

Technical sheet :

# **MSI 50**

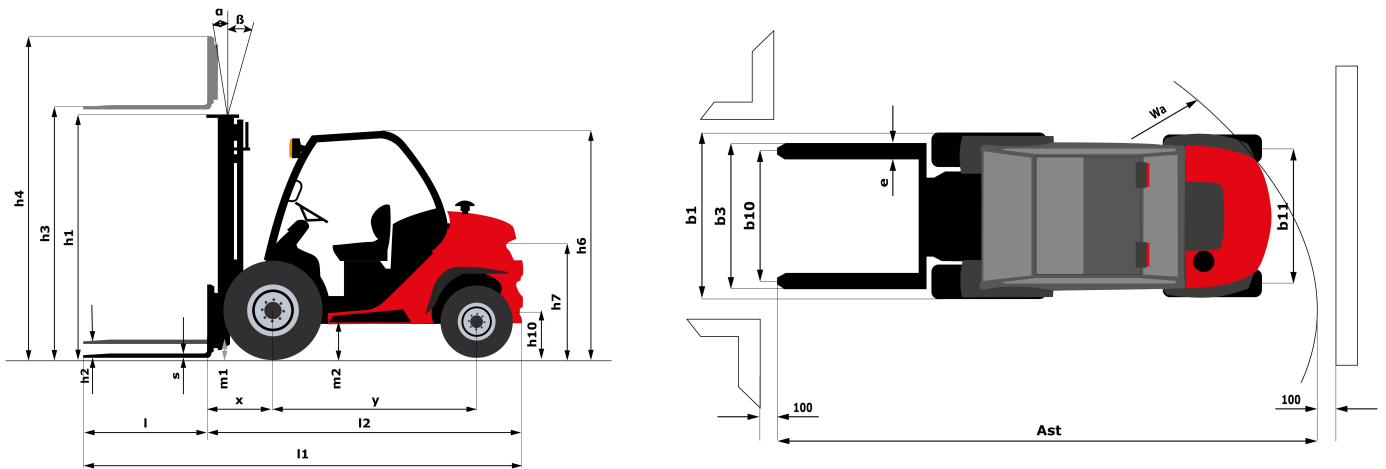
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Technical characteristics			Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		MSI 50	MSI 50
1.3	Power source		Diesel	Diesel
1.4	Operator type		Seated	Seated
1.5	Max. capacity	Q	5000 kg	11023 lbs
1.6	Load centre of gravity	c	600 mm	23.622 in
1.8	Load distance, centre of drive axle to fork	x	701 mm	27.598 in
1.9	Wheelbase	y	2075 mm	81.693 in
Weight				
2.1	Service Weight		8420 kg	18563 lbs
2.2	Weight on front axle (laden) / rear axle (laden)		11467 kg / 1953 kg	25280 lbs / 4306 lbs
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		3489 kg / 4931 kg	7692 lbs / 10871 lbs
Wheels				
3.1	Tyres type		Pneumatic	Pneumatic
3.2	Dimensions of front wheels		315/70 R22,5	315/70 R22,5
3.3	Dimensions of rear wheels		225/75 R15	225/75 R15
3.5	Number of front wheels / rear wheels		2 / 2	2 / 2
3.2	Number of drive wheels		2	2
3.6	Front wheel gauge	b10	1420 mm	55.906 in
3.7	Rear wheel gauge	b11	1142 mm	44.961 in
Dimensions				
4.1	Tilt of Mast Forward (deg) / Backward (deg)	$\alpha / \beta$	10 / 12	10 / 12
4.7	Overall height of standard overhead guard	h6	2440 mm	96.063 in
4.8	Seat height/stand height	h7	1300 mm	51.181 in
4.12	Height of towing bar (coupling height)	h10	540 mm	21.26 in
4.19	Overall length	l1	4584 mm	180.472 in
4.20	Length to face of forks	l2	3384 mm	133.228 in
4.21	Overall width	b1	1732 mm	68.189 in
4.22	Forks section / width / length	s / e / l	60 mm x 150 mm / 1200 mm	2.362 in x 5.906 in / 47.244 in
4.23	Fork carriage ISO 2328 (class/form) A/B		4A	4A
4.24	Fork carriage width	b3	1670 mm	65.748 in
4.31	Ground clearance below mast	m1	185 mm	7.283 in
4.32	Ground clearance at centre of wheelbase	m2	225 mm	8.858 in
4.35	Turning radius	Wa	2950 mm	116.142 in
4.36	Internal turning radius (over tyres)	b13	125 mm	4.921 in
Performances				
5.1	Travel speed (laden / unladen)		22 km/h / 22 km/h	13.7 mph / 13.7 mph
5.2	Lifting speed (laden / unladen)		0.5 m/s / 0.5 m/s	1.64 ft/s / 1.64 ft/s
5.3	Lowering speed (laden / unladen)		0.4 m/s / 0.4 m/s	1.31 ft/s / 1.31 ft/s
5.5	Drawbar pull (Laden / Unladen)		3350 daN / 2420 daN	3350 daN / 2420 daN
5.7	Gradeability - laden / unladen		24 % / 26 %	24 % / 26 %
5.9	Service brake		Hydraulic	Hydraulic
Engine				
7.1	Engine brand / model		Perkins / 854 F 10794	Perkins / 854 F 10794

