

Quality

Reliability

**Customer Service** 

## www.catlifttruck.com.sg

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08/14

# **PANTOGRAPH REACH TRUCKS** NR20-23 / ND18 SERIES CAPACITY 1.5 – 2.0 TON

CAT







# SURPASSYOUR IMIT CONFID FINIT

# Increase Efficiency. Double The Effectiveness.

Cat<sup>®</sup> NR20-23/ND18 pantograph reach truck series features industryleading lift speeds and high capacity retention – providing even greater efficiency at higher lift heights, larger run times, efficient handling and confident control.

#### **ADVANTAGES TO YOU:**

- 1500 2000 kg lift capacities
- Selection of single or double deep reach mast

PA

- Fastest lift speeds in the industry up to 830mm/s
- Robust mast design with lift heights up to 11 metres
- Advanced AC motor technology for lower energy consumption
- Longer run times

CAT

- Intuitive controls for efficient handling
- Stability-enhancing features for confident control
- Ergonomically-designed for greater comfort





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# **Setting New Standards**

Cat lift trucks are designed with advanced AC technology to provide unparalleled efficiency and maximum uptime. The NR20-23/ND18 reach trucks help you get the most out of your work day while lowering your total cost of ownership.

# **EFFICIENT AND RELIABLE DESIGN**

- while consuming less energy.
- overall maintenance costs.
- Advanced regenerative braking returns kinetic energy to the battery when the truck slows down or reverses. This results in longer run times and great efficiency.

- faster pickup and placement of loads.

# **CUSTOMIZE YOUR PERFORMANCE:**

Three programmable performance levels These pre-set performance levels provide greater flexibility and control, allowing you to adapt your settings for your specific application.

- Program 1 Ideal for transporting fragile goods or traveling in a congested environment.
- Program 2 Presets average speeds to maximize uptime.
- **Program 3** For use in applications that require maximum acceleration, throughput and travel/lift speeds.

\*Customized performance settings may be available. Please contact your local dealer for full details.

Advanced AC motors deliver higher performance levels,

• Sealed components offer greater durability and lower

#### **EXCELLENT LOAD HANDLING**

These pantograph reach trucks provide superior load handling at high lift heights up to 11 meters. • Load weight is balanced evenly with the **exclusive** ProTrac<sup>®</sup> suspended articulating axle for greater stability during cornering and when working at high lift heights. The rigid mast is designed with cushioning at all mast stage transitions for smooth operation.

Dual-articulating load wheels provide more contact with the floor for greater load force distribution.

• Industry-leading lift speeds, up to 0.84 m/s, result in

• Automatic speed reduction and automatic parking brake provide additional control during operation.



Compact motor compartment for easy service

# MADE FOR COMFÓRIC FOCUSED ON CONTROL

# Get More From Your Work Day

Designed with ergonomic features to maximize operator comfort and control, the NR20-23/ND18 series eases the job of working long shifts – while increasing productivity.







#### INCREASED CONTROL; SMOOTH, QUIET RIDE

Designed for a smooth, quiet ride, this reach truck series provides key features for greater comfort and less fatigue:

- Multifunction control handle allows for simultaneous control of travel and hydraulic functions
- Pantograph system features extensive cushioning for increased comfort and better protection of valuable loads

### **ENHANCED AWARENESS**

The **premium operator display panel** features key information in one easy-to-access location:

- Battery discharge and drive wheel direction indicators keep operators in the know about their lift truck's performance at all times
- The optional tilt position assist and lift height indicator help operators remain informed and in control

#### EXCELLENT VISIBILITY, GREATER CONFIDENCE

Greater all-around visibility increases operator confidence when lifting and maneuvering:

- The standard dual leg overhead guard offers enhanced side and rear visibility
- Wide channel spacing and stacked hydraulic hosing maximizes the forward view
- Overhead guard bars are strategically angled for excellent views of the load and mast during operation

**Compact, ergonomicallypositioned steering wheel** for precise and relaxed handling

### Ergo-cushioned floor mat reduces operator fatigue

Side stance, Low-entry step height for easy entry and exit

Soft rubber back, arm and knee cushions encircle operators in comfort

# For M The reach

The reach truck's spacious operator cabin is loaded with features to increase comfort and convenience. Less fatigue and easy handling make for a more productive work day.

