

Technical book

EP Range
1,6 to 2,2 tons
Pallet trucks



- Pedestrian
- Ride on 6 or 9 km/h
- Lateral exchange battery



1600 - 1800 kg

TECHNICAL SPECS

Specifications	1.1	Manufacturer			MANITOU	MANITOU
	1.2	Model			EP16	EP18
	1.3	Power source			Battery	Battery
	1.4	Driving position			Pedestrian	Pedestrian
	1.5	Nominal capacity	Q	kg	1600	1800
	1.6	Load centre of gravity	c	mm	600	600
	1.8	Distance centre to fork face (forks lowered/raised)	x	mm	964/901	953/890
	1.9	Wheelbase	y	mm	1309/1246	1372/1312
	Weights	2.1	Operating weight		kg	445
2.2		Axle load, with load, front/rear		kg	825/1185	1002/1278
2.3		Axle load, without load, front/rear		kg	311/134	336/144
Tyres, frame	3.1	Wheel type (front/rear)			Polyurethane	Polyurethane
	3.2	Size of drive wheel		mm	1x(Ø230x75)	1x(Ø230x75)
	3.3	Tyres size (load side)		mm	4x(Ø82x100)	2x(Ø82x100)
	3.4	Size of motor wheels		mm	2x(Ø100x40)	2x(Ø100x40)
	3.5	Number of front wheels (x=drive wheel) / rear wheels			1x + 2/4	1x + 2/2
	3.6	Front wheel gauge (middle of wheels)	b10	mm	435	435
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	365	365
Dimensions	4.4	Lift height	h3	mm	125	125
	4.9	Tiller arm in vertical position	h14	mm	1320	1336
	4.15	Fork height in low position	h13	mm	85 ^{s-o}	85 ^{s-o}
	4.19	Overall length	l1	mm	1659	1739
	4.20	Length at fork heels	l2	mm	480	589
	4.21	Total width (overall)	b1	mm	680	680
	4.22	Forks dimensions	s / e / l	mm	47x160x1150	45x175x1150
	4.25	Fork spread	b5	mm	526*	540*
	4.32	Ground clearance at centre of wheel-base	m2	mm	38	35
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	1921	1939
4.35	Turning radius (forks lowered/raised)	Wa	mm	1475/1422	1544/1484	
Performances	5.1	Speed of travel laden / unladen		km/h	5,8/6	5,8/6
	5.2	Speed of raise laden / unladen		m/s	0,030/0,038	0,030/0,038
	5.3	Speed of lowering laden / unladen		m/s	0,050/0,045	0,049/0,045
	5.8	Maximum climbing ability, with / without load		%	10/25	10/25
	5.10	Service brake			Electromagnetic	Electromagnetic
	5.11	Parking brake			Handle release	Handle release
Motors	6.1	Drive motor, 60 minute rating		kW	1,2	1,2
	6.2	lift motor rating at 10%y		kW	1	1
	6.3	Battery according to DIN 43531/35/36,A,B,C			BS	-
	6.4	Battery voltage/rated capacity (5h)		V/Ah	24/170	24/180**
	6.5	Battery weight		kg	170	180
Miscellaneous	8.1	Speed control			AC Mosfet variator	AC Mosfet variator
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	65	65

* Others dimensions are available.

