m1	35 mm						
m2	20 mm						
Wa	1400 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

150 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



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