Multifunction control handle allows for regulation of multiple truck functions in the palm of your hand

# **Ergonomically-Designed** For Maximum Comfort







Cat Lift Trucks is committed to providing industry-leading customer service, delivered by experienced and reliable material handling dealers. Cat Lift Trucks puts its customer's needs first, with one of the most comphrehensive customer support programs in the business.

# Dealers you can depend on

Cat<sup>®</sup> lift trucks dealers are unsurpassed, delivering superior customer service that sets us apart from the competition before, during and after the sale.

difficulties.

- Our dealers make available leading support programs with every new Cat lift truck you purchase, including:
- Genuine Cat lift truck OEM parts
- Planned Maintenance
- Rental fleet availability
- Convenient dealer branch locations

### PLANNED MAINTENANCE

Proper maintenance of your truck helps assure top performance over the long haul and helps extend truck longevity. That's why every Cat lift truck is backed by experienced and reliable dealers who make sure your truck is properly maintained.

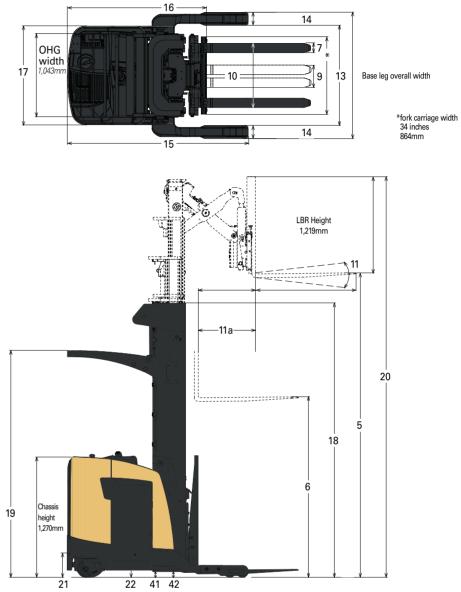
With Cat lift truck planned maintenance, you won't have to worry about scheduling maintenance or unexpected downtime. Regular planned maintenance calls are scheduled in advance to avoid interference with your operating schedules. Experienced Cat lift trucks service technicians will regularly perform all periodic maintenance including fluid and lubricant check for a predetermined rate. We'll even identify and fix potential problems before they become major

