TECHNICAL DATA SHEET

ME Range

Electric forklift trucks



MANITOU
HANDLING YOUR WORLD

1500 kg / 24V

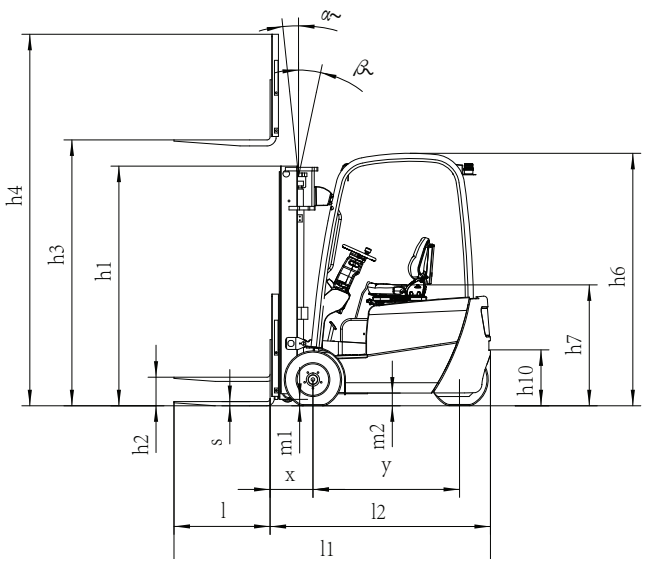
TECHNICAL SPECS

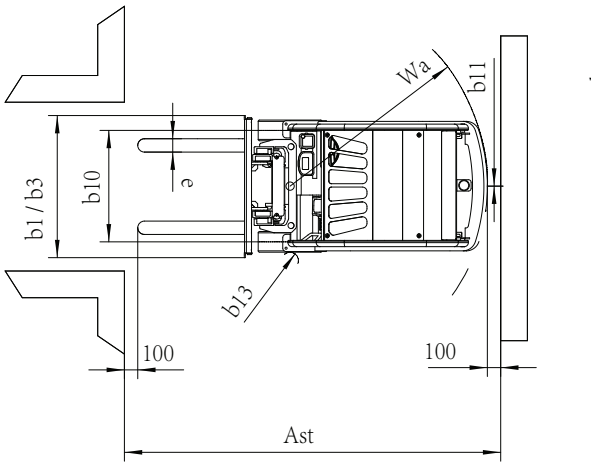
Specifications	1.1	Manufacturer			**MANITOU**
	1.2	Model			**ME 315c**
	1.3	Power source			Battery
	1.4	Driving position			Seated
	1.5	Nominal capacity	Q	t	1,5
	1.6	Load - centre of gravity	c	mm	500
	1.8	Distance from the load-bearing surface to centre of front axle	x	mm	345
	1.9	Wheelbase	y	mm	1220
Weight	2.1	Operating weight		kg	2880
	2.2	Axle load, with load, front / rear		kg	3835 / 545
	2.3	Axle load, without load, front / rear		kg	1315 / 1565
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE
	3.2	Size of front wheels			18 x 7-8
	3.3	Size of rear wheels			200 / 50-10
	3.5	Number of front wheels (x = drive wheel) / rear wheels			2 / 1x
	3.6	Front wheel gauge (middle of wheels) - mast <4m50 / mast > or = 4m50	b10	mm	835 / 855
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	
Dimensions	4.1	Tilt of mast forwards / backwards (1)	α / β	deg	5 / 6
	4.2	Height mast lowered	h1	mm	1995
	4.3	Free lift	h2	mm	135
	4.4	Lift height	h3	mm	3000
	4.5	Height mast extended without backrest	h4	mm	3565
	4.7	Height of overhead guard (cabin)	h6	mm	2105
	4.8	Height of seat	h7	mm	1020
	4.12	Height of towing bar	h10	mm	500
	4.19	Overall lenght	l1	mm	2635
	4.20	Lenght at fork heels	l2	mm	1835
	4.21	Total width (overall) - mast <4m50 / mast > or = 4m50	b1	mm	990 / 1030
	4.22	Fork dimensions	s / e / l	mm	35 / 100 / 1150
	4.23	Fork carriage to DIN 15173 A/B			FEM2A
	4.24	Width of fork carriage	b3	mm	1000
	4.31	Ground clearance below mast	m1	mm	100
	4.32	Ground clearance at centre of wheel-base	m2	mm	100
	4.33	Width of aisle for pallet 1000 x 1200 crossways	Ast	mm	3183
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	3306
	4.35	Turning radius	Wa	mm	1510
	4.36	Inner turning radius	b13	mm	
Performances	5.1	Speed of travel laden / unladen		km/h	9,5 / 10,5
	5.2	Speed of raise laden / unladen		m/s	0.22 / 0.33
	5.3	Speed of lowering laden / unladen		m/s	0.58 / 0.48
	5.5	Nominal towing power laden / unladen		N	5000 / 5300
	5.7	Gradeability with / without load		%	7 / 9
	5.10	Service brake			Hydraulic
Motors	6.1	Drive motor, 60 minute rating		kW	4
	6.2	Lifting motor rating		kW	8,6
	6.3	Battery according to DIN 43531/35/36 A,B,C, no			DIN 43535 A
	6.4	Battery voltage/capacity		V / Ah	24 / 840
	6.6	Energy consumption according to VDI cycle		kWh/h	3,5
Miscellan.	8.1	Power control			Electronic
	8.2	Operating pressure for attachments		bar	155
	8.3	Oil flow for attachments		l/min	16
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	70

