

FORTENS



LPG FORKLIFT TRUCKS

\$4.0-5.5FT FORTENS ADVANCE / FORTENS ADVANCE+



FORTENS ADVANCE S4.0FT, S4.5FT, S5.5FT, S5.5FTS

	1.1	Manufacturer (abbreviation)	١	HYS	TER	HYS	TER	HYS	TER	HYS	TER
	1.2	Manufacturer's type designition		\$4.0		S4.		S5.		S5.5	
L		Model	41	Fortens A		Fortens /		Fortens		Fortens /	
	-	Engine	-11	Kubota		Kubot		Kubot		Kubot Dura	
DISTINGUISHING MARK	-	Transmission	-11	DuraN 1-sp		DuraN 1-sp		Dural 1-sp		1-sp	
氢	_	Brake type	-11	Premium W		Premium V		Premium V		Premium V	
	1.3	Drive: electric (battery or mains), diesel, petrol, LPG	-	LP		LF		LF		LF	
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker	1	Sea	ted	Sea	ted	Sea	ited	Sea	ted
	1.5	Rated capacity/rated load Q	t)	4.0	0	4.	5	5.	.5	5.	5
	1.6	Load centre distance c (mn	n)	50		60			00	60	
	1.8	Load distance, centre of drive axle to fork x (mr	_	44		46			52	46	
	1.9	Wheelbase y (mn	1)	157	70	17	90	17	90	17	90
90	2.1	Service weight	g	579	95	69	77	75	95	76	18
WEIGHTS	2.2	-	g	8607	1188	10085	1392	11523	1572	11729	1389
=	2.3		g	2194	3601	2916	4061	2760	4835	2966	4652
	3.1	Tyres: L=pneumatic, V=solid, SE=pneumatic-shaped solid		V	'	١	1	١	/	١	
IYRES/CHASSIS	3.2	Tyre size, front		22x9		22x1		22x1		22x1	
[통	3.3	Tyre size, rear	-11	18x7x		18x8:		18x8:		18x8:	
ES	3.5	Wheels, number front/rear (x = driven wheels) Tread, front b_{10} (mr	1)	2x 94	2	2x	2	2x 10	2 15	2x 10	2
F	3.7	Tread, rear b ₁₁ (mr		97		10		10		10	
	-										
	4.1	Tilt of mast/fork carriage forward/backward $lpha$ / eta	°)	5	6	5	6	5	6	5	6
	4.2	Height, mast lowered h ₁ (mr		213	30	21	35	21	35	21	35
	4.3	Free lift ¶ h ₂ (mn		10		10			00	10	
	4.4	Lift ¶ h ₃ (mr		300		27		27		27	
	4.5	Height, mast extended ● h ₄ (mn		378		36		36		36	
	4.7	Height of overhead guard (cabin) h ₆ (mn Seat height/stand height ↑ (mn		217		21 13		21 13		21 13	
	4.12	Coupling height h ₁₀ (mn		36		37		37		37	
	4.19	Overall length		363		39		40		38	
	4.20	Length to face of forks I ₂ (mr		263		27		28	61	26	99
	4.21	Overall width b ₁ (mm	n)	1170	1270	1320	1420	1320	1420	1320	1420
S S	4.22	Fork dimensions ISO 2331 s/e/I (mm	n)	50 12	5 1000	60 150	1200	60 150	1200		50 1200
DIMENSI	4.23	Fork carriage ISO 2328, class/type A, B		III.		IV		IV		IV	
	4.24	Fork carriage width ■ b ₃ (mn Ground clearance, laden, below mast m ₁ (mn		107		10		10		10	
	4.51	Ground clearance, laden, below mast m ₁ (mr	1/			11	0			11	
	4 32	Ground clearance centre of wheelhase m. (mr				11	ifi		18	11	
	4.32	Ground clearance, centre of wheelbase m_2 (mn Load dimension $b_{12} \times I_6$ crossways $b_{12} \times I_6$ (mr	n)	15 1200 x	2	11 15 1200 >			56	11 15 1200 >	i6
		$ \begin{array}{lll} \mbox{Ground clearance, centre of wheelbase} & m_2 \mbox{ (mr} \\ \mbox{Load dimension } b_{12} \times I_6 \mbox{ crossways} & b_{12} \times I_6 \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{Aisle width predetermined load dimensions} & A_{st} \mbox{ (mr} \\ \mbox{ (mr} \\ \mbox{ (mr) of mr} \\ \mbox{ (mr) of mr) of mr} & A_{st} (mr) of mr) of m$	n) n)	15	1000	15	1000	15	56 < 1000	15	i6 : 1000
	4.33	Load dimension $b_{12} \times I_6$ crossways $b_{12} \times I_6$ (mn	n) n) n)	15 1200 x	2 1000 1 5	15 1200 x	1000 09	15 1200 x	56 < 1000 96	15 1200 >	i6 : 1000 :37
	4.33 4.34 4.34.1 4.34.2	$\begin{array}{ccc} Load \ dimension \ b_{12} \times I_{6} \ crossways & b_{12} \times I_{6} \ fm \end{array}$ $Aisle \ width \ predetermined \ load \ dimensions \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 1000 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways \\ & A_{st} \ (mn \\ Aisle \ width \ for \ pallets \ Res \ (mn \\ f$	n) n) n) n) n)	15 1200 x 394 414	2 1000 15 15	15 1200 x 41 43 43	1000 09 09 09	15 1200 x 41 43 43	56 < 1000 96 96 96	15 1200 > 40 42 42	66 : 1000 :37 :37
	4.33 4.34 4.34.1 4.34.2 4.35	$\begin{array}{ccc} Load \ dimension \ b_{12} \times I_{g} \ crossways & b_{12} \times I_{g} \ fmr \\ Aisle \ width \ predetermined \ load \ dimensions & A_{st} \ fmr \\ Aisle \ width \ for \ pallets \ 1000 \times 1200 \ crossways & A_{st} \ fmr \\ Aisle \ width \ for \ pallets \ 800 \times 1200 \ crossways & A_{st} \ fmr \\ Turning \ radius & W_{a} \ fmr \\ \end{array}$	n) n) n) n) n)	15 1200 x 39 ⁴ 41 ⁴ 41 ⁴ 229	2 1000 45 45 45 45	15 1200 x 41 43 43 24	1000 09 09 09 09	15 1200 x 41 43 43 25	56 < 1000 96 96 96 96 34	15 1200 > 40 42 42 23	37 37 37 37 37
	4.33 4.34 4.34.1 4.34.2 4.35 4.36	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ◆ A_{st} (mr Aisle width for pallets 1000×1200 crossways ◆ A_{st} (mr Aisle width for pallets 800×1200 crossways ◆ A_{st} (mr Turning radius W_a (mr Internal turning radius b_{13} (mr	n) n) n) n) n)	15 1200 x 39 ⁴ 41 ⁴ 41 ⁴ 229	2 1000 15 15 15 15 98	15 1200 x 41 43 43 24	1000 09 09 09 09 47	15 1200 x 41 43 43 25	56 < 1000 96 96 96 96 34	15 1200 x 40 42 42 23 76	1000 337 337 337 75
	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 800×1200 crossways ♦ A_{st} (mr Turning radius A_{st} (mr Internal turning radius A_{st} (mr A_{st}	n) n) n) n) n) n)	15 1200 x 394 414 414 225 67	2 1000 15 15 15 15 5 5 5	15 1200 x 41 43 43 24 76	x 1000 09 09 09 09 47 52	15 1200 x 41 43 43 25 76 22	56 c 1000 96 96 96 96 34 52	15 1200 x 40 42 42 23 76 21	37 337 337 337 35 55 52
	4.33 4.34 4.34.1 4.34.2 4.35 4.36	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ◆ A_{st} (mr Aisle width for pallets 1000×1200 crossways ◆ A_{st} (mr Aisle width for pallets 800×1200 crossways ◆ A_{st} (mr Turning radius W_a (mr Internal turning radius b_{13} (mr	n)	15 1200 x 39 ⁴ 41 ⁴ 41 ⁴ 229	2 1000 45 45 45 45 45 45 5 5 5 5 5	15 1200 x 41 43 43 24	1000 09 09 09 09 47 52 64	15 1200 x 41 43 43 25 76 22	56 < 1000 96 96 96 96 34	15 1200 x 40 42 42 23 76	66 1000 37 37 37 75 52 61
	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42	Load dimension $b_{12} \times I_6$ crossways $b_{12} \times I_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 800×1200 crossways ♦ A_{st} (mr Turning radius W_a (mr Internal turning radius B_{13} (mr 90° intersecting aisle (with pallet L = 1000 mm x W = 1200 mm) (mr Step Height (from ground to running board)	n)	15 1200 x 39 ⁴ 41 ⁴ 22! 67 20!	2 1000 45 45 45 45 45 45 5 5 5 5 5	15 1200 x 41 43 43 24 76 21	1000 09 09 09 09 47 52 64	15 1200 x 41 43 43 25 76 22	566 x 1000 96 96 96 96 34 52 11	15 1200 x 40 42 42 23 76 21	66 1000 37 37 37 75 52 61
	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43	Load dimension $b_{12} \times I_6$ crossways $b_{12} \times I_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 800×1200 crossways ♦ A_{st} (mr Turning radius W_a (mr Internal turning radius B_{13} (mr 90° intersecting aisle (with pallet L = 1000 mm x W = 1200 mm) (mr Step Height (from ground to running board)	n)	15 1200 x 39 ⁴ 41 ⁴ 22! 67 20!	2 1000 45 45 45 45 45 56 51 2 2	18 1200) 41 43 43 24 76 21 38 32	1000 09 09 09 47 52 64 66 22	1! 1200) 41 43 43 25 76 22 33 33	566 x 1000 96 96 96 96 34 52 11	15 1200 x 40 42 42 23 76 21 33 32	66 1000 37 37 37 75 52 61
ita	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions $◆$ A_{st} (mr Aisle width for pallets 1000×1200 crossways $◆$ A_{st} (mr Aisle width for pallets 800×1200 crossways $◆$ A_{st} (mr Turning radius b_{13} (mr Internal turning radius b_{13} (mr $b_$		15 1200 x 394 414 225 67 205 39 32	2	19 1200) 41 43 43 24 76 21 33 32	1000 09 09 09 09 47 62 64 166 122	1! 1200) 41 43 43 25 76 22 33 37 17.7	566 1000 96 96 96 98 34 52 11 96 22	15 1200 x 40 42 42 23 76 21 33 32	166