#### **Specifications**

Οþ	ecifications							1	
	Characteristics			NR	20	NR	23	NE	018
1	Туре			Single Reach		Single Reach		Double Deep Reach	
2	ower voltage		36		36		36		
3	Capacity at rated load center	lb	kg	4,000	1,810	4,500	2,040	3,500	1,580
4	Capacity load center – distance from fork face	in	mm	24	600	24	600	24	600
	Dimensions			NR		NR			018
5	Maximum fork height	in	mm	242	6,145	242	6,145	242	6,145
6	Free fork height	in	mm	59	1,500	59	1,500	59	1,500
7	Fork width	in	mm	3.9	100	3.9	100	3.9	100
8	Fork thickness	in	mm	1.6	40	1.6	40	1.4	35
9	Fork spacing - out-to-out minimum	in	mm	1.0	305	12	305	12	305
10	Fork spacing - out-to-out maximum <sup>1)</sup>	in	mm	31.5	802	31.5	802	31.5	802
10	Tilt angle - forward / backward		eg	3°/		3°/		3°	
	Reach stroke	in	mm	24	610	24	610	42	1,067
	Mast width <sup>2)</sup>	in	mm	32.2	816	32.2	816	32.2	816
13	Baseleg opening	in	mm	33 - 49	839 - 1,245	33 - 49	839 - 1,245	33 - 49	839 - 1,245
14	Baseleg width <sup>3)</sup>	in	mm	5.5	140	5.5	140	5	127
14	Overall length	in	mm	76.1	1,932	76.1	1,932	78.1	1,983
	Length to fork face	in		55	1,397	55	1,397	62.3	1,582
16	Overall chassis width		mm			41.5		41.5	
17		in in	mm	41.5	1,054	107	1,054	ł	1,054
18	Overall lowered height		mm	107	2,720		2,720	107	2,720
19	Overall height to top of overhead guard	in	mm	95	2,413	95	2,413	95	2,413
20	Overall height with extended mast	in	mm	290	7,370	290	7,370	290	7,370
21	Step height	in	mm	9.8	250	9.8	250	9.8	250
	Battery roller height	in	mm		178		178	I	178
23	Minimum outside turning radius	in	mm	70.74	1,797	70.74	1,797	70.74	1,797
24	Minimum aisle - 90° stack - zero clearance	in	mm	5.0	100	Please consult your (		50	100
25	Load wheel centerline 4)	in	mm	5.3	133	5.3	133	5.3	133
26	Performance		%	NR20 15.5		NR23 15.5		ND18 15.5	
20			/0	10	.o	10	.5	1 10	
27	Travel speed loaded / empty - standard 6)	mnh	km/h	75/75	121/121		121/121	75/75	
27	Travel speed loaded / empty – standard <sup>6)</sup>	mph	km/h	7.5/7.5	12.1/12.1	7.5 / 7.5	12.1 / 12.1	7.5/7.5	12.1 / 12.1
28	Travel speed loaded / empty – high performance <sup>6)</sup>	mph	km/h	7.5 / 8.0	12.1/12.9	7.5 / 7.5 7.5 / 8.0	12.1 / 12.9	7.5 / 8.0	12.1 / 12.1 12.1 / 12.9
28 29	Travel speed loaded / empty – high performance <sup>(i)</sup> Lift speed loaded / empty – standard	mph fpm	km/h m/s	7.5 / 8.0 75 / 120	12.1 / 12.9 0.38 / 0.60	7.5 / 7.5 7.5 / 8.0 75 / 120	12.1 / 12.9 0.38 / 0.60	7.5 / 8.0 75 / 120	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60
28 29 30	Travel speed loaded / empty – high performance ® Lift speed loaded / empty – standard Lift speed loaded / empty – high performance	mph fpm fpm	km/h m/s m/s	7.5/8.0 75/120 90/165	12.1/12.9 0.38/0.60 0.45/0.83	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83	7.5 / 8.0 75 / 120 90 /165	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83
28 29 30 31	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard	mph fpm fpm fpm	km/h m/s m/s m/s	7.5/8.0 75/120 90/165 110/110	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55	7.5 / 8.0 75 / 120 90 /165 110 / 110	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55
28 29 30 31 32	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance	mph fpm fpm fpm fpm	km/h m/s m/s m/s m/s	7.5/8.0 75/120 90/165 110/110 110/110	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55
28 29 30 31	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty - maximum	mph fpm fpm fpm fpm	km/h m/s m/s m/s	7.5/8.0 75/120 90/165 110/110 110/110 9/	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9	7.5/7.5 7.5/8.0 75/120 90/165 110/110 110/110 9/	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 9,	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9
28 29 30 31 32 33	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty - maximum Weight	mph fpm fpm fpm fpm	km/h m/s m/s m/s m/s	7.5/8.0 75/120 90/165 110/110 110/110 9/	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20	7.5/7.5 7.5/8.0 75/120 90/165 110/110 110/110 9/	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 23	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 9. NE	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9
28 29 30 31 32 33 33	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery	mph fpm fpm fpm fpm fpm	km/h m/s m/s m/s %	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 / NR 7,050	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 NE 7,400	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350
28 29 30 31 32 33 36 37	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty - maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum	mph fpm fpm fpm fpm	km/h m/s m/s m/s % kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050 2,000	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200 910	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 / <b>NR</b> 7,050 2,000	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 23 3,200 910	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 <b>NE</b> 7,400 2,000	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910