1- Values with duplex mast

Data is based on standard configurations (forks, mast).
Performance data and dimensions are nominal and subject to tolerances.
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DIMENSIONAL DRAWINGS





MASTS AND RESIDUAL CAPACITIES

ME 315c			Total Visibility Duplex							Free Lift Duplex				
			DVT27	DVT30	DVT33	DVT36	DVT40	DVT43	DVT45	DLL27	DLL30	DLL33	DLL36	DLL40
h3	Lift height	mm	2700	3000	3300	3600	4000	4300	4500	2700	3000	3300	3600	4000
h1	Height mast lowered	mm	1845	1995	2145	2295	2545	2710	2820	1845	1995	2145	2295	2545
h2	Free lift*	mm	135	135	135	135	135	135	135	1250	1400	1550	1700	1950
h4	Height mast extended*	mm	3265	3565	3865	4165	4565	4865	5065	3305	3605	3905	4205	4605
	Residual capacity at max. height	kg	1500	1500	1500	1500	1500	1500	1450	1500	1500	1500	1500	1500
	Tilt of mast forwards / backwards	deg	5 / 6	5 / 6	5 / 6	5 / 6	3,5 / 5	3,5 / 5	3,5 / 5	5 / 6	5 / 6	5 / 6	5 / 6	3,5 / 5

ME 315c			Free LIft Triplex							
			TLL40	TLL43	TLL45	TLL48	TLL50	TLL55	TLL60	TLL65
h3	Lift height	mm	4000	4300	4500	4800	5000	5500	6000	6500
h1	Height mast lowered	mm	1910	2010	2075	2175	2240	2410	2625	2840
h2	Free lift*	mm	1315	1415	1480	1580	1645	1815	2010	2180
h4	Height mast extended*	mm	4605	4905	5105	5405	5605	6105	6625	7170
	Residual capacity at max. height	kg	1450	1400	1350	1300	1250	1200	1000	600
	Tilt of mast forwards / backwards	deg	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5

