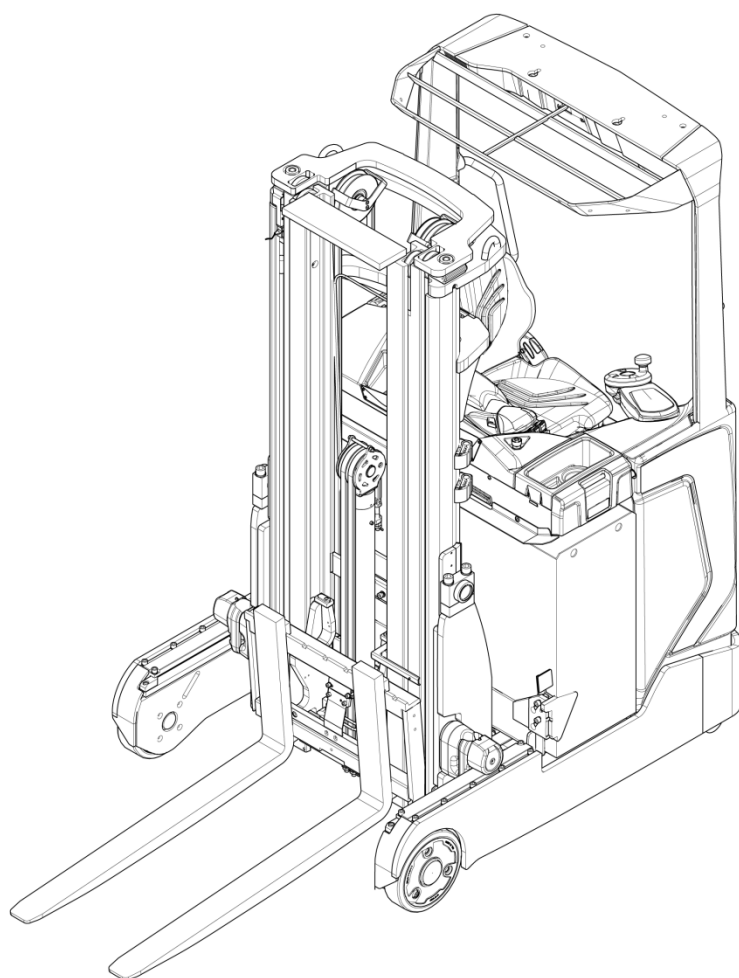


SPECIFICATION MANUAL

NR14-25N2(S)(C)(H)(X)



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1 Standard configuration

1.1 NR14N2(S)(HS) standard configuration

		NR14N2S	NR14N2HS
Nominal capacity	kg	1,400	1,400
Load centre	mm	600	600
Voltage	V	48	48
Maximum battery capacity	Ah	465 - 775	620 - 775
Overhead guard height	mm	2,200	2,200
Load wheel dimensions	pcs / mm	2 / 285 x 75	2 / 285 x 75
Traction wheel dimensions	pcs / mm	1 / 360 x 140	1 / 360 x 140
Chassis width	mm	1,270	1,270

Supplied with:

All motors AC-motors

Finger-tip hydraulics

Stepless control for traction and lift motor

Direction control by hand and foot

PowerRamic triplex mast

Regenerative braking

Integrated side shift (+/- 75 mm) and tilting fork carriage (2/4 degrees)

Unlimited 360 degree electric steering with full adjustable steering console

Control panel includes:

- Hour-meter / BDI
- Driving direction display
- Driving speed display
- Fault diagnostic
- Working hours
- Indicator for maintenance need
- Time & date display
- Lift height indicator (above free lift)

Powerthane wheels on NR14N2Smodel

Vulkollan wheels on NR14N2HS model

Drive speed limitation according to lift height

Ignition key start

Load backrest (H = 850 mm)

Load wheel brakes on Heavy Duty X-model

Temperature control in traction, pump motors and in controllers

Seat Grammer MSG20

Distance between load legs 900 mm (b4), suitable for EUR pallet (800 x 1,200 mm lengthwise) handling

