

# 9600, 9700 Swing-Reach Truck

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*9000-series*  
9600-CSR30T  
9700-CSR30T

# Dimensions and General Information

Specifications		In.(mm)	
A	Truck Head Length	In.(mm)	102 (2591)
B	Truck Wheelbase	In.(mm)	80 (2032)
C	Forks, Bar Type (Std.) (L x W x T)	In.(mm)	42 x 4 x 1.75 (1067 x 102 x 45)
C	Forks, Lengths (Opt.)	In.(mm)	30, 36, 48 (762, 914, 1219)
D	Fork Adjustment (OAW)	In.(mm)	20 or 25 or 29.5 (508 or 635 or 749)
E	Maximum Usable Battery Compartment Width [1]	In.(mm)	21 (533) (9600-CSR30T)23.75 (603) (9700-CSR30T)
F	Carriage Height	In.(mm)	29.5 (749)
G	Grade Clearance [2]	%	6%
H	Operator's Comp. Height	In.(mm)	78 (1981)
J	Truck Underclearance	In.(mm)	2 (51)
K	Overhead Guard Height	In.(mm)	97 (2464)
L	Battery Roller Height	In.(mm)	12.25 (311)
M	Turret Pivot to Carriage	In.(mm)	28.25 (std.), 32, 38, 44, 50, 56 (opt) (718)
N	Turret Thickness	In.(mm)	8 (203)
O	Operator Comp. Length	In.(mm)	32.5 (826)
P	Operator Platform Height	In.(mm)	16 (406)
Q	Operator Platform Width Stan- dards	In.(mm)	47.4 or 55.4 (Std.) or 61.4 or 67.4 (1204 or 1407 or 1560 or 1712)
R	Top of Fork to Top of Turret	In.(mm)	40 (1016)
S	Truck OAW - 9600	In.(mm)	48 or 56 (Std.) (1219 or 1422)
S	Truck OAW - 9700	In.(mm)	56 (< 208 in. OACH) (1422) 62 (> 208 in. OACH) (1575) (1422 or 1575)
T	Carriage Width	In.(mm)	48 or 56 (Std.) or 62 or 68 (1219 or 1422 or 1575 or 1727)
U	Recommended Side Clearance at Eleva- tion Min. - Max.	In.(mm)	Consult Sales Representative for side clearance requirements
Y	Power Unit OAW	In.(mm)	48 (1219)
W	Truck Length	In.(mm)	145.5 (3696)
X	Turning Radius	In.(mm)	92.2 (2342)
Y	Platform to Max. Aux. Lift (with 84 in. Aux. Carriage)	In.(mm)	68 (1727)
Y	Platform to Max. Aux. Lift (with 114 in. Aux. Carriage)	In.(mm)	98 (2489)
Z	Travel Clearance at Baselegs (Rail or Wire Guided)	In.(mm)	4–5 (101–127).

Power Unit		48 Volt, Single Drive
Max. Cap. @ 24 in. [600 mm] Load Center	lb.(kg)	3,000 (1361)
Operator's Compartment		Sit-Down/Stand-Up/Lean
Drive Tire, Poly, Dia. x W	In.(mm)	15 x 6 [2] (381 x 152) (1 per truck) 15 x 6.5 [3] (381 x 165) (1 per truck)
Load Tire, Soft Poly (2), Dia. x W	In.(mm)	14 x 8 (356 x 203) (2 per truck)
Gradability	In.(mm)	[1]
Mast		CSR30T (2-Stage Mast)
Maximum Elevated Height	In. (mm)	514 (13056)