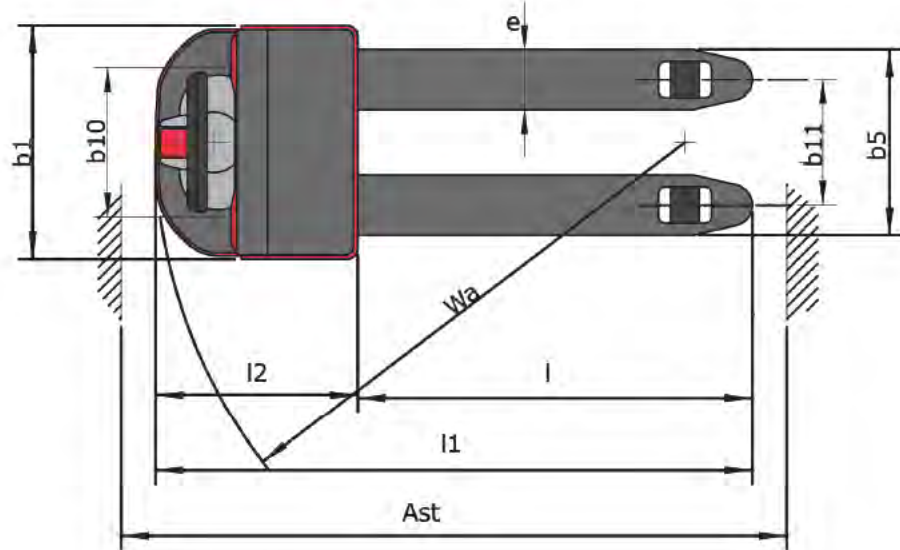
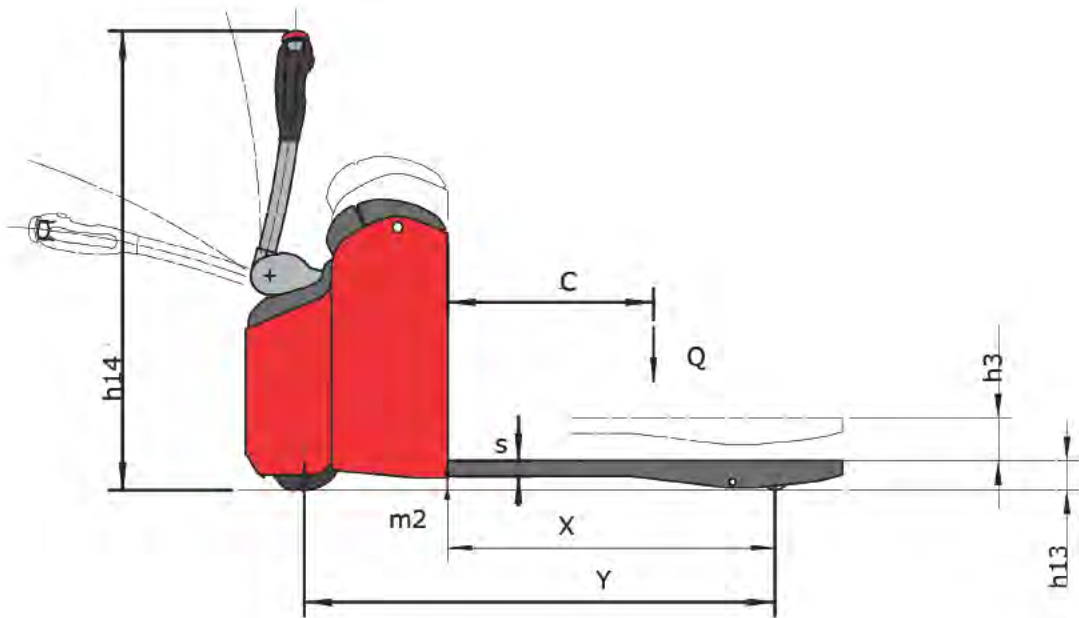
** Further alternatives are available.

Data is based on standard configurations (forks, battery).

Truck performance and dimensions are nominal and subject to tolerances.

Manitou product and specifications are subject to change without notice.

