





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)	НУ	STER	HYS	TER	HYS	TER	HYS	TER
	1.2	Manufacturer's type designition		.0FT	S4.!		S5.		S5.5	
IJ		Model		Advance	Fortens A		Fortens		Fortens /	
		Engine		ta 3.8L	Kubot		Kubot		Kubot Dura	
DISTINGUISHING MARK		Transmission		Match peed	DuraN 1-sp		Dural 1-sp		1-sp	
3		Brake type		Wet Brakes	Premium V		Premium V			Vet Brakes
	1.3	Drive: electric (battery or mains), diesel, petrol, LPG		PG	LP		LF			G Prakes
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		ated	Sea		Sea		Sea	
	1.5	Rated capacity/rated load Q (t)	4	1.0	4.	5	5.	.5	5.	.5
	1.6	Load centre distance c (mm)		00	60		60		60	
	1.8	Load distance, centre of drive axle to fork x (mm)	_	47	46			52		52
_	1.9	Wheelbase y (mm)	1	570	179	90	17	90	17	90
s	2.1	Service weight kg	5	795	69	77	75	95	76	18
WEIGHTS	2.2	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		V	٧	'	١	/		/
IVRES/CHASSIS	3.2	Tyre size, front		9x16	22x1:		22x1			2x16
툉	3.3	Tyre size, rear		/x12.1	18x8x		18x8:		18x8:	
ES	3.5 3.6	Wheels, number front/rear (x = driven wheels) Tread, front $b_{10} (mm)$	2x	41	2x 10	2	2x 10	2	2x 10	2
ᄐ	3.7	Tread, rear b ₁₁ (mm)		78	10		10		10	
		ση τιπιη			70		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 (mm)		130	21:	35	21	35	21	
	4.3	Free lift ¶ h ₂ (mm)		00	10		10		10	
	4.4	Lift ¶ h ₃ (mm)		000	27-		27		27	
	4.5	Height, mast extended ● h ₄ (mm)		780	36		36		36	
	4.7	Height of overhead guard (cabin) h ₆ (mm) Seat height/stand height h₁ (mm)		171 221	13		21 13		21 13	
	4.12	Coupling height h ₁₀ (mm)		67	37		37		37	
	4.19	Overall length I ₁ (mm)		630	39		40		38	
	4.20	Length to face of forks I ₂ (mm)		630	27		28	61	26	99
	4.21	Overall width b ₁ (mm)	1170	1270	1320	1420	1320	1420	1320	1420
S S	4.22	Fork dimensions ISO 2331 s/e/l (mm)	50 1	25 1000	60 150	1200	60 150	1200		50 1200
DIMENSIONS	4.23	Fork carriage ISO 2328, class/type A, B		IIA	IV		١٧		IV	
	4.24	Fork carriage width ■ b ₃ (mm) Ground clearance, laden, below mast m ₁ (mm)		070 14	10		10		10	
	4.32	$ \begin{array}{lll} \mbox{Ground clearance, laden, below mast} & & m_1 (mm) \\ \mbox{Ground clearance, centre of wheelbase} & & m_2 (mm) \\ \end{array} $		52	15			56	15	
	4.33	Load dimension $b_{12} \times I_6$ crossways $b_{12} \times I_6$ (mm)		x 1000	1200 x		1200 >		1200 >	
	4.34	Aisle width predetermined load dimensions ◆ A _{st} (mm)	35	945	41	09	41	96	40	37
	4.34.1	Aisle width for pallets 1000×1200 crossways $lacktriangle$ A_{st} (mm)	4	145	43	09	43	96	42	37
	_	Aisle width for pallets 800 × 1200 crossways ◆ A _{st} (mm)		145	43		43		42	
	4.35	Turning radius Wa (mm) Internal turning radius b ₁₂ (mm)		298	24		25		23	
	4.36 4.41	Internal turning radius b_{13} (mm) 90° intersecting aisle (with pallet L = 1000mm x W = 1200mm) (mm)		75 051	76		76		76	
	4.42	Step Height (from ground to running board) (mm)		92	39			96		96
	4.43	Step Height (between intermediate steps and floor) (mm)		22	32			22		22
	Service.									