**NOTES:** [1] Consult Sales Representative for more battery compartment dimensions.

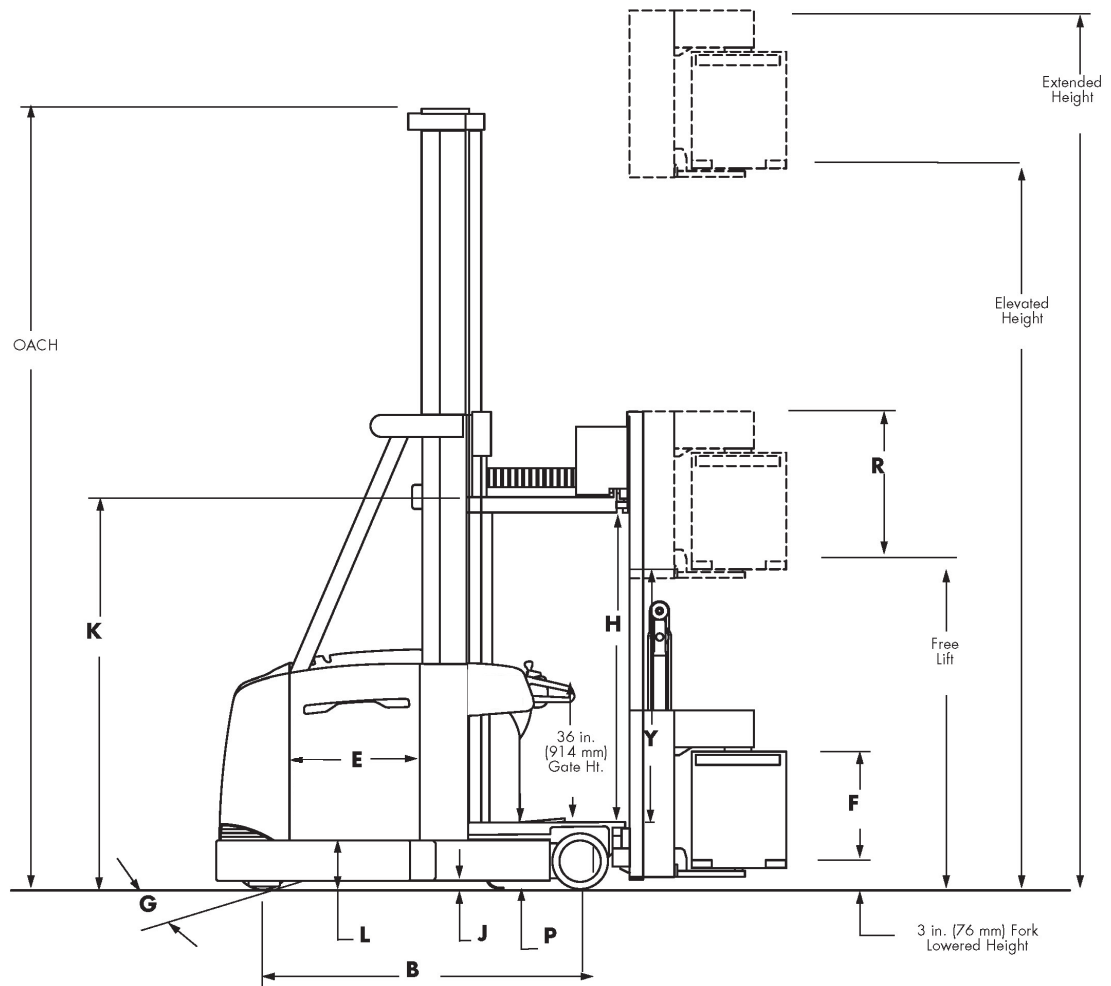
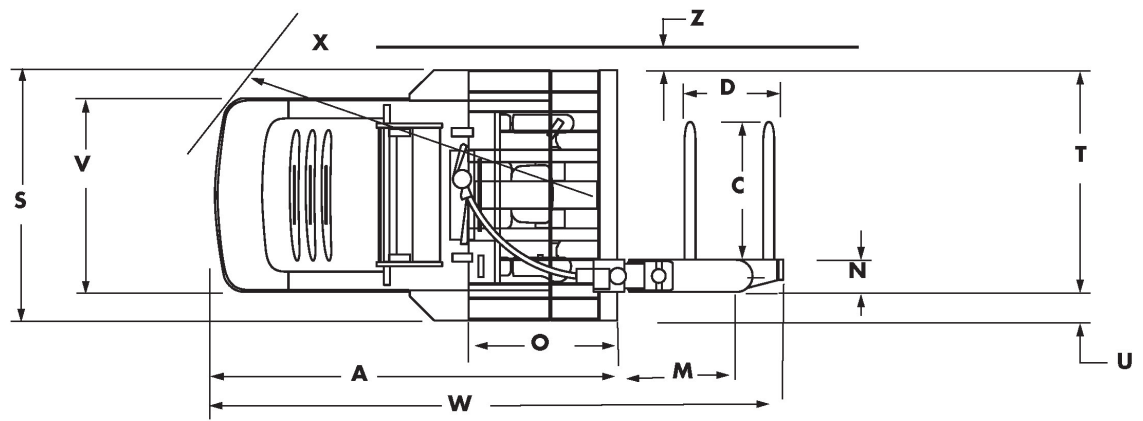
[2] Do not operate on grade with load. The 9600-9700 is designed for level floor operation only. It is capable of being driven in a fully lowered, unloaded condition on a maximum 100 ft. (our Std. measurement) ramp with a maximum incline of 6%

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[2] On 9600-CSR30T.