DIMENSIONAL DRAWINGS



2000 - 2200 kg

TECHNICAL SPECS

Specifications	1.1	Manufacturer			MANITOU	MANITOU
	1.2	Model			EP20	EP22
	1.3	Power source			Battery	Battery
	1.4	Driving posit on			Pedetrian	Pedetrian
	1.5	Nominal capacity	Q	kg	2000	2200
	1.6	Load centre of grav ty	c	mm	600	600
	1.8	Distance centre to fork face (forks lowered/raised)	x	mm	953/890	953/890
	1.9	Wheelbase	y	mm	1372/1312	1452/1392
	Weights	2.1	Operating weight		kg	482
2.2		Axle load, w th load, front/rear		kg	1077/1405	1286/1474
2.3		Axle load, w thout load, front/rear		kg	337/145	392/168
Tyres, frame	3.1	Wheel type (front/rear)			Polyurethane	Polyurethane
	3.2	Size of drive wheel		mm	1x(Ø230x75)	1x(Ø230x75)
	3.3	Tyres size (load side)		mm	4x(Ø82x100)	4x(Ø82x100)
	3.4	Size of cator wheels		mm	2x(Ø100x40)	2x(Ø100x40)
	3.5	Number of front wheels (x=drive wheel) / rear wheels			1x + 2/4	1x + 2/4
	3.6	Front wheel gauge (m ddle of wheels)	b10	mm	435	435
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	365	365
Dimensions	4.4	Lift height	h3	mm	125	125
	4.9	Tiller arm in vertical posit on	h14	mm	1336	1336
	4.15	Fork height in low posit on	h13	mm	85 ^{s-o}	85 ^{s-o}
	4.19	Overall lenght	l1	mm	1739	1819
	4.20	Lenght at fork heels	l2	mm	589	589
	4.21	Total w dth (overall)	b1	mm	680	680
	4.22	Forks dimens ons	s / e / l	mm	45x175x1150	45x175x1150
	4.25	Fork spread	b5	mm	540*	540*
	4.32	Ground clearance at centre of wheel-base	m2	mm	35	35
	4.34	Width of aisle for pallet 800 x 1200 lenghtways	Ast	mm	1939	2019
	4.35	Turning radius (forks lowered/raised)	Wa	mm	1544/1484	1624/1564
Performances	5.1	Speed of travel laden / unladen		km/h	5,8/6	5,8/6
	5.2	Speed of raise laden / unladen		m/s	0,029/0,038	0,028/0,038
	5.3	Speed of lowering laden / unladen		m/s	0,049/0,028	0,052/0,045
	5.8	Maximum climbing ability, w th / w thout load		%	10/25	10/25
	5.10	Serv ce brake			Electromagnet c	Electromagnet c
	5.11	Parking brake			Handle release	Handle release
Motors	6.1	Drive motor, 60 minute rating		kW	1,2	1,7
	6.2	lift motor rating at 10%y		kW	1	2
	6.3	Battery according to DIN 43531/35/36,A,B,C			-	-
	6.4	Battery voltage/rated capacity (5h)		V/Ah	24/180**	24/270**
	6.5	Battery weight		kg	180	245
Miscellaneous	8.1	Speed control			AC Mosfet variator	AC Mosfet variator
	8.4	Average noise level for the driver (in mot on) measured / guaranteed		db (A)	65	65

* Others dimensions are available.