* Without backrest

1500 - 2000 kg / 48V

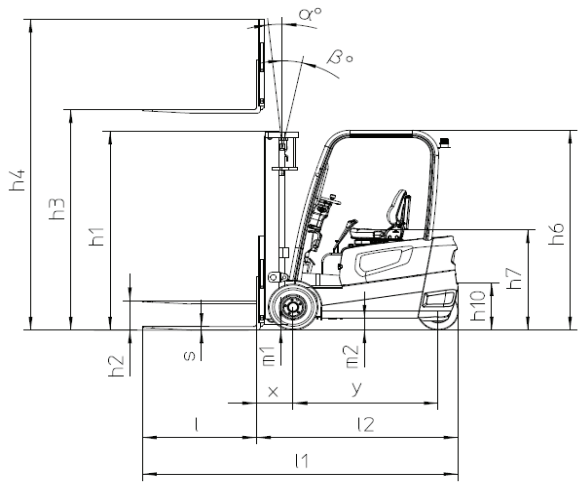
TECHNICAL SPECS

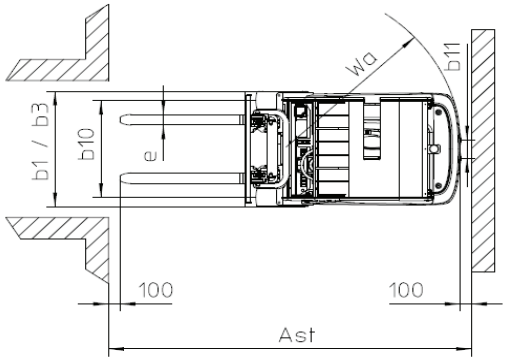
Specifications	1.1	Manufacturer			**MANITOU**	**MANITOU**	**MANITOU**	**MANITOU**
	1.2	Model			**ME 315**	**ME 316**	**ME 318**	**ME 320**
	1.3	Power source			Battery	Battery	Battery	Battery
	1.4	Driving position			Seated	Seated	Seated	Seated
	1.5	Nominal capacity	Q	t	1,5	1,6	1,8	2,0
	1.6	Load - centre of gravity	c	mm	500	500	500	500
	1.8	Distance from the load-bearing surface to centre of front axle	x	mm	355	355	355	355
	1.9	Wheelbase	y	mm	1250	1358	1358	1465
Weight	2.1	Operating weight		kg	2860	3120	3240	3470
	2.2	Axle load, with load, front / rear		kg	3600 / 560	4100 / 620	4350 / 690	4750 / 720
	2.3	Axle load, without load, front / rear		kg	1350 / 1510	1440 / 1680	1440 / 1800	1530 / 1940
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE	SE	SE	SE
	3.2	Size of front wheels			18 x 7-8	18 x 7-8	18 x 7-8	200 / 50-10
	3.3	Size of rear wheels			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 / 1	2x / 1	2x / 1	2x / 1
	3.6	Front wheel gauge (middle of wheels) - mast <4m50 / mast > or = 4m50	b10	mm	910	910	910	910
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	175	175	175	175
Dimensions	4.1	Tilt of mast forwards / backwards (1)	α / β	deg	5,5 / 6,5	5,5 / 6,5	5,5 / 6,5	5,5 / 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	3000	3000	3000
	4.5	Height mast extended without backrest	h4	mm	3565	3565	3565	3565
	4.7	Height of overhead guard (cabin)	h6	mm	2040	2040	2040	2040
	4.8	Height of seat	h7	mm	1000	1000	1000	1000
	4.12	Height of towing bar	h10	mm	500	500	500	500
	4.19	Overall lenght	l1	mm	2860	2968	2968	3076
	4.20	Lenght at fork heels	l2	mm	1790	1898	1898	2006
	4.21	Total width (overall) - mast <4m50 / mast > or = 4m50	b1	mm	1086	1086	1086	2006
	4.22	Fork dimensions	s / e / l	mm	35 / 100 / 1070	35 / 100 / 1070	35 / 100 / 1070	40 / 122 / 1070
	4.23	Fork carriage to DIN 15173 A/B			FEM2A	FEM2A	FEM2A	FEM2A
	4.24	Width of fork carriage	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	110	110	110	110
	4.33	Width of aisle for pallet 1000 x 1200 crossways	Ast	mm	3134	3237	3237	3342
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	3258	3361	3361	3466
	4.35	Turning radius	Wa	mm	1452	1555	1555	1660
	4.36	Inner turning radius	b13	mm				
Performances	5.1	Speed of travel laden / unladen		km/h	16 / 16	16 / 16	16 / 16	15 / 15
	5.2	Speed of raise laden / unladen		m/s	0,4 / 0,47	0,4 / 0,47	0,4 / 0,45	0,4 / 0,45
	5.3	Speed of lowering laden / unladen		m/s	0,46 / 0,45	0,46 / 0,44	0,46 / 0,42	0,47 / 0,42
	5.5	Nominal towing power laden / unladen		N	7000 / 7250	7500 / 7720	8000 / 8300	9000 / 9300
	5.7	Gradeability with / without load		%	16 / 18	16 / 18	15 / 17	13 / 15
	5.10	Service brake			Oli bath	Oli bath	Oli bath	Oli bath
Motors	6.1	Drive motor, 60 minute rating		kW	2 x 4,75	2 x 4,75	2 x 4,75	2 x 4,75
	6.2	Lifting motor rating		kW	8,6	8,6	8,6	8,6
	6.3	Battery according to DIN 43531/35/36 A,B,C, no			DIN 43531 A	DIN 43531 A	DIN 43531 A	DIN 43531 A
	6.4	Battery voltage/capacity		V / Ah	48 / 575	48 / 575	48 / 575	48 / 690
	6.6	Energy consumption according to VDI cycle		kWh/h	4,3	4,3	4,3	4,7
Miscellan.	8.1	Power control			Electronic	Electronic	Electronic	Electronic
	8.2	Operating pressure for attachments		bar	155	180	180	180
	8.3	Oil flow for attachments		l/min	35	35	35	35
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	70	70	70	70

1- Values with duplex mast

Data is based on standard configurations (forks, mast).
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DIMENSIONAL DRAWINGS





MASTS AND RESIDUAL CAPACITIES

ME 315 / 316 / 318 / 320			Total Visibility Duplex							Free Lift Duplex				
			DVT27	DVT30	DVT33	DVT36	DVT40	DVT43	DVT45	DLL27	DLL30	DLL33	DLL36	DLL40
h3	Lift height	mm	2700	3000	3300	3600	4000	4300	4500	2700	3000	3300	3600	4000
h1	Height mast lowered	mm	1845	1995	2145	2295	2545	2710	2820	1845	1995	2145	2295	2545
h2	Free lift*	mm	145	145	145	145	145	145	145	1260	1410	1560	1710	1960
h4	Height mast extended*	mm	3265	3565	3865	4165	4565	4865	5065	3295	3595	3895	4195	4595
	Residual capacity at max. height	kg												
	Tilt of mast forwards / backwards	deg	5,5 / 6	5,5 / 6	5,5 / 6	5,5 / 6	3,5 / 5	3,5 / 5	3,5 / 5	5,5 / 6	5,5 / 6	5,5 / 6	5,5 / 6	3,5 / 5

ME 315 / 316 / 318 / 320			Free LIft Triplex							
			TLL40	TLL43	TLL45	TLL48	TLL50	TLL55	TLL60	TLL65
h3	Lift height	mm	4000	4300	4500	4800	5000	5500	6000	6500
h1	Height mast lowered	mm	1910	2010	2075	2175	2240	2410	2625	2840
h2	Free lift*	mm	1325	1425	1490	1590	1655	1825	2010	2010
h4	Height mast extended*	mm	4595	4895	5095	5395	5595	6095	6625	7170
	Residual capacity at max. height	kg								
	Tilt of mast forwards / backwards	deg	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5	3,5 / 5