[3] On 9700-CSR30T.



Performance Specifications		9600-CSR30T		9700-CSR30T	
		Unloaded	Loaded	Unloaded	Loaded
Travel Speed [1]	mph (km/h)	6 (9.6)	6 (9.6)	6 (9.6)	6 (9.6)
Lift Speed [1]	fpm (m/s)	80 (0.41)	70 (0.36)	85 (0.43)	73 (0.37)
Lower Speed [1]	fpm (m/s)	100 (0.51)	100 (0.51)	80 (0.41)	81 (0.41)
Lift Aux. Speed [1]	fpm (m/s)	80 (0.41)	80 (0.41)	84 (0.43)	80 (0.41)
Lower Aux. Speed [1]	fpm (m/s)	60 (0.30)	60 (0.30)	60 (0.30)	64 (0.33)
Rotate Speeds 180 degrees	sec	6.5	6.5	6.5	6.5
Traverse Speeds	sec	7.2–9.7	7.2–9.7	7.2–9.7	7.2–9.7
<b>NOTES:</b> [1] Maximum speed attainable, after break-in period, varies with truck weight, rolling resistance, mast height, options, and battery condition.					

Battery Specifications		9600-CSR30T	9700-CSR30T
Ampere-hours, Max.		930	1085
Ampere-hours, Min.			
Battery Connector Type		SB350	SB350
Battery Connector Color		Blue	Blue
Lead Location		C/D	C/D
Lead Length	in.(mm)	20 (508)	20 (508)
Maximum Usable Battery Compartment Dimensions (L x W x H)	in.(mm)	44.19 x 21 x 31 (1122 x 533 x 787)	44.19 x 23.75 x 31 (1122 x 603 x 787)
Actual Battery Compartment Dimensions (L x W x H)	in.(mm)	44.25 x 21.25 x 32 (1124 x 540 x 813)	44.25 x 24 x 32 (1124 x 610 x 813)
Battery Weight, Maximum	lb.(kg)	3400 (1542)	3500 (1588)
Battery Weight, Minimum	lb.(kg)	2900 (1315)	2900 (1315)

Mast Specifications	OACH [1]	Elevated Height [3]	Extended Height [2]	Aux. Mast OACH	Free Lift [3]	Cross- over Height [4]	Max. Oper. Plat. Ht. [5]	Truck Weight without Battery [8]
Model	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	lb. (kg)	in. (mm)
9600	118 (2997)	226 (5740)	266 (6756)	118.50 (3010) [6][7]	78 (1981)	118 (2997)	158 (4013)	10,300 (4672)
	130 (3302)	250 (6350)	290 (7366)	118.50 (3010)	84 (2134)	142 (3607)	182 (4623)	10,730 (4867)
	142 (3607)	274 (6960)	314 (7976)	118.50 (3010)	84 (2134)	166 (4216)	206 (5232)	10,800 (4899)
	142 (3607)	297 (7544)	337 (8560)	141.50 (3594)	107 (2718)	142 (3607)	206 (5232)	10,840 (4917)
	154 (3912)	298 (7569)	338 (8585)	118.50 (3010)	84 (2134)	190 (4826)	230 (5842)	11,000 (4990)
	154 (3912)	322 (8179)	362 (9195)	148.50 (3772)	114 (2896)	160 (4064)	224 (5690)	11,040 (5008)
	166 (4216)	316 (8026)	356 (9042)	118.50 (3010)	84 (2134)	214 (5436)	248 (6299)	11,200 (5080)
	166 (4216)	346 (8788)	386 (9804)	148.50 (3772)	114 (2896)	184 (4674)	248 (6299)	11,240 (5098)
	178 (4521)	340 (8636)	380 (9652)	118.50 (3010)	84 (2134)	238 (6045)	272 (6909)	11,755 (5332)
	178 (4521)	370 (9398)	410 (10414)	148.50 (3772)	114 (2896)	208 (5283)	272 (6909)	11,795 (5350)
	190 (4826)	364 (9246)	404 (10262)	118.50 (3010)	84 (2134)	262 (6655)	296 (7518)	11,800 (5352)
	190 (4826)	394 (10008)	434 (11024)	148.50 (3772)	114 (2896)	232 (5893)	296 (7518)	11,840 (5371)

