

# GENERAL DATA & STANDARD DIMENSIONS

# STANDARD SPECIFICATIONS

# ESX 12/15S/15/17/20/22/25

## Upright Table

Maximum† Fork Height in mm	Overall Height Lowered in mm	Free Lift** in mm
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<b>Standard Two Stage</b>		
110 (2794)	78 (1981)	4.3 (109)
• 122 (3099)	84 (2134)	4.3 (109)
130 (3302)	88 (2235)	4.3 (109)

<b>Quad Four Stage†</b>		
222.5 (5652)	78.5 (1994)	55 (1397)
• 240.5 (6109)	83 (2108)	59 (1499)
258.5 (6566)	89 (2261)	65 (1651)

<b>ESX 12/15S/15/17/20 Hi-Lo Two Stage</b>		
116 (2946)	77 (1956)	53 (1346)
• 128 (3251)	83 (2108)	59 (1499)

<b>Triple Stage</b>		
152 (3875)	72 (1821)	46 (1168)
170 (4325)	77.5 (1964)	53 (1346)
• 188 (4775)	83 (2109)	59 (1499)
199 (5075)	89 (2259)	65 (1651)
214 (5450)	95 (2397)	68 (1727)
226 (5750)	99 (2517)	75 (1905)
238 (6050)	104 (2649)	79 (2007)

<b>ESX 22/25 Triple Stage</b>		
150 (3825)	72 (1821)	46 (1168)
168 (4275)	77.5 (1964)	53 (1346)
• 186 (4725)	83 (2109)	59 (1499)
197 (5025)	89 (2259)	65 (1651)
212 (5400)	95 (2397)	68 (1727)
224 (5700)	99 (2517)	75 (1905)
236 (6000)	104 (2649)	79 (2007)

- † Indicates preferred standard sizes. For overall height raised with load backrest, add 48 in. (1220 mm) to maximum fork height. Other uprights available contact a Clark representative.
- \*\* All free lift dimensions shown without standard 48 in. (1220 mm) high load backrest.
- † Length to face of fork and RAS increase 3.14 in. with quad installation.

## Battery Compartment Dimensions

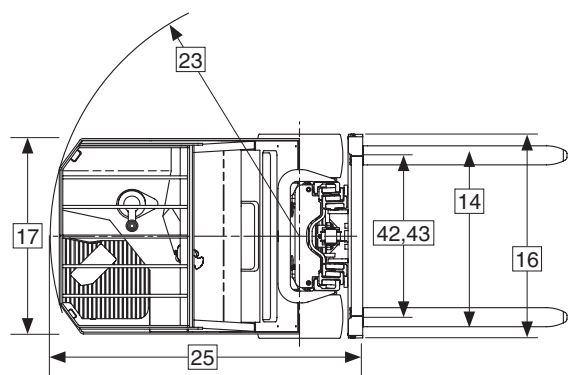
Width (W) in mm	Length (L) in mm	Height (H) in mm
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<b>ESX 12/15S</b>		
38.8 (985)	13.88 (353)	31.0 (787)

<b>ESX 15</b>		
38.8 (985)	16.13 (410)	31.0 (787)

<b>ESX 17</b>		
38.8 (985)	18.38 (467)	31.0 (787)

<b>ESX 20/22/25</b>		
38.8 (985)	20.88 (530)	31.0 (787)



## Grade Clearance\* A%

ESX 12/15S	41%
ESX 15	38%
ESX 17	36%
ESX 20	34%
ESX 22/25	32%

\* The ESX is designed for operation on and over grades but must be limited to 15%.

## Tilt Specifications

Upright MFH (in / mm)	Low Tilt B° / F°	High Tilt B° / F°
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All Uprights thru 151 in (3835 mm)	8°B / 6°F	8°B / 1.5°F
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All Standard and TSU 152 in (3861 mm) thru 240.5 in (6096 mm)	8°B / 6°F	5°B / 1.5°F
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TSU241 in (6121 mm) and over and All Quads	5°B / 6°F	3°B / 1.5°F
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\* Standard tilt with MFH's noted. Contact Clark representative for information on optional tilt.

## Notes

Performance may vary +5% and -10% due to motor and systems efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a standard machine.