* Without backrest

1800 - 2500 kg / 48V

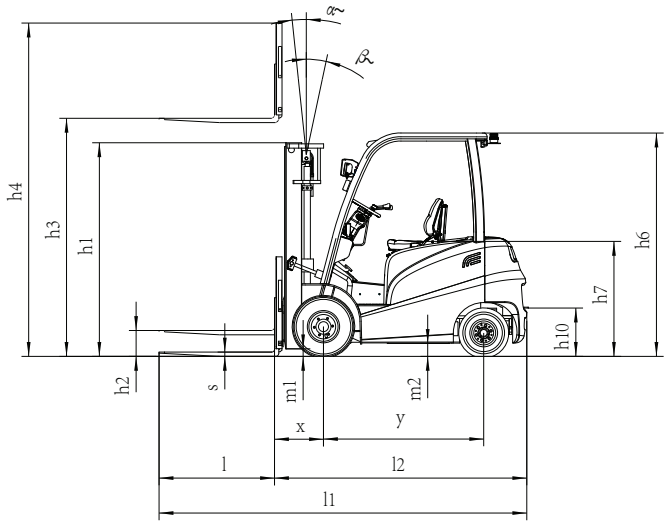
TECHNICAL SPECS

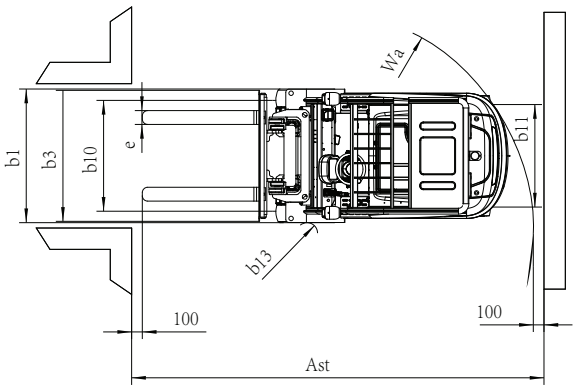
Specifications	1.1	Manufacturer			**MANITOU**	**MANITOU**	**MANITOU**
	1.2	Model			**ME 418**	**ME 420**	**ME 425c**
	1.3	Power source			Battery	Battery	Battery
	1.4	Driving position			Seated	Seated	Seated
	1.5	Nominal capacity	Q	t	1,8	2,0	2,5
	1.6	Load - centre of gravity	c	mm	500	500	500
	1.8	Distance from the load-bearing surface to centre of front axle	x	mm	406	455	455
	1.9	Wheelbase	y	mm	1380	1485	1485
Weight	2.1	Operating weight		kg	3070	4000	4300
	2.2	Axle load, with load, front / rear		kg	4350 / 520	5360 / 640	6060 / 740
	2.3	Axle load, without load, front / rear		kg	1400 / 1670	1910 / 2090	1960 / 2340
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE	SE	SE
	3.2	Size of front wheels			21 x 8-9	23 x 9-10	23 x 9-10
	3.3	Size of rear wheels			5.00-8	18 x 7-8	18 x 7-8
	3.5	Number of front wheels (x = drive wheel) / rear wheels			2x / 2	2x / 2	2x / 2
	3.6	Front wheel gauge (middle of wheels) - mast <4m50 / mast > or = 4m50	b10	mm	938	1058	1058
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	898	960	960
Dimensions	4.1	Tilt of mast forwards / backwards (1)	α / β	deg	5 / 10	5 / 10	5 / 10
	4.2	Height mast lowered	h1	mm	1975	2005	2005
	4.3	Free lift	h2	mm	145	140	140
	4.4	Lift height	h3	mm	3000	3000	3000
	4.5	Height mast extended without backrest	h4	mm	3565	3735	3735
	4.7	Height of overhead guard (cabin)	h6	mm	2130	2155	2155
	4.8	Height of seat	h7	mm	1045	1070	1070
	4.12	Height of towing bar	h10	mm	275	303	303
	4.19	Overall lenght	l1	mm	3248	3492	3492
	4.20	Lenght at fork heels	l2	mm	2098	2342	2342
	4.21	Total width (overall)	b1	mm	1138	1265	1265
	4.22	Fork dimensions	s / e / l	mm	35 / 100 / 1150	40 / 122 / 1150	40 / 122 / 1150
	4.23	Fork carriage to DIN 15173 A/B			FEM2A	FEM2A	FEM2A
	4.24	Width of fork carriage	b3	mm	1000	1038	1038
	4.31	Ground clearance below mast	m1	mm	100	112	112
	4.32	Ground clearance at centre of wheel-base	m2	mm	110	120	120
	4.33	Width of aisle for pallet 1000 x 1200 crossways	Ast	mm	3506	3745	3745
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	3755	3993	3993
	4.35	Turning radius	Wa	mm	1900	2090	2090
	4.36	Inner turning radius	b13	mm	680	730	730
Performances	5.1	Speed of travel laden / unladen		km/h	13,5 / 14	14 / 14	14 / 14
	5.2	Speed of raise laden / unladen		m/s	0,29 / 0,44	0,28 / 0,4	0,23 / 0,43
	5.3	Speed of lowering laden / unladen		m/s	0,49 / 0,48	0,42 / 0,29	0,41 / 0,22
	5.5	Nominal towing power laden / unladen		N	12000 / 11000	14000 / 12500	18000 / 17000
	5.7	Gradeability with / without load		%	12 / 13	11 / 12	11 / 12
	5.10	Service brake			Hydraulic	Hydraulic	Hydraulic
Motors	6.1	Drive motor, 60 minute rating		kW	8	11	11
	6.2	Lifting motor rating		kW	8,6	8,6	8,6
	6.3	Battery according to DIN 43531/35/36 A,B,C, no			DIN 43531 A	DIN 43531 B	DIN 43531 B
	6.4	Battery voltage/capacity		V / Ah	48 / 465	48 / 700	48 / 700
	6.6	Energy consumption according to VDI cycle		kWh/h	4,6	5,0	5,8
Miscellan.	8.1	Power control			Electronic	Electronic	Electronic
	8.2	Operating pressure for attachments		bar	175	175	175
	8.3	Oil flow for attachments		l/min	35	35	35
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	71	71	72