	5.1	Travel speed, laden/unladen km/h	18.1	18.3	17.8	18.1	17.7	18.1	17.7	18.1
E	5.1.1	Travel speed, laden/unladen, backwards km/h	18.1	18.3	17.8	18.1	17.7	18.1	17.7	18.1
	5.2 5.3	Lift speed, laden/unladen m/s	0.61	0.62 0.47	0.56 0.51	0.57	0.56	0.57 0.42	0.56	0.57 0.42
層	5.5	Lowering speed, laden/unladen m/s Drawbar pull, laden/unladen † N	0.55 31725	12804	34923	16916	0.51 34626	15999	0.51 34626	15999
PERFORMANCE DATA	5.7	Gradeability, laden/unladen * %	36.8	14.1	32.6	18.7	28.2	17.7	28.2	17.7
품	5.9	Acceleration time, laden/unladen ≒ s	4.3	4.9	4.2	4.9	4.3	5.1	4.3	5.1
	5.10	Service brake	Hyd	raulic	Hydra	aulic	Hydr	aulic	Hydr	aulic
4560	10000	HATEL STATE OF THE PROPERTY OF	Mariana.	THE WARRANT	National Property lies					
	7.5	Fuel consumption according to VDI cycle //h or kg/h	4	1.0	4.	5	4.	.9	4.	.9
Marca.	0.1	Time of drive unit	Heater-	dunami -	Header	unomi -	11	dunami-	11	dunom:
Sec.	8.1	Type of drive unit	Hydro	dynamic	Hydrod	ynamic	Hydro	dynamic	Hydro	dynamic
1	10.1	Operating pressure for attachments bar	1	55	15	5	10	55	10	55
	10.1	Oil volume for attachments I/min		3.3	83		83			3.3
	10.2	Hydraulic oil tank, capacity		6.6	76		76			i.6
E										3.6
NAL DATA	10.4	Fuel tank, capacity	3	8.6	38	.0	38		38	1.0
ITIONAL DATA		Sound pressure level at the driver's seat	8	34	8	4	8	4	8	
ADDITIONAL DATA	10.4 10.7 10.7.1	Sound pressure level at the driver's seat	1	34 02	8/	2	8	4)2	8	4
ADDITIONAL DATA	10.4 10.7	Sound pressure level at the driver's seat	1	34	8	4 2 6	8 10 10	4	8	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.

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

1.1	Manufacturer (abbreviation)		НУ	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		Fortens A		Fortens A		Fortens A	
B	Engine			a 3.8L	Kubot			a 3.8L latch 2	Kubot	
1.3	Transmission		2-sp	latch 2	2-sp	latch 2	Duraiv 2-sp		2-sp	latch 2
	Brake type		Premium V		Premium V			Vet Brakes		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	ited	Sea	ted	Sea	ited	Sea	ited
1.5	Rated capacity/rated load	Q (t)		.0	4		5		5	
1.6	Load centre distance	c (mm)	50		60		60		60	
1.8	Load distance, centre of drive axle to fork Wheelbase	y (mm)	44	70	17		17	62 an		90 90
1.0	Mileeingse	y (IIIII)	13	70	17	30	17	30	17	30
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		\		۱ ۵۵ ۱			2.10		. 10
3.2 3.3	Tyre size, front Tyre size, rear		22x9		22x1 18x8		22x1 18x8	2x16 x12 1	22x1 18x8	2x16 x12 1
3.2 3.3 3.5 3.6	Wheels, number front/rear (x = driven wheels)		2x	2	2x	2	2x	2	2x	2
3.6	Tread, front	b ₁₀ (mm)	94		10		10			15
3.7	Tread, rear	b ₁₁ (mm)	97	78	10	04	10	04	10	04
4.1	Tilt of mast/fork carriage forward/backward	α/β (°)	5	6	5	6	5	6	5	6
4.2	Height, mast lowered Free lift ¶	h ₁ (mm)	21		21		21	35 00	21	
4.3	Lift ¶	h ₂ (mm)	_	00	27		27		27	
4.5	Height, mast extended ●	h ₄ (mm)	37		36		36		36	
4.7	Height of overhead guard (cabin)	h ₆ (mm)	21	71	21	75	21	75	21	75
4.8	Seat height/stand height ●	h ₇ (mm)	12	21	13	39	13	39	13	39
4.12	Coupling height	h ₁₀ (mm)		67	37			71	37	
4.19	Overall length	I ₁ (mm)		30	39		40		38	
4.20 4.21	Length to face of forks Overall width	l ₂ (mm) b ₁ (mm)	1170	1270	1320	1420	1320	1420	1320	1420
	Fork dimensions ISO 2331	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	2, 2, 1 ()	III		IV		IV		IV	
4.24	Fork carriage width ■	b ₃ (mm)	10	70	10	70	10	70	10	70
4.31	Ground clearance, laden, below mast					18				
		m ₁ (mm)	11		11			18	11	
4.32	Ground clearance, centre of wheelbase	m ₂ (mm)	15	52	1!	56	1!	56	15	56
4.32 4.33	Ground clearance, centre of wheelbase Load dimension $b_{12} \times I_6$ crossways	m ₂ (mm) b ₁₂ × l ₆ (mm)	1200	52 x 1000	1200	56 c 1000	1! 1200 :	56 x 1000	1200	56 < 1000