## ANSI/ITSDF and Insurance Classification

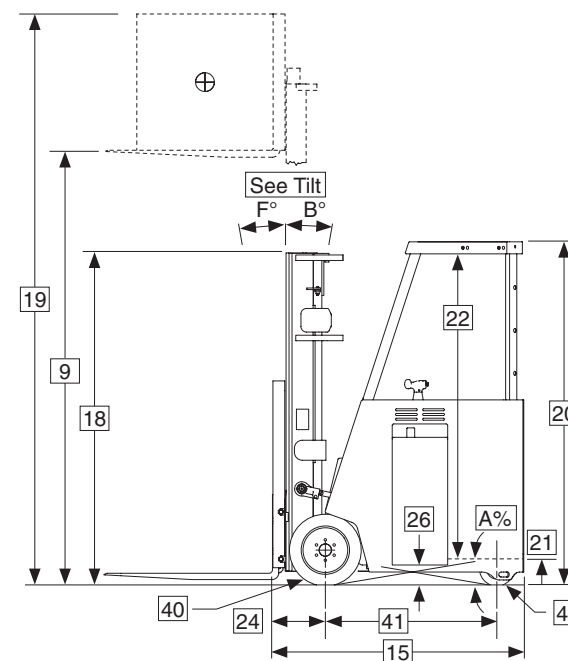
Standard truck meets all applicable mandatory requirements of Part II-ANSI/ITSDF B56.1 Safety Standard for Powered Industrial Trucks (latest edition at time of manufacture) and Underwriters Laboratories requirements as to fire and electrical shock hazard only for "E" classification. For further information contact a Clark representative.

Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1
- NFPA 505, fire safety standard for powered industrial trucks - type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Contact your authorized CLARK forklift truck dealer for further information including operator training programs and auxiliary visual and audible warning systems, fire extinguishers, etc., as available for specific user applications and requirements.

Specifications, equipment, technical data, photos and illustrations are based on information at time of printing and are subject to change without notice. Some products may be shown with optional equipment.



