Technical sheet :

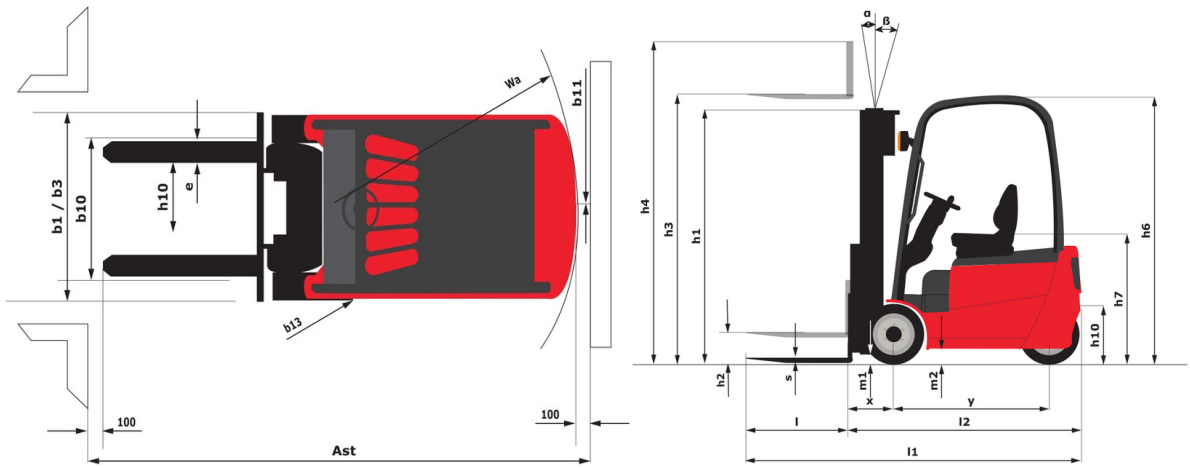
ME 425



MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		ME 425	ME 425
1.3	Power source		Electrical	Electrical
1.4	Operator type		Sitting	Sitting
1.5	Max. capacity	Q	2500 kg	5512 lb
1.6	Load center of gravity	c	500 mm	20 in
1.8	Load distance, centre of drive axle to fork	x	425 mm	17 in
1.9	Wheelbase	y	1750 mm	69 in
	Weight			
2.1	Service weight		5100 kg	11244 lb
2.2	Weight on front axle (laden) / rear axle (laden)		6620 kg / 980 kg	14595 lb / 2161 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		2500 kg / 2600 kg	5512 lb / 5732 lb
	Wheels			
3.1	Tires type		PPS	PPS
3.2	Dimensions of front wheels		23 x 9-10	23 x 9-10
3.3	Dimensions of rear wheels		18 x 7-8	18 x 7-8
3.5	Number of front wheels / rear wheels		2 / 2	2 / 2
3.5.2	Number of drive wheels		2	2
3.6	Front wheel gauge	b10	1073 mm	42 in
3.7	Rear wheel gauge	b11	960 mm	38 in
	Dimensions			
4.7	Height of overhead guard (cabin)	h6	2240 mm	88 in
4.8	Seat height/stand height	h7	1190 mm	47 in
4.12	Height of towing bar (coupling height)	h10	625 mm	25 in
4.19	Overall length	l1	3640 mm	143 in
4.20	Length to face of forks	l2	2490 mm	98 in
4.21	Overall width	b1	1275 mm	50 in
4.22	Forks section / width / length	s / e / l	122 mm x 1150 mm x 40 mm	5 in x 45 in x 2 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2A	2A
4.24	Fork carriage width	b3	1100 mm	43 in
4.31	Ground clearance below mast	m1	105 mm	4 in
4.32	Ground clearance at centre of wheelbase	m2	115 mm	5 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	4025 mm	158 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	4225 mm	166 in
4.35	Turning radius	Wa	2400 mm	94 in
4.36	Internal turning radius (over tyres)	b13	730 mm	29 in
	Performances			
5.1	Travel speed (laden / unladen)		19 km/h-20 km/h	12 mph-12 mph
5.2	Lifting speed (laden / unladen)		0.46 m/s-0.62 m/s	2 ft/s-2 ft/s
5.3	Lowering speed (laden / unladen)		0.47 m/s-0.42 m/s	2 ft/s-1 ft/s
5.5	Drawbar pull (Laden / Unladen)		1740 daN / 1640 daN	1740 daN / 1640 daN
5.7	Gradeability (laden / unladen)		16 % / 21 %	16 % / 21 %
5.10	Service brake		Oil bath	Oil bath
	Engine			
6.1	Drive motor rating S2 60 min		18.50 kW	18.50 kW
6.2	Lift motor rating at S3 15%		25.40 kW	25.40 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43536 A	DIN43536 A
6.4	Battery voltage / capacity		80 V / 700 Ah	80 V / 700 Ah
6.6	Energy consumption		10.50 kWh	10.50 kWh
	Miscellaneous			
8.1	Type of drive control		Electronic	Electronic
8.2	Working hydraulic pressure for attachments		210 bar	3046 PSI
8.3	Oil flow rate for attachments		65 l/min	17 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 71 dB	< 71 dB
8.4	Sound level at the driver's ear according to DIN 12 053		71 dB	71 dB

