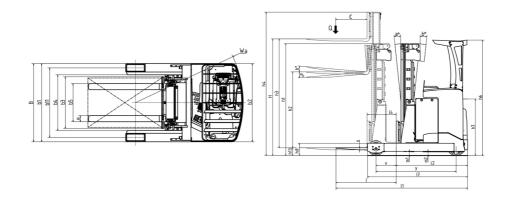
Technical sheet:

ER 12



Manufacture		Technical characteristics		Metric
1.4	1.1	Manufacturer		Manitou
1.5	1.2	Model Name		ER 12
1.5 Max. capacity c 600 mm 1.8 Load distance, centre of drive axie to fork x 307 mm 1.9 Wheebase y 1378 mm 2.1 Secrice weight C 2580 kg 2.1 Secrice weight C Whitela 3.1 Times type Whitela C Whitela 3.1 Number of drive wheels - Size of drive wheels C 2 2 x 220785 3.5 Number of front wheels - Size of drive wheels D 0 0 0 3.5 Number of front wheels - Size of drive wheels D 0 <	1.3	Power source		Electrical
1.6	1.4	Operator type		Seated
1.0 Mechasis	1.5	Max. capacity	Q	1200 kg
	1.6	Load center of gravity	С	600 mm
Neight Service weight Service weig	1.8	Load distance, centre of drive axle to fork	X	307 mm
2.1 Service weight 2580 kg Wheels Wilkollan 3.1 Tires type Vulkollan 3.5.2 Number of ford wheels - Size of five wheels 2.x x20985 3.5 Number of front wheels - Year wheels 1/2 3.6 Front wheel gauge b10 0 mm 3.7 Rear wheel gauge b11 95 mm 4.8 Seat height/ stand height h6 2205 mm 4.8 Seat height/ stand height h7 1077 mm 4.19 Overall length h6 2205 mm 4.20 Length to face of forks 12 1120 mm 4.21 Overall width b1 1120 mm 4.22 Fork section / width / length s / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B s / e / l 90 mm 4.25 Distance between wheel amrs/loading surfaces b4 900 mm 4.21 Goound clearance at centre of wheelbase m2 70 mm 4.22 Goound clearance at centre of wheelbase	1.9	Wheelbase	у	1378 mm
		Weight		
3.1 Tires type Wulkollan 3.5.2 Number of Idriv wheels - Size of Idriv wheels 1 x x 55x x 155 3.3 Number of Idriv wheels - Size of Idriv wheels 2 x 220°85 3.5 Front wheel gauge b10 0 mm 3.6 Front wheel gauge b11 995 mm Dimensions Belight of ownhead guard (cabin) h6 2205 mm 4.8 Sea height/stand height h7 1077 mm 4.9 Owenall length h7 1077 mm 4.9 Owenall width b1 2413 mm 4.20 Length to face of forks l2 1285 mm 4.21 Overall width b1 1120 mm 4.22 Fork section / width / length b1 1120 mm 4.22 Fork section / width / length b4 900 mm 4.24 Fork section / width / length b4 900 mm 4.25 Rock carriage (BSD 2282 (class/form) A/B b4 900 mm 4.25 Width over forks min / max b5 316 mm / 697 mm <	2.1	Service weight		2580 kg
3.5.2 Number of drive wheels - Size of drive wheels 1 x 355 x 155 3.3 Number of Ind wheels - Size of load wheels 2 x 220°85 3.5 Number of Ind wheels - Size of load wheels 1 / 2 3.6 Front wheel gauge b10 0 mm 3.7 Rear wheel gauge b10 995 mm Olimensions 4.7 Height of ownhead guard (cabin) h6 2205 mm 4.8 Sach height Stand height h7 1077 mm 4.19 Overall length 11 2413 mm 4.20 Length of face of forks 12 1256 mm 4.21 Overall width b1 1120 mm 4.22 Forks section / width / length 5 / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2232 (class/form) A/B 5 / e / l 40 mm x 100 mm / 1150 mm 4.24 Fork carriage ISO 2232 (class/form) A/B 5 / e / l 40 mm x 100 mm / 1150 mm 4.25.1 Width over fork min / max b5 316 mm / 697 mm 4.25.1 Width over fork min / max b5 <t< td=""><td></td><td>Wheels</td><td></td><td></td></t<>		Wheels		
3.3 Number of load wheels - Size of load wheels 1 / 2 3.5 Number of front wheel yare wheels 1 / 2 3.6 Forth wheel gauge b10 0 mm 3.7 Rear wheel gauge b11 995 mm 4.7 Height of overhead guard (cabin) h6 2205 mm 4.8 Seat height Stand height h7 1077 mm 4.9 Overall length h7 1077 mm 4.20 Length to face of forks 12 1265 mm 4.21 Overall width b1 1120 mm 4.22 Fork section / width / length s e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B s e / l 40 mm x 100 mm / 1150 mm 4.24 Distance between wheel arms/loading surfaces b4 900 mm 4.25 Fork carriage ISO 2328 (class/form) A/B a 2 70 mm 4.25 Ground cleannee at centre of wheelbase m2 70 mm 4.25 Ground cleannee at centre of wheelbase m2 70 mm 5.1 Travel speed (l	3.1	Tires type		Vulkollan