For corresponding data see Specification Chart

			Clark	Clark	Clark	Clark	Clark	Clark	Clark
<b>General Information</b>	1 Manufacturer		Clark	Clark	Clark	Clark	Clark	Clark	Clark
	2 Model	Manufacturer's Designation	ESX 12	ESX15S	ESX 15	ESX17	ESX 20	ESX22	ESX 25
	3 Load Capacity	lbs(kg)	2500 (1250)	3000 (1500)	3000 (1500)	3500 (1750)	4000 (1815)	4500 (2050)	5000 (2270)
	4 Load Center	Fork Face to Load CG in(mm)	24 (500)	24 (500)	24 (500)	24 (500)	24 (500)	24 (500)	24 (500)
	5 Power Unit		Electric	Electric	36 volt / 48 volt	36 volt / 48 volt	36 volt / 48 volt	36 volt / 48 volt	36 volt / 48 volt
	6 Operator Type		Stand-up Counterbalanced	Stand-up Counterbalanced	Stand-up Counterbalanced	Stand-up Counterbalanced	Stand-up Counterbalanced	Stand-up Counterbalanced	Stand-up Counterbalanced
	7 Tire Type	Multi-tire	Cushion / Pneumatic	Cushion / Pneumatic	Cushion / Pneumatic	Cushion / Pneumatic	Cushion / Pneumatic	Cushion / Pneumatic	Cushion / Pneumatic
	8 Wheels (x=driven)	Front/Rear	2x / 1 Dual	2x / 1 Dual	2x / 1 Dual	2x / 1 Dual	2x / 1 Dual	2x / 1 Dual	2x / 1 Dual
<b>Basic Dimensions</b>	9 Upright†	Maximum Lift Height, Full Capacity in(mm)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)
	10	Lift Height (Preferred Upright) in(mm)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)	188 (4775)
	11	Freelift in(mm)	59 (1499)	59 (1499)	59 (1499)	59 (1499)	59 (1499)	59 (1499)	59 (1499)
	12 Upright Tilt	Back/Forward (Triple Stage Upright) degrees	See Table	See Table	See Table	See Table	See Table	See Table	See Table
	13 Fork	Std. Fork Size (T x W x L) in(mm)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)	1.5 x 4 x 42 (40 x 100 x 1067)
	14 Carriage	Width of Carriage² in(mm)	37 (940)	37 (940)	37 (940)	37 (940)	37 (940)	37 (940)	37 (940)
	15 Overall Dimensions	Length to Fork Face (TSU)² in(mm)	62.6 (1590)	62.6 (1590)	64.6 (1641)	67.1 (1704)	69.6 (1763)	71.6 (1819)	71.6 (1819)
	16	Width Over Tires⁴ in(mm)	40.3 (1024) / 42.2 (1072)	40.3 (1024) / 42.2 (1072)	40.3 (1024) / 42.2 (1072)	40.3 (1024) / 47.2 (1199)	40.3 (1024) / 47.2 (1199)	42.2 (1072)	42.2 (1072)
	17	Width Over Frame in(mm)	40.3 (1024)	40.3 (1024)	40.3 (1024)	40.3 (1024)	40.3 (1024)	40.3 (1024)	40.3 (1024)
	18	Height, Upright Lowered in(mm)	83 (2108)	83 (2108)	83 (2108)	83 (2108)	83 (2108)	83 (2108)	83 (2108)
	19	Height, Upright Extended in(mm)	236 (5994)	236 (5994)	236 (5994)	236 (5994)	236 (5994)	236 (5994)	236 (5994)
	20	Height, Overhead Guard in(mm)	86.5 (2197)	86.5 (2197)	86.5 (2197)	86.5 (2197)	86.5 (2197)	86.5 (2197)	86.5 (2197)
	21	Step Height in(mm)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)	7.5 (191)
	22	Head Clearance in(mm)	78 (1981)	78 (1981)	78 (1981)	78 (1981)	78 (1981)	78 (1981)	78 (1981)
	23	Turning Radius in(mm)	51.6 (1311)	51.6 (1311)	53.6 (1361)	56.1 (1425)	58.6 (1488)	60.6 (1539)	60.6 (1539)
	24	Load Center Distance in(mm)	13.1 (334)	13.1 (334)	13.1 (334)	13.1 (334)	13.1 (334)	13.1 (334)	13.1 (334)
	25	Right Angle Stack Aisle in(mm)	64.5 (1638)	64.5 (1638)	66.5 (1689)	69.0 (1753)	71.5 (1816)	73.5 (1867)	73.5 (1867)
	26	Battery Roller Height in(mm)	6.0 (152)	6.0 (152)	6.0 (152)	6.0 (152)	6.0 (152)	6.0 (152)	6.0 (152)
<b>Performance</b>	27 Stability	Accroding to ANSI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	28 Speeds	Travel Speed, Max, With Load mph(kph)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)
	29	Travel Speed, Max, Without Load mph(kph)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)	7.3 (11.7)
	30	Lift Speeds, Loaded fpm(mps)	73 (.37)	69 (.35)	69 (.35) / 81 (.41)	65 (.33) / 75 (.38)	61 (.31) / 74 (.38)	53 (.27) / 64 (.33)	45 (.23) / 53 (.27)
