

Technical sheet :

# ME 316 LIFT

OXYGEN



 **MANITOU**  
HANDLING YOUR WORLD

Technical characteristics		Metric	
1.1	Manufacturer		Manitou
1.2	Model Name		ME 316 LIFT
1.3	Power source		Electrical - Lithium
1.4	Operator type		Seated
1.5	Max. capacity	Q	1600 kg
1.6	Load center of gravity	c	500 mm
1.8	Load distance, centre of drive axle to fork	x	359.50 mm
1.9	Wheelbase	y	1277 mm
	Standard mast reference of the machine		FVD 30
Weight			
2.1	Service weight		2940 kg
2.2	Weight on front axle (laden) / rear axle (laden)		3950 kg / 590 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1340 kg / 1600 kg
Wheels			
3.1	Tires type		Solid tires
3.2	Dimensions of front wheels		18x7-8
3.3	Dimensions of rear wheels		15x4,5-8
3.5	Number of front wheels / rear wheels		2 / 1
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	914 mm
3.7	Rear wheel gauge	b11	178 mm
Dimensions			
4.8	Seat height/stand height	h7	1120 mm
4.7	Height of overhead guard (cabin)	h6	2147 mm
4.12	Height of towing bar (coupling height)	h10	525 mm
4.19	Overall length	l1	2776 mm
4.20	Length to face of forks	l2	1856 mm
4.21	Overall width	b1	1086 mm
4.22	Forks section / width / length	s / e / l	35 mm x 100 mm x 920 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.24	Fork carriage width	b3	1000 mm
4.31	Ground clearance below mast	m1	100 mm
4.32	Ground clearance at centre of wheelbase	m2	110 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	3156 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	3280 mm
4.35	Turning radius	Wa	1470 mm
Performances			
5.1	Travel speed (laden / unladen)		16 km/h-16 km/h
5.2	Lifting speed (laden / unladen)		0.45 m/s-0.60 m/s
5.3	Lowering speed (laden / unladen)		0.46 m/s-0.44 m/s
5.5	Drawbar pull (Laden / Unladen)		330 daN / 390 daN
5.7	Gradeability (laden / unladen)		6 % / 10 %
5.10	Service brake		Hydraulic
Engine			
6.1	Drive motor rating S2 60 min		2.50 kW
6.2	Lift motor rating at S3 15%		11 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		Lithium
6.4	Battery voltage / capacity		76.80 V / 230 Ah
6.5	Battery weight (+/- 5%)		185 kg
6.6	Energy consumption according to VDI cycle (kWh/h)		3.80 kWh/h
Miscellaneous			
8.2	Working hydraulic pressure for attachments		185 bar
8.3	Oil flow rate for attachments		30 l/min
8.4	Sound level at the driver's ear according to DIN 12 053		70 dB

### ME 316 LIFT - Dimensional drawing



## Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)	FVD 30	FVD 33	FVD 40	FVD 45
α - Mast/fork carriage tilt, forward °	7	7	7	7
β - Mast/fork carriage tilt, backward °	6	6	6	6
h1 - Mast lowered height mm	1988	2138	2588	2838
h2 - Mast free lift mm	140	140	140	140
h3 - Mast lifting height mm	3000	3300	4000	4500
h4 - Mast extended height mm	3560	3860	4560	5060
Residual capacity at max height kg	1600	1600	1600	1500
Residual capacity with integrated side shift at max height kg	1550	1550	1550	1450

Free Lift Triplex (FLT)	FLT 40	FLT 45	FLT 48	FLT 50	FLT 55	FLT 60	FLT 65
α - Mast/fork carriage tilt, forward °	3.50	3.50	6	3.50	3.50	3.50	3.50
β - Mast/fork carriage tilt, backward °	5	5	12	5	5	5	5
h1 - Mast lowered height mm	1888	2038	1978	2213	2388	2588	2788
h2 - Mast free lift mm	1292	1392	1492	1582	1792	1992	2192
h3 - Mast lifting height mm	4000	4500	4800	5000	5500	6000	6500
h4 - Mast extended height mm	4552	5052		5552	6052	6552	7052
Residual capacity at max height kg	1600	1500	1450	1400	1250	1100	900
Residual capacity with integrated side shift at max height kg	1550	1450	1400	1350	1200	1050	850

## Equipment

Standard
Audio warning on reverse movements
Battery - 17.7kWh - Lithium-ion
Electric parking brake
External charger - 10kW AC - Lithium-ion - Three-phase
Front and Rear - Work Lights
Mechanical suspension PVC seat - Grammer MSG65
Overhead guard - With roof window (Tempered glass)
Panoramic interior rear view mirror
Rear working light

Optional
Battery - 23.3kWh - Lithium-ion
Enclosed cab
External charger - 8kW AC - Lithium-ion - Three-phase
Heater
LED front blue lamp
LED rear blue lamp
Mini levers - 4 hydraulics movements
Non marking tires
Open cab
Overhead guard - With tempered glass windshield
Writing table



**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](http://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