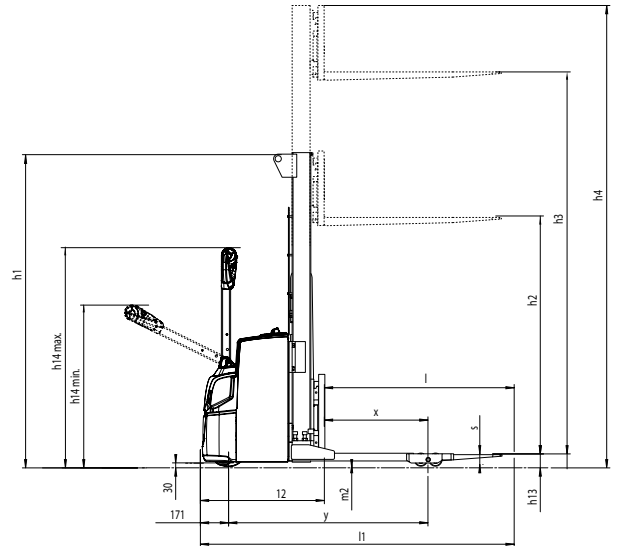
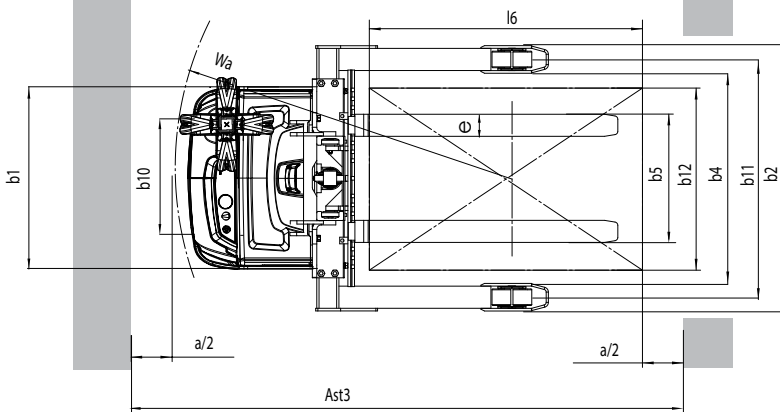
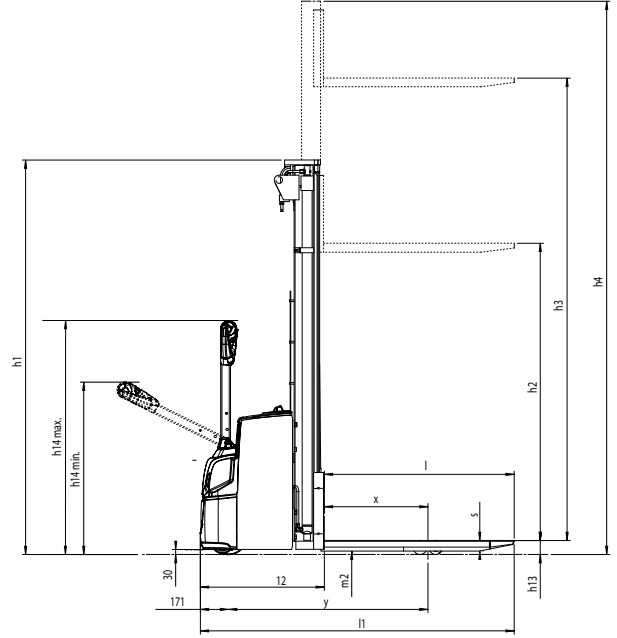
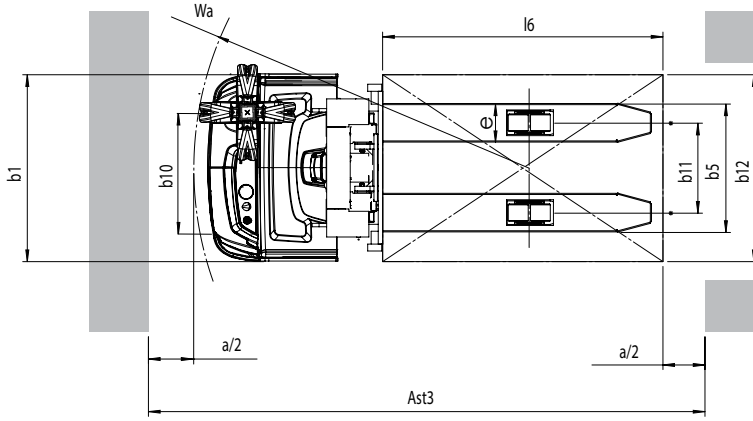


