Technical sheet :



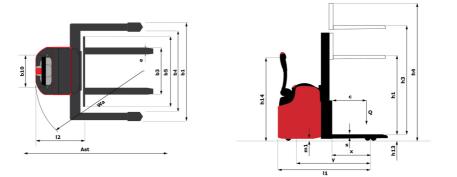




	Technical characteristics
1.1	Manufacturer
1.2	Model Name
1.3	Power source
1.4	Operator type
	· · · ·
1.5	Max. capacity
1.6	Load center of gravity
1.8	Distance from Load backrest to center of rear axle
1.9	Wheelbase
	Weight
2.1	Service weight
2.2	Weight on front axle (laden) / rear axle (laden)
2.3	Weight on front axle (Unladen) / rear axle (Unladen)
	Wheels
3.1	Tires type
3.3	Number of load wheels / Size of load wheels
	Number of castor wheels / Dimensions of castor wheels
3.4	
3.4	Number of stabilizer wheels / Size of the stabilizer wheels
3.5	Number of front wheels / rear 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
	Ground clearance at centre of wheelbase
4.32	
4.9	Height tiller max.
	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%)
0.0	Miscellaneous
0 1	
8.1	Type of drive control
8.4	Sound level at the driver's ear according to DIN 12 053

ES 412	LE Created on 5 May 2024 at 17:36:17 UTC
	Metric
	Manitou
	ES 412 LE
	Electrical
	Pedestrian
Q	1200 kg
С	600 mm
x	683 mm
У	1245 mm
	924 kg
	743 kg / 1381 kg
	612 kg / 262 kg
	Polyurethane
	2 / 82x70
	1/1
	2 / 125x50
	2 / 2
	1/230x75
b10	517 mm
b11	978 mm
h13	85 mm
1113	05 11111
11	1870 mm
11	1870 mm 720 mm 1106 mm
1 2	1870 mm 720 mm
l1 l2 b1	1870 mm 720 mm 1106 mm
1 2 b1 s / e / l	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm
1 2 b1 s / e / b3	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm
1 2 5 5 6 1 1	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 %
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW 3 kW
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW 3 kW
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW 3 kW DIN 43535-B 24 V / 180 Ah
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW 3 kW
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.24 m/s 0.30 m/s / 0.24 m/s 0.30 m/s / 0.24 m/s 1.20 kW 3 kW DIN 43535-B 24 V / 180 Ah 176 kg
1 2 b1 s / e / l b3 m1 m2	1870 mm 720 mm 1106 mm 60 mm / 180 mm / 1150 mm 680 mm 35 mm 20 mm 1050 mm 6 km/h / 6 km/h 0.12 m/s / 0.24 m/s 0.30 m/s / 0.20 m/s 8 % / 10 % Electro magnetic 1.20 kW 3 kW DIN 43535-B 24 V / 180 Ah

ES 412 LE - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 29	FVD 34	FVD 38
h1 - Mast lowered height	mm	1940	2190	2390
h3 - Mast lifting height	mm	2940	3440	3840
h4 - Mast extended height	mm	3365	3865	4265
Residual capacity at max height	kg	1200	1200	1200

Free Lift Duplex (FLD)		FLD 29	FLD 34
h1 - Mast lowered height	mm	1940	2190
h2 - Mast free lift	mm	1510	1760
h3 - Mast lifting height	mm	2935	3435
h4 - Mast extended height	mm	3365	3865
Residual capacity at max height	kg	1200	1200
Height at max capacity	mm	2935	3435

Free Lift Triplex (FLT)		FLT 42
h1 - Mast lowered height	mm	1960
h2 - Mast free lift	mm	1470
h3 - Mast lifting height	mm	4240
h4 - Mast extended height	mm	4730
Residual capacity at max height	kg	1200
Height at max capacity	mm	4240



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