ME 425 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30	FVD 33	FVD 35	FVD 37	FVD 40	FVD 43	FVD 45	FVD 48	FVD 50
Mast/fork carriage tilt, forward	°	5	5	5	5	5	5	5	5	5
Mast/fork carriage tilt, backward	°	8	8	8	8	8	5	5	5	5
h1 - Mast lowered height	in (mm)	82.1 (2085)	88 (2235)	91.9 (2335)	97.8 (2485)	105.7 (2685)	111.6 (2835)	115.6 (2935)	121.5 (3085)	125.4 (3185)
h2 - Mast free lift	in (mm)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)	5.5 (140)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	196.9 (5000)
h4 - Mast extended height	in (mm)	143.4 (3643)	155.2 (3943)	163.1 (4143)	167 (4243)	182.8 (4643)	194.6 (4943)	202.5 (5143)	214.3 (5443)	222.2 (5643)
Residual capacity at max height	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with integrated side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	196.9 (5000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	137.8 (3500)	145.7 (3700)	157.5 (4000)	169.3 (4300)	177.2 (4500)	189 (4800)	196.9 (5000)

Free Lift Duplex (FLD)		FLD 30	FLD 33	FLD 37	FLD 40
Mast/fork carriage tilt, forward	°	5	5	5	5
Mast/fork carriage tilt, backward	°	8	8	8	8
h1 - Mast lowered height	in (mm)	80.1 (2035)	86 (2185)	93.9 (2385)	101.8 (2585)
h2 - Mast free lift	in (mm)	53.9 (1370)	59.8 (1520)	67.7 (1720)	75.6 (1920)
h3 - Mast lifting height	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)
h4 - Mast extended height	in (mm)	144.3 (3665)	156.1 (3965)	171.9 (4365)	183.7 (4665)
Residual capacity at max height	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with integrated side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Height at max capacity	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)
Height at max capacity with integrated sideshift	in (mm)	118.1 (3000)	129.9 (3300)	145.7 (3700)	157.5 (4000)

Free Lift Triplex (FLT)		FLT 40	FLT 43	FLT 48	FLT 50	FLT 55	FLT 60
Mast/fork carriage tilt, forward	°	5	5	5	5	5	5
Mast/fork carriage tilt, backward	°	5	5	5	5	5	5
h1 - Mast lowered height	in (mm)	80.1 (2035)	84.1 (2135)	90 (2285)	93.9 (2385)	101.8 (2585)	111.6 (2835)
h2 - Mast free lift	in (mm)	53.9 (1370)	57.9 (1470)	63.8 (1620)	67.7 (1720)	75.6 (1920)	85.4 (2170)
h3 - Mast lifting height	in (mm)	157.5 (4000)	169.3 (4300)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
h4 - Mast extended height	in (mm)	183.7 (4665)	195.5 (4965)	215.2 (5465)	223 (5665)	242.7 (6165)	262.4 (6665)
Residual capacity at max height	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with integrated side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)
Residual capacity with hooked-on side shift at max heigth	lb (kg)	5512 (2500)	5512 (2500)	5512 (2500)	5512 (2500)	5401 (2450)	5291 (2400)
Height at max capacity	in (mm)	157.5 (4000)	169.3 (4300)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)
Height at max capacity with integrated sideshift	in (mm)	157.5 (4000)	169.3 (4300)	189 (4800)	196.9 (5000)	216.5 (5500)	236.2 (6000)

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