

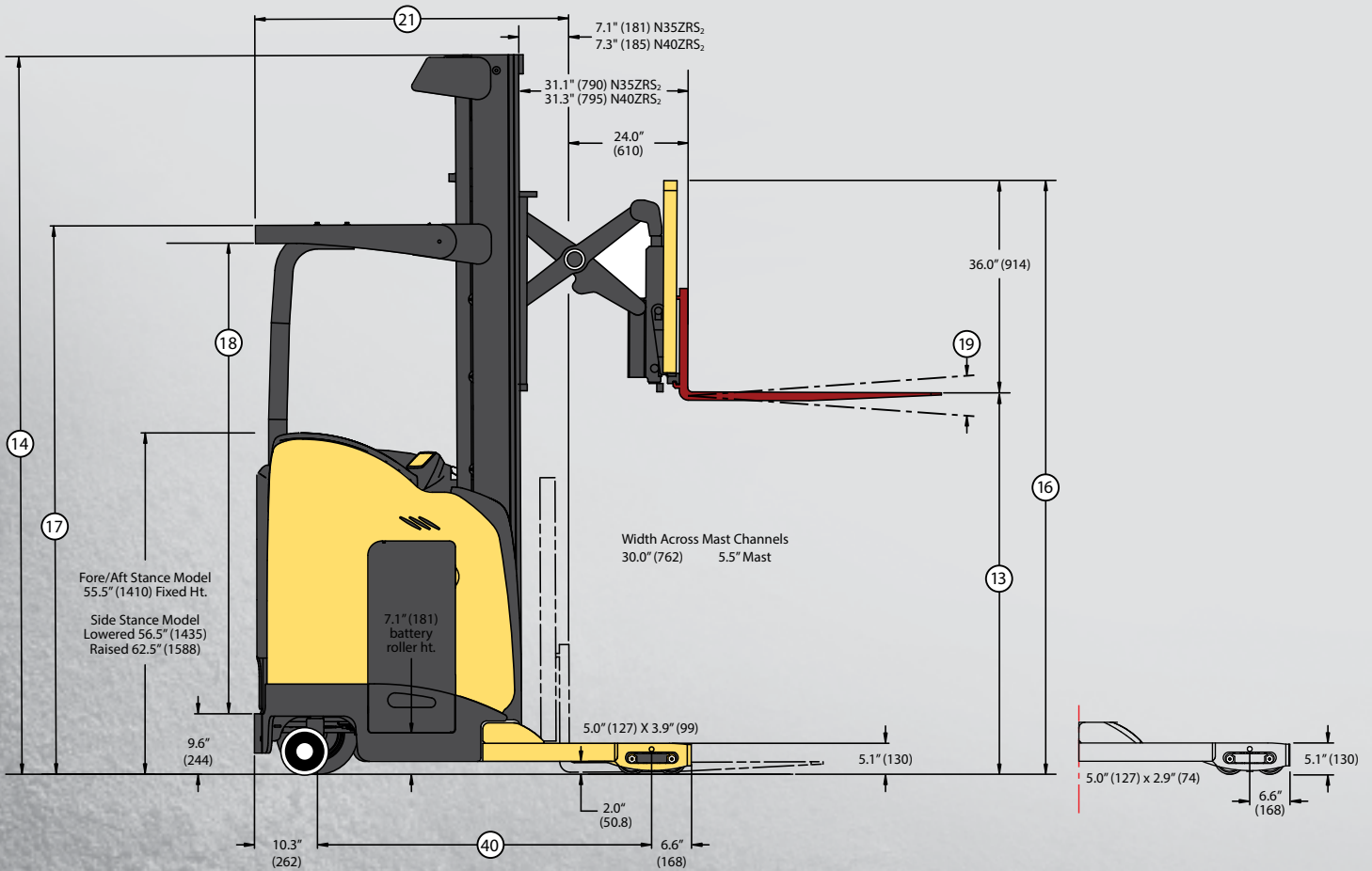
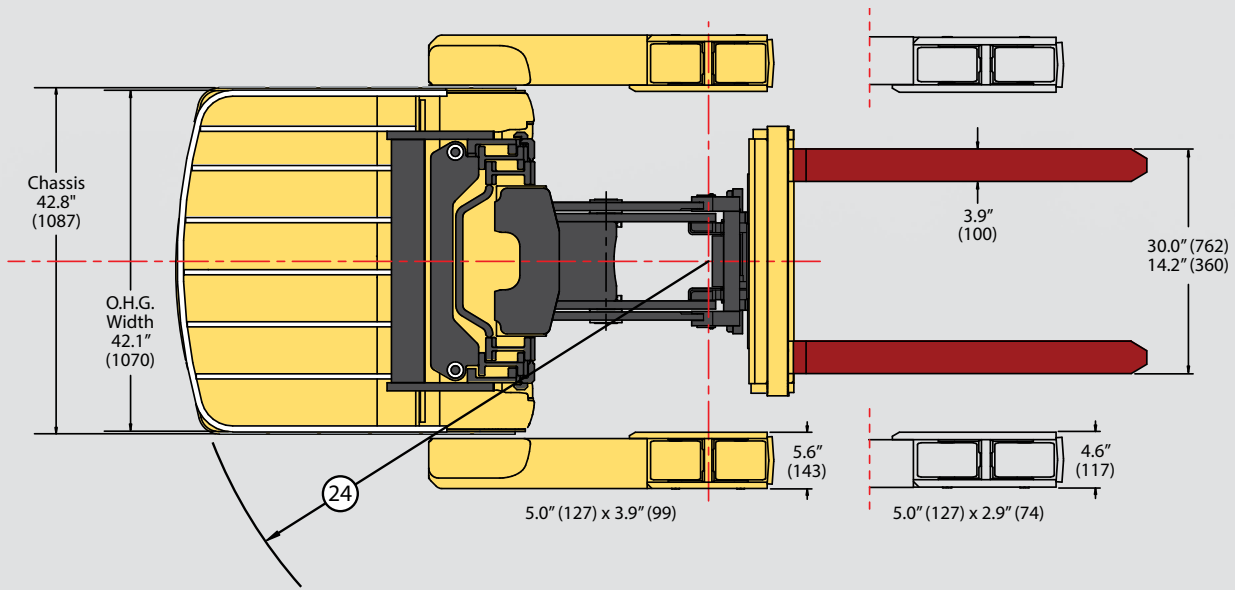