28 29 30 31 32 33 36 37	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty - maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum	mph fpm fpm fpm fpm fbm lb	km/h m/s m/s m/s %	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050 2,000 2,300	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 <b>20</b> 3,200 910 1,050	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 / NR 7,050 2,000 2,300	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9, NE 7,400 2,000 2,300	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 18 3,350 910 1,050
28 29 30 31 32 33 36 37 38	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty - maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b>	mph fpm fpm fpm fpm fbm lb	km/h m/s m/s m/s % kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b>	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200 910 1,050 20	7.5 / 7.5 7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 9 / NR 7,050 2,000 2,300 NR	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 110 / 110 7,400 2,000 2,300 NE	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050
28 29 30 31 32 33 36 37 38 39	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - loaded / empty – maximum Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit)	mph fpm fpm fpm fpm fpm lb lb lb	km/h m/s m/s m/s m/s % kg kg kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050 2,000 2,300 NR Sta	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         90 / 2,000         2,000         2,300         NR         Sta	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 110 / 110 9 NE 7,400 2,300 NE Sta	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018
28 29 30 31 32 33 36 37 38 37 38 39	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - loaded / empty – maximum Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase	mph fpm fpm fpm fpm lb lb lb	km/h m/s m/s m/s m/s % kg kg kg kg kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> Sta 61.5	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         91 / 110         110 / 110         91 / 110         110 / 110         91 / 110         110 / 110         91 / 110         110 / 110         91 / 110         91 / 110         110 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         92 / 110         93 / 110         94 / 110         95 / 110         96 / 110         97 / 110         98 / 110         99 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 110 / 110 7,400 2,000 2,300 NE Sta 61.5	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562
28 29 30 31 32 33 36 37 38 39 40 41	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - empty – without battery Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase	mph fpm fpm fpm lb lb lb lb	km/h m/s m/s m/s m/s % kg kg kg kg kg kg mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> Sta 61.5 2.4	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         910 / 165         7,050         2,000         2,300         NR         Sta         61.5         2.4	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 7,400 2,000 2,300 NE 5tr 61.5 2.4	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61
28 29 30 31 32 33 36 37 38 39 40 41 42	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty - maximum <b>Weight</b> Truck weight - loaded / empty - maximum <b>Battery</b> weight - empty - without battery Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast	mph fpm fpm fpm lb lb lb lb	km/h m/s m/s m/s m/s % kg kg kg kg kg kg mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> Sta 61.5 2.4 2.4 2.4	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         7,050         2,000         2,300         NR         Sta         61.5         2.4         2.4	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61	7.5 / 8.0 75 / 120 90 /165 110 / 110 110 / 110 7,400 2,000 2,300 NI Sta 61.5 2.4 2.4	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61
28 29 30 31 32 33 36 36 37 38 36 37 38 39 40 41 41 42	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty - maximum <b>Weight</b> Truck weight - loaded / empty - maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer	mph fpm fpm fpm fpm fpm fpm fb lb lb lb lb lb lb lb lb lb lb lb lb lb	km/h m/s m/s m/s m/s % % kg kg kg kg kg kg mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 2,300 <b>NR</b> Sta 61.5 2.4 2.4 2.4 2.4 13.5 x 5.5	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 61 343 x 140	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         90 / 2,000         2,000         2,300         NR         61.5         2.4         2.4         13.5 x 5.5	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 61 343 x 140	7.5 / 8.0 75 / 120 90 /165 110 / 110 10 / 110 7,400 2,000 2,300 NE 61.5 2.4 2.4 2.4 13.5 × 5.5	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 61 343 x 140