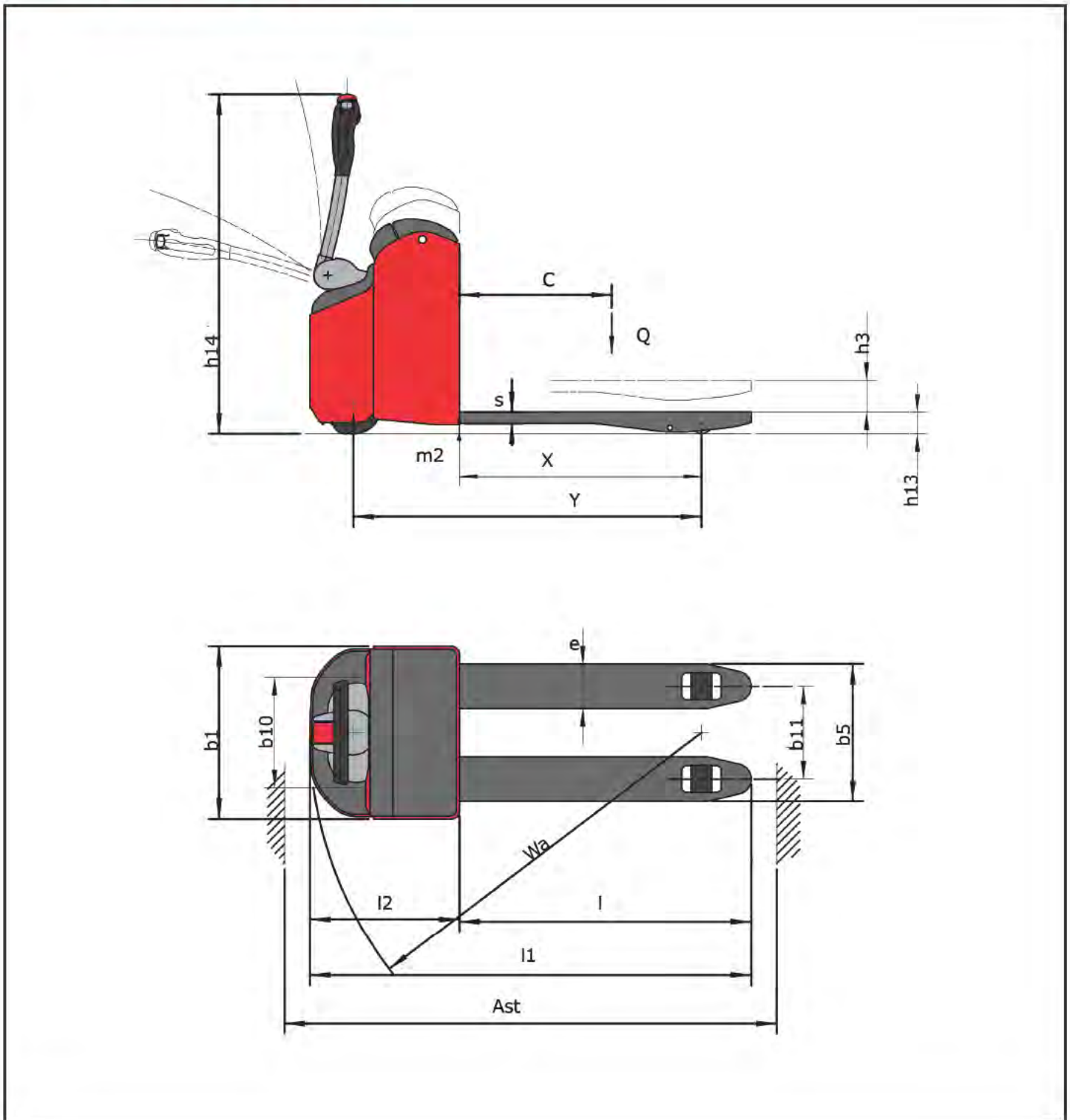
** Further alternatives are available.

Data is based on standard configurations (forks, battery).

Truck performance and dimensions are nominal and subject to tolerances.

Manitou product and specifications are subject to change without notice.