CE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Turning radius W_a (mr Internal turning radius B_{t3} (mr t_{t3} (mr t_{t4})) B_{t3} (mr t_{t4})) B_{t5} (mr t_{t5}) B_{t5} (mr t_{t5})) B_{t5} (mr $t_$		15 1200 x 394 414 225 67 205 39 32 18.1 18.1 0.61	2	15 1200) 41 43 43 24 76 21 33 32 17.8 17.8	1000 09 09 09 09 47 12 26 64 16 62 18.1 18.1 0.57	19 1200) 41 43 43 25 76 22 33 32 17.7 17.7 0.56	566 \$1000 96 96 96 98 34 52 11 106 22 18.1 18.1 0.57	15 1200 x 40 42 42 23 76 21 33 32 17.7 17.7 0.56	166 1000 137 137 137 137 155 152 152 154 156 156 156 156 156 156 156 156 156 156
MANGE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Turning radius W_a (mr Internal turning radius W_a (mr 90° intersecting aisle (with pallet L = 1000 mm x W = 1200 mm) (mr Step Height (from ground to running board) (mr 100° Step Height (between intermediate steps and floor) (mr 100° Travel speed, laden/unladen 100° km, 100° Lift speed, laden/unladen 100° m, 100° Lift speed, laden/unladen 100° m, 100° laden/unladen 100° m, 100		15 1200 x 394 414 412 225 67 205 39 32 18.1 18.1 0.61 0.55	2 1000 115 15 15 15 15 15 15 15 15 15 15 15 15	15 1200) 41 43 43 24 76 21 33 32 17.8 17.8 0.56 0.51	1000 09 09 09 09 47 12 64 16 62 18.1 18.1 0.57 0.42	19 1200 x 41 43 43 43 25 76 22 33 32 32 17.7 17.7 0.56 0.51	566 \$1000 96 96 96 98 34 52 11 106 22 18.1 18.1 0.57 0.42	15 1200 x 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51	166 1000 137 137 137 137 155 152 152 154 154 154 154 154 154 154 154 154 154
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PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions $◆$ A_{st} (mr Aisle width for pallets 1000×1200 crossways $◆$ A_{st} (mr Aisle width for pallets 1000×1200 crossways $◆$ A_{st} (mr Turning radius W_a (mr Internal turning radius b_{13} (mr 90° intersecting aisle (with pallet $L = 1000$ mm $\times W = 1200$ mm) (mr Step Height (from ground to running board) (mr Step Height (between intermediate steps and floor) (mr Travel speed, laden/unladen k_{tot} k		15 1200 x 394 414 412 225 67 205 39 32 18.1 18.1 0.61 0.55	2 1000 115 15 15 15 15 15 15 15 15 15 15 15 15	15 1200 > 41 43 43 24 76 21 33 37 17.8 17.8 0.56 0.51 34923	1000 109 109 109 109 147 122 164 166 122 18.1 18.1 0.57 0.42 16916	15 1200 o 41 43 43 25 76 22 33 31 17.7 17.7 0.56 0.51 34626	566 \$1000 96 96 96 96 96 34 52 111 36 222 18.1 18.1 0.57 0.42 15999	15 1200 > 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51 34626	166 1000 137 137 137 137 157 157 157 157 157 157 157 157 157 15
PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3 5.5	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width predetermined load dimensions ♦ A_{st} (mr Aisle width for pallets 1000×1200 crossways ♦ A_{st} (mr Aisle width for pallets 800×1200 crossways ♦ A_{st} (mr Turning radius W_a (mr Internal turning radius b_{12} (mr 90° intersecting aisle (with pallet $L = 1000$ mm \times $W = 1200$ mm) (mr Step Height (from ground to running board) (mr Step Height (between intermediate steps and floor) (mr Travel speed, laden/unladen b_a km, Lift speed, laden/unladen b_a km, Lift speed, laden/unladen b_a m, Drawbar pull, laden/unladen b_a m, Drawbar pull, laden/unladen b_a b_a b_a b_a b_a b_b b_a b_b		15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8	2 1000 155 156 156 157 18.3 18.3 0.62 0.47 12804 14.1 4.9	15 1200 > 41 43 43 24 76 21 33 32 17.8 17.8 0.56 0.51 34923 32.6	1000 09 09 09 447 52 64 64 16 122 18.1 0.57 0.42 16916 18.7 4.9	19 1200 x 41 43 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3	566 x 1000 96 96 96 96 34 52 11 96 22 18.1 18.1 0.57 0.42 15999 17.7	15 1200 > 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51 34626 28.2	166 1000 137 137 137 155 150 150 150 150 150 150 150 150 150
PERFORMANCE DATA	4.33 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions \spadesuit A_{st} (mr Aisle width for pallets 1000×1200 crossways \spadesuit A_{st} (mr Aisle width for pallets 800×1200 crossways \spadesuit A_{st} (mr Internal turning radius B_{13} (mr Internal turning radius B_{13} (mr B_{13}	(a) (b) (b) (c) (c)	15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra	2 1000 155 156 155 156 157 18.3 18.3 18.3 0.62 0.47 12804 14.1 4.9 suilic	15 1200 > 41 43 43 24 76 21 38 32 17.8 0.56 0.51 34923 32.6 4.2 Hydr	1000 09 09 09 447 12 64 66 16 122 18.1 18.1 0.57 0.42 16916 18.7 4.9	19 1200 o 41 43 43 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	566 x 1000 96 96 96 96 34 52 11 56 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic	15 1200 > 40 42 42 23 76 21 35 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	166 1000 137 137 137 137 155 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15
PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3 5.5 5.7	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions \spadesuit A_{st} (mr Aisle width predetermined load dimensions \spadesuit A_{st} (mr Aisle width for pallets 1000×1200 crossways \spadesuit A_{st} (mr Turning radius W_a (mr Internal turning radius b_{12} (mr 90° intersecting aisle (with pallet L = 1000 mm x W = 1200 mm) (mr Step Height (from ground to running board) (mr Step Height (between intermediate steps and floor) (mr Travel speed, laden/unladen b_a km, Lift speed, laden/unladen b_a km, Lift speed, laden/unladen b_a km, Lowering speed, laden/unladen b_a m, Drawbar pull, laden/unladen b_a	(a) (b) (b) (c) (c)	15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3	2 1000 155 156 155 156 157 18.3 18.3 18.3 0.62 0.47 12804 14.1 4.9 suilic	15 1200 > 41 43 43 24 76 21 35 32 17.8 17.8 0.56 0.51 34923 32.6 4.2	1000 09 09 09 447 12 64 66 16 122 18.1 18.1 0.57 0.42 16916 18.7 4.9	19 1200 x 41 43 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3	566 x 1000 96 96 96 96 34 52 11 56 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic	15 1200 > 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51 34626 28.2 4.3	166 1000 137 137 137 137 155 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15
PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension b ₁₂ × I ₈ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius Bo's intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle Vh or kg,	(a) (b) (b) (c) (c)	15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra	2 1000 155 155 155 155 155 165 165 165 165 165	15 1200 o 41 43 43 24 76 21 38 32 17.8 0.56 0.51 34923 32.6 4.2 Hydr	1000 09 09 09 447 12 164 64 166 122 18.1 18.1 0.57 0.42 16916 18.7 4.9	1! 1200 o 41 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	566 x 1000 96 96 96 96 96 34 52 11 56 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic	15 1200 > 40 42 42 23 76 21 35 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	166 1000 137 137 137 155 15 15 15 15 15 15 15 15 15 15 15 15
PERFORMANCE DATA	4.33 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mr Aisle width predetermined load dimensions \spadesuit A_{st} (mr Aisle width for pallets 1000×1200 crossways \spadesuit A_{st} (mr Aisle width for pallets 800×1200 crossways \spadesuit A_{st} (mr Internal turning radius B_{13} (mr Internal turning radius B_{13} (mr B_{13}	(a) (b) (b) (c) (c)	15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra	2 1000 155 156 155 156 157 18.3 18.3 18.3 0.62 0.47 12804 14.1 4.9 suilic	15 1200 o 41 43 43 24 76 21 38 32 17.8 0.56 0.51 34923 32.6 4.2 Hydr	1000 09 09 09 447 12 64 66 16 122 18.1 18.1 0.57 0.42 16916 18.7 4.9	1! 1200 o 41 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	566 x 1000 96 96 96 96 34 52 11 56 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic	15 1200 > 40 42 42 23 76 21 35 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	166 1000 137 137 137 137 155 15 14 15 15 15 15 15 15 15 15 15 15 15 15 15
PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension b ₁₂ × I ₈ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius Bo* intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Type of drive unit	nh hh hh hh h h h h h h h h h h h h h h	15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra	2 1000 155 156 157 157 158 159 159 159 159 159 159 159 159 159 159	15 1200 o 41 43 43 24 76 21 38 32 17.8 0.56 0.51 34923 32.6 4.2 Hydroc	1000 09 09 09 447 12 64 66 16 122 18.1 18.1 0.57 0.42 16916 18.7 4.9 aulic	1! 1200 o 41 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro	566 x 1000 96 96 96 96 96 34 52 11 56 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic	15 1200 > 40 42 42 23 76 21 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro	166 1000 137 137 137 137 155 12 151 151 151 151 151 151 151 151
PERFORMANCE DATA	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension b ₁₂ × I ₈ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius W _a (mn Internal turning radius Bo ² intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards Lift speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle I/h or kg, Type of drive unit		15 1200 x 394 414 414 225 67 209 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra 4.1	2 1000 155 155 155 155 155 165 165 165 165 165	15 1200 o 41 43 43 43 43 44 76 44 4.2 Hydroco	1000 09 09 09 447 12 164 66 18.1 18.1 0.57 0.42 16916 18.7 4.9 aulic	15 1200 o 41 43 43 43 43 25 76 22 36 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydr	566 x 1000 96 96 96 96 96 34 52 11 66 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9	15 1200 > 40 42 42 23 76 21 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro	166 1000 137 137 137 137 155 15 15 15 15 15 15 15 15 15 15 15 15
	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Load dimension b ₁₂ × I ₈ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius Bo* intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Type of drive unit		15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra	2	15 1200 o 41 43 43 24 76 21 38 32 17.8 0.56 0.51 34923 32.6 4.2 Hydroc	1000 109 109 109 147 122 164 166 122 18.1 18.1 0.57 0.42 18.1 18.1 18.1 18.1 18.1 19.5 19.6 19	1! 1200 o 41 43 43 25 76 22 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro	566 x 1000 96 96 96 96 96 34 52 11 66 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic	15 1200 > 40 42 42 23 76 21 38 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro	166 1000 137 137 137 155 12 161 166 122 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic
	4.33 4.34 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.5 5.7 5.9 5.10 7.5	Load dimension $b_{12} \times l_6$ crossways $b_{12} \times l_6$ (mrosswith predetermined load dimensions ♦ As the middle predetermined predetermined load dimensions ♦ As the middle predetermined load expensions \$\delta_{13}\$ (mross \$\de		15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra 4.1 Hydroc 15 83.	2	15 1200 o 41 43 43 43 43 43 44 76 44 4.2 Hydroc 15 83	1000 109 109 109 147 122 164 166 122 18.1 18.1 0.57 0.42 18.1 18.1 18.1 19.57 19.16	1! 1200 o 41 43 43 43 25 76 22 33 37 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro	566 x 1000 96 96 96 96 96 34 52 11 66 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic	15 1200 > 40 40 42 42 23 76 21 33 37 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro	166 1000 137 137 137 155 12 161 166 122 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic
	4.33 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5 8.1 10.1 10.2 10.3 10.4 10.7	Load dimension b12 × 16 crossways Aisle width predetermined load dimensions ◆ Ast (mn Aisle width for pallets 1000 × 1200 crossways ◆ Aisle width for pallets 800 × 1200 crossways ◆ Aisle width for pallets 800 × 1200 crossways ◆ Aisle width for pallets 800 × 1200 crossways ◆ Aisle width for pallets 800 × 1200 crossways ◆ Ais (mn Turning radius Wa (mn Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards km, Lift speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel sp		15 1200 x 394 414 414 225 67 200 39 32 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra 4.1 Hydroc 15 83 76 38.8 44 3 84 84	2	15 1200 o 41 43 43 43 24 76 21 33 32 17.8 0.56 0.51 34923 32.6 4.2 Hydroc 15 83 76 38	1000 09 09 09 447 122 664 66 122 18.1 18.1 0.57 0.42 16916 18.7 4.9 audic	1! 1200 o 41 43 43 43 25 76 22 33 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro 1! 83 76 38	566 x 1000 96 96 96 96 96 34 52 11 06 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic	15 1200 > 40 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro 15 83 76 38 88	166 17000 177 175 175 175 175 175 175 175 175 175
ADDITIONAL DATA PERFORMANCE DATA	4.33 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5 8.1 10.1 10.2 10.3 10.4 10.7, 10.7, 1	Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius W _a (mn Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards km, Iift speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle I/h or kg, Type of drive unit Operating pressure for attachments Di volume for attachments ♦ Hydraulic oil tank, capacity Fuel tank, capacity Sound pressure level at the driver's seat Sound power level during the workcycle dB (// Sound power level during the workcycle)		15 1200 x 394 414 414 225 67 205 39 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydro 5 15 83 36 84 10 10 15 12 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	2	15 1200 x 41 43 43 43 43 43 43 43 43 43 43 43 43 43	1000 09 09 09 09 09 09 09 09 09 09 09 09	1! 1200) 41 43 43 43 25 76 22 33 37 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro 1! 83 76 38 88	18.1 18.1 18.1 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic	15 1200 × 400 400 400 400 400 400 400 400 400	166 1000 137 137 137 137 155 12 161 166 122 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 ddynamic
	4.33 4.34.1 4.34.2 4.35 4.36 4.41 4.42 4.43 5.1.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5 8.1 10.1 10.2 10.3 10.4 10.7	Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ A _{st} (mn Aisle width for pallets 1000 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mn Internal turning radius W _a (mn Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards km, Iift speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle I/h or kg, Type of drive unit Operating pressure for attachments Di volume for attachments ♦ Hydraulic oil tank, capacity Fuel tank, capacity Sound pressure level at the driver's seat Sound power level during the workcycle dB (// Sound power level during the workcycle)		15 1200 x 394 414 414 225 67 200 39 32 32 18.1 18.1 0.61 0.55 31725 36.8 4.3 Hydra 4.1 Hydroc 15 83 76 38.8 44 3 84 84	2	15 1200 o 41 43 43 43 24 76 21 33 32 17.8 0.56 0.51 34923 32.6 4.2 Hydroc 15 83 76 38	1000 109 109 109 109 147 122 164 166 122 18.1 18.1 0.57 0.42 16916 18.7 4.9 18.1 18.	1! 1200 o 41 43 43 43 25 76 22 38 37 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro 4. Hydro 1! 83 76 38 88	566 x 1000 96 96 96 96 96 34 52 11 06 22 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic	15 1200 > 40 40 42 42 23 76 21 33 32 17.7 17.7 0.56 0.51 34626 28.2 4.3 Hydro Hydro 15 83 76 38 88	166 1000 137 137 137 155 122 161 166 162 122 18.1 18.1 0.57 0.42 15999 17.7 5.1 aulic 9 dynamic 15 16 16 16 16 16 16 16 16 16 16 16 16 16