	31	Lift Speeds, Unloaded fpm(mps)	108 (.55)	108 (.55)	108 (.55) / 118 (.60)	108 (.55) / 118 (.60)	108 (.55) / 118 (.60)	108 (.55) / 118 (.60)	108 (.55) / 118 (.60)
	32	Lower Speeds, Loaded fpm(mps)	90 (.46)	90 (.46)	90 (.46)	90 (.46)	90 (.46)	90 (.46)	90 (.46)
33	Lower Speeds, Unloaded fpm(mps)	81 (.41)	81 (.41)	81 (.41)	81 (.41)	81 (.41)	81 (.41)	81 (.41)	
<b>Weights³</b>	34 Service Weight, TSU lbs(kg)	W/Min Battery Weight	8200 (3720)	8515 (3862)	8805 (3994)	9240 (4191)	9450 (4287)	9650 (4377)	10265 (4656)
	35 Axle loading lbs(kg)	With Load, Front	8935 (4053)	10011 (4541)	10058 (4562)	10922 (4654)	11820 (5362)	12503 (5671)	13653 (6193)
	36	With Load, Rear	1765 (801)	1504 (682)	1747 (792)	1630 (825)	1647 (739)	1612 (731)	1612 (731)
	37	W/O Load, Front lbs(kg)	4280 (1941)	4419 (2004)	4595 (2084)	4688 (2126)	4852 (2201)	4792 (2174)	5086 (2307)
38	W/O Load, Rear lbs(kg)	3922 (1779)	4096 (1858)	4210 (1910)	4552 (2065)	4598 (2086)	4858 (2204)	5179 (2349)	
<b>Chassis</b>	39 Tires	Number, Front/Rear	2X / 1 DUAL	2X / 1 DUAL	2X / 1 DUAL	2X / 1 DUAL	2X / 1 DUAL	2X / 1 DUAL	2X / 1 DUAL
	40	Size, Front in	18X7X12.12 / 18X7X8 16PR	18X7X12.12 / 18X7X8 16PR	18X7X12.12 / 18X7X8 16PR	18X8X12.12 / 18X9X8 16PR	18X8X12.12 / 18X9X8 16PR	18X9X12.12	18X9X12.12
		Size, Rear in(mm)	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly	9 x 5 (229 x 127) Dual Poly
	41	Wheelbase in(mm)	43.0 (1092)	43.0 (1092)	45.2 (1148)	47.5 (1207)	50.0 (1270)	52.0 (1321)	52.0 (1321)
	42	Track in(mm)	33.3 (846)	33.3 (846)	33.3 (846)	32.3 (820)	32.3 (820)	33.3 (846)	33.3 (846)
	43	Front, Pneumatic in(mm)	35.6 (904)	35.6 (904)	35.6 (904)	38.2 (970)	38.2 (970)	NA	NA
	44	Ground Clearance in(mm)	Min w/Load⁵	2.4 (61)	2.4 (61)	2.4 (61)	2.4 (61)	2.4 (61)	2.4 (61)
	45	At Center of Wheelbase, Loaded in(mm)		3.6 (91)	3.6 (91)	3.6 (91)	3.6 (91)	3.6 (91)	3.6 (91)
	46	Service Brake Type		Regenerative	Regenerative	Regenerative	Regenerative	Regenerative	Regenerative
	47	Parking Brake Type		Auto-Electro Magnetic	Auto-Electro Magnetic	Auto-Electro Magnetic	Auto-Electro Magnetic	Auto-Electro Magnetic	Auto-Electro Magnetic
<b>Drive Line</b>	48	Battery Type	Lead-Acid	Lead-Acid	Lead-Acid	Lead-Acid	Lead-Acid	Lead-Acid	Lead-Acid
		Max Capacity (6 hr. Rate) kWh	27.0	27.0	32.2	37.6	43.0	43.0	43.0
		Weight, Min lbs(kg)	1280 (581)	1590 (721)	1885 (855)	2175 (987)	2460 (1116)	1845 (837)	2460 (1116)
	49	Drive Motor, Diameter (Dual) in(mm)	7.9 (201)	7.9 (201)	7.9 (201)	7.9 (201)	7.9 (201)	7.9 (201)	7.9 (201)
		Hydraulic Motor, Diameter in(mm)	6.7 (170)	6.7 (170)	6.7 (170)	6.7 (170)	6.7 (170)	6.7 (170)	6.7 (170)
		Drive Motor Control	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	Speed Control	Solid State	Solid State	Solid State	Solid State	Solid State	Solid State	Solid State	
	Hydraulic Motor Control	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	
57	Hydraulic Pressure		Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	
58	Sound Level	Avg. at Operator's Ear Per ANSI B56.11.5 dB(A)	70	70	70	70	70	70	70

- 1 See upright table for other available uprights.
- 2 Dimensions are for TSU uprights; add the following (with 1.5in. thick forks) for other uprights: 3.14in. for Quad, 0.1in. for STD and 2.37in. for HiLo uprights.
- 3 Specifications are given with preferred triple stage upright and minimum battery weight.

- 4 QAW with wide drive tires is 45in. for all models with all quad uprights and with triple stage uprights above 240in.
- 5 36in. max fork spread w/37in. carriage. 40in. max fork spread w/41in. carriage.
- 6 Ground Clearance at rear frame tie-down points is approximately 1.5in.