DIMENSIONAL DRAWINGS



2200 kg - PFR : Folding platform

TECHNICAL SPECS

Specifications	1.1	Manufacturer			MANITOU	MANITOU
	1.2	Model			EP22 PFR6	EP22 PFR9***
	1.3	Power source			Battery	Battery
	1.4	Driving position			Porté	Porté
	1.5	Nominal capacity	Q	kg	2200	2200
	1.6	Load centre of gravity	c	mm	600	600
	1.8	Distance centre to fork face (forks lowered/raised)	x	mm	894	894
	1.9	Wheelbase	y	mm	1496/1436	1496/1436
	Weights	2.1	Operating weight		kg	610
2.2		Axle load, w th load, front/rear		kg	1239/1571	1247/1543
2.3		Axle load, w thout load, front/rear		kg	415/195	425/205
Tyres, frame	3.1	Wheel type (front/rear)			Polyurethane	Polyurethane
	3.2	Size of drive wheel		mm	1x(Ø230x75)	1x(Ø230x75)
	3.3	Tyres size (load side)		mm	4x(Ø82x68)	4x(Ø82x68)
	3.4	Size of cator wheels		mm	2x(Ø120x50)	2x(Ø120x50)
	3.5	Number of front wheels (x=drive wheel) / rear wheels			1x + 2/4	1x + 2/4
	3.6	Front wheel gauge (m ddle of wheels)	b10	mm	435	435
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	365/505	365/505
Dimensions	4.4	Lift height	h3	mm	125	125
	4.9	Tiller arm in vertical posit on	h14	mm	1276	1276
	4.15	Fork height in low posit on	h13	mm	85 ^{±0}	85 ^{±0}
	4.19	Overall lenght	l1	mm	1956/2463	1956/2518
	4.20	Lenght at fork heels	l2	mm	726/1233	726/1288
	4.21	Total w dth (overall)	b1	mm	688	688
	4.22	Forks dimens ons	s / e / l	mm	45x175x1150	45x175x1150
	4.25	Fork spread	b5	mm	540/680*	540/680*
	4.32	Ground clearance at centre of wheel-base	m2	mm	40	40
	4.34	Width of aisle for pallet 800 x 1200 lenghtways	Ast	mm	2250	2250
4.35	Turning radius (forks lowered/raised)	Wa	mm	1805	1805	
Performances	5.1	Speed of travel laden / unladen		km/h	5,6/6	8,5/9
	5.2	Speed of raise laden / unladen		m/s	0,029/0,038	0,029/0,038
	5.3	Speed of lowering laden / unladen		m/s	0,05/0,045	0,05/0,045
	5.8	Maximum climbing abil ty, w th / w thout load		%	10/20	12/20
	5.10	Serv ce brake			Electromagnetic	Electromagnetic
	5.11	Parking brake			Handle release	Handle release
Motors	6.1	Drive motor, 60 minute rating		kW	1,7	1,7
	6.2	lift motor rating at 10%y		kW	2	2
	6.3	Battery according to DIN 43531/35/36,A,B,C			-	-
	6.4	Battery voltage/rated capacity (5h)		V/Ah	24/270	24/270 (375 max)
	6.5	Battery weight		kg	245 (360 max)**	245 (360 max)**
Miscellaneous	8.1	Speed control			AC Mosfet variator	AC Mosfet variator
	8.4	Average noise level for the driver (in mot on) measured / guaranteed		db (A)	65	65

* Others dimensions are available.