4.32	Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆	m_2 (mm) $b_{12} \times l_6$ (mm) A_{st} (mm)	1! 1200 x	52	1!	56 c 1000 09	1!	56 x 1000 96	15	56 < 1000 37
4.32 4.33 4.34 4.34.	Ground clearance, centre of wheelbase Load dimension b ₁₂ × I ₆ crossways Aisle width predetermined load dimensions ◆	m ₂ (mm) b ₁₂ × l ₆ (mm)	1! 1200 x 39 41	52 x 1000 45	1! 1200 x 41	66 < 1000 09 09	1! 1200 :	56 x 1000 96	19 1200 x 40 42	56 < 1000 37
4.32 4.33 4.34 4.34. 4.34. 4.35	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	$m_2 \text{ (mm)}$ $b_{12} \times l_6 \text{ (mm)}$ $A_{st} \text{ (mm)}$ $A_{st} \text{ (mm)}$ $A_{st} \text{ (mm)}$ $W_a \text{ (mm)}$	1! 1200 3 39 41 41 22	52 < 1000 45 45 45 98	1! 1200 : 41 43 43 24	66 < 1000 09 09 09 47	1! 1200 : 41 43 43 25	566 x 1000 96 96 96 96 934	1! 1200 x 40 42 42 23	56 < 1000 37 37 37 37
4.32 4.33 4.34 4.34. 4.34. 4.35 4.36	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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) V ₃ (mm) U ₃ (mm) b ₁₃ (mm)	1! 1200 3 39 41 41 22	52 < 1000 45 45 45 45 98	1! 1200 3 41 43 43 24	66 6 1000 09 09 09 47 62	1! 1200 : 41 43 43 25	56 x 1000 96 96 96 96 934	1! 1200 x 40 42 42 23	37 37 37 37 37 55
4.32 4.33 4.34 4.34. 4.34. 4.35 4.36 4.41	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)	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) b ₁₃ (mm) (mm)	1! 1200 3 39 41 41 22 66	52 < 1000 45 45 45 45 98 75	1! 1200 3 41 43 43 24 70	56 1000 09 09 09 47 62 64	1! 1200 : 41 43 43 25 70	566 x 1000 96 996 996 996 34 52	1! 1200 3 40 42 42 23 76	56 < 1000 37 37 37 75 62
4.32 4.33 4.34 4.34. 4.34. 4.35 4.36	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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) V ₃ (mm) U ₃ (mm) b ₁₃ (mm)	1! 1200 3 39 41 41 22	52 < 1000 45 45 45 45 98 75 51	1! 1200 3 41 43 43 24	66 1000 09 09 09 47 66 64	1! 1200 3 41 43 43 25 71 22	56 x 1000 96 96 96 96 934	1! 12003 40 42 42 23 7(21	56 < 1000 37 37 37 75 62
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42	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 × W = 1200mm) Step Height (from ground to running board)	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) b ₁₃ (mm) (mm)	1! 12003 39 41 41 22 66 20	52 < 1000 45 45 45 45 98 75 51	1! 12003 41 43 43 24 7(21	66 1000 09 09 09 47 66 64	1! 1200 3 41 43 43 25 71 22	566 x 1000 96 996 996 996 334 52 111	1! 12003 40 42 42 23 7(21	56 < 1000 37 37 37 75 52 61
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	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 × W = 1200mm) Step Height (from ground to running board)	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) b ₁₃ (mm) (mm)	1! 12003 39 41 41 22 66 20	52 < 1000 45 45 45 45 98 75 51	1! 1200 3 41 43 43 24 76 21 33 3.	566 1000 009 009 009 447 52 64 06 22	1! 1200 : 41 43 43 25 70 22 3: 3:	566 x 1000 96 996 996 996 334 52 111	1! 12003 40 42 42 23 7(21	56 < 1000 37 37 37 75 52 61
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	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	m ₂ (mm) b ₁₂ × l ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) (mm) (mm) (mm) (mm) (mm)	1! 1200 3 39 41 41 22 66 20 33 3: 22.1 18.1	52 x 1000 45 45 45 45 98 75 51 32 22 22.5 18.3	1! 1200 3 41 43 43 24 76 21 33 32 21.7	66 (c) 1000 (c) 909 (c) 909 (c) 47 (c) 22 (c) 18.1	1! 1200 : 41 43 43 25 70 22 3: 3: 21.6	566 x 1000 96 996 996 996 334 62 2111 96 22	1! 1200 3 40 42 42 23 76 21 33 32 21.6	566 6 1000 37 37 37 775 52 61 36 22 22.1 18.1