3.5 Number of front wheels / rear wheels 1 / 2 3.6 Front wheel gauge b10 0 mm 3.7 Rear wheel gauge b11 995 mm 4.7 Height of owehead gauge (cabin) 6 2205 mm 4.8 Sea height/stand height h7 1077 mm 4.9 Overall length 11 2413 mm 4.20 Length of ace of forks 12 1253 mm 4.21 Overall width b1 1120 mm 4.22 Fork centage ISO 2308 (class/form) A/B 5 / e/1 40 mm x 100 mm / 1150 mm 4.26 Oistance between wheel arms/loading surfaces b4 900 mm 4.26 Oistance between wheel arms/loading surfaces b5 316 mm / 697 mm 4.27 Ground clearance at center of wheelbase m2 70 mm 4.32 Fortou delearance at centre of wheelbase m2 770 mm 4.33 Alsie width for 1000 v. 1200 pallet lengthways Ast 2756 mm 4.35 Timing radius Ast 2756 mm 5.1 Travel sp	3.5.2	Number of drive wheels - Size of drive wheels		1 x 355 x 155
3.5 Number of front wheels / rear wheels 1 / 2 3.6 Front wheel gauge b10 0 mm 3.7 Rear wheel gauge b11 995 mm 4.7 Height of owehead gauge (cabin) 6 2205 mm 4.8 Sea height/stand height h7 1077 mm 4.9 Overall length 11 2413 mm 4.20 Length of ace of forks 12 1253 mm 4.21 Overall width b1 1120 mm 4.22 Fork centage ISO 2308 (class/form) A/B 5 / e/1 40 mm x 100 mm / 1150 mm 4.26 Oistance between wheel arms/loading surfaces b4 900 mm 4.26 Oistance between wheel arms/loading surfaces b5 316 mm / 697 mm 4.27 Ground clearance at center of wheelbase m2 70 mm 4.32 Fortou delearance at centre of wheelbase m2 770 mm 4.33 Alsie width for 1000 v. 1200 pallet lengthways Ast 2756 mm 4.35 Timing radius Ast 2756 mm 5.1 Travel sp				
3.6 Front wheel gauge b10 95 mm 3.7 Rear wheel gauge b11 995 mm 4.7 Height of overhead guard (cabin) h6 2205 mm 4.8 Seat height/stand height h7 1077 mm 4.9 Overall length 11 2431 mm 4.20 Length of ace of forks 12 1263 mm 4.21 Overall width / length b1 1120 mm 4.22 Fork section / width / length s / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2238 (class/form) A/B b4 900 mm 4.26 Distance between wheel arms/loading surfaces b4 900 mm 4.26 Distance between wheel arms/loading surfaces b4 900 mm 4.27 Ground clearance at center of wheelbase m2 70 mm 4.28 Islaie width for 800 x 1200 pallet lengthways Ast 270 mm 4.31 Aisle width for 800 x 1200 pallet lengthways Ast 270 mm 4.32 Turning addus Wa 1598 mm 5.2 <td></td> <td></td> <td></td> <td></td>				
Rear wheel gauge			b10	
New New			b11	995 mm
4.8 Seal height/stand height h7 1077 mm 4.19 Overall length 11 2413 mm 4.20 Length to face of forks 12 1263 mm 4.21 Overall width b1 1120 mm 4.22 Fork section / width / length s / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B b4 900 mm 4.25 Distance between wheel ams/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.25.2 Ground clearance at centre of wheelbase m2 70 mm 4.32 A sie width for 1000 x 1200 pallet lengthways Ast 2701 mm 4.33 A sie width for 800 x 1200 pallet lengthways Ast 2768 mm 4.35 Turning radius Ast 2768 mm 5.1 Travel speed (laden / unladen) Ma 152.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.26 m/s / 0.54 m/s 0.25 m/s / 0.50 m/s 5.1 Gradeability (laden / unladen) 0.20				
