Technical sheet :



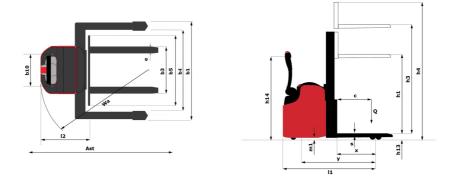




	Technical characteristics
1.1	Manufacturer
1.2	Model Name
1.3	Power source
1.4	Operator type
1.5	Max. capacity
1.6	Load center of gravity
1.8	Distance from Load backrest to center of rear axle
1.9	Wheelbase
	Weight
2.1	Service weight
2.2	Weight on front axle (laden) / rear axle (laden)
2.3	Weight on front axle (Unladen) / rear axle (Unladen)
	Wheels
3.1	Tires type
3.3	Number of load wheels / Size of load wheels
3.4	Number of stabilizer wheels / Size of the stabilizer wheels
3.5	Number of front wheels / rear wheels
3.5.2	Number of drive wheels / Size of drive wheels
3.6	Front wheel gauge
3.7	Rear wheel gauge
	Dimensions
4.15	Fork height in low position
4.19	Overall length
4.20	Length to face of forks
4.21	Overall width
4.22	Forks section / width / length
4.24	Fork carriage width
4.31	Ground clearance below mast
4.32	Ground clearance at centre of wheelbase
4.35	Turning radius
	Performances
5.1	Travel speed (laden / unladen)
5.2	Lifting speed (laden / unladen)
5.3	Lowering speed (laden / unladen)
5.8	Max Gradeability (laden / unladen)
5.10	Service brake
	Engine
6.1	Drive motor rating S2 60 min
6.2	Lift motor rating at S3 15%
6.4	Battery voltage / capacity
6.5	Battery weight (+/- 5%)
	Miscellaneous
8.1	Type of drive control
8.4	Sound level at the driver's ear according to DIN 12 053