Engine				
7.2	Engine power according to ISO 1585		55 kW	55 kW
7.3	Rated speed		2200 tr/min	2200 tr/min
7.4	Number of cylinders / Capacity of cylinders		4 - 3400 cm <sup>3</sup>	4 - 207.48 in <sup>3</sup>
Miscellaneous				
8.1	Type of drive control		Hydraulic	Hydraulic
8.2	Working hydraulic pressure for attachments		230 Bar	16 PSI
8.3	Oil flow rate for attachments		103 l/min	103 l/min
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 81 dB(A)	< 81 dB(A)

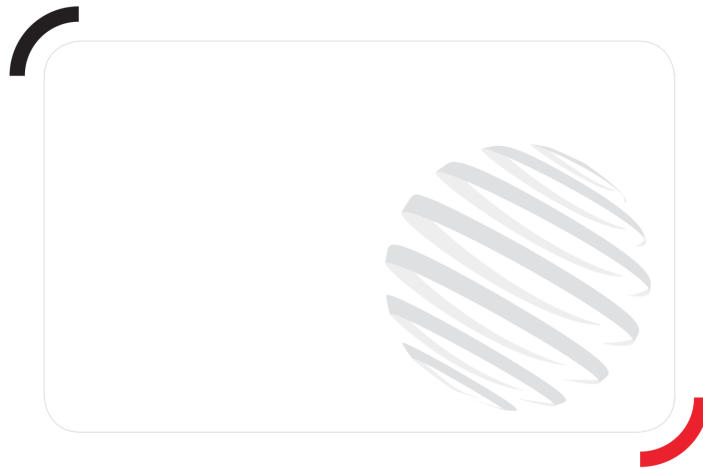
## Dimensional drawing



## Characteristics of masts and residual capacities

Full Visibility Duplex		FVD 30	FVD 33	FVD 35	FVD 37	FVD 40	FVD 45	FVD 50
h1 - Height mast lowered *	mm	2425	2575	2675	2775	2925	3175	3425
h3 - Lifting Height	mm	3000	3300	3500	3500	4000	4500	5000
h4 - Height mast extended *	mm	3972	4272	4472	4672	4972	5472	5972
$\alpha / \beta$ - Mast inclination (front / rear)	°	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12
Residual capacity at max height	kg	5000	5000	5000	5000	5000	4800	4800

Free Lift Triplex		FLT 37	FLT 40	FLT 43	FLT 45	FLT 47	FLT 50	FLT 55	FLT 60
h2 - Free lift	mm	1263	1363	1463	1538	1598	1713	1863	2038
h1 - Height mast lowered *	mm	2175	2275	2375	2450	2510	2625	2775	2950
h3 - Lifting Height	mm	3700	4000	4300	4500	4700	5000	5500	6000
h4 - Height mast extended *	mm	4662	4962	5262	5462	5662	5962	6462	6962
$\alpha / \beta$ - Mast inclination (front / rear)	°	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12	10 / 12
Residual capacity at max height	kg	4900	4900	4900	4800	4600	4400	3800	3100



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