4.8 Seat height/stand height h7 1077 mm 4.19 Overall length I1 2413 mm 4.20 Length to face of forks I2 1263 mm 4.21 Overall width b1 1120 mm 4.22 Fork section / width / length s / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B b4 900 mm 4.26 Distance between wheel ams/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Asie width for 1000 x 1200 pallet lengthways Ast 2701 mm 4.34 Asie width for 800 x 1200 pallet lengthways Ast 2758 mm 4.35 Turning radius Ma 1598 mm 5.1 Travel speed (laden / unladen) 0.4 m/s / 0.54 m/s 5.2 Lifting speed (laden / unladen) 0.2 m/s 0.20 m/s / 0.20 m/s 5.1 Travel speed (laden / unladen) 0.2 m/s / 0.00 m/s 0.20 m/s /	4.7	Height of overhead quard (cabin)	h6	2205 mm
4.19 Overall length I1 2413 mm 4.20 Length to face of forks I2 1263 mm 4.21 Forks section / width / length s / e / I 40 mm x 100 mm / 1150 mm 4.22 Fork section / width / length s / e / I 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.25.1 Width over forks min. / max. m2 70 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2701 mm 4.34 Aisle width for 1000 x 1200 pallet lengthways Ast 2768 mm 4.35 Turning radius Wa 1598 mm 5.1 Tavel speed (laden / unladen) Ast 2768 mm 5.2 Lifting speed (laden / unladen) 0.58 m/s / 0.60 m/s 0.58 m/s / 0.60 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 0.58 m/s / 0.60 m/s 5.7 Gradeability (laden / unladen) 0.59 m/s / 0.20 m/s 7.50 k/ 11.10 %	4.8	- , ,		1077 mm
4.21 Overall width b1 1120 mm 4.22 Forks section / width / length \$ / e / I 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B 2A 4.26 Di stance between wheel ams/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2776 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2776 mm 4.35 Tuming radius Ma 1598 mm 4.35 Tuming radius Wa 1598 mm 5.1 Travel speed (laden / unladen) Wa 1598 mm 5.2 Lifting speed (laden / unladen) 0.04 m/s / 0.54 m/s 0.54 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.02 m/s / 0.20 m/s 0.75 m/s / 0.20 m/s 5.1 Reach speed (with load / without load) To So w/ 11.10 m 0.20 m/s / 0.20 m/s 5.1 Respice brake	4.19		I1	2413 mm
4.21 Overall width b1 1120 mm 4.22 Forks section / width / length \$ / e / l 40 mm x 100 mm / 1150 mm 4.23 Fork carriage ISO 2328 (class/form) A/B 2A 4.26 Di stance between wheel ams/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 27761 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 27766 mm 4.35 Tuming radius Wa 1598 mm 4.35 Tuming radius Wa 1598 mm 5.1 Travel speed (laden / unladen) Wa 1598 mm 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 0.54 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.20 m/s / 0.20 m/s 0.58 m/s / 0.60 m/s 5.1 Reach speed (with load / without load) 7.50 % / 11.10 % 0.50 % m/s / 0.50 m/s 1.10 % 5.1	4.20	Length to face of forks	12	1263 mm
4.23 Fork carriage ISO 2328 (class/form) A/B 2A 4.26 Distance between wheel amms/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2701 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2768 mm 4.35 Tuming radius Wa 1598 mm 5.1 Travel speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.58 m/s / 0.60 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric 6.1 Dirive motor rating S2 60 min 5.00 kW 6.1 Dirive motor rating S2 60 min 5.00 kW 6.2 Lift motor rating S2 60 min 48 V / 420 Ah 6.3 Battery woltage / capacity 48 V / 420 Ah </td <td>4.21</td> <td></td> <td>b1</td> <td>1120 mm</td>	4.21		b1	1120 mm