**STRONG PARTNERS.  
TOUGH TRUCKS.™**

# N30-40ZRS/ZDRS SERIES TECHNICAL GUIDE

[WWW.HYSTER.COM](http://WWW.HYSTER.COM)

# ➤ N35-40ZRS2 DIMENSIONS



Circled dimensions correspond to the line numbers on the tabulated chart inside the Technical Guide. Dimensions are in inches (millimeters).

# N35-40ZRS2 SPECIFICATIONS

GENERAL	1	Manufacturer Name	Hyster Company		Hyster Company		Hyster Company		Hyster Company			
	2	Model	N35ZRS <sub>2</sub>		N35ZRS <sub>2</sub>		N40ZRS <sub>2</sub>		N40ZRS <sub>2</sub>			
	3	Wheel Base Designation	SWB (Short Wheel Base)									
	4	Rated Capacity	lb. (kg)	3500 (1588)				4000 (1814)				
	5	Load Center, Distance	in. (mm)	24 (610)								
	6	Power Type - Electric, Diesel, LPG		Electric - 24 volt		Electric - 36 volt		Electric - 24 volt		Electric - 36 volt		
	7	Operator Type		Stand								
	8	Tire Type - Load/Caster/Drive		Poly / Poly / Rubber								
	9	Wheels, Number Load/Drive (x=driven)		4 / 2 (1x)								
WT.	10	Truck Weight, without Battery (approximate)	lb.	4950		4950		5000		5000		
	11			Front	Rear	Front	Rear	Front	Rear	Front	Rear	
	12	Axle Loading - Front/Rear with Assemble Retracted **	lb.	6750	3800	6750	3800	7400	3700	7400	3700	
DIMENSIONS	13	Height, Standard Lift (TOF)	in. (mm)	See Mast Table								
	14	Height, Standard Mast Lowered (OALH)	in. (mm)									
	15	Height, Freelift (TOF)	in. (mm)									
	16	Height, Standard Mast Extended w/LBR	in. (mm)									
	17	Height, Top of OHG	in. (mm)									
	18	Height, Operator Clearance	in. (mm)									
	19	Mast Tilt Angle, Forward/Back	degrees°	3 / 4								
	20	Forks, Standard (Length x Width x Thickness)	in.	1.6 x 3.9 x 42				1.8 x 3.9 x 42				
	21	Headlength to Face of Forks - All Battery Compartments ***	in. (mm)	See Mast Table								
	22	Basearm OEC	in.	34" - 49" (1" increments)								
	23	Battery Compartment Size, 12.5" Battery Compartment - (LxWxH)	in.	39.0 x 12.5 x 31.5								
		Battery Compartment Size, 14.5" Battery Compartment - (LxWxH)	in.	39.0 x 14.5 x 31.5								
	Battery Compartment Size, 16.5" Battery Compartment - (LxWxH)	in.	39.0 x 16.5 x 31.5									
24	Turning Radius - minimum outside, 12.5" Battery Compartment	in.	65.74									
	Turning Radius - minimum outside, 14.5" Battery Compartment	in.	65.74									
	Turning Radius - minimum outside, 16.5" Battery Compartment	in.	67.74									
25	Aisle Width - Zero Clearance - Right Angle Stack	see chart	See "RAS" Table									
PERFORMANCE	26	Stability - Comply with ANSI		Yes								
	27	Travel Speed, Rearward (chassis first) - Empty/RL	mph	6.5/6.5		6.7/6.5		6.5/6.5		6.7/6.5		
	28	Travel Speed, Forward (forks first) - Empty/RL	mph	6.5/6.5		6.7/6.5		6.5/6.0		6.7/6.0		
	29	Lift Speeds, Empty	ft./min	60		75		60		75		
	30	Lift Speeds, 2,000 lb.	ft./min	46		54		46		54		
	31	Lift Speeds, 3,000 lb.	ft./min	43		50		43		50		
	32	Lift Speeds, 3,500 lb.	ft./min	40		47		40		47		
	33	Lift Speeds, 4,000 lb.	ft./min	N/A				38		45		
	34	Lift Speeds, 4,500 lb.	ft./min	N/A								
	35	Lowering Speeds, Empty	ft./min	85								
	36	Lowering Speeds, RL	ft./min	85								
WHEELS & TIRES	37	Size - Front Load Wheels, Standard		5 x 3.9								
	38			Drive	Caster	Drive	Caster	Drive	Caster	Drive	Caster	
	39	Size, Standard - Drive Tire/Dual Casters		12.0 x 5.5	7.9 x 2.2	12.0 x 5.5	7.9 x 2.2	12.0 x 5.5	7.9 x 2.2	12.0 x 5.5	7.9 x 2.2	
	40	Wheelbase - 12.5" Battery Compartment	in.	55.35		N/A		55.35		N/A		
		Wheelbase - 14.5" Battery Compartment	in.	55.35								
		Wheelbase - 16.5" Battery Compartment	in.	57.36								
	41	Brakes, Method of Control - Service/Parking		Foot								
42	Brakes, Method of Operation - Service/Parking		Spring Apply / Electric Release									
ELECTRIC	43	Battery Type		Lead Acid								
	44	Traction Motor Rating (60 minute rating)	hp (kw)	7.5 (5.6)								
	45	Hoist Motor Rating (5 minute rating)	hp (kw)	14.8 (11.0)								
	46	Traction Motor Control Method		Transistor								
	47	Hoist Motor Control Method		Transistor								
	48	Number of Speeds		Infinitely Variable								