Specification data is per VDI 2198 December 2012

EQUIPMENT AND WEIGHT: Specification data based on 3050mm (S4.0FT) / 2800mm (S4.5FT - S5.5FTS) TOF 2 stage LFL mast with standard carriage, 1000mm (S4.0FT) / 1200mm (S4.5FT - S5.5FTS) forks with e-hydraulics.

FORTENS ADVANCE+ \$4.0FT, \$4.5FT, \$5.5FT, \$5.5FT\$

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1.1	Manufacturer (abbreviation)		HYS	STER	HYS	TER	HYS	TER	HYS	TER
1.2	Manufacturer's type designition		S4.	0FT	S4.	5FT	S5.	5FT	S5.5	FTS
	Model		Fortens A	dvance+	Fortens A	dvance+	Fortens A	ldvance+	Fortens A	Advance+
E	Engine	-	Kubot			a 3.8L	Kubot		Kubot	
<u> </u>	Transmission		DuraM 2-sp		DuraN 2-sp	latch 2	DuraN 2-sp		DuraN 2-sp	
1.3	Brake type	-	Premium V		Premium V		Premium V			Vet Brakes
1.3	Drive: electric (battery or mains), diesel, petrol, LPG		LF		LF		LF			PG
1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Sea	ted	Sea	ted	Sea	ted	Sea	ited
1.5	Rated capacity/rated load	Q (t)	4.			5	5.		5	
1.6	Load centre distance	c (mm)	50		60		60		60	
1.8	Load distance, centre of drive axle to fork	x (mm)	44		17	62	17	62	46	
1.9	Wheelbase	y (mm)	15	70	17	90	17	90	17	90
2.1 2.1 2.1	Service weight	kg	57	95	69	77	75	95	76	18
2.1 2.2 2.3	Axle loading laden, front/rear	kg	8607	1188	10085	1392	11523	1572	11729	1389
2.3	Axle loading unladen, front/rear	kg	2194	3601	2916	4061	2760	4835	2966	4652
_			_	_				_		
3.1	Tyres: L=pneumatic, V=solid, SE=pneumatic-shaped solid		\		\			/		/
3.2 3.3	Tyre size, front Tyre size, rear		22x9		22x1 18x8		22x1 18x8:		22x1 18x8	2x16
3.5	Wheels, number front/rear (x = driven wheels)		2x	2	2x	2	2x	2	2x	2
3.2 3.3 3.5 3.6	Tread, front	b ₁₀ (mm)	94		10		10		10	
3.7	Tread, rear	b ₁₁ (mm)	97		10		10		10	
4.1	Tilt of mast/fork carriage forward/backward	α/β (°)	5	6	5	6	5	6	5	6
4.2	Height, mast lowered	h ₁ (mm)	21		21		21		21	
4.3	Free lift ¶ Lift ¶	h ₂ (mm)	30		27	00 40	27	00 40	27	
4.5	Height, mast extended ●	h ₄ (mm)	37		36		36		36	
4.7	Height of overhead guard (cabin)	h ₆ (mm)	21		21		21		21	
4.8	Seat height/stand height ●	h ₇ (mm)	12	21	13	39	13	39	13	39
4.12	Coupling height	h ₁₀ (mm)	36		37			71	37	
4.19	Overall length	I ₁ (mm)	36		39		40		38	
4.20 4.21	Length to face of forks Overall width	l ₂ (mm)	1170	1270	1320	1420	1320	1420	1320	1420
	Fork dimensions ISO 2331	b ₁ (mm) s/e/I (mm)	50 12		60 15		60 15		60 15	
4.22 4.23 4.24	Fork carriage ISO 2328, class/type A, B	5,5,1 ()	III		IV		IV		IV	
4.24	Fork carriage width ■	b ₃ (mm)				70	10	70		70
	g	D ₃ (IIIIII)	10	70	10		10	70	10	70
4.31	Ground clearance, laden, below mast	m ₁ (mm)	11	14	1	18	11	18	11	18
4.31 4.32	Ground clearance, laden, below mast Ground clearance, centre of wheelbase	m ₁ (mm) m ₂ (mm)	11	52	1°	18	11 15	18	11	18 56
4.31 4.32 4.33	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension $b_{12} \times I_g$ crossways	m ₁ (mm) m ₂ (mm) b ₁₂ × l ₆ (mm)	11 15 1200 >	52 c 1000	1: 1: 1200 :	18 56 c 1000	11 15 1200 x	18 56 < 1000	11 15 1200 x	18 56 < 1000
4.31 4.32	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm)	11	52 < 1000 45	1°	18 56 < 1000 09	11 15	18 56 < 1000 96	11	18 56 < 1000 37
4.31 4.32 4.33 4.34 4.34.	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆	m ₁ (mm) m ₂ (mm) b ₁₂ × l ₆ (mm)	11 15 1200 >	4 52 < 1000 45 45	1: 1: 1200 x	18 56 < 1000 09	11 15 1200 x	18 56 < 1000 96 96	11 15 1200 x	18 56 < 1000 37 37
4.31 4.32 4.33 4.34 4.34. 4.34. 4.35	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius	$\begin{aligned} & & m_1 \text{ (mm)} \\ & & m_2 \text{ (mm)} \\ & b_{12} \times l_6 \text{ (mm)} \\ & A_{st} \text{ (mm)} \\ & A_{st} \text{ (mm)} \\ & A_{st} \text{ (mm)} \\ & W_a \text{ (mm)} \end{aligned}$	11 15 1200 x 39 41 41	62 61000 45 45 45 45	11 1200 3 41 43 43	8 66 c 1000 09 09 09 47	11 15 1200 x 41 43 43	18 56 < 1000 96 96 96 34	11 1200 x 40 42 42 23	18 56 < 1000 37 37 37 75
4.31 4.32 4.33 4.34 4.34. 4.35 4.36	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) b ₁₃ (mm)	111 1200 x 39 41 41 22	14 52 1000 45 45 45 45 98	11 1200 3 41 43 43 24 76	8 66 6 1000 09 09 09 47 62	11 1200 x 41 43 43 25	8 66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	11 1200 3 40 42 42 23 76	18 56 6 1000 37 37 37 37 52
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm)	$\begin{array}{c} m_1 \ (mm) \\ m_2 \ (mm) \\ b_{12} \times l_6 \ (mm) \\ A_{st} \ (mm) \\ A_{st} \ (mm) \\ A_{st} \ (mm) \\ W_a \ (mm) \\ b_{13} \ (mm) \\ \end{array}$	111 1200 x 39 41 41 22 67	14 52 x 1000 45 45 45 45 98 75	11: 1200 x 41: 43: 43: 24: 70: 21:	8 66 6 1000 09 09 09 47 62 64	11 1200 x 41 43 43 25 76	8 66 k 1000 96 96 96 34 62 11	11: 1200 x 40 42 42 23 76	18 56 6 1000 37 37 37 75 52 61
4.31 4.32 4.33 4.34 4.34. 4.35 4.36	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) b ₁₃ (mm)	111 1200 x 39 41 41 22	14 52 6 1000 45 45 45 45 98 75 51	11: 1200 3 41 43 43 43 24 77 21 33	8 66 6 1000 09 09 09 47 62	11 11 1200 x 41 43 43 25 76 22	8 66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	11 1200 3 40 42 42 23 76	18 56 6 1000 37 37 37 75 52 61
4.31 4.32 4.33 4.34 4.34. 4.34. 4.35 4.36 4.41	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ Aisle width for pallets 1000 × 1200 crossways ◆ Z Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board)	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm)	111 1200 x 39 41 41 22 66 20	14 52 6 1000 45 45 45 45 98 75 51	11: 1200 3 41 43 43 43 24 77 21 33	18 8 66 6 1000 09 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	11 11 1200 x 41 43 43 25 76 22	18	11: 1200 x 40 42 42 23 70 21	18 56 6 1000 37 37 37 75 52 61
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ Aisle width for pallets 1000 × 1200 crossways ◆ Z Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board)	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm)	111 1200 x 39 41 41 22 66 20	14 52 6 1000 45 45 45 45 98 75 51	11: 1200 x 41 43 43 43 24 76 21 33: 21.7	188 566 1000 009 009 47 52 64 64 166	11: 1200) 41: 43: 43: 25: 76: 22: 38: 32:	18	11: 1200 x 40 42 42 23 70 21	18 56 6 1000 37 37 37 75 52 61
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ Aisle width for pallets 1000 × 1200 crossways ◆ Z Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm)	111 1200 3 39 41 41 22 67 20 33 32	14 52 6 1000 45 45 45 98 75 51 92 22 22.5 18.3	11: 1200 x 41 43 43 43 24 76 21 33 3: 21.7 17.8	188 166 1000 1000 1009 10	11: 1200 o 41: 43: 43: 25: 76: 22: 38: 31: 21.6: 17.7	18 8 66 6 1000 996 996 996 34 62 11 1 96 22 2 1 18.1	11: 1200 3 40 42 42 23 76 21 33 32 21.6	18