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	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	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _s (mm) W _a (mm) (mm) (mm) (mm) (mm)	1! 1200 39 41 41 22 66 20 33 32 22.1 18.1 0.61	52 x 1000 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62	1! 1200 ; 41 43 43 24 76 21 33 32 21.7 17.8 0.56	66 (c) 1000 (c) 909 (c) 909 (c) 47 (c) 22 (c) 18.1 (c) 57	1! 1200 : 41 43 43 25 70 22 33 3: 21.6 17.7 0.56	566 x 1000 96 996 996 996 134 62 111 96 22 22.1 18.1 0.57	1! 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56	566 6 1000 337 337 337 357 562 61 106 222 22.1 18.1 0.57
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	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	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) W ₃ (mm) U ₃ (mm) (mm) (mm) (mm) (mm)	1! 1200 39 41 41 22 66 20 33 33 22.1 18.1 0.61 0.55	52 x 1000 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47	1! 1200 ; 41 43 43 24 76 21 33 32 21.7 17.8 0.56 0.51	66 (1000) 09 09 09 47 62 64 166 22 22.1 18.1 0.57 0.42	1! 1200 : 41 43 43 25 70 22 33 3: 21.6 17.7 0.56 0.51	566 x 1000 96 996 996 996 334 62 111 96 22 22.1 18.1 0.57 0.42	1! 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51	566 6 1000 37 37 37 37 775 62 61 36 62 22 22.1 18.1 0.57 0.42
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43	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	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _s (mm) W _a (mm) (mm) (mm) (mm) (mm)	1! 1200 39 41 41 22 66 20 33 32 22.1 18.1 0.61	52 x 1000 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62	1! 1200 ; 41 43 43 24 76 21 33 32 21.7 17.8 0.56	66 (c) 1000 (c) 909 (c) 909 (c) 47 (c) 22 (c) 18.1 (c) 57	1! 1200 : 41 43 43 25 70 22 33 3: 21.6 17.7 0.56	566 x 1000 96 996 996 996 134 62 111 96 22 22.1 18.1 0.57	1! 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56	566 6 1000 337 337 337 357 562 61 106 222 22.1 18.1 0.57
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	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 × 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	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) M _{3t} (mm) M ₃ (mm) (mm) (mm) (mm) (mm) (mm)	1! 1200 3 39 41 41 22 66 20 33 3: 22.1 18.1 0.61 0.55 38091	52 x 1000 45 45 45 45 45 98 75 51 32 222 22.5 18.3 0.62 0.47 12804	1! 1200 3 41 43 43 43 24 71 21 33 3: 21.7 17.8 0.56 0.51 41944	66 c 1000	1! 1200 : 41 43 43 43 25 7(22 33 3: 21.6 17.7 0.56 0.51 41649	566 x 1000 96 996 996 996 34 52 111 96 222 22.1 18.1 0.57 0.42 15999	1! 1200 3 40 42 42 23 70 21 33 31 21.6 17.7 0.56 0.51 41649	566 x 1000 337 337 337 755 52 61 61 61 622 22.1 18.1 0.57 0.42 15999
4.32 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	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 Drawbar pull, laden/unladen Drawbar pull, laden/unladen † Gradeability, laden/unladen *	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _{st} (mm) M _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm) (mm)	1! 1200 3 39 41 41 22 66 20 33 3: 22.1 18.1 0.61 0.55 38091 45.6	52 \$\(\) 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5	1! 1200 : 41 43 43 43 24 7(21 33 3: 21.7 17.8 0.56 0.51 41944 40.1	66 x 1000 09 09 09 447 55 2 64 4 06 22 22.1 18.1 0.57 0.42 16916 18.7 5	1! 1200 : 41 43 43 25 70 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5	566 x 1000 96 996 996 996 334 52 111 96 222 22.1 18.1 0.57 0.42 15999 17.7 5.2	1! 1200 3 40 42 42 23 7(21 33 32 21.6 17.7 0.56 0.51 41649 34.5	566 x 1000 37 37 37 37 75 52 61 606 222 22.1 18.1 0.57 0.42 15999 17.7 5.2
