

Technical sheet :

# ***ES 616 LI (5PTS)***

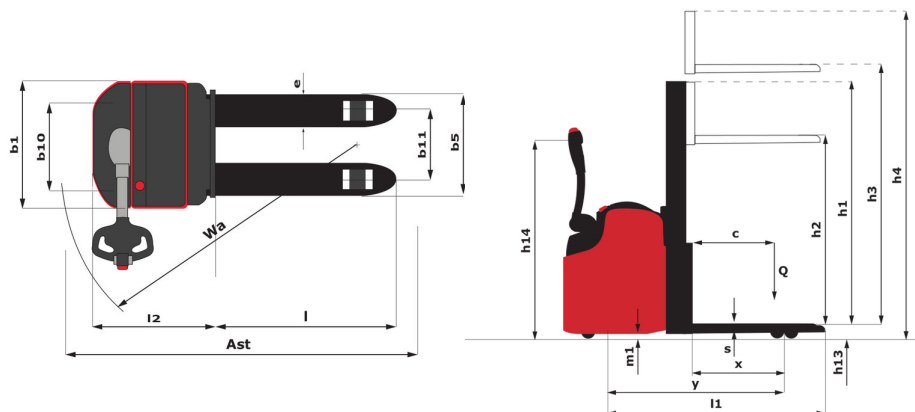
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 **MANITOU**  
HANDLING YOUR WORLD

	Technical characteristics		Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		ES 616 LI 5 point	ES 616 LI 5 point
1.3	Power source		Electrical	Electrical
1.4	Operator type		Pedestrian	Pedestrian
1.5	Max. capacity	Q	1600 kg	3527 lb
1.6	Load center of gravity	c	600 mm	24 in
1.8	Distance from Load backrest to center of rear axle	x	848 mm	33 in
1.9	Wheelbase	y	1492 mm	59 in
	Weight			
2.1	Service weight		1327 kg	2926 lb
2.2	Weight on front axle (laden) / rear axle (laden)		1246 kg / 1670 kg	2747 lb / 3682 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1033 kg / 290 kg	2277 lb / 639 lb
	Wheels			
3.1	Tires type		Bandage	Bandage
3.3	Number of load wheels / Size of load wheels		2 / 140x60	2 / 140x60
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		1 / 140x60	1 / 140x60
3.5	Number of front wheels / rear wheels		2 / 4	2 / 4
3.5.2	Number of drive wheels / Size of drive wheels		1/230x70	1/230x70
3.6	Front wheel gauge	b10	529 mm	21 in
3.7	Rear wheel gauge	b11	380 mm	15 in
	Dimensions			
4.6	Initial lift	h5	110 mm	4 in
4.15	Fork height in low position	h13	86 mm	3 in
4.19	Overall length	l1	2174 mm	86 in
4.20	Length to face of forks	l2	976 mm	38 in
4.21	Overall width	b1	800 mm	31 in
4.22	Forks section / width / length	s / e / l	60 mm / 185 mm / 1190 mm	2 in / 7 in / 47 in
4.24	Fork carriage width	b3	700 mm	28 in
4.32	Ground clearance at centre of wheelbase	m2	30 mm	1 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2399 mm	94 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2402 mm	95 in
4.35	Turning radius	Wa	1588 mm	63 in
4.9	Height tiller min. / max.	h14 / h14	750 mm / 1250 mm	30 in / 49 in
	Performances			
5.1	Travel speed (laden / unladen)		6 km/h / 6 km/h	4 mph / 4 mph
5.2	Lifting speed (laden / unladen)		0.18 m/s / 0.30 m/s	0.59 ft/s / 0.98 ft/s
5.3	Lowering speed (laden / unladen)		0.27 m/s / 0.22 m/s	0.89 ft/s / 0.72 ft/s
5.8	Max Gradeability (laden / unladen)		7 % / 10 %	7 % / 10 %
5.10	Service brake		Electro magnetic	Electro magnetic
	Engine			
6.1	Drive motor rating S2 60 min		1.50 kW	1.50 kW
6.2	Lift motor rating at S3 15%		3 kW	3 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43535-B	DIN 43535-B
6.4	Battery voltage / capacity		24 V / 180 Ah	24 V / 180 Ah
6.5	Battery weight (+/- 5%)		189 kg	417 lb
	Miscellaneous			
8.1	Type of drive control		AC	AC
8.4	Sound level at the driver's ear according to DIN 12 053		65 dB	65 dB

## ES 616 LI (5pts) - Dimensional drawing



# Characteristics of masts and residual capacities

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
h1 - Mast lowered height	in (mm)	76.9 (1953)	86.7 (2203)
h2 - Mast free lift	in (mm)	59.3 (1506)	69.1 (1756)
h3 - Mast lifting height	in (mm)	59.3 (1506)	69.1 (1756)
h4 - Mast extended height	in (mm)	77.2 (1960)	87 (2210)
Residual capacity at max height	lb (kg)	3527 (1600)	3527 (1600)

Free Lift Duplex (FLD)		FLD 29	FLD 34
h1 - Mast lowered height	in (mm)	76.9 (1953)	86.7 (2203)
h2 - Mast free lift	in (mm)	59.3 (1506)	69.1 (1756)
h3 - Mast lifting height	in (mm)	115.4 (2931)	135.1 (3431)
h4 - Mast extended height	in (mm)	133.3 (3385)	153 (3885)
Residual capacity at max height	lb (kg)	2866 (1300)	2205 (1000)

Free Lift Triplex (FLT)		FLT 42
h1 - Mast lowered height	in (mm)	75.2 (1911)
h2 - Mast free lift	in (mm)	57.7 (1466)
h3 - Mast lifting height	in (mm)	167.2 (4246)
h4 - Mast extended height	in (mm)	185.9 (4723)
Residual capacity at max height	lb (kg)	1323 (600)



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