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards Lift speed, laden/unladen	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm)	111 115 1200 3 39 41 41 22 67 20 33 32	22 x 1000 445 445 445 498 75 51 122 22 22.5 18.3 0.62	11: 1200 3: 41 43 43 43 24 76 21 33 32: 21.7 17.8 0.56	188 166 1000 1000 1009 10	11: 12: 12: 12: 12: 41: 43: 43: 25: 76: 22: 33: 32: 21:6: 17:7: 0.56:	28 8 66 6 6 1000 996 996 996 334 652 111 136 22 2 1 18.1 0.57	11: 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56	188 566 \$\(\alpha\) 1000 337 337 337 75 52 61 196 22 22.1 18.1 0.57
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ Aisle width for pallets 1000 × 1200 crossways ◆ Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) b ₁₃ (mm) (mm) (mm) (mm) (mm) (mm)	111 1200 x 39 41 41 22 67 20 33 32 22.1 18.1 0.61 0.55	22 x 1000 445 445 445 445 45 45 45 45 45 45 45 45	11: 1200 : 141 43 43 43 24 70 21 33: 21.7 17.8 0.56 0.51	188 166 1000 1009 10	11: 12: 12: 12: 12: 14: 43: 43: 25: 76: 22: 33: 21:6: 17.7: 0.56: 0.51	28 8 66 6 6 1000 996 996 996 996 996 996 996 996 997 997	11: 1200) 40 42 42 23 76 21 33: 21.6 17.7 0.56 0.51	28.8
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen, backwards Lift speed, laden/unladen	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm)	111 115 1200 3 39 41 41 22 67 20 33 32	22 x 1000 445 445 445 498 75 51 122 22 22.5 18.3 0.62	11: 1200 3: 41 43 43 43 24 76 21 33 32: 21.7 17.8 0.56	188 166 1000 1000 1009 10	11: 12: 12: 12: 12: 41: 43: 43: 25: 76: 22: 33: 32: 21:6: 17:7: 0.56:	28 8 66 6 6 1000 996 996 996 334 652 111 136 22 2 1 18.1 0.57	11: 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56	188 566 \$\(\alpha\) 1000 337 337 337 75 52 61 196 22 22.1 18.1 0.57
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.1.1 5.2 5.3 5.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen Trawel speed, laden/unladen	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A ₃₄ (mm) A ₃₄ (mm) A ₃₄ (mm) W ₉ (mm) b ₁₃ (mm) (mm) (mm) (mm) (mm) Nm/s Nm/s	111 1200 x 39 41 41 22 67 20 38 32 22.1 18.1 0.61 0.55	22.5 18.3 0.62 0.47 12804	11: 1200 : 141 43 43 43 24 76 21 33 32 21.7 17.8 0.56 0.51 41944	28	111 1200 x 411 43 43 25 76 22 38 32 21.6 17.7 0.56 0.51 41649	28 8 66 6 6 1000 996 996 996 996 996 996 996 996 996	11: 1200 x 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649	22.1 18.1 0.57 0.42 15999
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.11 5.2 5.3 5.5 5.5 5.7	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A ₃₄ (mm) A ₃₄ (mm) A ₃₄ (mm) W ₉ (mm) (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N %	111 1200 x 39 411 411 222 67 20 33 32 22.1 18.1 0.61 0.55 38091 45.6	22.5 18.3 0.62 0.47 12804 14.1 5	11: 1200 : 141 43 43 43 24 70 21 33 3: 21.7 17.8 0.56 0.51 41944 40.1	28.8	11: 12: 12: 12: 12: 13: 43: 43: 25: 76: 22: 36: 37: 21:6 17:7 0.56 0.51 41649 34.5	28 8 66 6 6 1000 996 996 996 996 996 996 996 996 996	11: 1200 o 400 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5	188 566 61000 337 337 357 552 661 96 96 922 22.1 18.1 0.57 0.42 15999 17.7 5.2
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm) km/h m/s n/s N	111 115 1200 x 339 41 41 22 66 20 38 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydr	144 522 61000 445 445 445 445 445 98 875 551 302 222 22.5 18.3 0.62 0.47 12804 14.1 5	11: 1200 ; 41 43 43 43 24 70 21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydr	28.8 26.6 26.0000 26.000 26.000 26.000 26.000 26.000 26.000 26.000	11: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	18 8 66 6 1000 996 996 996 996 34 652 111 996 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	11: 1200 o 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	18 8 66 6 6 1000 37 37 37 37 55 2 61 106 622 2 1 18.1 0.57 0.42 15999 17.7 5.2 aulic
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.11 5.2 5.3 5.5 5.7 5.9	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A ₃₄ (mm) A ₃₄ (mm) A ₃₄ (mm) W ₉ (mm) (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N %	111 1200 x 39 411 411 222 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4	144 522 61000 445 445 445 445 445 98 875 551 302 222 22.5 18.3 0.62 0.47 12804 14.1 5	11: 1200 ; 411 43 43 43 24 70 21 33 3; 21.7 17.8 0.56 0.51 41944 40.1 4.2	28.8 26.6 26.0000 26.000 26.000 26.000 26.000 26.000 26.000 26.000	11: 12: 12: 12: 12: 13: 43: 43: 25: 76: 22: 36: 37: 21:6 17:7 0.56 0.51 41649 34.5 4.3	18 8 66 6 1000 996 996 996 996 34 652 111 996 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	11: 1200 o 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	188 566 61000 337 337 357 552 661 96 96 922 22.1 18.1 0.57 0.42 15999 17.7 5.2
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm) km/h m/s n/s N	111 115 1200 x 39 41 41 22 66 20 38 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydr	144 522 61000 445 445 445 445 445 98 875 551 302 222 22.5 18.3 0.62 0.47 12804 14.1 5	11: 1200 ; 411 43 43 43 24 70 21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydr	28.8 26.6 26.0000 26.000 26.000 26.000 26.000 26.000 26.000 26.000	11: 12: 12: 12: 12: 13: 43: 43: 25: 76: 22: 33: 32: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	18 8 66 6 1000 996 996 996 996 34 652 111 996 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	11: 1200 o 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	18 8 66 6 6 1000 37 37 37 37 55 2 61 106 622 2 1 18.1 0.57 0.42 15999 17.7 5.2 aulic
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Type of drive unit	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) w _a (mm) b ₁₃ (mm) (mm) (mm) (mm) km/h km/h m/s n/s N % s	111 115 1200 x 339 411 411 222 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydroi	22.5 18.3 0.62 0.47 12804 14.1 5 aulic	11: 1200 3 41 43 43 43 24 70 21 33 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod	188	11: 12: 12: 12: 12: 13: 43: 43: 25: 76: 22: 33: 32: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	18 8 66 6 6 1000 996 996 996 996 996 996 996 996 996	11: 1200 o 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	18 8 66 6 6 1000 37 37 37 37 75 52 61 106 22 2 22 1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm) km/h m/s n/s N	111 115 1200 x 39 41 41 22 66 20 38 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro	22.5 18.3 0.62 0.47 12804 14.1 5 35 36 37 37 38 38 39 30 30 30 30 30 30 30 30 30 30 30 30 30	11: 12: 12: 12: 12: 14: 43: 43: 24: 77: 21: 38: 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod Hydrod	188	11: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	18 8 66 6 1000 996 996 996 996 34 52 111 966 22 2 1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9	11: 12: 12: 12: 12: 12: 12: 12: 12: 13: 13: 13: 14: 17.7 1.56 17.7 1.56 17.7 18: 18: 19: 19: 19: 19: 19: 19: 19: 19: 19: 19	18 8 66 6 6 1000 37 37 37 37 75 52 61 61 66 622 2 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Type of drive unit Operating pressure for attachments	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) w _a (mm) b ₁₃ (mm) (mm) (mm) (mm) km/h km/h m/s N % s	111 115 1200 x 339 411 411 222 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydroi	144 52 61000 445 445 445 445 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	11: 1200 3 41 43 43 43 24 70 21 33 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod	188	11: 12: 12: 12: 12: 13: 43: 43: 25: 76: 22: 33: 32: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	18 8 66 6 1000 996 996 996 34 52 111 966 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic 55 5.3	11: 12: 12: 12: 12: 12: 12: 12: 13: 13: 13: 13: 14: 15: 16: 17.7 1.56 1.51 14: 1649 134.5 14.3 14.3 14.4 14.4 15: 16: 17.7 17.6 18: 18: 18: 18: 18: 18: 18: 18: 18: 18:	18 8 66 6 6 1000 37 37 37 37 75 52 61 106 22 2 22 1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b₁₂ × I₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Urning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen 1 Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Fravel speed, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Fravel speed, laden/unladen Travel speed, laden/unladen Fravel speed, laden/unladen Travel speed, laden/unladen Fravel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Drawbar speed, laden/unl	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h s N % s	111 115 1200 x 339 411 411 222 66 20 38 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro Hydro 115 83	144 52 61000 445 445 445 445 485 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	11: 1200 3 41 43 43 43 24 77 21 33 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod Hydrod 11: 83	188	11: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	188 566 561000 996 996 996 996 34 52 111 566 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic	11: 12: 12: 12: 12: 12: 12: 12: 12: 13: 13: 13: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	18 8 66 6 6 1000 37 37 37 37 75 52 61 61 66 622 22 1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 4 dynamic 55 5.3
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen 1 Travel speed, laden/unladen 1 Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Travel speed, laden/unladen Drawbar pull, laden/unladen Fuel consumption according to VDI cycle Type of drive unit Operating pressure for attachments Oil volume for attachments ◆ Hydraulic oil tank, capacity Fuel tank, capacity	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h s N % s	111 115 1200 o 39 41 41 22 667 200 33(33/ 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydrof 4.4 Hydrof 115 83 76 38	22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	11: 1200 : 141 43 43 43 24 76 21 33: 35: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod 11: 83 76 38 88	28.8	11: 12: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	28 8 66 6 1000 996 996 996 996 34 62 111 136 62 11 1 157 0.42 15999 17.7 5.2 aulic 99 dynamic 55 3.3 6.6 6.6 4	11: 12: 12: 12: 12: 12: 12: 13: 13: 13: 14: 15: 16: 17: 17: 16: 16: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic
4.31 4.32 4.33 4.34 4.34 4.35 4.36 4.41 4.42 4.43 5.1 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5 8.1 10.2 10.3 10.4 10.7 10.7	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen 1 Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle Type of drive unit Operating pressure for attachments Oil volume for attachments ◆ Hydraulic oil tank, capacity Fuel tank, capacity Sound pressure level at the driver's seat ● ♦ 1 Sound power level during the workcycle ◆	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) w _a (mm) (mm) (mm) (mm) (mm) (mm) km/h km/h s v _a s V/h or kg/h	111 115 1200 o 399 41 41 22 667 200 336 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydrod 115 833 766 388 8	22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	11: 1200 : 141 43 43 43 24 76 21 33: 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod 11: 83: 76 38: 88 110	28.8	11: 12: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	28 8 66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	11: 12: 12: 12: 12: 12: 12: 12: 13: 13: 13: 14: 15: 16: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	18 8 66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
4.31 4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.2 5.3 5.5 5.7 5.9 5.10 7.5	Ground clearance, laden, below mast Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆ 1 Aisle width for pallets 1000 × 1200 crossways ◆ 2 Aisle width for pallets 800 × 1200 crossways ◆ 1 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) Step Height (from ground to running board) Step Height (between intermediate steps and floor) Travel speed, laden/unladen 1 Travel speed, laden/unladen 1 Travel speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake Fuel consumption according to VDI cycle Type of drive unit Operating pressure for attachments Oil volume for attachments ◆ Hydraulic oil tank, capacity Fuel tank, capacity Sound pressure level at the driver's seat ● ♦ 1 Sound power level during the workcycle ◆	m ₁ (mm) m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h s N % s	111 115 1200 o 39 41 41 22 667 200 33(33/ 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydrof 4.4 Hydrof 115 83 76 38	22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic 556 6 4 122	11: 1200 : 141 43 43 43 24 76 21: 31: 32: 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod 11: 833 76 38 88 100 11: 11: 11: 11: 11: 12: 14: 14: 15: 16: 16: 16: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	28.8	11: 12: 12: 12: 12: 12: 13: 14: 14: 14: 15: 16: 17: 17: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	28 8 66 6 1000 996 996 996 996 34 62 111 136 62 11 1 157 0.42 15999 17.7 5.2 aulic 99 dynamic 55 3.3 6.6 6.6 4	11: 12: 12: 12: 12: 12: 12: 13: 13: 13: 14: 15: 16: 17: 17: 16: 16: 17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 99 dynamic 55 3.3 3.66 4 02 06