28 29 30 31 32 33 36 37 38 36 37 38 39 40 41 42 43	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - loaded / empty - maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster	mph fpm fpm fpm fpm lb lb lb lb	km/h m/s m/s m/s m/s % % kg kg kg kg kg kg kg mm mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> Sta 61.5 2.4 2.4 2.4 13.5 x 5.5 7 x 4	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 343 × 140 180 × 100	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         90 / 2000         2,000         2,300         NR         61.5         2.4         2.4         13.5 x 5.5         7 x 4	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 61 343 × 140 180 × 100	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 NI 5tr 61.5 2.4 2.4 2.4 13.5 × 5.5 7 × 4	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 343 x 140 180 x 100
28 29 30 31 32 33 36 37 38 36 37 38 39 40 41 42 43 44	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - load wheels	mph fpm fpm fpm fpm fpm fpm fb lb lb lb lb lb lb lb lb lb lb lb lb lb	km/h m/s m/s m/s m/s % % kg kg kg kg kg kg mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> Sta 61.5 2.4 2.4 2.4 13.5 x 5.5 7 x 4 5 x 3.62	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 343 × 140 180 × 100 127 × 92	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         110 / 10         9 /         7.050         2,000         2,300         NR         Sta         61.5         2.4         2.4         2.4         2.4         5 x 3.62	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 2,000 2,000 2,300 NI 5tr 61.5 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 343 x 140 180 x 100 127 x 92
28 29 30 31 32 33 36 37 38 36 37 38 39 40 41 42 43 44	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - load wheels Park brake	mph fpm fpm fpm fpm lb lb lb lb	km/h m/s m/s m/s m/s % % kg kg kg kg kg kg kg mm mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050 2,000 2,300 NR 61.5 2,4 61.5 2.4 2,4 13.5 x 5.5 7 x 4 5 x 3.62 Electromage	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 20 20 20 20 20 20 20 20 20 20	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 10         910 / 165         110 / 110         110 / 110         91 / 10         92 / 000         2,000         2,300         NR         Sta         61.5         2.4         2.4         2.4         2.4         2.4         2.4         5.5         7 x 4         5 x 3.62         Electromage	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 x 140 180 x 100 127 x 92 inetic Disc	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 2,000 2,300 NE 61.5 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electroma	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 343 x 140 180 x 100 127 x 92 gnetic Disc
28 29 30 31 32 33 36 37 38 37 38 39 40 41 41 42 43 44 45 46	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b>	mph fpm fpm fpm fpm lb lb lb lb	km/h m/s m/s m/s m/s % % kg kg kg kg kg kg kg mm mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ NR 7,050 2,000 2,300 NR 61.5 2.4 61.5 2.4 2.4 13.5 x 5.5 7 x 4 5 x 3.62 Electromage	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200 910 1,050 20 1,050 20 1,050 20 61 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc 20	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         91 / 110         110 / 110         91 / 110         110 / 110         91 / 110         91 / 110         92 / 000         2,000         2,300         NR         61.5         2.4         2.4         2.4         2.4         2.4         2.4         5 × 3.62         Electromage	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 pnetic Disc 23	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 NE 61.5 2.4 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electrometer	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc 018
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 45 46	Travel speed loaded / empty – high performance <sup>®)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – standard Lower speed loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - loaded / empty – maximum <b>Battery</b> weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b> Traction / pump / steer motor type	mph fpm fpm fpm lb lb lb lb lb in in in in in in	km/h m/s m/s m/s m/s % kg kg kg kg kg kg kg mm mm mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> 61.5 2.4 61.5 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electromage <b>NR</b>	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc 20 uction	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         91 / 110         110 / 110         91 / 110         110 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110         91 / 110      <	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 inetic Disc 23 uction	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 NE 61.5 2.4 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electromatic	12.1 / 12.1 12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 0.55 / 0.55 / 9 018 3,350 910 1,050 018 and 1,562 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc 018 duction