## Technical specifications



5 models	<b>AC</b> tech	1.2 – 1.6 t
Pedestrian stackers	 world wide network	<b>24/7</b> support

		Manufacturers Data and Design Characteristics				
CHARACTERISTICS	1.1	Manufacturer (abbreviation)		MLE	MLE	MLE
	1.2	Manufacturer's model designation		MSW120	MSW160	MSW160S
	1.3	Power source: Battery, Diesel, LPG, Petrol		Battery	Battery	Battery
	1.4	Operator type: pedestrian, (operator)-standing, -seated		Pedestrian	Pedestrian	Pedestrian
	1.5	Load capacity	Q (kg)	1200	1600	1600
	1.6	Load center distance	c (mm)	600	600	600
	1.8	Load wheel axle to fork face (forks lowered)	x (mm)	750	750	750
	1.9	Wheel base	y (mm)	1330	1330	1395
	WEIGHTS	2.1b	Truck weight without load, with maximum battery weight	kg	1020	1020
2.2		Axle loadings with load & with maximum battery weight, drive/load side	kg	810/1410	870/1755	1941/1056
2.3		Axle loadings without load & with maximum battery weight, drive/load side	kg	730/295	730/295	945/452
WHEELS, DRIVE TRAIN	3.1	Tires: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive/load side		Vul/Vul	Vul/Vul	Vul/Vul
	3.2	Tire dimensions, drive side		230 x 70	230 x 70	230 x 70
	3.3	Tire dimensions, load side		85 x 90	85 x 75	85 x 75
	3.4	Castor wheel dimensions (diameter x width)		125 x 60	125 x 60	125 x 60
	3.5	Number of wheels, load/drive side (x = driven)		1+ 1x/2	1+ 1x/4	1+ 1x/4
	3.6	Truck width (center of tires), drive side	b10 (mm)	515	515	515
	3.7	Truck width (center of tires), load side	b11 (mm)	385	385	1025-1425
DIMENSIONS	4.2b	Height	h <sub>1</sub> (mm)	see tables	see tables	see tables
	4.3	Free lift	h <sub>2</sub> (mm)	see tables	see tables	see tables
	4.4	Lift height	h <sub>3</sub> (mm)	see tables	see tables	see tables
	4.5	Height with mast extended	h <sub>4</sub> (mm)	see tables	see tables	see tables
	4.9	Height of tiller arm / steering console (min./max.)	h <sub>14</sub> (mm)	865/1420	865/1420	865/1420
	4.15	Fork height, fully lowered	h <sub>13</sub> (mm)	90	90	85
	4.19	Overall length	l <sub>1</sub> (mm)	1900*	1900	1965
	4.20	Length to fork face	l <sub>2</sub> (mm)	750*	750	815
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	800	800	800/1140-1575
	4.22	Fork dimensions (thickness, width, length)	s/e/l (mm)	56/186/1150	56/186/1150	40/100/1150
	4.24	Fork carriage width	b <sub>3</sub> (mm)	750	750	980
	4.25	Outside width over forks (minimum / maximum)	b <sub>5</sub> (mm)	570	570	260-900
	4.26	Inner width of support legs	b <sub>4</sub> (mm)	-	-	900-1300
	4.32	Ground clearance at center of wheelbase, (forks lowered)	m <sup>2</sup> (mm)	20	20	20
	4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)	2445	2445	2430
	4.33d	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3 (mm)			2085
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)	2374	2374	2415	
4.34d	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3 (mm)			2285	
4.35	Turning radius	Wa (mm)	1572	1572	1535	
PERFORMANCE	5.1	Travel speed, with/without load	km/h	6.0/6.0	6.0/6.0	6.0/6.0
	5.2	Lifting speed, with/without load	m/s	0.16/0.33	0.15/0.32	0.14/0.27
	5.3	Lowering speed, with/without load	m/s	0.46/0.35	0.43/0.34	0.35/0.40
	5.8	Maximum gradeability with/without load	%	8/15	8/15	8/15
	5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Electric	Electric	Electric
ELECTRIC MOTOR	6.1	Drive motor capacity (60 min. short duty)	kW	1.0	1.0	1.0
	6.2	Lift motor output at 15% duty factor	kW	2.2	3.2	3.2
	6.4	Battery voltage/capacity at 5-hour discharge	V/Ah	24/150	24/250-375	24/250-375
	6.5	Battery weight	kg	210	212-294	212-294
	6.6a	Energy consumption according to EN16796	kWh/h	0.76	0.77	-
	MISC.	8.1	Type of drive control		Stepless	Stepless
10.7.1		Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ	dB (A)	60/60/41	70/72/41	70/72/41
10.7.2		Whole-body vibration (EN 13 059:2002)		-		-
10.7.3		Hand-arm vibration (EN 13 059:2002)		< 2.5	< 2.5	< 2.5