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Model	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	lb. (kg)	in. (mm)
9700	142 (3607)	258 (6553)	298 (7569)	118.50 (3010)	84 (2134)	158 (4013)	190 (4826)	11,470 (5203)
	142 (3607)	281 (7137)	321 (8153)	141.5 (3594)	107 (2718)	142 (3607)	190 (4826)	11,510 (5221)
	154 (3912)	282 (7163)	322 (8179)	118.50 (3010)	84 (2134)	184 (4674)	214 (5436)	11,670 (5293)
	154 (3912)	312 (7925)	352 (8941)	148.50 (3772)	114 (2896)	154 (3912)	214 (5436)	11,710 (5312)
	164 (4166)	302 (7671)	342 (8687)	118.50 (3010)	84 (2134)	204 (5182)	234 (5944)	11,870 (5384)
	164 (4166)	332 (8433)	372 (9449)	148.50 (3772)	114 (2896)	174 (4420)	234 (5944)	11,910 (5402)
	173.5 (4407)	321 (8153)	361 (9170)	118.50 (3010)	84 (2134)	224 (5690)	253 (6426)	12,020 (5452)
	173.5 (4407)	351 (8915)	391 (9931)	148.50 (3772)	114 (2896)	194 (4928)	253 (6426)	12,060 (5470)
	183.5 (4661)	341 (8661)	381 (9677)	118.50 (3010)	84 (2134)	244 (6198)	273 (6934)	13,035 (5913)
	183.5 (4661)	371 (9423)	411 (10439)	148.50 (3772)	114 (2896)	214 (5436)	273 (6934)	13,075 (5931)
	193.5 (4915)	361 (9169)	401 (10185)	118.50 (3010)	84 (2134)	264 (6706)	293 (7442)	13,115 (5949)
	193.5 (4915)	391 (9931)	431 (10947)	148.50 (3772)	114 (2896)	234 (5944)	293 (7442)	13,155 (5967)
	208 (5283)	390 (9906)	430 (10922)	118.50 (3010)	84 (2134)	292 (7417)	322 (8179)	13,600 (6169)
	208 (5283)	420 (10668)	460 (11684)	148.50 (3772)	114 (2896)	292 (7417)	322 (8179)	13,640 (6187)

9700	214 (5436)	402 (10211)	442 (11227)	118.50 (3010)	84 (2134)	304 (7722)	334 (8484)	13,060 (5897)
	214 (5436)	432 (10973)	472 (11989)	148.50 (3772)	114 (2896)	274 (6960)	334 (8484)	13,040 (5915)
	219 (5563)	412 (10465)	452 (11481)	118.50 (3010)	84 (2134)	314 (7976)	344 (8738)	13,030 (5910)
	219 (5563)	442 (11227)	482 (12243)	148.50 (3772)	114 (2896)	284 (7214)	344 (8738)	13,070 (5928)
	226 (5740)	426 (10820)	466 (11836)	118.50 (3010)	84 (2134)	328 (8331)	358 (9093)	13,195 (5991)
	226 (5740)	456 (11582)	496 (12599)	148.50 (3772)	114 (2896)	298 (7569)	358 (9093)	13,235 (6003)
	238 (6045)	450 (11430)	490 (12446)	118.50 (3010)	84 (2134)	352 (8941)	382 (9703)	13,405 (6080)
	238 (6045)	480 (12192)	520 (13208)	148.50 (3772)	114 (2896)	322 (8179)	382 (9703)	13,445 (6099)
	243 (6172)	460 (11684)	500 (12700)	118.50 (3010)	84 (2134)	362 (9195)	392 (9957)	13,530 (6137)
	243 (6172)	490 (12446)	530 (13462)	148.50 (3772)	114 (2896)	332 (8433)	392 (9957)	13,570 (6155)
	250 (6350)	474 (12040)	514 (13056)	118.50 (3010)	84 (2134)	376 (9550)	406 (10312)	13,655 (6199)
	250 (6350)	504 (12802)	544 (13818)	148.50 (3772)	114 (2896)	346 (8788)	406 (10312)	13,695 (6212)
	255 (6477)	484 (12294)	524 (13310)	118.50 (3010)	84 (2134)	386 (9804)	416 (10566)	14,330 (6500)
	255 (6477)	514 (13056)	554 (14072)	148.50 (3772)	114 (2896)	356 (9042)	416 (10566)	14,370 (6518)