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 45 46 45 46	Travel speed loaded / empty – high performance <sup>©)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum Weight Truck weight - loaded / empty – maximum Battery weight - minimum Battery weight - minimum Chassis Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - load wheels Park brake Motors / Battery Traction / pump / steer motor type Traction motor output (60 minute rating) – standard	mph fpm fpm fpm fpm lb lb lb lb lb in in in in in in hp	km/h m/s m/s m/s m/s % kg kg kg kg kg kg kg mm mm mm mm mm mm	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> 61.5 2.4 61.5 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electromage <b>NR</b> 61.5 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electromage	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 343 x 140 180 x 100 127 x 92 gnetic Disc 20 uction 4.5	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         910 / 165         110 / 110         910 / 165         110 / 110         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100         910 / 100 / 100	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 metic Disc 23 uction 4.5	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 <b>NE</b> 61.5 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electroma <b>NE</b> 6.0	12.1 / 12.1 $12.1 / 12.9$ $0.38 / 0.60$ $0.45 / 0.83$ $0.55 / 0.55$ $0.55 / 0.55$ $0.55 / 0.55$ $0.9$ <b>D18</b> $3,350$ 910 1,050 <b>D18</b> and $1,562$ 61 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc <b>D18</b> stuction 4.5
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 43 44 45 46 45 46	Travel speed loaded / empty – high performance <sup>©</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b> Traction / pump / steer motor type Traction motor output (60 minute rating) – standard Traction motor output (60 minute rating) – high performance	mph fpm fpm fpm fpm fpm fpm fpm fpm fpm fpm	km/h m/s m/s m/s m/s m/s kg kg kg kg kg kg kg kg kg kg kg kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ <b>NR</b> 7,050 2,000 2,300 <b>NR</b> 61.5 2.4 61.5 2.4 2.4 13.5 x 5.5 7 x 4 5 x 3.62 Electromage <b>NR</b> 6.0 9.2	12.1/12.9 0.38/0.60 0.45/0.83 0.55/0.55 9 20 3,200 910 1,050 20 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 pnetic Disc 20 uction 4.5 6.9	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         910 / 165         110 / 110         910 / 165         110 / 110         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165         910 / 165	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 metic Disc 23 uction 4.5 6.9	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 8 61.5 2.4 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electroma NE 6.0 9.2	12.1 / 12.1 $12.1 / 12.9$ $0.38 / 0.60$ $0.45 / 0.83$ $0.55 / 0.55$ $0.55 / 0.55$ $0.55 / 0.55$ $0.9$ <b>D18</b> $3,350$ 910 1,050 <b>D18</b> and $1,562$ 61 61 343 × 140 180 × 100 127 × 92 gnetic Disc <b>D18</b> duction $4.5$ 6.9
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 45 46 45 46 45 46 45 46 45 50	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - maximum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b> Traction / pump / steer motor type Traction motor output (60 minute rating) – standard Traction motor output (60 minute rating) – high performance Pump motor output (5 minute rating)	mph fpm fpm fpm fpm fpm fpm fpm fpm fpm fpm	km/h         m/s         kg         kg         mm         mm         mm         mm         mm         kW         kW         kW         kW	7.5/8.0 75/120 90/165 110/110 110/110 9/ 7,050 2,000 2,300 8 61.5 2.4 2.4 2.4 13.5 x 5.5 7 x 4 5 x 3.62 Electromag AC Ind 6.0 9.2 27.2	$\begin{array}{c} 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 9 \\ \hline \hline \\ 20 \\ 20$	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         910 / 165         110 / 110         910 / 165         110 / 110         910 / 165         100 / 100         910 / 165         100 / 100         910 / 165         910 / 100         910 / 165         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 343 × 140 180 × 100 127 × 92 metic Disc 23 uction 4.5 6.9 20	7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         90 / 65         7,400         2,000         2,300         NE         61.5         2.4         2.4         2.4         2.4         5 x 3.62         Electroma         AC Inc         6.0         9.2         27.2	$\begin{array}{c} 12.1 / 12.1 \\ 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.9 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,562 \\ 61 \\ 61 \\ 343 \times 140 \\ 180 \times 100 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ 120 \\ 120 \\ 127 \times 92 \\ 120 \\ 127 \times 92 \\ 120 \\ 120 \\ 127 \times 92 \\ 120 \\ 120$