\*\* Static with Rated Load and Max. Wt. Battery

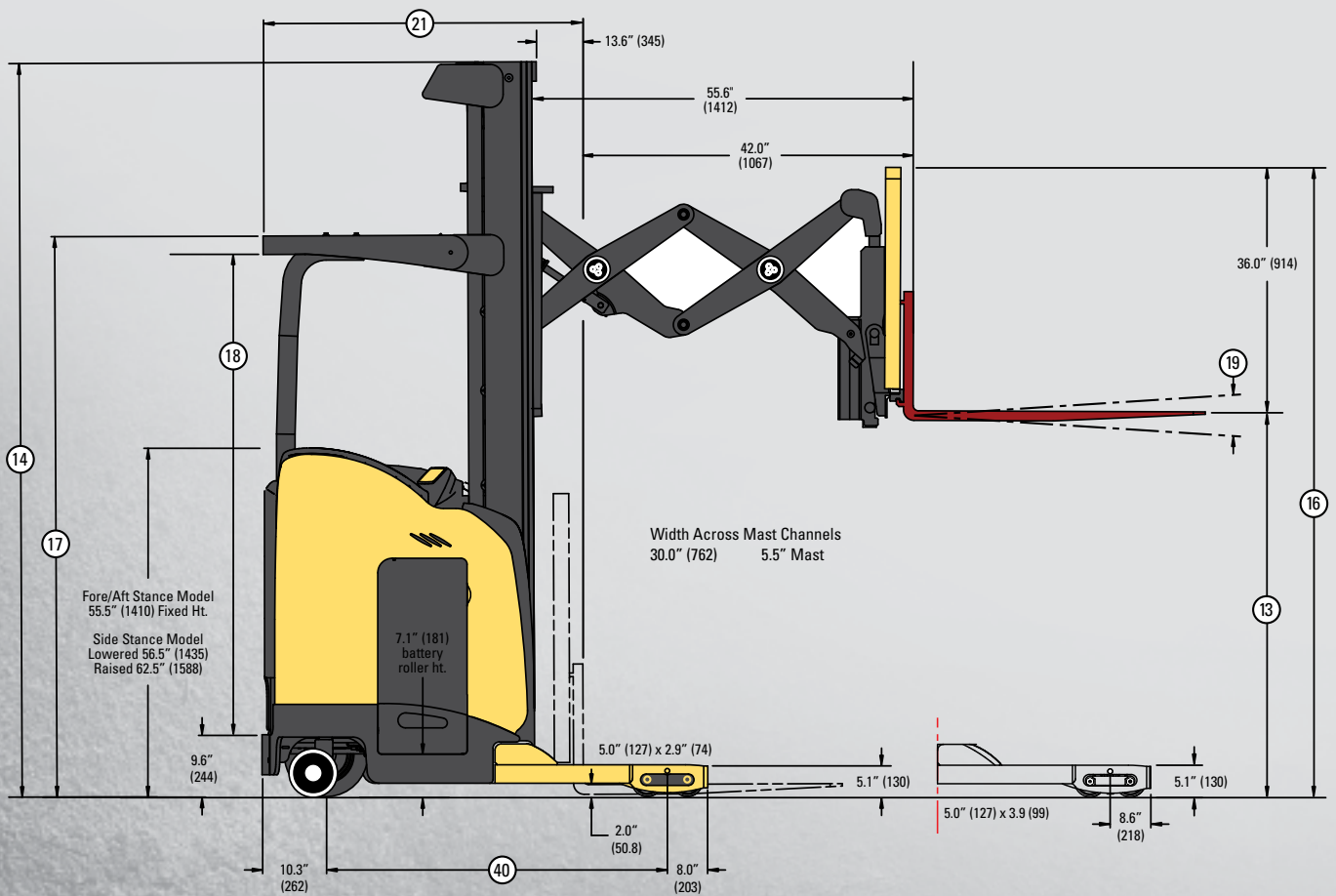