1- Values with duplex mast

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DIMENSIONAL DRAWINGS





MASTS AND RESIDUAL CAPACITIES

ME 418			Total Visibility Duplex							Free Lift Duplex				
			DVT27	DVT30	DVT33	DVT36	DVT40	DVT43	DVT45	DLL27	DLL30	DLL33	DLL36	DLL40
h3	Lift height	mm	2700	3000	3300	3600	4000	4300	4500	2700	3000	3300	3600	4000
h1	Height mast lowered	mm	1825	1975	2125	2325	2575	2725	2825	1825	1975	2125	2275	2525
h2	Free lift*	mm	145	145	145	145	145	145	145	1240	1390	1540	1690	1940
h4	Height mast extended*	mm	3265	3565	3865	4165	4565	4865	5065	3295	3595	3895	4195	4595
	Residual capacity at max. height	kg	1800	1800	1800	1800	1800	1550	1650	1800	1800	1800	1800	1800
	Tilt of mast forwards / backwards	deg	5 / 6	5 / 10	5 / 10	5 / 10	5 / 10	5 / 6	5 / 6	5 / 6	5 / 10	5 / 10	5 / 10	5 / 10

ME 418			Free LIft Triplex							
			TLL40	TLL43	TLL45	TLL48	TLL50	TLL55	TLL60	TLL65
h3	Lift height	mm	4000	4300	4500	4800	5000	5500	6000	6500
h1	Height mast lowered	mm	1975	2075	2085	2200	2250	2425	2650	2815
h2	Free lift*	mm	1250	1350	1500	1600	1665	1840	2000	2200
h4	Height mast extended*	mm	4735	5035	5105	5410	5595	6095	6660	7125
	Residual capacity at max. height	kg	1700	1650	1650	1600	1550	1500	1300	1150
	Tilt of mast forwards / backwards	deg	5 / 6	5 / 6	5 / 6	5 / 6	5 / 6	3 / 6	3 / 6	3 / 6

ME 420 & 425c			Total Visibility Duplex							Free Lift Duplex				
			DVT27	DVT30	DVT33	DVT36	DVT40	DVT43	DVT45	DLL27	DLL30	DLL33	DLL36	DLL40
h3	Lift height	mm	2700	3000	3300	3600	4000	4300	4500	2700	3000	3300	3600	4000
h1	Height mast lowered	mm	1855	2005	2170	2305	2555	2730	2830	1866	1980	2130	2280	2530
h2	Free lift*	mm	140	140	140	140	140	140	140	1250	1350	1500	1650	1900
h4	Height mast extended*	mm	3350	3650	3980	4250	4650	4970	5150	3370	3635	3970	4270	4635
	Residual capacity at max height - ME420	kg	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Residual capacity at max height - ME425c	kg	2500	2500	2500	2500	2500	2500	2450	2500	2500	2500	2500	2500
	Tilt of mast forwards / backwards	deg	5 / 6	5 / 10	5 / 10	5 / 10	5 / 10	5 / 6	5 / 6	5 / 6	5 / 10	5 / 10	5 / 10	5 / 10

ME 420 & 425c			Free LIft Triplex							
			TLL40	TLL43	TLL45	TLL48	TLL50	TLL55	TLL60	TLL65
h3	Lift height	mm	4000	4300	4500	4800	5000	5500	6000	6500
h1	Height mast lowered	mm	1925	2025	2095	2195	2260	2425	2645	2820
h2	Free lift*	mm	1255	1355	1425	1525	1590	1755	1975	2150
h4	Height mast extended*	mm	4680	4980	5230	5480	5680	6180	6690	7180
	Residual capacity at max height - ME420	kg	2000	2000	2000	1950	1850	1800	1650	1550
	Residual capacity at max height - ME425c	kg	2500	2450	2350	2250	2150	2050	1650	1350
	Tilt of mast forwards / backwards	deg	5 / 6	5 / 6	5 / 6	5 / 6	5 / 6	3 / 6	3 / 6	3 / 6