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, 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, backwards Lift speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) W _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N %	1! 1200 3 39 41 41 22 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydr	52 \$\(\) 1000 45 45 45 45 45 98 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic	1! 1200 : 41 43 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydr	566 x 1000 09 09 09 09 447 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5	1! 1200: 41 43 43 25 7/ 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	566 x 1000 96 996 996 996 334 52 111 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	1! 1200 3 40 42 42 23 7(21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	566 x 1000 37 37 37 37 75 52 61 60 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic
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, 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 ◆ 7 Turning radius Internal turning radius 90° intersecting aisle (with pallet L = 1000mm × 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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _{st} (mm) M _{st} (mm) (mm) (mm) (mm) (mm) (mm) (mm) (mm)	1! 1200 3 39 41 41 22 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydr	52 \$\(\) 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5	1! 1200 : 41 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2	566 x 1000 09 09 09 09 447 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5	1! 1200: 41 43 43 25 7/ 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3	566 x 1000 96 996 996 996 334 52 111 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	1! 1200 3 40 42 42 23 7(21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	566 x 1000 37 37 37 37 75 52 61 606 222 22.1 18.1 0.57 0.42 15999 17.7 5.2
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, 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, backwards Lift speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen ≒ Service brake	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) W _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N %	1! 1200 3 39 41 41 22 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydr	52 \$\(\) 1000 45 45 45 45 45 98 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic	1! 1200 : 41 43 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydr	566 x 1000 09 09 09 09 447 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5	1! 1200: 41 43 43 25 7/ 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	566 x 1000 96 996 996 996 334 52 111 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	1! 1200 3 40 42 42 23 7(21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr	566 x 1000 37 37 37 37 75 52 61 60 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic
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, 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 Type of drive unit	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _{st} (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h m/s m/s N % s	1! 1200 3 39 41 41 222 6: 20 33 3: 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro	52 x 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic	1! 1200 3 41 43 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod	566 x 1000 09 09 09 09 447 52 64 66 622 22.1 18.1 0.57 0.42 16916 18.7 5 auulic	1! 1200: 41 43 43 25 7/ 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	566 x 1000 96 996 996 996 334 52 111 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic	1! 1200 3 40 42 42 23 7(21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	566 x 1000 37 37 37 37 75 52 61 60 622 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic
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, 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, backwards Lift speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen Drawbar pull, laden/unladen ★ Acceleration time, laden/unladen □ Service brake	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) W _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N %	1! 1200 3 39 41 41 22 66 20 33 33 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro	52 x 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	1! 1200 2 41 43 43 43 24 77 21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod	566 x 1000 09 09 09 09 47 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5 aulic	1! 1200: 41 43 43 43 25 77 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro Hydro	566 x 1000 96 996 996 996 334 52 111 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9	1! 1200 a 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro Hydro	566 x 1000 337 337 337 755 52 661 696 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.5 5.7 5.9 5.10 7.5 8.1	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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h m/s m/s N % s	1! 1200 3 39 41 41 222 6: 20 33 3: 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro	52 x 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic	1! 1200 3 41 43 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod	566 x 1000 09 09 09 09 47 52 64 64 66 22 22.1 18.1 0.57 0.42 16916 18.7 5 aulic 5 tynamic	1! 1200: 41 43 43 25 7/ 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro	566 x 1000 96 996 996 996 334 52 :11 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9	1! 1200 a 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 4 Hydro	566 x 1000 37 37 37 37 75 52 61 60 622 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.5 5.7 5.9 5.10 7.5 8.1	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 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	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) M _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N % s	1! 1200 3 39 41 41 22 66 20 33 33 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro	52 x 1000 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic 0 dynamic 55 3.3	1! 1200 2 41 43 43 43 24 77 21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod Hydrod 1! 83	566 x 1000 09 09 09 09 447 52 644 66 622 22.1 18.1 0.57 0.42 16916 18.7 5 aulic tynamic 55 tynamic	1! 1200: 41 43 43 43 25 77 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 4 Hydro 1! 83	566 x 1000 96 996 996 996 334 52 :11 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 idynamic	1! 1200 0 40 42 42 23 77 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 4 Hydro 1! 83	566 x 1000 337 337 377 552 661 666 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.5 5.7 5.9 5.10 7.5 8.1	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, backwards Lift speed, laden/unladen Lowering speed, laden/unladen Drawbar pull, laden/unladen † Gradeability, 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 ● ◆	m ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N % s	1! 1200 3 39 41 41 22 6: 20 33 33: 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro Hydro 1! 83 76 38 8	52 x 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic dynamic 55 3.3 6.6 6.6	1! 1200 3 41 43 43 43 24 76 21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod Hydrod 1! 83 76 38	566 x 1000 09 09 09 47 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5 aulic 5 4 vynamic	1! 1200: 41 43 43 43 25 76 22 33 33 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydr Hydro 1! 83 76 38	566 x 1000 96 996 996 996 334 562 :11 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic -9 ddynamic	1! 1200 0 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro Hydro 1! 83 76 38	566 x 1000 37 37 37 75 52 61 61 66 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic 55 3.3 6.6 6.6 4