Specification data is per VDI 2198 December 2012.

EQUIPMENT AND WEIGHT: Specification data based on 3050mm (S4.0FT) / 2800mm (S4.5FT - S5.5FTS) TOF 2 stage LFL mast with standard carriage, 1000mm (S4.0FT) / 1200mm (S4.5FT - S5.5FTS) forks with e-hydraulics.

MAST AND CAPACITY INFORMATION

MACTE CA OFT

IIIA010 04.011									
	Maximum fork height	The state of the s		fork height IIII lowered		Overall Extended	Overall Extended	Free lift (top of forks)	
	(mm)	F	В	height (mm)	height (mm) ▽	height (mm)	(mm)		
2-Stage Limited Free Lift	3050 3650 4250	5° 5° 5°	6° 6° 6°	2135 2435 2735	3785 ▽ 4385 ▽ 4985 ▽	4285 * 4885 * 5485 *	150 150 150		
2-Stage Full Free Lift	3075	5°	6°	2153	3860 ▽	4130 💠	1355		
3-Stage Full Free Lift	4415 4950 5550 6000	5° 5° 5° 5°	6° 6° 6° 6°	2135 2335 2535 2735	5200 ▽ 5735 ▽ 6335 ▽ 6785 ▽	5650 * 6185 * 6785 * 7235 *	1355 1555 1755 1955		

MASTS \$4.5-5.5FTS

18010 0-10 0.0110									
	Maximum fork height	TIII III		Overall lowered	Overall Extended	Overall Extended	Free lift (top of forks)		
	(mm)	F	В	height (mm)	height (mm)	height (mm)	(mm)		
2-Stage Limited Free Lift	2800 3400 4000	5° 5° 5°	6° 6° 6°	2140 2440 2740	3660 ▽ 4260 ▽ 4860 ▽	4035 * 4635 * 5235 *	160 160 160		
2-Stage Full Free Lift	2825	5°	6°	2140	3735 ▽	4060 ❖	1235		
3-Stage Full Free Lift	4145 4700 5300	5° 5° 5°	6° 6° 6°	2140 2340 2540	5060 ▽ 5615 ▽ 6215 ▽	5380 * 5935 * 6535 *	1230 1430 1630		

SART - CAPACITY CHART in kg @ 500 mm load centre

	Cushion Tyres								
	Maximum Without sideshift With sideshift								
	fork height (mm) ❖	S4.0FT	S4.0FT						
2-Stage Limited Free Lift	3050 3650 4250	4000 4000 4000	4000 4000 4000						
2-Stage Full Free Lift	3075	4000	4000						
3-Stage Full Free Lift	4415 4950 5550 6000	4000 ▶ 3890 ▶ 3760 ▶ 3640 ▶	3860 ▶ 3750 ▶ 3600 ▶ 3480 ▶						

\$4.5-5.5FTS - CAPACITY CHART in kg @ 600 mm load centre

	Cushion Tyres									
	Maximum		Without sideshift		With integral sideshift					
	fork height (mm) ❖	S4.5FT	S5.5FT	S5.5FTS	S4.5FT	S5.5FT	S5.5FTS			
2-Stage Limited Free Lift	2800 3400 4000	4500 4500 4500	5500 5500 5500	5500 5500 5500	4500 4500 4500	5500 5500 5500	5440 ▶ 5420 ▶ 5410 ▶			
2-Stage Full Free Lift	2825	4500	5500	5500	4500	5480	5420			
3-Stage Full Free Lift	4145 4700 5300	4500 ▶ 4500 ▶ 4380 ▶	5500 ▶ 5500 ▶ 5370 ▶	5500 ▶ 5490 ▶ 5290 ▶	4400 ▶ 4390 ▶ 4260 ▶	5290 ▶ 5280 ▶ 5140 ▶	5240 ▶ 5220 ▶ 5060 ▶			

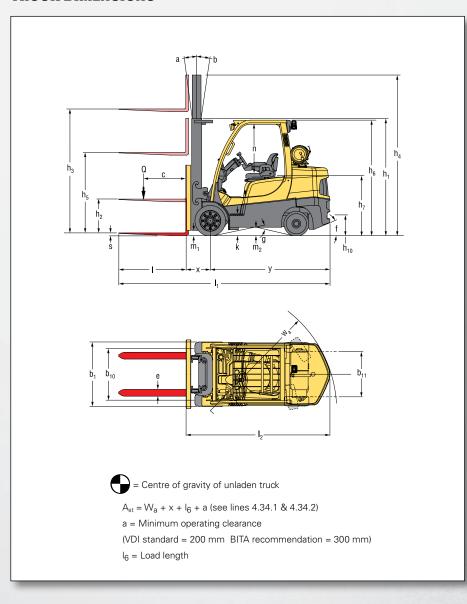
NOTESTo calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please use the Hy-Rater software.

Specification data based on standard carriage, load backrest, and 1000mm (S4.0FT) / 1200mm (S4.5FT - S5.5FTS) forks.

The rated capacities shown are for masts in a vertical position on trucks equipped with standard or sideshift carriage, and nominal length forks. Masts above the maximum fork heights shown in the mast table are classified as high lift, and depending on the tyre/tread configuration may require reduced capacity, restricted back tilt or wide tread.

Values shown are for standard equipment. When using non-standard equipment these values may change. Please contact your Hyster dealer for information.

TRUCK DIMENSIONS



Dimensions (mm)	S4.0FT	S4.5FT	S5.5FT	S5.5FTS
f	40%	32%	32%	32%
g	22.7°	22°	21°	21°
k	391.5	395.5	395.5	395.5
n	1 062	1 062	1 062	1 062

NOTE:

Specifications are affected by the condition of the vehicle and how it is equipped, as well as the nature and condition of the operating area. Inform your dealer of the nature and condition of the intended operating area when purchasing your Hyster Truck.

- ¶ Top of forks
- W/o load backrest, add 32mm with load backrest
- Full suspension seat in depressed position
- Standard / Wide
- Add 32 mm with load backrest
- Stacking aisle width (lines 4.34 & 4.34.1 & 4.34.2) are based on the V.D.I. standard calculation as shown on illustration. The British Industrial Truck Association recommends the addition of 100 mm to the total clearance (dimension a) for extra operating margin at the rear of the truck.
- † at 1.6 km/h
- at 4.8km/h. Gradeability figures are provided for comparison of tractive performance, but are not intended to endorse the operation of the vehicle on the stated inclines. Follow instructions in the operating manual regarding operation on inclines.
- → to 15m (per VDI 2198 December 2012)
- Battery ampere hour (Ah) nominal capacity ratings are estimated.
- ♦ Variable
- With and without cab.
- ♦ L_{PAZ}, Measured according to the test cycles and based on the weighting values contained in EN12053
- L_{WAZ}, Measured according to the test cycles and based on the weighting values contained in EN12053

MAST TABLES:

∇ Without load backrest

- With load backrest
- Wide tread required

POWERTRAINS TABLE:

 Battery ampere hour (Ah) nominal capacity ratings are estimated.

NOTICE

Care must be exercised when handling elevated loads. When the carriage and/or load is elevated, truck stability is reduced. It is important that the mast tilt in either direction is kept to a minimum when loads are elevated.

Operators must be trained and must read, understand and follow the instructions contained in the Operating Manual.