4.26 Distance between wheel amms/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2768 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2768 mm 4.35 Tuming radius Wa 1598 mm 5.1 Tavel speed (laden / unladen) Wa 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 0.58 m/s / 0.60 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 0.20 m/s / 0.20 m/s 5.4 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 0.20 m/s / 0.20 m/s Electric 5.10 Service brake Electric Electric 6.1 Drive motor rating \$2.50 min \$5.90 kW 11 kW 6.2 Lift motor rating \$2.50 min \$5.90 kW 11 kW 6.3 Battery vaccording to DIN 43531/35/36 A, B, C \$7.30 kg <td>4.22</td> <td>Forks section / width / length</td> <td>s / e / l</td> <td>40 mm x 100 mm / 1150 mm</td>	4.22	Forks section / width / length	s / e / l	40 mm x 100 mm / 1150 mm
4.26 Distance between wheel amms/loading surfaces b4 900 mm 4.25.1 Width over forks min. / max. b5 316 mm / 697 mm 4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2768 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 27768 mm 4.35 Tuming radius Wa 1598 mm 5.1 Tavel speed (laden / unladen) Wa 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 0.58 m/s / 0.50 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.50 m/s 0.58 m/s / 0.50 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 0.20 m/s / 0.20 m/s Electric 5.10 Englie 11 kW 6.2 Lift motor rating S2 60 min 5.90 kW 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C 11 kW 11 kW 6.3 Battery weight (+/- 5%) 730 kg 730 kg	4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.32 Ground clearance at centre of wheelbase m2 70 mm 4.33 Aisle width for 1000 x 1200 pallet lengthways 2701 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2768 mm 4.35 Tuming radius Wa 1598 mm Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 0.20 m/s / 0.20 m/s 5.10 Service brake Electroic 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating \$2.60 min 5.90 kW 6.3 Battery according to DIN 43531/35/36 A, B, C 0.11 kW 6.4 Battery weight (+/- 5%) 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 19 Electronic 8.1 Type of dr	4.26		b4	900 mm
4.33 Aisle width for 1000 x 1200 pallet lengthways Ast 2701 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Wa 1598 mm 4.35 Tuming radius Wa 1598 mm Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating \$2.50 min 5.90 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN4531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous Illectronic 8.1 Type of drive control Electronic	4.25.1	Width over forks min. / max.	b5	316 mm / 697 mm
4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2768 mm 4.35 Tuming radius Wa 1598 mm Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3 15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery weight (+/- 5%) 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 1/min	4.32	Ground clearance at centre of wheelbase	m2	70 mm
Tuming radius Wa 1598 mm Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (with load / without load) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating \$2.50 min 5.90 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	4.33	Aisle width for 1000 x 1200 pallet lengthways		2701 mm
4.35 Tuming radius Wa 1598 mm Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (with load / without load) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 5.00 m/s 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating \$2.50 min 5.90 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2768 mm
Performances 5.1 Travel speed (laden / unladen) 12.30 km/h / 12.50 km/h 5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (with load / without load) 0.20 m/s / 0.20 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric 6.1 Drive motor rating S2 60 min 5.90 kW 6.2 Lift motor rating S2 60 min 5.90 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous Type of drive control Electronic 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	4.35		Wa	1598 mm