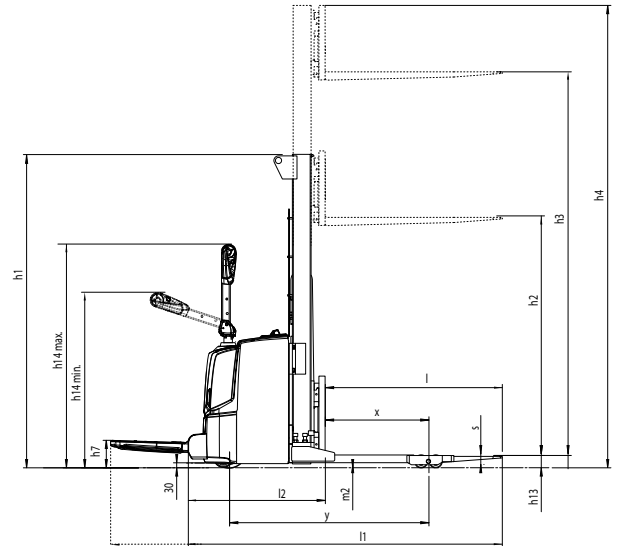
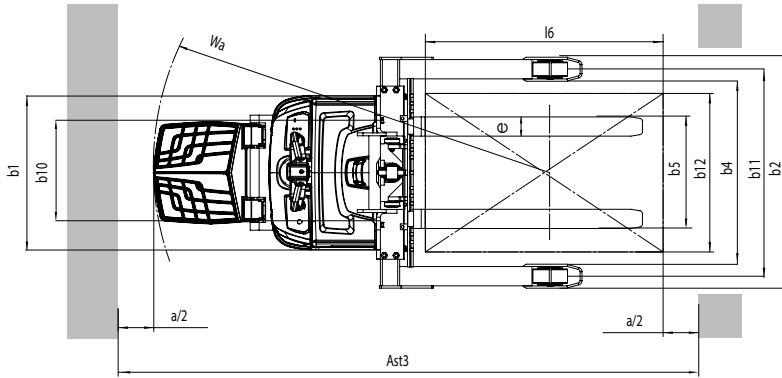
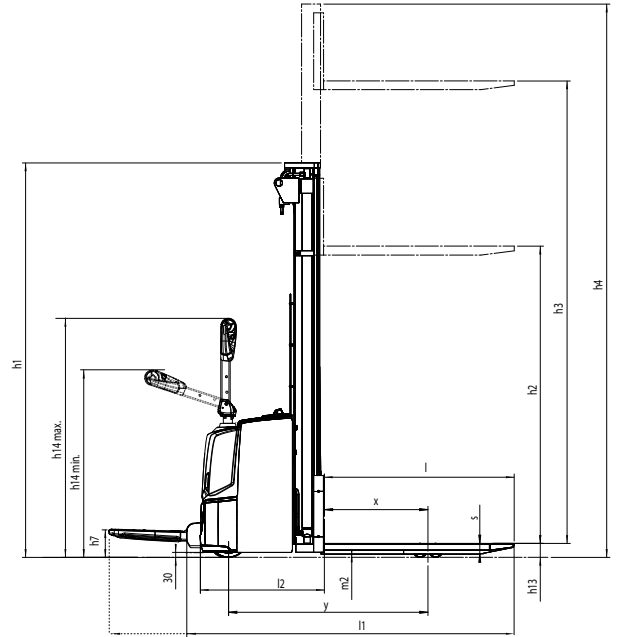
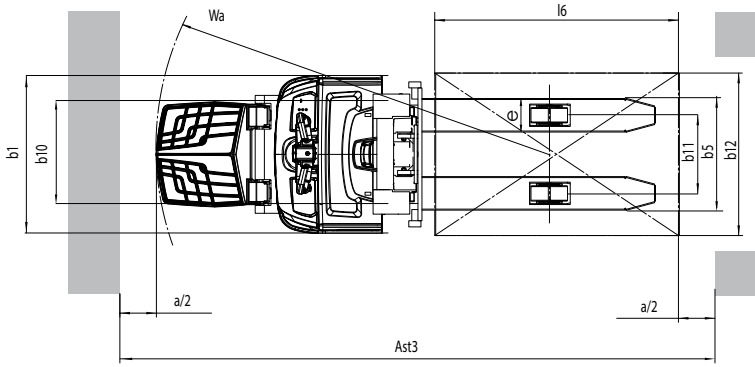