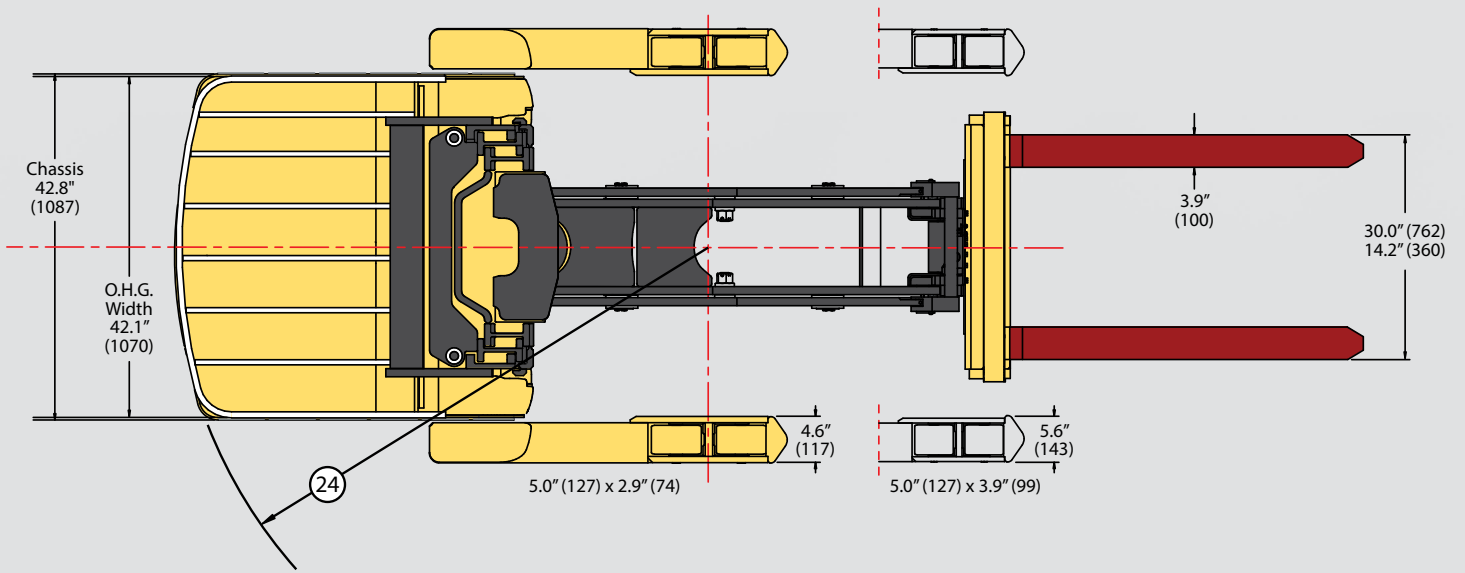
\*\*\* Add 1" for Sideshift