1.2 NR16N2(C)(HC) standard configuration

		NR16N2C	NR16N2HC
Nominal capacity	kg	1,600	1,600
Load centre	mm	600	600
Voltage	V	48	48
Maximum battery capacity	Ah	465 - 620	620
Overhead guard height	mm	2,200	2,200
Load wheel dimensions	pcs / mm	2 / 285 x 75	2 / 285 x 75
Traction wheel dimensions	pcs / mm	1 / 360 x 140	1 / 360 x 140
Chassis width	mm	1,100	1,100

Supplied with:

All motors AC-motors

Finger-tip hydraulics

Stepless control for traction and lift motor

Direction control by hand and foot

PowerRamic triplex mast

Regenerative braking

Integrated side shift (+/- 75 mm) and tilting fork carriage (2/4 degrees)

Unlimited 360 degree electric steering with full adjustable steering console

Control panel includes:

- Hour-meter / BDI
- Driving direction display
- Driving speed display
- Fault diagnostic
- Working hours
- Indicator for maintenance need
- Time & date display
- Lift height indicator (above free lift)

Powerthane wheels on NR16N2C model

Vulkollan wheels on NR16N2HC model

Drive speed limitation according to lift height

Ignition key start

Load backrest (H = 850 mm)

Load wheel brakes on Heavy Duty X-model

Temperature control in traction, pump motors and in controllers

Seat Grammer MSG20

Distance between load legs 900 mm (b4), suitable for EUR pallet (800 x 1,200 mm lengthwise) handling

1.3 NR16N2(H)(S)(HS) standard configuration

		NR16N2	NR16N2H	NR16N2S	NR16N2HS
Nominal capacity	kg	1,600	1,600	1,600	1,600
Load centre	mm	600	600	600	600
Voltage	V	48	48	48	48
Maximum battery capacity	Ah	465 - 775	620 - 775	465 - 775	620 - 775
Overhead guard height	mm	2,200	2,200	2,200	2,200
Load wheel dimensions	pcs / mm	2 / 285 x 130	2 / 285 x 130	2 / 285 x 75	2 / 285 x 75
Traction wheel dimensions	pcs / mm	1 / 360 x 140	1 / 360 x 140	1 / 360 x 140	1 / 360 x 140
Chassis width	mm	1,270	1,270	1,270	1,270

Supplied with:

All motors AC-motors

Stepless control for traction and lift motor

Direction control by hand and foot

PowerRamic triplex mast

Regenerative braking

Powerthane wheels on NR16N2 and NR16N2S models

Integrated side shift (+/- 75 mm) and tilting fork carriage (2/4 degrees) el

Unlimited 360 degree electric steering with full adjustable steering console

Control panel includes:

- Hour-meter / BDI
- Driving direction display
- Driving speed display
- Fault diagnostic
- Working hours
- Indicator for maintenance need
- Time & date display
- Lift height indicator (above free lift)

Finger-tip hydraulics

Drive speed limitation according to lift height

Ignition key start

Load backrest (H = 850 mm)

Load wheel brakes on Heavy Duty X-mod

Vulkollan wheels on NR16N2H and NR16N2HS models

Temperature control in traction, pump motors and in controllers

Seat Grammer MSG20

NR16N2, NR16N2H: Distance between load legs 900 mm (b4), suitable for EUR pallet (800 x 1,200 mm lengthwise) handling

NR16N2S, NR16N2HS: Distance between load legs 1,070mm (b4), suitable for UK pallet (1,000 x 1,200 mm lengthwise) and EUR pallet (800 x 1,200 mm lengthwise) handling

1.4 NR20N2(H)(X), NR25N2X standard configuration

		NR20N2H	NR20N2X	NR25N2X
Nominal capacity	kg	2,000	2,000	2,500
Load centre	mm	600	600	600
Voltage	V	48	48	48
Maximum battery capacity	Ah	620 - 930	620 - 930	620 - 930
Overhead guard height	mm	2,200	2,200	2,200
Load wheel dimensions	pcs / mm	2 / 285 x 130	2 / 285 x 130	2 / 285 x 130
Traction wheel dimensions	pcs / mm	1 / 360 x 140	1 / 360 x 140	1 / 360 x 140
Chassis width	mm	1,270	1,470	1,470

Supplied with:

All motors AC-motors

Stepless control for traction and lift motor

Direction control by hand and foot

Regenerative braking

PowerRamic triplex mast

Vulkollan traction and load wheels

Integrated side shift (+/- 75 mm) and tilting fork carriage (2/4 degrees) el

Unlimited 360 degree electric steering with full adjustable steering console

Finger-tip hydraulics

Drive speed limitation according to lift height

Ignition key start

Load wheel brakes on Heavy Duty X-mod

Load backrest (H = 850 mm)

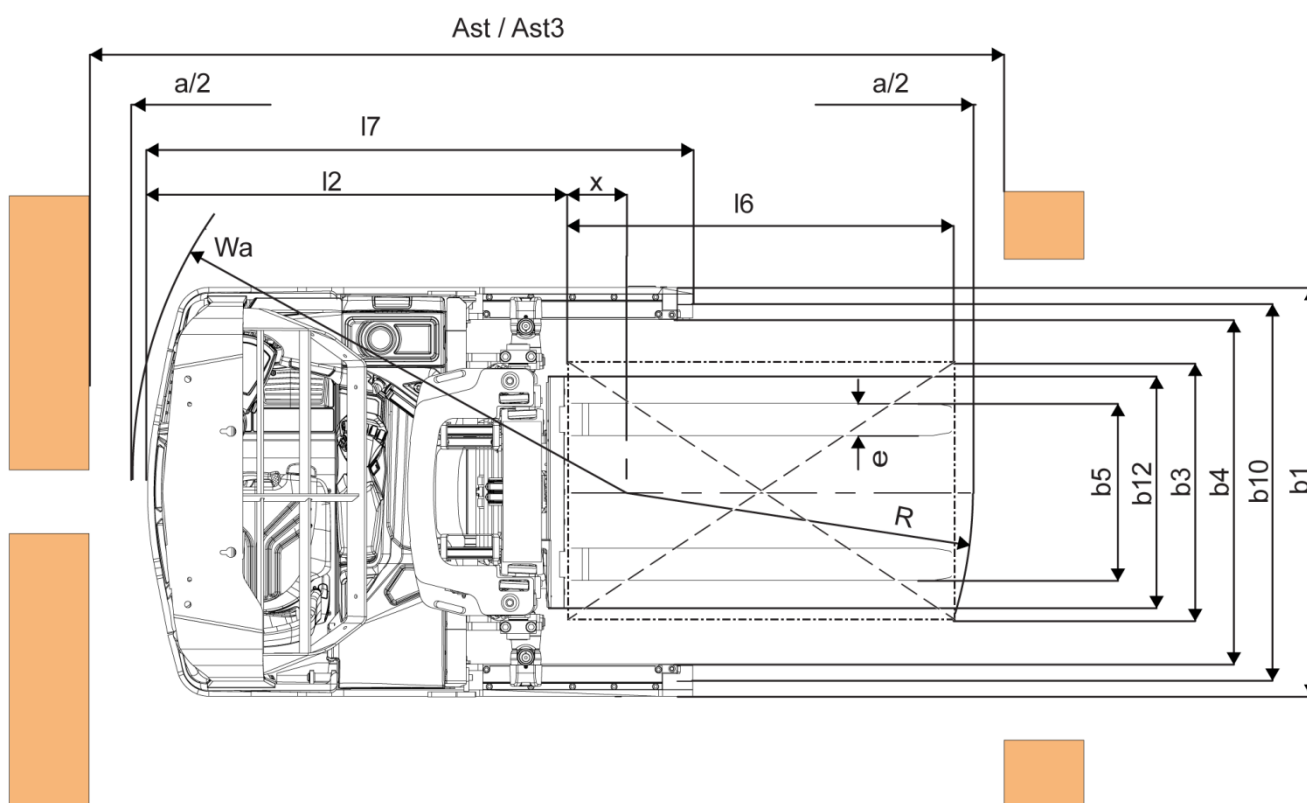
Temperature control in traction, pump motors and in controllers

Seat Grammer MSG20

Distance between load legs 1,070 mm (b4), suitable for UK pallet (1,000 x 1,200 mm lengthwise) and EUR pallet (800 x 1,200mm lengthwise) handling