# UNI CARRIERS®

## FORKLIFT

### STANDARD SPECIFICATIONS

		Manufacturers Data and Design Characteristics			
CHARACTERISTICS	1.1	Manufacturer (abbreviation)		MLE	MLE
	1.2	Manufacturer's model designation		MSF120	MSF160S
	1.3	Power source: Battery, Diesel, LPG, Petrol		Battery	Battery
	1.4	Operator type: pedestrian, (operator)-standing, -seated		Pedestrian/Stand-on	
	1.5	Load capacity	Q (kg)	1200	1600
	1.6	Load center distance	c (mm)	600	600
	1.8	Load wheel axle to fork face (forks lowered)	x (mm)	750	750
	1.9	Wheel base	y (mm)	1330	1395
	WEIGHTS	2.1b	Truck weight without load, with maximum battery weight	kg	1245
2.2		Axle loadings with load & with maximum battery weight, drive/load side	kg	870/1575	1981/1056
2.3		Axle loadings without load & with maximum battery weight, drive/load side	kg	860/385	985/452
WHEELS, DRIVE TRAIN	3.1	Tires: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive/load side		Vul/Vul	Vul/Vul
	3.2	Tire dimensions, drive side		230 x 70	230 x 70
	3.3	Tire dimensions, load side		85 x 90	85 x 75
	3.4	Castor wheel dimensions (diameter x width)		125 x 60	125 x 60
	3.5	Number of wheels, load/drive side (x = driven)		1+ 1x/2	1 + 1x/4
	3.6	Truck width (center of tires), drive side	b10 (mm)	515	515
	3.7	Truck width (center of tires), load side	b11 (mm)	385	1025-1425
DIMENSIONS	4.2b	Height	h <sub>1</sub> (mm)	see tables	see tables
	4.3	Free lift	h <sub>2</sub> (mm)	see tables	see tables
	4.4	Lift height	h <sub>3</sub> (mm)	see tables	see tables
	4.5	Height with mast extended	h <sub>4</sub> (mm)	see tables	see tables
	4.9	Height of tiller arm / steering console (min./max.)	h <sub>14</sub> (mm)	1155/1550	1155/1550
	4.15	Fork height, fully lowered	h <sub>13</sub> (mm)	90	85
	4.19	Overall length	l <sub>1</sub> (mm)	2020/2500	2085/2565
	4.20	Length to fork face	l <sub>2</sub> (mm)	870/1350	935/1415
	4.21	Overall width	b <sub>1</sub> /b <sub>2</sub> (mm)	800	800/1140-1575
	4.22	Fork dimensions (thickness, width, length)	s/e/l (mm)	56/186/1150	40/100/1150
	4.24	Fork carriage width	b <sub>3</sub> (mm)	750	980
	4.25	Outside width over forks (minimum / maximum)	b <sub>5</sub> (mm)	570	260-900
	4.26	Inner width of support legs	b <sub>4</sub> (mm)	-	900-1300
	4.32	Ground clearance at center of wheelbase, (forks lowered)	m <sup>2</sup> (mm)	20	20
	PERFORMANCE	4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)	2550/3050
4.33d		Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3 (mm)		2205/2685
4.34c		Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)	2660/2980	2535/3015
4.34d		Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3 (mm)		2405/2885
4.35		Turning radius	Wa (mm)		1655/2135
5.1		Travel speed, with/without load	km/h	6.0/6.0	6.0/6.0
5.2		Lifting speed, with /without load	m/s	0.16/0.33	0.14/0.27
5.3		Lowering speed, with/without load	m/s	0.46/0.35	0.35/0.40
ELECTRIC MOTOR	5.8	Maximum gradeability with/without load	%	8/15	8/15
	5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Electric	Electric
	6.1	Drive motor capacity (60 min. short duty)	kW	1.0	1.0
	6.2	Lift motor output at 15% duty factor	kW	2.2	3.2
	6.4	Battery voltage/capacity at 5-hour discharge	V/Ah	24/150-250	24/250-375
	6.5	Battery weight	kg	151-212	212-294
MISC.	6.6a	Energy consumption according to EN16796	kWh/h	-	-
	8.1	Type of drive control		Stepless	Stepless
	10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ	dB (A)	60/60/41	70/72/41
	10.7.2	Whole-body vibration (EN 13 059:2002)		0.8	0.8
	10.7.3	Hand-arm vibration (EN 13 059:2002)		< 2.5	< 2.5