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 45 46 45 46 45 46 45 46 50 50 51	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - loaded / empty – maximum <b>Battery</b> weight - minimum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b> Traction motor output (60 minute rating) – standard Traction motor output (60 minute rating) Steer motor output (60 minute rating)	mph fpm fpm fpm fpm fpm fpm fpm fpm fpm fpm	km/h m/s m/s m/s m/s m/s kg kg kg kg kg kg kg kg kg kg kg kg kg	7.5/8.0 75/120 90/165 110/110 110/110 9/ 7,050 2,000 2,300 NR 5ta 61.5 2,4 2,4 2,4 13.5 x 5.5 7 x 4 5 x 3.62 Electromag AC Ind 6.0 9.2 2,7.2 1.0	$\begin{array}{c} 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 9 \end{array}$ 20 20 3,200 910 1,050 20 nd 1,050 20 nd 1,562 61 61 61 343 x 140 180 x 100 127 x 92 gnetic Disc 20 uction 4.5 6.9 20 0.7	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         91 / 100         110 / 110         91 / 100         110 / 110         91 / 100         110 / 110         91 / 100         110 / 110         91 / 100         110 / 110         92         13.5 x 5.5         7 x 4         5 x 3.62         Electromage         AC Ind         6.0         9.2         27.2         1.0	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 61 343 x 140 180 x 100 127 x 92 untic Disc 23 uution 4.5 6.9 20 0.7	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 8 61.5 2.4 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electroma AC Inc 6.0 9.2 27.2 1.0	$\begin{array}{c} 12.1 / 12.1 \\ 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.9 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 01 \\ 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,050 \\ 1,050 \\ \hline 010 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\ 1,050 \\$
28 29 30 31 32 33 36 37 38 39 40 41 41 42 43 44 45 46 45 46 45 46 45 46 45 50 51 52	Travel speed loaded / empty – high performance <sup>6)</sup> Lift speed loaded / empty – standard Lift speed loaded / empty – high performance Lower speed loaded / empty – high performance Gradeability - loaded / empty – high performance Gradeability - loaded / empty – maximum <b>Weight</b> Truck weight - empty - without battery Battery weight - maximum Battery weight - maximum <b>Chassis</b> Chassis type (stand/sit) Wheelbase Ground clearance - center of wheelbase Ground clearance - lowest point at mast Tire size - steer Tire size - caster Tire size - caster Tire size - load wheels Park brake <b>Motors / Battery</b> Traction / pump / steer motor type Traction motor output (60 minute rating) – standard Traction motor output (60 minute rating) – high performance Pump motor output (5 minute rating)	mph fpm fpm fpm fpm fpm fpm fpm fpm fpm fpm	km/h         m/s         kg         kg         mm         mm         mm         mm         mm         kW         kW         kW         kW	7.5/8.0 75/120 90/165 110/110 110/110 9/ 7,050 2,000 2,300 8 61.5 2.4 2.4 2.4 13.5 x 5.5 7 x 4 5 x 3.62 Electromag AC Ind 6.0 9.2 27.2	$\begin{array}{c} 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 9 \end{array}$ 20 20 3,200 910 1,050 20 nd 1,050 20 nd 1,562 61 61 61 343 x 140 180 x 100 127 x 92 gnetic Disc 20 uction 4.5 6.9 20 0.7	7.5 / 7.5         7.5 / 8.0         75 / 120         90 / 165         110 / 110         110 / 110         110 / 110         110 / 110         90 / 65         110 / 110         110 / 110         910 / 165         110 / 110         910 / 165         110 / 110         910 / 165         100 / 100         910 / 165         100 / 100         910 / 165         910 / 100         910 / 165         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100         910 / 100	12.1 / 12.9 0.38 / 0.60 0.45 / 0.83 0.55 / 0.55 9 23 3,200 910 1,050 23 nd 1,562 61 61 61 343 x 140 180 x 100 127 x 92 untic Disc 23 uution 4.5 6.9 20 0.7	7.5 / 8.0 75 / 120 90 / 165 110 / 110 110 / 110 7,400 2,000 2,300 8 61.5 2.4 2.4 2.4 2.4 13.5 × 5.5 7 × 4 5 × 3.62 Electroma AC Inc 6.0 9.2 27.2 1.0	$\begin{array}{c} 12.1 / 12.1 \\ 12.1 / 12.9 \\ 0.38 / 0.60 \\ 0.45 / 0.83 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.55 / 0.55 \\ 0.9 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 3,350 \\ 910 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,050 \\ \hline 018 \\ \hline 010 \\ 1,562 \\ 61 \\ 61 \\ 343 \times 140 \\ 180 \times 100 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 018 \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ \text{gnetic Disc} \\ \hline 010 \\ 127 \times 92 \\ 120 \\ 120 \\ 127 \times 92 \\ 120 \\ 127 \times 92 \\ 120 \\ 120 \\ 127 \times 92 \\ 120 \\ 120$

# NR20-NR23/ND18





 Maximum fork spacing 27.5 inches (698 mm) with 33 inch BLO.
 Out-to-out dimension across mast outer channels.
 5.9 inches (150 mm) on single reach trucks with MFH over 332 inches (8430 mm).
 7.3 inches (186 mm) on single reach trucks with mast MFH above 332 inches (8430 mm).
 Reduce grade clearance by 1.5% with 18.25 inch (463 mm) battery compartment length or 21.25 inch (539 mm) battery compartment length vs. 16.25 inch (412 mm) length.
 Maximum speed attainable, after break-in period, varies with truck travel direction, weight, rolling resistance, mast battery compartment developed battery compartment. height, options and battery condition.
 21.25 inch (539 mm) battery compartment length standard on chassis with MFH over 332 inches (8430 mm).