SWB = Short Wheel Base; LWB = Long Wheel Base

CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck.

† NOTE: Performance specifications / ratings are for truck equipped as described under Standard Equipment in this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Company Dealer.

# ➤ N30ZDRS2 DIMENSIONS



Circled dimensions correspond to the line numbers on the tabulated chart inside the Technical Guide. Dimensions are in inches (millimeters).

# N30ZDRS2 SPECIFICATIONS



GENERAL	1	Manufacturer Name		Hyster Company		Hyster Company	
	2	Model		N30ZDRS <sub>2</sub>		N30ZDRS <sub>2</sub>	
	3	Wheel Base Designation		LWB (Long Wheel Base)			
	4	Rated Capacity	lb. (kg)	3000 (1361)			
	5	Load Center, Distance	in. (mm)	24 (610)			
	6	Power Type - Electric, Diesel, LPG		Electric - 24 volt		Electric - 36 volt	
	7	Operator Type		Stand			
	8	Tire Type - Load/Caster/Drive		Poly / Poly / Rubber			
	9	Wheels, Number Load/Drive (x=driven)		4 / 2 (1x)			
WT.	10	Truck Weight, without Battery (approximate)	lb.	5250			
	11			Front	Rear	Front	Rear
DIMENSIONS	12	Axle Loading - Front/Rear with Assemble Retracted **	lb.	6300	4050	6300	4050
	13	Height, Standard Lift (TOF)	in. (mm)	See Mast Table			
	14	Height, Standard Mast Lowered (OALH)	in. (mm)				
	15	Height, Freelift (TOF)	in. (mm)				
	16	Height, Standard Mast Extended w/LBR	in. (mm)				
	17	Height, Top of OHG	in. (mm)				
	18	Height, Operator Clearance	in. (mm)				
	19	Mast Tilt Angle, Forward/Back	degrees°	3 / 4			
	20	Forks, Standard (Length x Width x Thickness)	in.	1.6 x 3.9 x 42			
	21	Headlength to Face of Forks - All Battery Compartments ***	in. (mm)	See Mast Table			
	22	Basearm OEC	in.	34" - 49" (1" increments)			
	23	Battery Compartment Size, 12.5" Battery Compartment - (LxWxH)	in.	N/A			
		Battery Compartment Size, 14.5" Battery Compartment - (LxWxH)	in.	39.0 x 14.5 x 31.5			
		Battery Compartment Size, 16.5" Battery Compartment - (LxWxH)	in.	39.0 x 16.5 x 31.5			
	24	Turning Radius - minimum outside, 12.5" Battery Compartment	in.	N/A			
		Turning Radius - minimum outside, 14.5" Battery Compartment	in.	70.74			
		Turning Radius - minimum outside, 16.5" Battery Compartment	in.	72.74			
	25	Aisle Width - Zero Clearance - Right Angle Stack	see chart	See "RAS" Table			
	PERFORMANCE	26	Stability - Comply with ANSI		Yes		
27		Travel Speed, Rearward (chassis first) - Empty/RL	mph	6.5/6.5		6.7/6.7	
28		Travel Speed, Forward (forks first) - Empty/RL	mph	6.5/6.5		6.7/6.7	
29		Lift Speeds, Empty	ft./min	60		75	
30		Lift Speeds, 2,000 lb.	ft./min	44		51	
31		Lift Speeds, 3,000 lb.	ft./min	40		47	
32		Lift Speeds, 3,500 lb.	ft./min	N/A			
33		Lift Speeds, 4,000 lb.	ft./min	N/A			
34		Lift Speeds, 4,500 lb.	ft./min	N/A			
35		Lowering Speeds, Empty	ft./min	85			
36		Lowering Speeds, RL	ft./min	85			
WHEELS & TIRES	37	Size - Front Load Wheels, Standard		5 x 2.9			
	38			Drive	Caster	Drive	Caster
	39	Size, Standard - Drive Tire/Dual Casters		12.0 x 5.5	7.9 x 2.2	12.0 x 5.5	7.9 x 2.2
	40	Wheelbase - 12.5" Battery Compartment	in.	N/A			
		Wheelbase - 14.5" Battery Compartment	in.	60.35			
		Wheelbase - 16.5" Battery Compartment	in.	62.36			
	41	Brakes, Method of Control - Service/Parking		Foot			
42	Brakes, Method of Operation - Service/Parking		Spring Apply / Electric Release				
ELECTRIC	43	Battery Type		Lead Acid			
	44	Traction Motor Rating (60 minute rating)	hp (kw)	7.5 (5.6)			
	45	Hoist Motor Rating (5 minute rating)	hp (kw)	14.8 (11.0)			
	46	Traction Motor Control Method		Transistor			
	47	Hoist Motor Control Method		Transistor			
	48	Number of Speeds		Infinitely Variable			