* Without backrest

2500 - 3500 kg / 80V

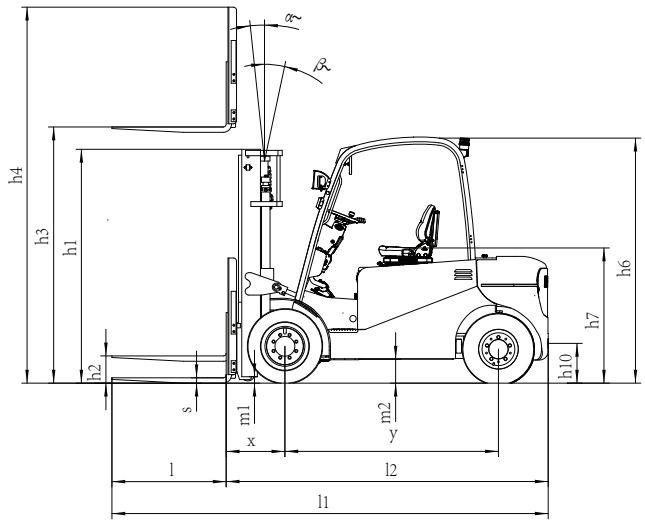
TECHNICAL SPECS

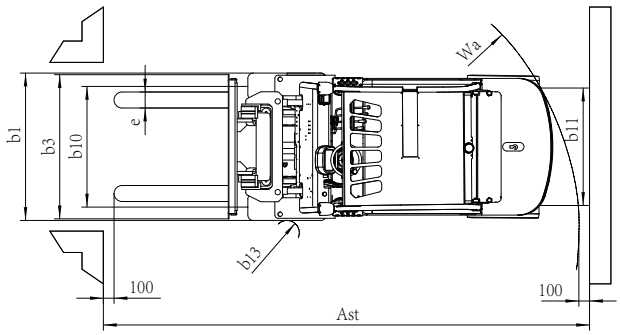
Specifications	1.1	Manufacturer			**MANITOU**	**MANITOU**	**MANITOU**
	1.2	Model			**ME 425**	**ME 430**	**ME 435**
	1.3	Power source			Battery	Battery	Battery
	1.4	Driving position			Seated	Seated	Seated
	1.5	Nominal capacity	Q	t	2,5	3,0	3,5
	1.6	Load - centre of gravity	c	mm	500	500	500
	1.8	Distance from the load-bearing surface to centre of front axle	x	mm	435	440	450
	1.9	Wheelbase	y	mm	1750	1750	1750
Weight	2.1	Operating weight		kg	5100	5250	5550
	2.2	Axle load, with load, front / rear		kg	6620 / 980	7340 / 910	8050 / 1000
	2.3	Axle load, without load, front / rear		kg	2500 / 2600	2572 / 2578	2720 / 2830
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE	SE	SE
	3.2	Size of front wheels			23x9-10	23x9-10	23x9-10
	3.3	Size of rear wheels			18x7-8	18x7-8	18x7-8
	3.5	Number of front wheels (x = drive wheel) / rear wheels			2x / 2	2x / 2	2x / 2
	3.6	Front wheel gauge (middle of wheels) - mast <4m50 / mast > or = 4m50	b10	mm	1073	1073	1085
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	960	960	960
Dimensions	4.1	Tilt of mast forwards / backwards (1)	α / β	deg	5 / 8	5 / 8	5 / 8
	4.2	Height mast lowered	h1	mm	2235	2235	2235
	4.3	Free lift	h2	mm	150	150	150
	4.4	Lift height	h3	mm	3000	3000	3000
	4.5	Height mast extended without backrest	h4	mm	4100	4100	4100
	4.7	Height of overhead guard (cabin)	h6	mm	2240	2240	2240
	4.8	Height of seat	h7	mm	1190	1190	1190
	4.12	Height of towing bar	h10	mm	625	625	625
	4.19	Overall lenght	l1	mm	3640	3645	3650
	4.20	Lenght at fork heels	l2	mm	2490	2495	2500
	4.21	Total width (overall)	b1	mm	1275	1275	1315
	4.22	Fork dimensions	s / e / l	mm	40 / 122 / 1150	45 / 122 / 1150	50 / 122 / 1150
	4.23	Fork carriage to DIN 15173 A/B			FEM2A	FEM3A	FEM3A
	4.24	Width of fork carriage	b3	mm	1100	1100	1100
	4.31	Ground clearance below mast	m1	mm	105	105	112
	4.32	Ground clearance at centre of wheel-base	m2	mm	115	115	115
	4.33	Width of aisle for pallet 1000 x 1200 crossways	Ast	mm	4035	4040	4050
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	4235	4240	4250
	4.35	Turning radius	Wa	mm	2400	2400	2400
	4.36	Inner turning radius	b13	mm	730	730	730
Performances	5.1	Speed of travel laden / unladen		km/h	19 / 20	19 / 20	19 / 20
	5.2	Speed of raise laden / unladen		m/s	0,46 / 0,62	0,42 / 0,54	0,39 / 0,54
	5.3	Speed of lowering laden / unladen		m/s	0,47 / 0,42	0,45 / 0,42	0,47 / 0,42
	5.5	Nominal towing power laden / unladen		N	17400 / 16400	17200 / 16800	16900 / 17000
	5.7	Gradeability with / without load		%	16 / 21	14 / 20	12 / 18
	5.10	Service brake			Oli bath	Oli bath	Oli bath
Motors	6.1	Drive motor, 60 minute rating		kW	18,5	18,5	18,5
	6.2	Lifting motor rating		kW	25,4	25,4	25,4
	6.3	Battery according to DIN 43531/35/36 A,B,C, no			DIN 43536 A	DIN 43536 A	DIN 43536 A
	6.4	Battery voltage/capacity		V / Ah	80 / 700	80 / 700	80 / 700
	6.6	Energy consumption according to VDI cycle		kWh/h	10,5	11,5	12,5
Miscellan.	8.1	Power control			Electronic	Electronic	Electronic
	8.2	Operating pressure for attachments		bar	210	210	210
	8.3	Oil flow for attachments		l/min	65	65	65
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	71	72	74

1- Values with duplex mast

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

ME 425			Total Visibility Duplex									Free Lift Duplex				Free LIft Triplex					
			DVT30	DVT33	DVT35	DVT37	DVT40	DVT43	DVT45	DVT48	DVT50	DLL30	DLL33	DLL37	DLL40	TLL40	TLL43	TLL48	TLL50	TLL55	TLL60
h3	Lift height	mm	3000	3300	3500	3700	4000	4300	4500	4800	5000	3000	3300	3700	4000	4000	4300	4800	5000	5500	6000
h1	Height mast lowered	mm	2085	2235	2335	2435	2685	2835	2935	3085	3185	2035	2185	2385	2585	2035	2135	2285	2385	2585	2853
h2	Free lift*	mm	140	140	140	140	140	140	140	140	140	1370	1520	1720	1920	1370	1470	1620	1720	1920	2170
h4	Height mast extended*	mm	3643	3943	4143	4243	4643	4943	5143	5443	5643	3665	3965	4365	4665	4665	4965	5465	5665	6165	6665
	Residual capacity at max. height	kg																			
	Tilt of mast forwards / backwards	deg	5 / 8	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5

