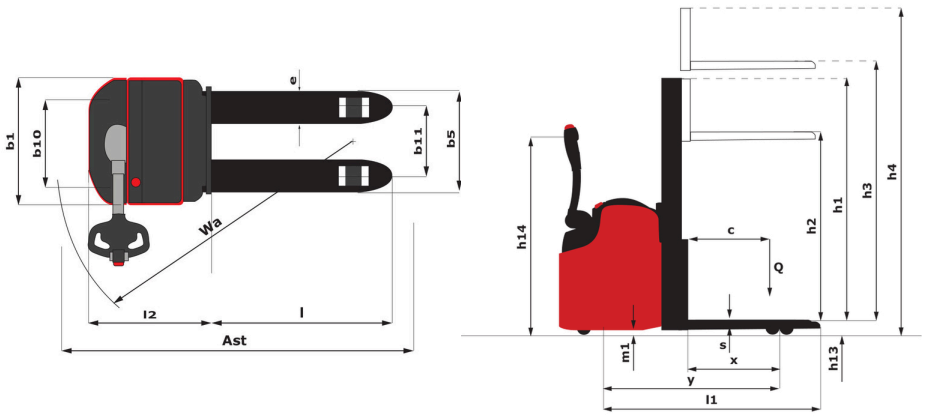
Technical sheet :

ES 616 LI (5PTS)

MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric
1.1	Manufacturer		Manitou
1.2	Model Name		ES 616 LI (5pts)
1.3	Power source		Electrical - Lead
1.4	Operator type		Pedestrian
1.5	Max. capacity	Q	1600 kg
1.6	Load center of gravity	c	600 mm
1.8	Distance from Load backrest to center of rear axle	x	729 mm
1.9	Wheelbase	y	1393 mm
	Weight		
2.1	Service weight		1280 kg
2.2	Weight on front axle (laden) / rear axle (laden)		1070 kg / 1855 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		905 kg / 375 kg
	Wheels		
3.1	Tires type		Polyurethane cushion
3.3	Number of load wheels / Size of load wheels		4 / 82 x 68
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		2 / 120 x 54
3.5	Number of front wheels / rear wheels		3 / 4
3.5.2	Number of drive wheels / Size of drive wheels		1/230x70
3.6	Front wheel gauge	b10	558 mm
3.7	Rear wheel gauge	b11	380 mm
	Dimensions		
4.15	Fork height in low position	h13	86 mm
4.19	Overall length	l1	1995 mm
4.20	Length to face of forks	l2	846 mm
4.21	Overall width	b1	800 mm
4.22	Forks section / width / length	s / e / l	60 mm / 185 mm / 1150 mm
4.24	Fork carriage width	b3	700 mm
4.32	Ground clearance at centre of wheelbase	m2	24 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2399 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2402 mm
4.6	Initial lift	h5	110 mm
4.35	Turning radius	Wa	1597 mm
4.9	Height tiller min. / max.	h14	750 mm / 1250 mm
	Performances		
5.1	Travel speed (laden / unladen)		6 km/h / 6 km/h
5.2	Lifting speed (laden / unladen)		0.18 m/s / 0.30 m/s
5.3	Lowering speed (laden / unladen)		0.27 m/s / 0.22 m/s
5.8	Max Gradeability (laden / unladen)		7 % / 10 %
5.10	Service brake		Electro magnetic
	Engine		
6.1	Drive motor rating S2 60 min		1.50 kW
6.2	Lift motor rating at S3 15%		3 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43535-B
6.4	Battery voltage / capacity		24 V / 180 Ah
6.5	Battery weight (+/- 5%)		220 kg
	Miscellaneous		
8.1	Type of drive control		AC
8.4	Sound level at the driver's ear according to DIN 12 053		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	mm	1953	2203
h2 - Mast free lift	mm	1420	1670
h3 - Mast lifting height	mm	1500	1700
h4 - Mast extended height	mm	1960	2210
Residual capacity at max height	kg	1600	1600

Full Visibility Duplex (FVD)		FVD 29	FVD 34	FVD 38
h1 - Mast lowered height	mm	1953	2203	2403
h3 - Mast lifting height	mm	2900	3400	3800
h4 - Mast extended height	mm	3390	3890	4290
Residual capacity at max height	kg	1300	1000	700

Free Lift Duplex (FLD)		FLD 29	FLD 34
h1 - Mast lowered height	mm	1953	2203
h2 - Mast free lift	mm	1420	1670
h3 - Mast lifting height	mm	2900	3400
h4 - Mast extended height	mm	3385	3885
Residual capacity at max height	kg	1250	950

Free Lift Triplex (FLT)		FLT 42
h1 - Mast lowered height	mm	1911
h2 - Mast free lift	mm	1380
h3 - Mast lifting height	mm	4200
h4 - Mast extended height	mm	4723
Residual capacity at max height	kg	600

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