### MAST SPECIFICATIONS

Mast type	MSW120, MSW 160 / MSF120			
	h3 + h13	h1	h4	h2+h13
<b>S</b>	1500	1950	1950	1500
<b>DS</b>	2500	1835	3000	200
	2900	2035	3400	200
	3300	2235	3800	200
	3600	2385	4100	200
	4300	2735	4800	200
<b>DEV</b>	2500	1775	2940	1355
	2900	1975	3340	1555
	3300	2235	3800	1755
	3600	2385	4100	1905
	4300	2735	4800	2255
<b>TR</b>	4100	1955	4640	-
	4300	2020	4840	-
	4700	2153	5240	-
	5400*	2385	5940	-
<b>TREV</b>	4100	1955	4640	1475
	4300	2020	4840	1540
	4700	2153	5240	1673
	5400*	2385	5940	1905

Mast type	MSW160S / MSF160S			
	h3 + h13	h1	h4	h2+h13
<b>S</b>	1500	1950	1950	1500
<b>DS</b>	2500	1835	3000	200
	2900	2035	3400	200
	3300	2235	3800	200
	3600	2385	4100	200
	4300	2735	4800	200
<b>DEV</b>	2500	1775	2940	1355
	2900	1975	3340	1555
	3300	2235	3800	1755
	3600	2385	4100	1905
	4300	2735	4800	2255
<b>TR</b>	4100	1955	4640	-
	4300	2020	4840	-
	4700	2153	5240	-
	5400*	2385	5940	-
<b>TREV</b>	4100	1955	4640	1475
	4300	2020	4840	1540
	4700	2153	5240	1673
	5400*	2385	5940	1905

- \* = MSW160
- S = Simplex
- DS = Duplex without freelift
- DEV = Duplex mast with freelift
- TR = Triplex without freelift
- TREV = Triplex mast with freelift
- h3+h13 = Lift height
- h1 = Height with mast lowered
- h4 = Overall height with mast raised
- h2+h13 = Freelift



It's all about  
the price.  
But what  
price?

## Reduce your Total Cost of Operation with UniCarriers

We agree. Price is everything. Or to be more specific: your Total Cost of Operation (TCO). That's why we're so focused on cutting costs and improving your material handling. The truck and its performance play an important role, but this is even more about how we can support you in optimizing your warehouse operations to give you the best value for your money. Which – in the long run – is what creates a winner.

\* The product shown may be different than the actual configuration based on market requirements.

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