Technical book

ME POP Range

1,5 to 3 tons

Electric trucks



MANITOU

1500 - 1600 kg - 3 wheels - 48V

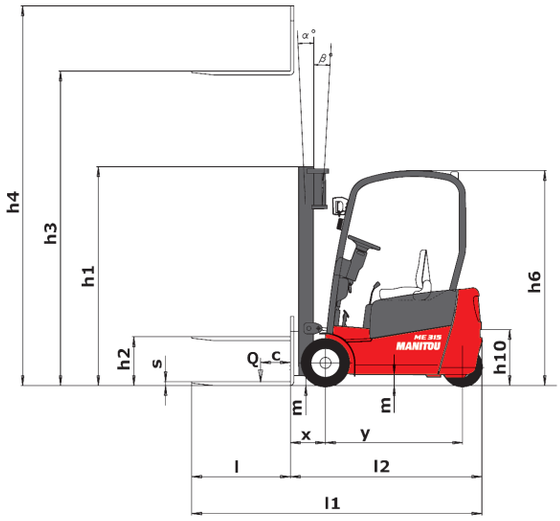
TECHNICAL SPECS

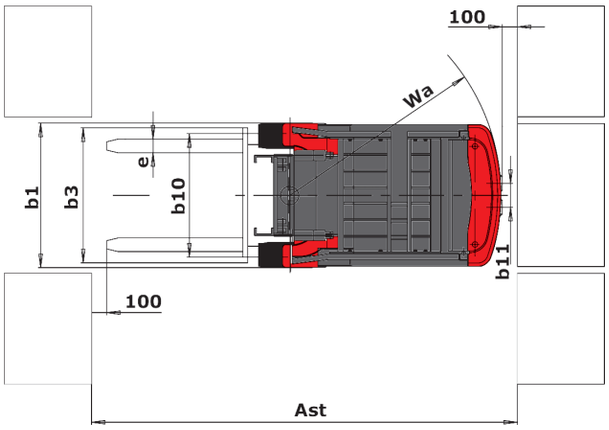
Specifications	1.1	Manufacturer			**MANITOU**	**MANITOU**	**MANITOU**	**MANITOU**
	1.2	Model			**ME315**	**ME316**	**ME318**	**ME320**
	1.3	Power source			Electric	Electric	Electric	Electric
	1.4	Driving position			Seated	Seated	Seated	Seated
	1.5	Nominal capacity	Q	t	1,5	1,6	1,8	2,0
	1.6	Load - centre of gravity	c	mm	500	500	500	500
	1.8	Distance from the load-bearing surface to centre of front axle with TDLI	x	mm	400[1)]	400[1)]	400[1)]	400[1)]
	1.9	Wheelbase	y	mm	1250	1358	1358	1465
Weight	2.1	Operating weight		kg	3050	3070	3090	3440
	2.2	Axle load, with load, front / rear		kg	3993/557	4155/515	4305/585	4893/547
	2.3	Axle load, without load, front / rear		kg	1400/1650	1565/1505	1668/1422	1662/1778
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE	SE	SE	SE
	3.2	Size of front wheels		" ou mm	18 x 7 - 8	18 x 7 - 8	18 x 7 - 8	200/50-10
	3.3	Size of rear wheels		" ou mm	15 x 4,5 - 8	15 x 4,5 - 8	15 x 4,5 - 8	15 x 4,5 - 8
	3.5	Number of front wheels (x = drive wheel) / rear wheels			2x/2	2x/2	2x/2	2x/2
	3.6	Front wheel gauge (middle of wheels)	b10	mm	902	902	902	902
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	175	175	175	175
Dimensions	4.1	Tilt of mast forwards / backwards	α / β	deg	6,5/6,5	6,5/6,5	6,5/6,5	6,5/6,5
	4.2	Height mast lowered	h1	mm	1995	1995	1995	1995
	4.3	Free lift	h2	mm	145	145	145	145
	4.4	Lift height	h3	mm	3000[2)]	3000[2)]	3000[2)]	3000[2)]
	4.5	Height mast extended	h4	mm	3565	3565	3565	3565
	4.7	Height of overhead guard (cabin)	h6	mm	2020	2020	2020	2020
	4.12	Height of towing bar	h10	mm	473	473	473	473
	4.19	Overall lenght	l1	mm	2862	2970	2970	3082
	4.20	Lenght at fork heels	l2	mm	1792	1900	1900	2012
	4.21	Total width (overall)	b1	mm	1060	1060	1060	1060
	4.22	Fork dimensions	s / e / l	mm	35 / 100 / 1070	35 / 100 / 1070	35 / 100 / 1070	40 / 100 / 1070
	4.23	Fork carriage to DIN 15173 A/B			FEM2A	FEM2A	FEM2A	FEM2A
	4.24	Width of fork carriage (with load backrest)	b3	mm	1000	1000	1000	1000
	4.31	Ground clearance below mast	m1	mm	100	100	100	100
	4.32	Ground clearance at centre of wheel-base	m2	mm	90	90	90	90
	4.33	Width of aisle for pallet 1000 x 1200 width	Ast	mm	3161	3271	3271	3380
	4.34	Width of aisle for pallet 800 x 1200 lenght	Ast	mm	3260	3370	3370	3480
	4.35	Turning radius	Wa	mm	1440	1550	1550	1658
	4.36	Inner turning radius	b13	mm	0	0	0	0
Performances	5.1	Speed of travel laden / unladen		km/h	13 / 14	13 / 14	12,5/14	12,5/14
	5.2	Speed of raise laden / unladen		m/s	0.29 / 0.44	0.28 / 0.44	0,27/0,43	0,25/0,4
	5.3	Speed of lowering laden / unladen		m/s	0,43/0,42	0,44/0,43	0,45/0,43	0,47/0,46
	5.5	Nominal towing power laden / unladen		N	7000/7250	7500/7720	8000/8300	9000/9300
	5.7	Gradeability with / without load		%	14/15	13/14	13/14	11/12
	5.10	Service brake			Wet disk brake	Wet disk brake	Wet disk brake	Wet disk brake
Engines	6.1	Drive motor, 60 minute rating		kW	2 x 4.5	2 x 4.5	2 x 4.5	2 x 4.5
	6.2	Lift motor rating at 10%		kW	8.6	8.6	8.6	8.6
	6.3	Battery according to DIN 43531/35/36 A,B,C,no			DIN 45531 A	DIN 45531 A	DIN 45531 A	DIN 45531 A
	6.4	Battery voltage/rated capacity (5h)		V / Ah	48 / 460[3)]	48 / 575[3)]	48 / 625[3)]	48 / 690[3)]
Divers	8.1	Power control			Electronic	Electronic	Electronic	Electronic
	8.2	Operating pressure for attachments		bar	145	145	145	145
	8.3	Oil flow for attachments		l/min	65	65	65	65
	8.4	Average noise level for the driver (in motion) measured DIN 12053		dB	71	72	72	72