Metric       Manitou       ES 410 ET       Electrical       Pedestrian       Q       1000 kg       c       600 mm       x       720 mm       y       1245 mm       870 kg       709 kg / 1161 kg       609 kg / 261 kg       Polyurethane       2 / 125x50       1 / 125x50       2 / 2       1/230x70       b10       517 mm       b11       380 mm       11       1870 mm       12       720 mm       b1       800 mm       5/ e / 1       60 mm / 180 mm / 1150 mm       b3       680 mm
ES 410 ET       Electrical       Pedestrian       Q     1000 kg       c     600 mm       x     720 mm       y     1245 mm       B70 kg     709 kg / 1161 kg       609 kg / 261 kg     609 kg / 261 kg       Polyurethane     2 / 125x50       1 / 125x50     2 / 2       1 / 125x50     2 / 2       1 / 230x70     517 mm       b11     380 mm       11     1870 mm       12     720 mm       b13     85 mm       11     1870 mm       12     720 mm       b1     800 mm       3     680 mm / 1150 mm
Electrical       Pedestrian       Q     1000 kg       c     600 mm       x     720 mm       y     1245 mm       870 kg     709 kg / 1161 kg       609 kg / 261 kg     609 kg / 261 kg       Polyurethane     2 / 125x50       1 / 125x50     2 / 2       1 / 125x50     2 / 2       1 / 1230x70     511       380 mm     11       11     1870 mm       12     720 mm       51     800 mm       5/ e / I     60 mm / 180 mm / 1150 mm       5/ e / I     60 mm / 180 mm / 1150 mm
Pedestrian       Q     1000 kg       c     600 mm       x     720 mm       y     1245 mm       870 kg     709 kg / 1161 kg       609 kg / 261 kg     609 kg / 261 kg       Polyurethane     2 / 125x50       1 / 125x50     2 / 2       1 / 125x50     2 / 2       1 / 230x70     517 mm       b11     380 mm       11     1870 mm       12     720 mm       b1     800 mm       s/ e / l     60 mm / 180 mm / 1150 mm
Q   1000 kg     c   600 mm     x   720 mm     y   1245 mm     870 kg   709 kg / 1161 kg     609 kg / 261 kg   609 kg / 261 kg     Polyurethane   2 / 125x50     1 / 125x50   2 / 2     1 / 125x50   2 / 2     1 / 1250x70   517 mm     b10   517 mm     b11   380 mm     11   1870 mm     12   720 mm     b1   800 mm     s/ e / l   60 mm / 180 mm / 1150 mm
c 600 mm x 720 mm y 1245 mm 870 kg 709 kg / 1161 kg 609 kg / 261 kg Polyurethane 2 / 125x50 1 / 125x50 2 / 2 1/230x70 b10 517 mm b11 380 mm h13 85 mm 11 1870 mm 12 720 mm b1 800 mm s / e / I 60 mm / 180 mm / 1150 mm b3 680 mm
x 720 mm   y 1245 mm   870 kg 709 kg / 1161 kg   609 kg / 261 kg 609 kg / 261 kg   Polyurethane 2 / 125x50   1 / 125x50   2 / 2 1 / 230x70   b10 517 mm   b11 380 mm   h13 85 mm   11 1870 mm   12 720 mm   b1 800 mm   s / e / I 60 mm / 180 mm / 1150 mm   b3 680 mm
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870 kg     709 kg / 1161 kg     609 kg / 261 kg     Polyurethane     2 / 125x50     1 / 125x50     2 / 2     1/230x70     b10     517 mm     b11     380 mm     11     13     85 mm     11     1870 mm     12     720 mm     b1     800 mm     5/ e / I     60 mm / 180 mm / 1150 mm     b3
709 kg / 1161 kg     609 kg / 261 kg     Polyurethane     2 / 125x50     1 / 125x50     2 / 2     1 / 125x50     2 / 2     1/230x70     b10     517 mm     b11     380 mm     11     1870 mm     12     720 mm     b1     800 mm     s / e / I     60 mm / 180 mm / 1150 mm     b3
709 kg / 1161 kg     609 kg / 261 kg     Polyurethane     2 / 125x50     1 / 125x50     2 / 2     1 / 125x50     2 / 2     1/230x70     b10     517 mm     b11     380 mm     11     1870 mm     12     720 mm     b1     800 mm     s / e / I     60 mm / 180 mm / 1150 mm     b3
609 kg / 261 kg       Polyurethane       2 / 125x50       1 / 125x50       2 / 2       1 / 125x70       510       517 mm       b11       380 mm       11       1870 mm       12       720 mm       b1       800 mm       51       800 mm       51       800 mm       51       60 mm / 180 mm / 1150 mm       53
2 / 125x50 1 / 125x50 2 / 2 1 /230x70 b10 517 mm b11 380 mm 11 385 mm 11 1870 mm 12 720 mm b1 800 mm s / e / I 60 mm / 180 mm / 1150 mm b3 680 mm
2 / 125x50 1 / 125x50 2 / 2 1/230x70 b10 517 mm b11 380 mm h13 85 mm 11 1870 mm 12 720 mm b1 800 mm s / e / I 60 mm / 180 mm / 1150 mm b3 680 mm
1 / 125x50     2 / 2     1/230x70     b10     517 mm     b11     380 mm     11     13     85 mm     11     1870 mm     12     720 mm     b1     800 mm     s / e / I     60 mm / 180 mm / 1150 mm     b3
2 / 2 1/230x70 b10 517 mm b11 380 mm h13 85 mm i1 1870 mm i2 720 mm b1 800 mm s / e / i 60 mm / 180 mm / 1150 mm b3 680 mm
1/230x70   b10 517 mm   b11 380 mm   h13 85 mm   i1 1870 mm   i2 720 mm   b1 800 mm   s / e / l 60 mm / 180 mm / 1150 mm   b3 680 mm
b10     517 mm       b11     380 mm       h13     85 mm       i1     1870 mm       i2     720 mm       b1     800 mm       s / e / i     60 mm / 180 mm / 1150 mm       b3     680 mm
b11     380 mm       h13     85 mm       i1     1870 mm       i2     720 mm       b1     800 mm       s / e / i     60 mm / 180 mm / 1150 mm       b3     680 mm
h13     85 mm       i1     1870 mm       i2     720 mm       b1     800 mm       s / e / I     60 mm / 180 mm / 1150 mm       b3     680 mm
11     1870 mm       12     720 mm       b1     800 mm       s / e / l     60 mm / 180 mm / 1150 mm       b3     680 mm
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b1     800 mm       s / e / I     60 mm / 180 mm / 1150 mm       b3     680 mm
s / e / l 60 mm / 180 mm / 1150 mm b3 680 mm
b3 680 mm
m1 35 mm
m2 20 mm
Wa 1400 mm
5.80 km/h / 6 km/h
0.24 m/s / 0.14 m/s
0.20 m/s / 0.30 m/s
8 % / 10 %
Electro magnetic
1.20 kW
3 kW
24 V / 160 Ah
150 kg
AC 65 dB

## ES 410 ET - Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Duplex (CCD)		CCD 26	CCD 29	CCD 34
h1 - Mast lowered height	mm	1780	1930	2180
h2 - Mast free lift	mm	140	140	140
h3 - Mast lifting height	mm	2630	2930	3430
h4 - Mast extended height	mm	3065	3365	3865
Residual capacity at max height	kg	1000	1000	900

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
h1 - Mast lowered height	mm	1930	2180
h2 - Mast free lift	mm	1500	1750
h3 - Mast lifting height	mm	1500	1750
h4 - Mast extended height	mm	1930	2180
Residual capacity at max height	kg	1000	1000



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