5.2 Lifting speed (laden / unladen) 0.46 m/s / 0.54 m/s 5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating S2 60 min 5.90 kW 6.2 Lift motor rating at S3 15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min				
5.3 Lowering speed (laden / unladen) 0.58 m/s / 0.60 m/s 5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.1	Travel speed (laden / unladen)		12.30 km/h / 12.50 km/h
5.4.1 Reach speed (with load / without load) 0.20 m/s / 0.20 m/s 5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.2	Lifting speed (laden / unladen)		0.46 m/s / 0.54 m/s
5.7 Gradeability (laden / unladen) 7.50 % / 11.10 % 5.10 Service brake Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.3	Lowering speed (laden / unladen)		0.58 m/s / 0.60 m/s
Electric Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/-5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.4.1	Reach speed (with load / without load)		0.20 m/s / 0.20 m/s
Engine Engine 6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.7	Gradeability (laden / unladen)		7.50 % / 11.10 %
6.1 Drive motor rating \$2.60 min 5.90 kW 6.2 Lift motor rating at \$3.15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	5.10	Service brake		Electric
6.2 Lift motor rating at S3 15% 11 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min		Engine		
6.3 Battery according to DIN 43531/35/36 A, B, C DIN43531 B 6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.1	Drive motor rating S2 60 min		5.90 kW
6.4 Battery voltage / capacity 48 V / 420 Ah 6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.2			11 kW
6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.3	Battery according to DIN 43531/35/36 A, B, C		DIN43531 B
6.5 Battery weight (+/- 5%) 730 kg Miscellaneous 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.4	Battery voltage / capacity		48 V / 420 Ah
Miscellaneous Electronic 8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min		, , ,		
8.1Type of drive controlElectronic8.3Oil flow rate for attachments25 l/min				
	8.1			Electronic
9.4 Sound level at the driver's corresponding to DIN 12.052	8.3	Oil flow rate for attachments		25 I/min
0.4 Sound level at the universean according to DNV 12 000	8.4	Sound level at the driver's ear according to DIN 12 053		57.40 dB

ER 12 - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 32	FVD 36	FVD 38	FVD 42	FVD 45	FVD 48
Mast/fork carriage tilt, forward	۰	4	4	4	4	4	4
Mast/fork carriage tilt, backward	۰	1	1	1	1	1	1
h1 - Mast lowered height	mm	2170	2370	2470	2670	2820	2970
h2 - Mast free lift	mm	125	125	125	125	125	125
h3 - Mast lifting height	mm	3200	3600	3800	4200	4500	4800
h4 - Mast extended height	mm	3780	4180	4380	4780	5080	5380
Residual capacity with integrated side shift at max heigth	kg	1200	1200	1200	1200	1200	1200

Free Lift Triplex (FLT)		FLT 48	FLT 54	FLT 57	FLT 63	FLT 68
Mast/fork carriage tilt, forward	٠	3	3	3	3	3
Mast/fork carriage tilt, backward	۰	1	1	1	1	1
h1 - Mast lowered height	mm	2140	2340	2440	2640	2790
h2 - Mast free lift	mm	1600	1800	1900	2100	2250
h3 - Mast lifting height	mm	4800	5400	5700	6300	6800
h4 - Mast extended height	mm	5380	5980	6280	6880	7330
Residual capacity with integrated side shift at max heigth	kg	1200	1200	1200	1000	700





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