### 4.32 ### 4.34 ### 4.34 ### 4.34 ### 4.35 ### 4.36 ### 4.43 ### 5.1 ### 5	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 1 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 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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{3t} (mm) A _{3t} (mm) A _{3t} (mm) W ₃ (mm) U ₃ (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N % s	1! 1200 3 39 41 41 22 66 20 33 32 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro 1! 83 76 38 8	52 x 1000 45 45 45 45 45 98 75 51 32 222 22.5 18.3 0.62 0.47 12804 14.1 5 aulic dynamic 55 3.3 6.6 6.6 4 02	1! 1200 3 41 43 43 43 24 71 21 38 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod 1! 83 76 38 8	22.1 18.1 0.57 0.42 16916 18.7 5 aulic 5 444 144 142	1! 1200 : 41 43 43 43 25 70 22 33 3: 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 4 Hydro 1! 83 76 38	566 x 1000 96 996 996 996 996 34 52 111 96 222 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 99 ddynamic	1! 1200 3 40 42 42 23 76 21 33 32 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 1! 83 76 38 88	22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 ddynamic
4.32 4.33 4.34 4.34. 4.35 4.36 4.41 4.42 4.43 5.1 5.1.1 5.2 5.5 5.7 5.9 5.10 7.5 8.1	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 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 ₂ (mm) b ₁₂ × I ₆ (mm) A _{st} (mm) A _{st} (mm) A _{st} (mm) W _a (mm) W _a (mm) (mm) (mm) (mm) (mm) km/h km/h m/s N % s	1! 1200 3 39 41 41 22 66 20 33 3: 22.1 18.1 0.61 0.55 38091 45.6 4.4 Hydro 1! 83 76 38 8 10 10	52 x 1000 45 45 45 45 45 98 75 51 32 22 22.5 18.3 0.62 0.47 12804 14.1 5 aulic dynamic 55 3.3 6.6 6.6	1! 1200 3 41 43 43 43 24 7(21 33 32 21.7 17.8 0.56 0.51 41944 40.1 4.2 Hydrod 4 Hydrod 1! 83 76 38 88	566 x 1000 09 09 09 47 52 64 66 66 22 22.1 18.1 0.57 0.42 16916 18.7 5 aulic 5 4 vynamic	1! 1200 : 41 43 43 43 25 76 22 31 31 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 1! 83 76 38 88 10	566 x 1000 96 996 996 996 334 562 :11 96 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic -9 ddynamic	1! 1200 3 40 42 42 23 76 21 33 31 21.6 17.7 0.56 0.51 41649 34.5 4.3 Hydro 1! 83 76 38 88 10 10	566 x 1000 37 37 37 75 52 61 61 66 22 22.1 18.1 0.57 0.42 15999 17.7 5.2 aulic 9 dynamic 55 3.3 6.6 6.6 4

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

MASTS \$4.0FT

MR010 04.011								
	Maximum fork height	Т	ilt	Overall lowered	Overall Extended	Overall Extended height (mm)	Free lift (top of forks)	
	(mm)	F	В	height (mm)	height (mm) ▽	neight (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	Ti	ilt	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	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 ▶				

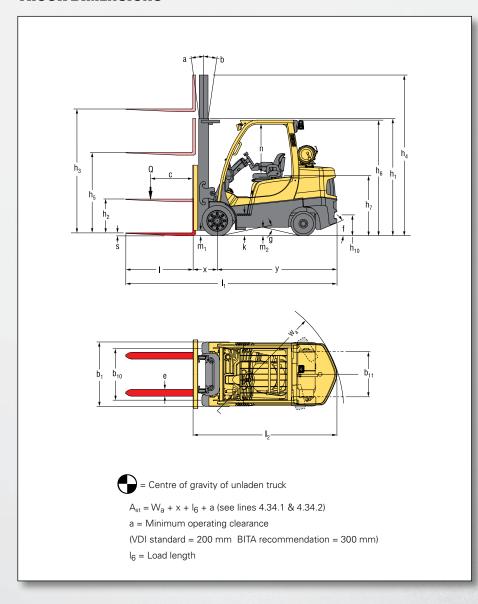
NOTESTo calculate truck capacities with alternative truck specifications to the ones shown in the above tables, please use the Hy-Rater software.

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.
- 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.

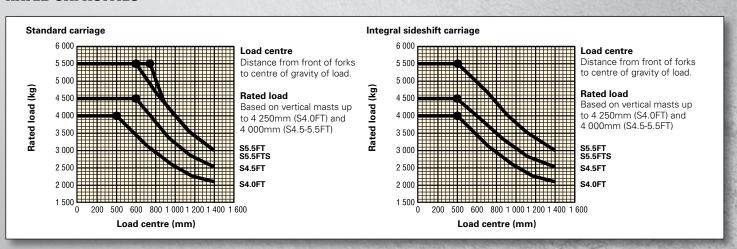
All values are nominal values and they are subject to tolerances. For further information, please contact the manufacturer.

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

Engine manufacturer/type	
Engine power according to ISO 1585	kW
Rated speed	min-1
Torque at 1/min	Nm/min-1
Number of cylinders/displacement	(-)/cm ³
Battery voltage/nominal capacity	(V)/(Ah)
	Engine power according to ISO 1585 Rated speed Torque at 1/min Number of cylinders/displacement

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