\*\* Static with Rated Load and Max. Wt. Battery

SWB = Short Wheel Base; LWB = Long Wheel Base

\*\*\* Add 1" for Sideshift

*CERTIFICATION: Hyster lift trucks meet the design and construction requirements of B56.1-1969, per OSHA Section 1910.178(a)(2), and also comply with the B56.1 revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck.*

*† NOTE: Performance specifications / ratings are for truck equipped as described under Standard Equipment in this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Company Dealer.*

# MAST DIMENSIONS AND BATTERY SPECIFICATIONS

MAST DIMENSIONS (5.5" STANDARD DUTY)									
Maximum Fork Height (TOF)	Overall Lowered Ht.	Overall Height (Mast Extended) Highest Point w/ 36" Load Backrest	Free-Lift (TOF)	Overhead Guard Height to Top	Operator Clearance	Head Length (Length to Face of Forks)			
						12.5", 14.5" B.C.		16.5" B.C.	
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	Single Reach	Double Reach	Single Reach	Double Reach
3-STAGE FULL FREE-LIFT (FFL) VISTA™ MAST									
191 (4851)	87 (2210)	230 (5842)	48 (1219)	86.5 (2197)	75.3 (1913)	52.12	58.02	54.12	60.02
203 (5156)	91 (2311)	242 (6147)	52 (1321)	90.5 (2299)	79.3 (2014)	52.12	58.02	54.12	60.02
212 (5385)	95 (2413)	251 (6375)	56 (1422)	94.5 (2400)	83.3 (2116)	52.12	58.02	54.12	60.02
227 (5766)	101 (2565)	266 (6756)	62 (1575)	91 (2311)	79.8 (2027)	52.12	58.02	54.12	60.02
242 (6147)	107 (2718)	281 (7137)	68 (1727)	91 (2311)	79.8 (2027)	52.12	58.02	54.12	60.02
251 (6375)	110 (2794)	290 (7366)	71 (1803)	91 (2311)	79.8 (2027)	52.12	58.02	54.12	60.02
272 (6909)	119 (3023)	311 (7899)	80 (2032)	91 (2311)	79.8 (2027)	52.12	58.02	54.12	60.02

## RIGHT ANGLE AISLE STACKING

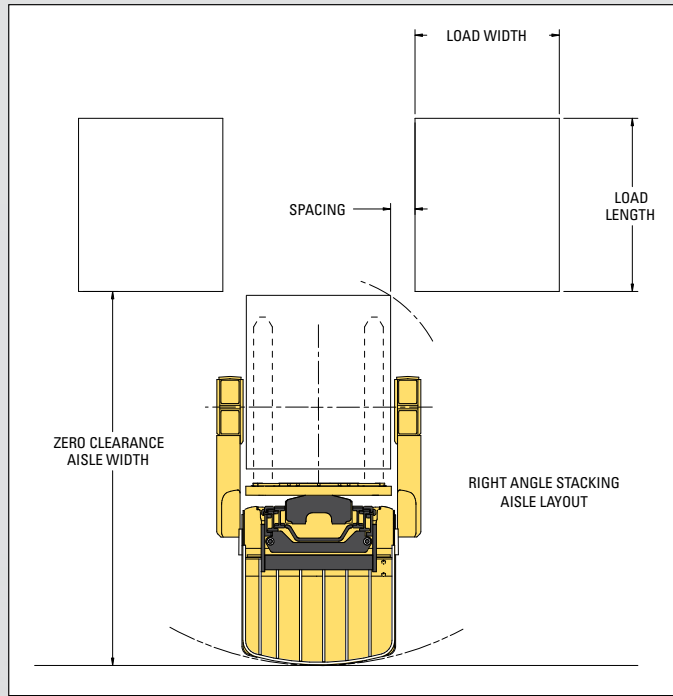
Note: These are "Zero Clearance" aisles and require an additional 6" or more to be added to provide for easier maneuvering.