1 - Others dimensions are available according to masts
2 - Please refer to the tables opposite for other values
3 - Others capacities are available

Data is based on standard configurations (forks, battery).
Performance data and dimensions are nominal and subject to tolerances.
Manitou products and their specifications are subject to change without notice.

DIMENSIONAL DRAWINGS





MASTS AND RESIDUAL CAPACITIES

ME315 - 316 - 318 - 320			Total Visibility Duplex						
			DVT27	DVT30	DVT33	DVT36	DVT40	DVT43	DVT45
h3	Lift height	mm	2700	3000	3300	3500	3600	4000	4500
h1	Height mast lowered	mm	1845	1995	2145	2295	2545	2710	2820
h2	Free lift	mm	145	145	145	145	145	145	145
h4	Height mast extended*	mm	3645	3945	4245	4545	4945	5245	5445
1,5T	Residual capacity with integrated sideshift	kg	1500	1500	1500	1500	1500	1400	1300
1,6T	Residual capacity with integrated sideshift	kg	1600	1600	1600	1600	1600	1500	1400
1,8T	Residual capacity with integrated sideshift	kg	1800	1800	1800	1800	1800	1700	1600
2,0T	Residual capacity with integrated sideshift	kg	2000	2000	2000	2000	2000	1900	1800
α/β	Tilt of mast forwards / backwards	°	6,5/6,5	6,5/6,5	6,5/6,5	6,5/6,5	3,5/5	3,5/5	3,5/5
x	Dist. from the load-bearing surface/centre of front axle with TDLI	mm	400	400	400	400	400	400	400

ME315 - 316 - 318 - 320			Free Lift Duplex			Free Lift Triplex						
			DLL27	DLL30	DLL33	TLL40	TLL43	TLL45	TLL48	TLL50	TLL55	TLL60
h3	Lift height	mm	2700	3000	3300	4000	4300	4500	4800	5000	5500	6000
h1	Height mast lowered	mm	1845	1995	2145	1910	2010	2075	2175	2240	2410	2625
h2	Free lift	mm	1260	1410	1560	1325	1425	1490	1590	1655	1825	2010
h4	Height mast extended*	mm	3295	3595	3895	4595	4895	5095	5395	5595	6095	6625
1,5T	Residual capacity with integrated sideshift	kg	1500	1500	1500	1400	1400	1300	1200	1150	1050	950
1,6T	Residual capacity with integrated sideshift	kg	1600	1600	1600	1500	1500	1400	1300	1250	1150	1050
1,8T	Residual capacity with integrated sideshift	kg	1800	1800	1800	1700	1700	1600	1500	1450	1200	1100
2,0T	Residual capacity with integrated sideshift	kg	2000	2000	2000	1900	1900	1800	1550	1500	1300	1200
α/β	Tilt of mast forwards / backwards	°	6/6	6/6	6/6	3,5/5	3,5/5	3,5/5	3,5/5	3,5/5	3,5/5	3,5/5
x	Dist. from the load-bearing surface/centre of front axle with TDLI	mm	419	419	419	430	430	430	430	430	430	430