

Technical sheet :

ME 316 US



 **MANITOU**
HANDLING YOUR WORLD

Technical characteristics		Imperial	
1.1	Manufacturer		Manitou
1.2	Model Name		ME 316 US
1.3	Power source		Electrical - Lead
1.4	Operator type		Seated
1.5	Max. capacity	Q	3527 lb
1.6	Load center of gravity	c	20 in
1.8	Load distance, centre of drive axle to fork	x	14 in
1.9	Wheelbase	y	53 in
Weight			
2.1	Service weight		6878 lb
2.2	Weight on front axle (laden) / rear axle (laden)		9039 lb / 1367 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		3175 lb / 3704 lb
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	36 in
3.7	Rear wheel gauge	b11	7 in
Dimensions			
4.8	Seat height/stand height	h7	39 in
4.7	Height of overhead guard (cabin)	h6	80 in
4.12	Height of towing bar (coupling height)	h10	20 in
4.19	Overall length	l1	117 in
4.20	Length to face of forks	l2	75 in
4.21	Overall width	b1	43 in
4.22	Forks section / width / length	s / e / l	1 in x 4 in x 42 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.24	Fork carriage width	b3	39 in
4.31	Ground clearance below mast	m1	4 in
4.32	Ground clearance at centre of wheelbase	m2	4 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	127 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	132 in
4.35	Turning radius	Wa	61 in
Performances			
5.1	Travel speed (laden / unladen)		10 mph-11 mph
5.2	Lifting speed (laden / unladen)		1 ft/s-2 ft/s
5.3	Lowering speed (laden / unladen)		2 ft/s-1 ft/s
5.5	Drawbar pull (Laden / Unladen)		750 daN / 772 daN
5.7	Gradeability (laden / unladen)		16 % / 18 %
5.10	Service brake		Oil bath
Engine			
6.1	Number of drive motor / Drive motor rating S2 60 min		2 / 4.50 kW
6.2	Lift motor rating at S3 15%		8.60 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43531 A
6.4	Battery voltage / capacity		48 V / 575 Ah
6.6	Energy consumption according to VDI cycle (kWh/h)		4.30 kWh/h
Miscellaneous			
8.1	Type of drive control		Electronic
8.2	Working hydraulic pressure for attachments		2611 PSI
8.3	Oil flow rate for attachments		9 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 70 dB
8.4	Sound level at the driver's ear according to DIN 12 053		70 dB

ME 316 US - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 27	FVD 30	FVD 33	FVD 36	FVD 40	FVD 43	FVD 45
α - Mast/fork carriage tilt, forward	°	5.50	5.50	5.50	5.50	3.50	3.50	3.50
β - Mast/fork carriage tilt, backward	°	6	6	6	6	5	5	5
h1 - Mast lowered height	in	72.6	78.5	84.4	90.4	100.2	106.7	111
h2 - Mast free lift	in	5.7	5.7	5.7	5.7	5.7	5.7	5.7
h3 - Mast lifting height	in	106.3	118.1	129.9	141.7	157.5	169.3	177.2
h4 - Mast extended height	in	128.5	140.4	152.2	164	179.7	191.5	199.4
Residual capacity at max height	lb	3527	3527	3527	3527	3527	3527	3307
Residual capacity with integrated side shift at max height	lb	3527	3527	3527	3527	3527	3527	3307
Residual capacity with hooked-on side shift at max height	lb	3527	3527	3527	3527	3417	3307	3086
Height at max capacity	in	106.3	118.1	129.9	141.7	157.5	169.3	177.2
Height at max capacity with integrated sideshift	in	106.3	118.1	129.9	141.7	157.5	169.3	177.2

Free Lift Duplex (FLD)		FLD 27	FLD 30	FLD 33	FLD 36	FLD 40
α - Mast/fork carriage tilt, forward	°	5.50	5.50	5.50	5.50	3.50
β - Mast/fork carriage tilt, backward	°	6	6	6	6	5
h1 - Mast lowered height	in	72.6	78.5	84.4	90.4	100.2
h2 - Mast free lift	in	49.6	55.5	61.4	67.3	77.2
h3 - Mast lifting height	in	106.3	118.1	129.9	141.7	157.5
h4 - Mast extended height	in	129.7	141.5	153.3	165.2	180.9
Residual capacity at max height	lb	3527	3527	3527	3527	3527
Residual capacity with integrated side shift at max height	lb	3527	3527	3527	3527	3527
Residual capacity with hooked-on side shift at max height	lb	3527	3527	3527	3527	3417
Height at max capacity	in	106.3	118.1	129.9	141.7	157.5
Height at max capacity with integrated sideshift	in	106.3	118.1	129.9	141.7	157.5

Free Lift Triplex (FLT)		FLT 40	FLT 43	FLT 45	FLT 48	FLT 50	FLT 55	FLT 60	FLT 65
α - Mast/fork carriage tilt, forward	°	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
β - Mast/fork carriage tilt, backward	°	5	5	5	5	5	5	5	5
h1 - Mast lowered height	in	75.2	79.1	81.7	85.6	88.2	94.9	103.3	111.8
h2 - Mast free lift	in	52.2	56.1	58.7	62.6	65.2	71.9	79.1	79.1
h3 - Mast lifting height	in	157.5	169.3	177.2	189	196.9	216.5	236.2	
h4 - Mast extended height	in	180.9	192.7	200.6	212.4	220.3	240	260.8	282.3
Residual capacity at max height	lb	3527	3417	3307	3197	3086	2756	2425	1984
Residual capacity with integrated side shift at max height	lb	3527	3417	3307	3197	3086	2756	2425	1984
Residual capacity with hooked-on side shift at max height	lb	3307	3197	3086	2976	2866	2535	2205	1764
Height at max capacity	in	157.5	169.3	177.2	189	196.9	216.5	236.2	255.9



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