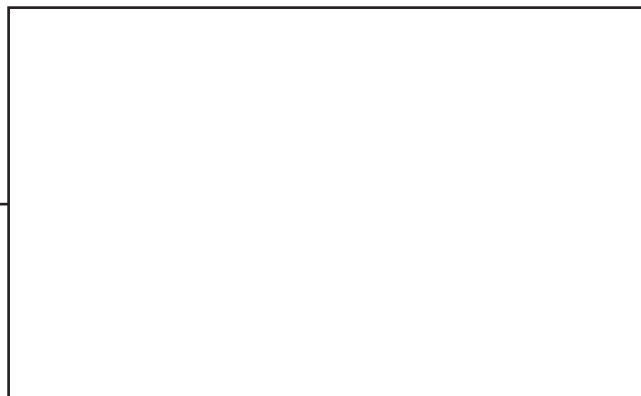
**NOTES:** [1] Tolerance = +/- 0.5 in. (+/- 13 mm).  
[2] Tolerance = + 2.5/- 0.5 in. (+ 64/- 13 mm), elevated heights are with auxiliary lift fully elevated. With rated load, 10 in. (254 mm) is a recommended lift-off difference between top beam and fork elevation.  
[3] The Free Lift is accomplished through total travel of auxiliary lift except on 118 OACH truck. On 118 OACH free lift is where top of telescope and top of uppermost part of the aux. lift turret are equal.  
[4] Crossover Height equals the Extended Height when the top of the telescope and the top of the uppermost part of the auxiliary lift turret are equal. [El. Ht. = Crossover Ht. – 40 in. (1016 mm)].  
[5] This will impact order picking height. Recommended max order picking height 60" greater than platform height.  
[6] If additional capacity is required, consult Sales Representative.  
[7] Aux. mast OACH is taller than main mast OACH.  
[8] Shipping weights are 500 lb. (227 kg) greater due to shipping crate.  
[9] 62" Baseleg OAW.

## Standard Equipment

- 3-Wheel Suspension System
- 3 Year/3,000 Hour Extended Warranty
- 48-Volt Power Unit
- ACR System™
- AC-Traction and Lift System
- Auto Center Nest
- Auto Traverse and Rotate
- Automatic Speed Reduction When Carriage Not Travel-Ready
- Automatic Steer Center on Power-Up
- Battery Compartment Width 21 in. (9600-CSR30T)  
(Maximum Usable Dimensions)
- Battery Compartment Width 23.75 in. (9700-CSR30T)  
(Maximum Usable Dimensions)
- Battery Gates, Adjustable Retainers
- Battery Rollers
- Battery State-of-Charge (BSOC) with Lift Interrupt
- Configurable Performance Parameters
- Controls, Ergonomic Handle Design
- Deadman, Dual
- Ergonomic Seat
- Fall Protection System: Body Belt or Full Body  
*Harness and Tether*
- Fan Package
- Flip-up Sidegates and Control Arms
- Height Indicator
- Hour Meters (HD, HL, TM, KH, HA, HT)
- intellispeed™ Control System
- LED Compartment, and Work Lights
- Lift System, High Performance
- Mast, Clear-View
- Mast, Twin Tubular Design
- Non-skid Operator's Platform
- Operator's Position (Sit/Stand/Lean)
- OSHA and ANSI/ITSDF Compliance
- Parking Brake, Automatic Engaging
- Power-up and run time diagnostics real time status/fault codes
- Raymond® Red Finish with Black Mast
- Regenerative Braking
- Regenerative Lowering
- Separate Lift, Travel, and Steer Motors
- Slack Chain Switches
- Steering, Power
- Storage Tote
- UL Type "E" Construction
- Vehicle Navigation Assistant
- Weight Sensing
- Work Lights and Fan

## Available Options

- Alternate Personal Fall Protection System  
– *Full Front Barriers and 3-Bar Side-gates*
- Audible Alarms
- Barriers, Pallet Handling
- Cold Storage Conditioning
- Enclosure for Cold Storage Conditioning
- End of Aisle Slowdown
- Extended Turrets
- Keyless On/Off
- Lift and Lower Limit Switches
- Lights
- Operator's Clipboard
- UL Type "EE" Construction
- Wire Guidance



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