N35/40ZRS <sub>2</sub>					
Truck with 12.5" or 14.5" Battery Compartment and 42" ID					
3 Stage - 4" Between Loads					
PALLET LENGTH (IN)	PALLET WIDTH (IN)				
		36	40	44	48
	36	85	85	85	85
	40	87	87	86	86
	44	92	91	91	90
48	96	96	95	95	

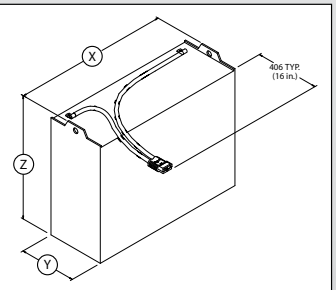
Add 2" for 16.5" Battery Compartment; Add 1" for Sideshift

N30ZDRS <sub>2</sub>					
Truck with 14.5" Battery Compartment and 42" ID					
3 Stage - 4" Between Loads					
PALLET LENGTH (IN)	PALLET WIDTH (IN)				
		36	40	44	48
	36	90	90	90	90
	40	91	91	91	91
	44	95	94	94	93
48	99	99	98	98	

Add 2" for 16.5" Battery Compartment; Sideshift is Standard on Double Reach



BATTERY AND COMPARTMENT SPECIFICATIONS											
Battery Specifications											
Battery Compartment Size	Battery Voltage	Maximum 6 Hr Rate		Battery Dimensions						Minimum Batt. Wt. lb (kg)	Maximum Batt. Wt. lb (kg)
		ah	kwh	"X" Max.		"Y" Max.		"Z" Max.			
				in	(mm)	in	(mm)	in	(mm)		
12.5"	24	1085	25.4	38.8	(985)	12.25	(311)	31.0	(788)	1400 (635)	1900 (862)
14.5"	24	1240	29.0	38.8	(985)	14.25	(362)	31.0	(788)	1600 (726)	2100 (953)
14.5"	36	775	27.2	38.8	(985)	14.25	(362)	31.0	(788)	1600 (726)	2100 (953)
16.5"	24	1395	32.6	38.8	(985)	16.25	(413)	31.0	(788)	1850 (839)	2350 (1066)
16.5"	36	930	32.6	38.8	(985)	16.25	(413)	31.0	(788)	1850 (839)	2350 (1066)



Battery Compartment is designed to accommodate standard wet cell batteries with fixed lifting eyes and no cover. Contact Applications Engineering to verify compatibility / fit when using maintenance free, covered or non-standard batteries. Battery Connector: 24V - Red; 36V - Gray; Position "B", Lead Length 16" Manufacturers Standard Cable Size Not to Exceed 4/0 AWG