ME 430			Total Visibility Duplex									Free Lift Duplex				Free LIft Triplex					
			DVT30	DVT33	DVT35	DVT37	DVT40	DVT43	DVT45	DVT48	DVT50	DLL30	DLL33	DLL37	DLL40	TLL40	TLL43	TLL48	TLL50	TLL55	TLL60
h3	Lift height	mm	3000	3300	3500	3700	4000	4300	4500	4800	5000	3000	3300	3700	4000	4000	4300	4800	5000	5500	6000
h1	Height mast lowered	mm	2235	2385	2485	2535	2835	2985	3085	3235	3335	2135	2285	2485	2685	2035	2135	2285	2385	2585	2835
h2	Free lift*	mm	145	145	145	145	145	145	145	145	145	1275	1425	1625	1825	1250	1350	1500	1600	1800	2050
h4	Height mast extended*	mm	3838	4138	4338	4438	4838	5138	5338	5638	5838	3860	4160	4560	4860	4785	5085	5585	5785	6285	6785
	Residual capacity at max. height	kg																			
	Tilt of mast forwards / backwards	deg	5 / 8	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5

ME 435			Total Visibility Duplex									Free Lift Duplex				Free LIft Triplex					
			DVT30	DVT33	DVT35	DVT37	DVT40	DVT43	DVT45	DVT48	DVT50	DLL30	DLL33	DLL37	DLL40	TLL40	TLL43	TLL48	TLL50	TLL55	TLL60
h3	Lift height	mm	3000	3300	3500	3700	4000	4300	4500	4800	5000	3000	3300	3700	4000	4000	4300	4800	5000	5500	6000
h1	Height mast lowered	mm	2235	2385	2485	2535	2835	2985	3085	3235	3335	2135	2285	2485	2685	2135	2235	2435	2535	2735	2985
h2	Free lift*	mm	150	150	150	150	150	150	150	150	150	1275	1425	1625	1825	1275	1375	1575	1675	1875	2125
h4	Height mast extended*	mm	3838	4138	4338	4438	4838	5138	5338	5638	5838	3860	4160	4560	4860	4680	5160	5660	5860	6360	6860
	Residual capacity at max. height	kg																			
	Tilt of mast forwards / backwards	deg	5 / 8	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 8	5 / 8	5 / 8	5 / 8	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5