** Further alternatives are available.

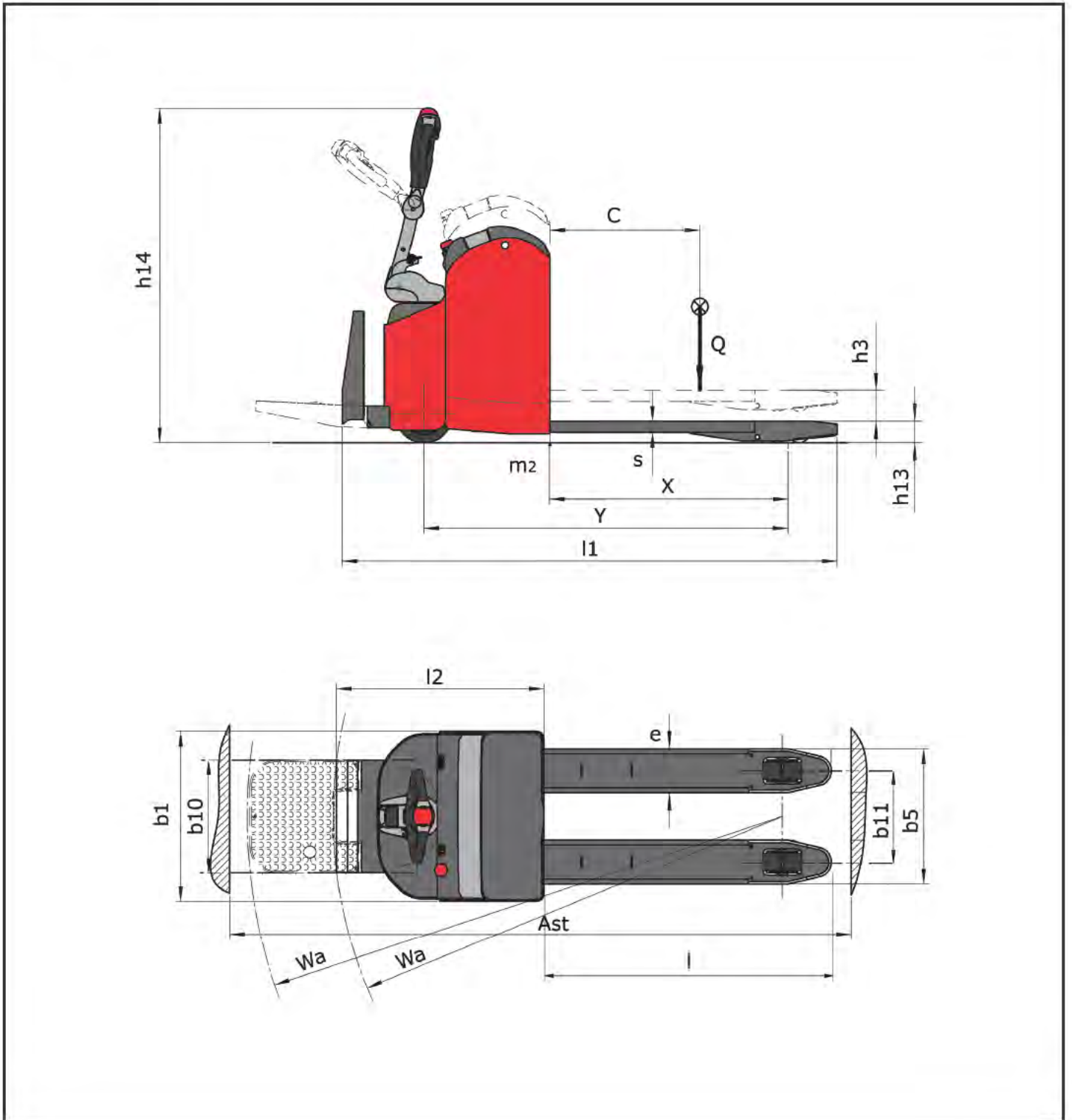
*** PFR 9 equipped with side guard

Data is based on standard configurations (forks, battery).

Truck performance and dimensions are nominal and subject to tolerances.

Manitou product and specifications are subject to change without notice.

DIMENSIONAL DRAWINGS



Your nearest MANITOU dealer :



Head office

B.P. 249 - 430 rue de l'Aubinière - 44158 Ancenis Cedex - France
Tel: 00 33 (0)2 40 09 10 11 - Fax: 00 33 (0)2 40 09 10 97
www.manitou.com

This brochure describes versions and configuration options for Manitou products which may be fitted with different equipment. The equipment described in this brochure may be standard, optional or not available depending on version. Manitou reserves the right to change the specifications shown and described at any time and without prior warning. The manufacturer is not liable for the specifications given. For more information, contact your Manitou dealer. Non-contractual document. Product descriptions may differ from actual products. List of specifications is not comprehensive. The logos and visual identity of the company are the property of Manitou and may not be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are provided for information only.

MANITOU BF SA - Limited company with board of directors - Share capital: 39,547,824 euros - 857 802 508 RCS Nantes