## STANDARD EQUIPMENT

- Fore/Aft Stance Operator Controls
- 24 Volt Battery (Includes 350 Amp Red Battery Connector)
- 91" / 203" / 52" – 3 Stage Full Free Lift Mast
- Single Reach Mast (24" Extend) with 33.5" Wide Class II Hook Type Carriage (Standard on N35ZRS<sub>2</sub> and N40ZRS<sub>2</sub>)
- Double Reach Mast (42" Extend) with 33.5" Wide Class II Hook Type Carriage (Standard on N30ZDRS<sub>2</sub>)
- Forks: 1.8" x 3.9" (45 mm x 100 mm) 42" (1067 mm) – Class II Hook Type (Standard on N40ZRS<sub>2</sub>)
- Forks: 1.6" x 3.9" (40 mm x 100 mm) 42" (1067 mm) – Class II Hook Type (Standard on N30ZDRS<sub>2</sub> and N35ZRS<sub>2</sub>)
- 5" x 3.9" Poly Articulating Tandem Load Wheels - High Load Compound (Standard on N35ZRS<sub>2</sub> and N40ZRS<sub>2</sub>)
- 5" x 2.9" Poly Articulating Tandem Load Wheels - High Load Compound (Standard on N30ZDRS<sub>2</sub>)
- Integral Sideshift for Standard 33.5" Wide Carriage - 7" Total Sideshift Travel (Standard on N30ZDRS<sub>2</sub>)
- AC Traction, Lift / Lower and Steering
- Low Step Height
- Transistor Controller with Regenerative Braking
- i<sup>3</sup> Technology™
- Fully Proportional Lift/Lower Control
- Programmable Traction Speed and Acceleration
- Electric Power Steering
- Automatic Field Control and Auto Deceleration
- Rubber Drive Tire - 12.0" x 5.5"
- Dual Articulating Polyurethane Caster Wheels
- Power Disconnect
- Key Start
- 36" High Load Backrest Extension
- Sealed Battery Rollers
- Tilting Carriage (3° Fwd, 4° Back)
- Padded Operator Compartment
- Rear Post Operator Protection
- Operator's Overhead Guard
- Low Profile Anti-Fatigue Floormat
- Control Handle with Simultaneous Hydraulic Functions
- Graphic LCD Multifunction Smart Display with:
  - Back lighting
  - Bar Graphic Battery Discharge Indicator and Lift Interrupt
  - Hour Meter; Truck, Traction and Hoist Pump
  - Performance Mode selection and Indication with lift interrupt
  - LED Status Indicators with symbols
  - Programmable Performance Modes
  - User passwords and Operator logs with history
  - Steer Wheel Angle Graphic Indication
  - Truck Inspection Check List
  - Truck Speed Indication in MPH or KPH
- Electronic Horn
- Static Discharge Strap
- Operator's Manual
- UL Classification E

## OPTIONAL EQUIPMENT

- Side Stance Operator Controls
- Reverse Steering
- Steered Caster - Electric (for 36V only)
- Keyless Start
- 36 Volt Battery (Includes 350 Amp Gray Battery Connector)
- Battery Stand
- Battery Puller
- Cooler/Freezer Construction (0° F to 120° F)
- Various-Sized Load Wheels with Sealed Bearings
- Tapered Basearm
- Poly Siped Drive Tires
- Lift Limits
- Various Fork Lengths
- Fork Height Display
- 48" High Load Backrest Extension
- Audible Back-up and Motion Alarms
- Rear Operator Compartment Door
- Audible Motion Alarm
- Visual Amber Strobe Light
- Operator Desktop Light
- Dual Headlight
- Rear Worklight
- Operator Overhead Fan
- Load Weight Display
- Reduced Travel Speed with Carriage Extended
- RF Terminal Bracket
- RF Handheld Scanner Holder
- Impact Monitor
- Parts Manual

## CAPACITY

**Model N30ZDRS<sub>2</sub>:** 3,000 lbs. at 24.0" (1,361 kg at 610 mm) load center.

**Model N35ZRS<sub>2</sub>:** 3,500 lbs. at 24.0" (1,588 kg at 610 mm) load center.

**Model N40ZRS<sub>2</sub>:** 4,000 lbs. at 24.0" (1,814 kg at 610 mm) load center.


## RATED CAPACITIES ARE FOR TRUCKS EQUIPPED WITH:

- 3-Stage full free-lift (FFL) VISTA™ mast to maximum fork height of 203" (5156 mm)
- 33.5" (851 mm) wide hook-type carriage, single reach (24.0" extend) with 42.0" (1067 mm) long forks
- 33.5" (851 mm) wide hook-type carriage, double reach (42.0" extend) with 42.0" (1067 mm) long forks
- 36.0" high load backrest extension (LBE)
- 1.8" x 3.9" (45 mm x 100 mm) 42" (1067 mm) long forks [N40ZRS<sub>2</sub>]
- 1.6" x 3.9" (40 mm x 100 mm) 42" (1067 mm) long forks [N35ZRS<sub>2</sub> and N30ZDRS<sub>2</sub>]
- 5" x 3.9" poly articulating tandem load wheels [N35ZRS<sub>2</sub> and N40ZRS<sub>2</sub>]
- 5" x 2.9" poly articulating tandem load wheels [N30ZDRS<sub>2</sub>]



Hyster Company  
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Part No. N30-40ZRS/ZDRS/TG  
2/2017 Litho in U.S.A.

Visit us online at [www.hyster.com](http://www.hyster.com) or call us at **1-800-HYSTER-1**.

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