* Without backrest

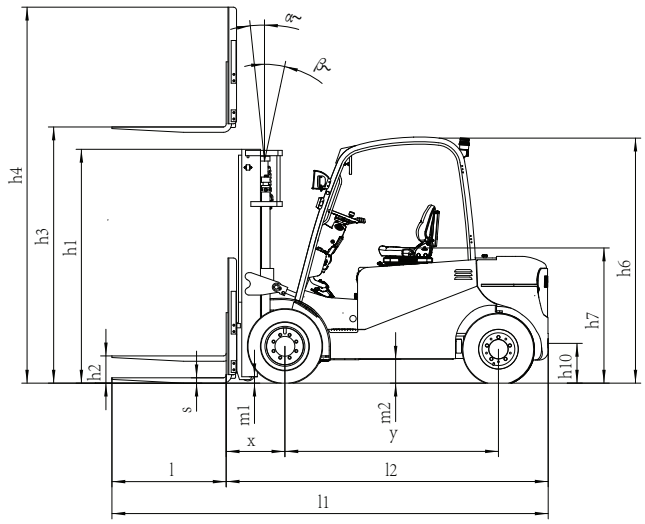
4000 - 5000 kg / 80V

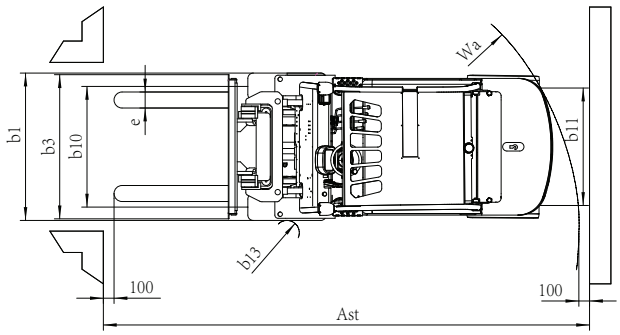
TECHNICAL SPECS

Specifications	1.1	Manufacturer			**MANITOU**	**MANITOU**	**MANITOU**
	1.2	Model			**ME 440**	**ME 445**	**ME 450**
	1.3	Power source			Battery	Battery	Battery
	1.4	Driving position			Seated	Seated	Seated
	1.5	Nominal capacity	Q	t	4,0	4,5	5,0
	1.6	Load - centre of gravity	c	mm	500	500	500
	1.8	Distance from the load-bearing surface to centre of front axle	x	mm	550	550	550
	1.9	Wheelbase	y	mm	2000	2000	2000
Weight	2.1	Operating weight		kg	6600	6800	7100
	2.2	Axle load, with load, front / rear		kg	9440 / 1160	9950 / 1350	10635 / 1465
	2.3	Axle load, without load, front / rear		kg	3960 / 2640	3950 / 2850	3625 / 3475
Tyres, frame	3.1	Tyre equipment: cushion (V), superelastic (SE), pneumatic (L)			SE	SE	SE
	3.2	Size of front wheels			250/15	250/15	250/15
	3.3	Size of rear wheels			7.00-12	7.00-12	7.00-12
	3.5	Number of front wheels (x = drive wheel) / rear wheels			2x / 2	2x / 2	2x / 2
	3.6	Front wheel gauge (middle of wheels) - mast <4m50 / mast > or = 4m50	b10	mm	1130	1130	1130
	3.7	Rear wheel gauge (middle of wheels)	b11	mm	1100	1100	1100
Dimensions	4.1	Tilt of mast forwards / backwards (1)	α / β	deg	6 / 12	6 / 12	6 / 12
	4.2	Height mast lowered	h1	mm	2185	2185	2185
	4.3	Free lift	h2	mm	150	150	150
	4.4	Lift height	h3	mm	3000	3000	3000
	4.5	Height mast extended without backrest	h4	mm	4170	4170	4170
	4.7	Height of overhead guard (cabin)	h6	mm	2300	2300	2300
	4.8	Height of seat	h7	mm	1235	1235	1235
	4.12	Height of towing bar	h10	mm	460	460	460
	4.19	Overall lenght	l1	mm	4165	4165	4165
	4.20	Lenght at fork heels	l2	mm	3015	3015	3015
	4.21	Total width (overall)	b1	mm	1380	1380	1380
	4.22	Fork dimensions	s / e / l	mm	50 / 122 / 1150	50 / 150 / 1150	50 / 150 / 1150
	4.23	Fork carriage to DIN 15173 A/B			FEM3A	FEM3A	FEM3A
	4.24	Width of fork carriage	b3	mm	1100	1100	1100
	4.31	Ground clearance below mast	m1	mm	110	110	110
	4.32	Ground clearance at centre of wheel-base	m2	mm	219	219	219
	4.33	Width of aisle for pallet 1000 x 1200 crossways	Ast	mm	4470	4470	4470
	4.34	Width of aisle for pallet 800 x 1200 lengthways	Ast	mm	4715	4715	4715
	4.35	Turning radius	Wa	mm	2720	2720	2720
	4.36	Inner turning radius	b13	mm	805	805	805
Performances	5.1	Speed of travel laden / unladen		km/h	13,5 / 14	13,5 / 14	13 / 13,5
	5.2	Speed of raise laden / unladen		m/s	0,26 / 0,4	0,26 / 0,4	0,26 / 0,4
	5.3	Speed of lowering laden / unladen		m/s	0,5 / 0,3	0,5 / 0,3	0,5 / 0,3
	5.5	Nominal towing power laden / unladen		N	24000 / 19500	26000 / 20000	27000 / 20500
	5.7	Gradeability with / without load		%	15 / 16	15 / 16	15 / 16
	5.10	Service brake			Hydraulic	Hydraulic	Hydraulic
Motors	6.1	Drive motor, 60 minute rating		kW	16,6	16,6	16,6
	6.2	Lifting motor rating		kW	25,4	25,4	25,4
	6.3	Battery according to DIN 43531/35/36 A,B,C, no			DIN 43536 A	DIN 43536 A	DIN 43536 A
	6.4	Battery voltage/capacity		V / Ah	80 / 700	80 / 700	80 / 700
	6.6	Energy consumption according to VDI cycle		kWh/h	12,5	13,1	15,3
Miscellan.	8.1	Power control			Electronic	Electronic	Electronic
	8.2	Operating pressure for attachments		bar	210	210	210
	8.3	Oil flow for attachments		l/min	65	65	65
	8.4	Average noise level for the driver (in motion) measured / guaranteed		db (A)	78	78	78

1- Values with duplex mast

DIMENSIONAL DRAWINGS





MASTS AND RESIDUAL CAPACITIES

ME 440 / 445 / 450			Total Visibility Duplex								Free Lift Duplex		
			DVT30	DVT33	DVT35	DVT40	DVT43	DVT45	DVT48	DVT50	DLL30	DLL33	DLL40
h3	Lift height	mm	3000	3300	3500	4000	4300	4500	4800	5000	3000	3300	4000
h1	Height mast lowered	mm	2185	2335	2435	2735	2900	3010	3175	3285	2166	2316	2666
h2	Free lift*	mm	150	150	150	150	150	150	150	150	1365	1515	1865
h4	Height mast extended*	mm	3770	4070	4270	4770	5070	5270	5570	5770	3805	4105	4805
	Residual capacity at max. height	kg											
	Tilt of mast forwards / backwards	deg	6 / 12	6 / 12	6 / 12	6 / 12	6 / 6	6 / 6	6 / 6	6 / 6	6 / 12	6 / 12	

ME 440 / 445 / 450			Free LIft Triplex					
			TLL40	TLL43	TLL48	TLL50	TLL55	TLL60
h3	Lift height	mm	4000	4300	4800	5000	5500	6000
h1	Height mast lowered	mm	2020	2120	2280	2350	2515	2730
h2	Free lift*	mm	1218	1318	1478	1548	1710	1928
h4	Height mast extended*	mm	4805	5105	5605	5805	6305	6805
	Residual capacity at max. height	kg						
	Tilt of mast forwards / backwards	deg	6 / 12	6 / 6	6 / 6	6 / 6	3 / 6	3 / 6

* Without backrest

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