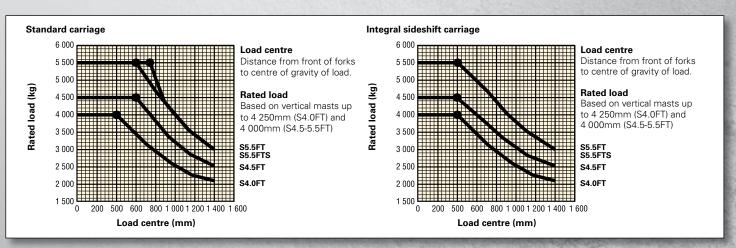
All values are nominal values and they are subject to tolerances. For further information, please contact the manufacturer.

Hyster products are subject to change without notice. Lift trucks illustrated may feature optional equipment. Values may vary with alternative configurations.

C € Safety:

This truck conforms to the current EU requirements.

RATED CAPACITIES



POWERTRAINS

	1.3	Drive: electric (battery or mains), diesel, petrol, LPG	
-			
뿔	7.1	Engine manufacturer/type	
9	7.2	Engine power according to ISO 1585	kW
를	7.3	Rated speed	min-1
IST	7.3.1	Torque at 1/min	Nm/min-1
COMBUSTION-ENGINE	7.4	Number of cylinders/displacement	(-)/cm ³
8	7.10	Battery voltage/nominal capacity	(V)/(Ah)

S	8.1	Type of drive unit
₹	8.2	Manufacturer/type
DRIVE MECHANISM	8.6	Wheel drive/drive axle manufacturer/type
	8.11	Service brake
誓	8.12	Parking brake

LPG SWB	LPG LWB
Kubota WG3800	Kubota WG3800
54.9	67.8
1800	2200
300 /1000	300 /1000
4 / 3769	4 / 3769
12 / 88	12 / 88

Hydrodynamic	Hydrodynamic
NMHG/Electronic	NMHG/Electronic
Dana or NMHG/WBA	Dana or NMHG/WBA
Hydraulic	Hydraulic
Multi Disc Brake	Multi Disc Brake

PRODUCT PACKAGES

Model / Bundle	S4.0FT			S4.5FT			
LPG	Engine	Transmission	Brakes	Engine	Transmission	Brakes	
Fortens Advance	Kubota 3.8L	DuraMatch™ 1 speed	Premium Wet Brakes	Kubota 3.8L	DuraMatch™ 1 speed	Premium Wet Brakes	
Fortens Advance+	Kubota 3.8L	DuraMatch™ 2 2 speed	Premium Wet Brakes	Kubota 3.8L	DuraMatch™ 2 2 speed	Premium Wet Brakes	

Model / Bundle	S5.5FT			S5.5FTS		
LPG	Engine	Transmission	Brakes	Engine	Transmission	Brakes
Fortens Advance	Kubota 3.8L	DuraMatch™ 1 speed	Premium Wet Brakes	Kubota 3.8L	DuraMatch™ 1 speed	Premium Wet Brakes
Fortens Advance+	Kubota 3.8L	DuraMatch™ 2 2 speed	Premium Wet Brakes	Kubota 3.8L	DuraMatch™ 2 2 speed	Premium Wet Brakes

PRODUCT FEATURES

The Fortens Advance and Fortens Advance+ trucks provide excellent performance for the most demanding of applications and are engineered for the lowest hourly operating cost. The mainframe, mast and powertrain are designed, tested and built for intensive heavy duty tasks either with forks or attachments.

The Kubota 3800 series engines

The Fortens Advance and Fortens Advance+ models feature the electronically controlled Kubota WG3800 LPG engine with 54.9 or 67.8kW.

The LPG Engine (WG 3800) is derived from the diesel version and shares many of its operational characteristics that make it an ideal match for use in forklift trucks (high levels of torque at low rpm, low max rated speed, low noise and heavy duty robust construction).

The maximum engine power depends on the truck series and load centre:

Truck	Engine power	Fuel type
S4.0FT	54.9kw@2200rpm	LPG
S4.5FT – S5.5FTS	67.8kw@2200rpm	LPG

Transmission

The Fortens Fortens Advance models feature the electronically controlled single-speed DuraMatch™ transmission, providing:

- Auto Deceleration System (ADS) automatically slows the truck when the accelerator pedal is released, and finally brings the truck to a stop, which helps to significantly extend brake life. In addition, this feature assists the driver to accurately position the truck in front of a load. There are 10 ADS settings, programmable via the dash display by a service technician, which deliver different braking characteristics, from very gradual to aggressive, to suit the needs of the application.
- VSM™ controls the transmission to deliver smooth direction changes. The VSM reduces the throttle to slow the engine, initiates auto-deceleration to stop the truck, changes the transmission direction automatically and increases the throttle to accelerate the truck. The system virtually eliminates tyre spin and shock loads on the transmission and significantly increases tyre life. As with ADS, the system is programmable via the dash display by a service technician, with settings from 1 to 10, to suit the needs of the application.

PRODUCT FEATURES (2)

- Controlled Roll-Back on Ramp; the transmission controls the rate of decent of the truck on a ramp, when the brake and throttle pedal are released, to provide maximum control on a grade and increase operator productivity.
 - The **Fortens Advance+** models are available with the electronically controlled two-speed transmission. This transmission, in addition to the above features:-
- First Gear offers increased Drawbar Pull for use on gradients
- Second Gear provides maximum engine efficiency in applications where longer travel distances are common.

DuraMatch™ transmissions are available with **Auto-speed Hydraulics** which automatically increases engine speed on activation of the hydraulics, eliminating the need for inching when lifting the load.

All Fortens S4.0-5.5FT Series models are equipped with Oil-immersed brakes offering reduced maintenance and repair time and costs, which results in extended truck dependability and uptime.

All powertrains are controlled, protected and managed by the **Pacesetter VSM™** industrial onboard computer, featuring a CANbus communications network. This system permits adjustment and optimisation of the truck's performance, in addition to monitoring key functions. It enables quick, easy diagnostics, minimizing repair downtime and unnecessary parts swapping.

Hassle-Free Hydraulic systems, featuring Leak-free O-ring face seal fittings reduce leaks for enhanced reliability. Non-mechanical, Hall-Effect sensors and switches have been fitted and are designed to outlast the life of the truck.

The operator compartment features class-leading **Ergonomics** for maximum driver comfort and productivity.

- Operator space is optimised by an overhead guard design that achieves a generous floor space.
- A full range of Cabs with heating and optional Air Conditioning are available, including lowered cab for operation in containers etc.
- The Easy-to-use 3-point entry design of operator compartment has an open non-slip step with a height of just 39,5cm.
- The isolated drivetrain minimises the effect of powertrain vibration.
- The adjustable armrest that accompanies the TouchPoint™ **mini-lever module** features a contoured design, and in addition to the hydraulic functions features a horn and direction switch, ensuring that all key truck functions are within constant, easy reach.
- The Rear grab handle with horn button and optional swivel seat facilitates reverse driving.
- An infinitely adjustable steering column, 30 cm diameter steering wheel with spinner knob and full-suspension seat, enhance driver comfort.

The Hyster Fortens is the fastest and easiest lift truck to **Service:**-

- Complete cowl-to-counterweight service access and simplified layout of wiring and hydraulics offers greater access to components, which in turn decreases service time for un-scheduled repairs and regular maintenance.
- Fast, colour-coded daily checks and diagnostic systems can be managed via the dash display.
- An Engine coolant, oil change and Hydraulic oil change interval of 4,000 hours also contributes to reduced downtime.

STRONG PARTNERS. TOUGH TRUCKS.™ FOR DEMANDING OPERATIONS, EVERYWHERE,

Hyster supplies a complete range of warehouse equipment, IC and electric counterbalanced trucks, container handlers and reach stackers. Hyster is committed to being much more than a lift truck supplier.

Our aim is to offer a complete partnership capable of responding to the full spectrum of material handling issues: Whether you need professional consultancy on your fleet management, fully qualified service support, or reliable parts supply, you can depend on Hyster.

Our network of highly trained dealers provides expert, responsive local support. They can offer cost-effective finance packages and introduce effectively managed maintenance programmes to ensure that you get the best possible value. Our business is dealing with your material handling needs so you can focus on the success of your business today and in the future.





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