Technical sheet :

ME 438 LIFT

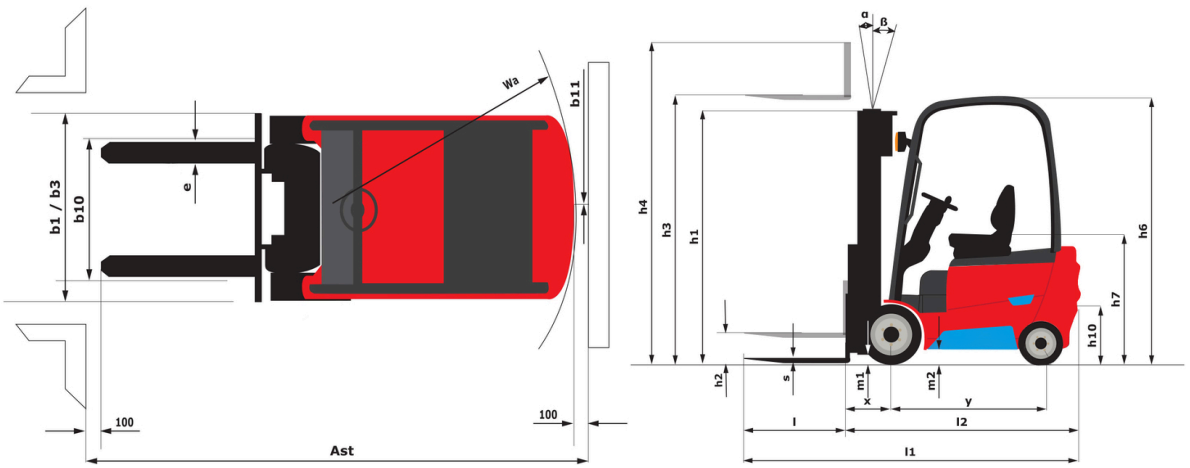
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	Technical characteristics		Metric
1.1	Manufacturer		Manitou
1.2	Model Name		ME 438 LIFT
1.3	Power source		Electrical - Lithium
1.4	Operator type		Seated
1.5	Max. capacity	Q	3800 kg
1.6	Load center of gravity	c	500 mm
1.8	Load distance, centre of drive axle to fork	x	479 mm
1.9	Wheelbase	y	1650 mm
	Standard mast reference of the machine		FVD 30
	Weight		
2.1	Service weight		5260 kg
2.2	Weight on front axle (laden) / rear axle (laden)		7900 kg / 1100 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1870 kg / 3260 kg
	Wheels		
3.1	Tires type		Solid tires
3.2	Dimensions of front wheels		23×10-12-18PR
3.3	Dimensions of rear wheels		200/50
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	1044 mm
3.7	Rear wheel gauge	b11	950 mm
	Dimensions		
4.8	Seat height/stand height	h7	1155 mm
4.7	Height of overhead guard (cabin)	h6	2186 mm
4.12	Height of towing bar (coupling height)	h10	440 mm
4.19	Overall length	l1	3600 mm
4.20	Length to face of forks	l2	2530 mm
4.21	Overall width	b1	1298 mm
4.22	Forks section / width / length	s / e / l	50 mm x 122 mm x 1070 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		3A
4.24	Fork carriage width	b3	1100 mm
4.31	Ground clearance below mast	m1	127 mm
4.32	Ground clearance at centre of wheelbase	m2	125 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	3918 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	4118 mm
4.35	Turning radius	Wa	2239 mm
	Performances		
5.1	Travel speed (laden / unladen)		16 km/h-17 km/h
5.2	Lifting speed (laden / unladen)		0.35 m/s-0.46 m/s
5.3	Lowering speed (laden / unladen)		0.50 m/s-0.53 m/s
5.5	Drawbar pull (Laden / Unladen)		850 daN / 650 daN
5.7	Gradeability (laden / unladen)		10 % / 18 %
5.10	Service brake		Hydraulic
	Engine		
6.1	Number of drive motor / Drive motor rating S2 60 min		20 / 20 kW
6.2	Lift motor rating at S3 15%		28 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		Lithium
6.4	Battery voltage / capacity		76.80 V / 460 Ah
	Battery energy		35.30 kWh
6.5	Battery weight (+/- 5%)		310 kg
6.6	Energy consumption according to VDI cycle (kWh/h)		7.20 kWh/h
	Miscellaneous		
8.2	Working hydraulic pressure for attachments		160 bar
8.3	Oil flow rate for attachments		25 l/min
8.4	Sound level at the driver's ear according to DIN 12 053		70 dB

ME 438 LIFT - Dimensional drawing



Characteristics of masts and residual capacities

-		FLT 43	FLT 70
α - Mast/fork carriage tilt, forward	°	6	3
β - Mast/fork carriage tilt, backward	°	6	6
h1 - Mast lowered height	mm	2207	
h2 - Mast free lift	mm	1377	
h3 - Mast lifting height	mm	4300	7000
h4 - Mast extended height	mm	5130	
Residual capacity at max height	kg	3600	
Residual capacity with integrated side shift at max heigth	kg	3500	

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 37	FVD 40	FVD 45
α - Mast/fork carriage tilt, forward	°	6	6	6	6	6
β - Mast/fork carriage tilt, backward	°	12	12	12	12	6
h1 - Mast lowered height	mm	2157	2307	2507	2757	3007
h2 - Mast free lift	mm	150	150	150	150	150
h3 - Mast lifting height	mm	3000	3300	3700	4000	4500
h4 - Mast extended height	mm	3786	4086	4486	4786	5286
Residual capacity at max height	kg	3800	3800	3800	3800	3600
Residual capacity with integrated side shift at max heigth	kg	3700	3700	3700	3700	3500

Free Lift Triplex (FLT)		FLT 40	FLT 45	FLT 48	FLT 50	FLT 55	FLT 60	FLT 65
α - Mast/fork carriage tilt, forward	°	6	6	6	6	3	3	3
β - Mast/fork carriage tilt, backward	°	6	6	6	6	6	6	6
h1 - Mast lowered height	mm	2107	2307	2457	2607	2857	3107	3357
h2 - Mast free lift	mm	1277	1477	1600	1777	2000	2200	2500
h3 - Mast lifting height	mm	4000	4500	4800	5000	5500	6000	6500
h4 - Mast extended height	mm	4830	5330	5657	5830	6357	6907	7357
Residual capacity at max height	kg	3700	3500	3400	3350	3250	2900	2650
Residual capacity with integrated side shift at max heigth	kg	3600	3400	3300	3250	3150	2800	2550

Equipment

Standard
Audio warning on reverse movements
Battery - 35.3kWh - Lithium-ion
Electric parking brake
External charger - 10kW AC - Lithium-ion - Three-phase
LED rear work light
Mechanical suspension PVC seat - Grammer MSG65
Overhead guard - With roof window (Tempered glass)
Panoramic interior rear view mirror
Rear working light

Optional
Battery - 46.7kWh - Lithium-ion
Enclosed cab
External charger - 20kW AC - Lithium-ion - Three-phase
External charger - 8kW AC - Lithium-ion - Three-phase
Heater
LED blue lamp
LED rear blue lamp
Non marking tires
Open cab
Overhead guard - With tempered glass windshield
Writing table

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