Control panel includes:

- Hour-meter / BDI
- Driving direction display
- Driving speed display
- Fault diagnostic
- Working hours
- Indicator for maintenance need
- Time & date display
- Lift height indicator (above free lift)



1.5.1 NR14N2S, NR14N2HS, NR16N2S, NR16N2HS and NR16N2

1 IDENTIFICATION							
1.1	Manufacturer		CAT	CAT	CAT	CAT	CAT
1.2	Manufacturer's type designation		NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2
1.3	Drive		Electric	Electric	Electric	Electric	Electric
1.4	Operator type		Seated	Seated	Seated	Seated	Seated
1.5	Rated capacity / rated load	Q [t]	1.4	1.4	1.6	1.6	1.6
1.6	Load center distance	c [mm]	600	600	600	600	600
1.8	Load distance, centre of drive load to fork	x [mm]	281	199	281	199	331
1.9	Wheel base	y [mm]	1,300	1,300	1,300	1,300	1,350
2 WEIGHTS							
2.1*	Service weight	[kg]	4,770	5,497	4,991	5,697	5,245
2.3	Axle loading unladen, with battery, front / rear	[kg]	1,925 / 1,445	2,208 / 1,889	1,925 / 1,466	2,208 / 1,889	1,995 / 1,650
2.4	Axle loading laden, forks advanced, front / rear	[kg]	605 / 4,165	704 / 4,793	590 / 4,402	704 / 4,793	616 / 4,628

			NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2
2.5	Axle loading laden, forks retracted, front / rear	[kg]	1,590 / 3,180	1,873 / 3,624	1,570 / 3,422	1,873 / 3,624	1,626 / 3,618
3	WHEELS AND TYRES						
3.1	Tyres, material (R=rubber / U=Urethane / Vul=Vulkollan / P=Powerthane), drive / load side		P	Vul	P	Vul	P
3.2	Tyre size, front	[mm]	Ø360*140	Ø360*140	Ø360*140	Ø360*140	Ø360*140
3.3	Tyre size, rear	[mm]	Ø285x75	Ø285x75	Ø285x75	Ø285x75	Ø285*130
3.5	Wheels, number front / rear (x = driven wheels)		2/1X	2/1X	2/1X	2/1X	2/1X
3.7	Track width, rear	b10 [mm]	1,195	1,195	1,195	1,195	1,140
4	DIMENSIONS						
4.1	Tilt of fork carriage, forward / backward	[]	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4
4.2	Height, mast lowered	h1 [mm]	2,710	3,785	2,710	3,785	2,710
4.3	Free lift	h2 [mm]	2,060	3,135	2,060	3,135	2,060
4.4	Lift	h3 [mm]	6,300	9,000	6,300	9,000	6,300
4.5	Height, mast extended	h4 [mm]	7,130	9,830	7,130	9,830	7,130
4.7	Height of overhead guard	h6 [mm]	2,200	2,200	2,200	2,200	2,200
4.8	Seat height relating to SIP**	h7 [mm]	1,040	1,040	1,040	1,040	1,040
4.10	Height of load legs	h8 [mm]	360	360	360	360	360
4.15	Fork height, lowered	h13 [mm]	85	85	85	85	85
4.19	Overall length	l1 [mm]	2,404	2,486	2,404	2,486	2,404
4.20	Length to face of forks	l2 [mm]	1,254	1,336	1,254	1,336	1,254
4.21	Overall width	b1/b2 [mm]	1,270	1,270	1,270	1,270	1,270
4.22	Fork dimensions DIN ISO 2331	s/e/l [mm]	40 / 100 / 1,150	40 / 100 / 1,150	40 / 100 / 1,150	40 / 100 / 1,150	40 / 100 / 1,150
4.23	Fork carriage ISO 2328 class/type A, B		2A	2A	2A	2A	2A
4.24	Fork carriage width	b3 [mm]	720	720	720	720	720
4.25	Distance between fork arms	b5 [mm]	315 - 710	315 - 710	315 - 710	315 - 710	315 - 710
4.26	Distance between load legs	b4 [mm]	1,070	1,070	1,070	1,070	900
4.28	Reach distance	l4 [mm]	463	381	463	381	513
4.32	Ground clearance, center of wheel base	m2 [mm]	75	75	75	75	75

			NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2
4.33	Aisle width for pallets 1,000x1,200 mm, crossways	Ast [mm]	2,684	2,748	2,684	2,748	2,693
4.34	Aisle width for pallets 800x1,200mm, lengthwise	Ast [mm]	2,750	2,825	2,750	2,825	2,751
4.35	Turning radius	Wa [mm]	1,541	1,541	1,541	1,541	1,629
4.37	Length across load legs	l7 [mm]	1,693	1,693	1,693	1,693	1,793
5	PERFORMANCE						
5.1	Travel speed, laden / unladen	[km/h]	12 / 12	12 / 12	12 / 12	12 / 12	12 / 12
5.2	Lift speed, laden / unladen	[m/s]	0.4 / 0.65	0.4 / 0.7	0.4 / 0.65	0.4 / 0.7	0.4 / 0.65
5.3	Lowering speed, laden / unladen	[m/s]	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5
5.4	Reaching speed, laden / unladen	[m/s]	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2
5.8	Maximum gradeability, laden / unladen	[%]	10 / 15	10 / 15	10 / 15	10 / 15	10 / 15
5.9	Acceleration time, laden / unladen	[s]	5.0 / 4.5	4.8 / 4.4	5.0 / 4.5	4.8 / 4.4	5.0 / 4.5
5.10	Service brake		Electric	Electric	Electric	Electric	Electric
6	MOTORS						
6.1	Traction motor rating S2 60%	[kW]	7.5	7.5	7.5	7.5	7.5
6.2	Lift motor rating S3 15%	[kW]	10	14	10	14	10
6.4	Battery voltage / nominal capacity (5 h)	[V/Ah]	48 / 465, 620, 775	48 / 620, 775	48 / 465, 620, 775	48 / 620, 775	48 / 465, 620, 775
6.5	Battery weight	[kg]	700, 900, 1,100	900, 1,100	700, 900, 1,100	900, 1,100	700, 900, 1,100
8.1	Type of drive unit		Stepless	Stepless	Stepless	Stepless	Stepless
10	OTHER						
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work L _{pAZ} ***	[dB (A)]	66	63	66	63	66
10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 487, drive / lift / idle L _{WAZ} ***	[dB (A)]	58 / 73 / 50	61 / 69 / 48	58 / 73 / 50	61 / 69 / 48	58 / 73 / 50
	Whole-body vibration according to EN 13 059:2002+A1:2008****	[m/s ²]	0.31	0.31	0.31	0.31	0.31

			NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2
	Hand-arm vibration according to EN 13 059:2002+A1:2008****	[m/s ²]	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Manufacturer reserves the right to make technical changes.							
* Values of the table according to the smallest size of batteries.							
** Measured with standard seat.							
*** Inaccuracy of 4 dB (A).							
*** Body tremble measured with air pressured seat.							

1.5.2 NR16N2H, NR16N2C, NR16N2HC, NR20N2H, NR20N2X and NR25N2X

1	IDENTIFICATION							
1.1	Manufacturer		CAT	CAT	CAT	CAT	CAT	CAT
1.2	Manufacturer's type designation		NR16N2H	NR16N2C	NR16N2HC	NR20N2H	NR20N2X	NR25N2X
1.3	Drive		Electric	Electric	Electric	Electric	Electric	Electric
1.4	Operator type		Seated	Seated	Seated	Seated	Seated	Seated
1.5	Rated capacity / rated load	Q [t]	1.6	1.6	1.6	2.0	2.0	2.5
1.6	Load center distance	c [mm]	600	600	600	600	600	600
1.8	Load distance, centre of drive load to fork	x [mm]	249	327	228	399	389	389
1.9	Wheel base	y [mm]	1,350	1,400	1,400	1,500	1,500	1,500
2	WEIGHTS							
2.1*	Service weight	[kg]	5,971	4,909	5,639	6,170	6,665	6,756
2.3	Axle loading unladen, with battery, fron / rear	[kg]	2,275 / 2,096	1,840 / 1,469	2,114 / 1,925	2,200 / 1,970	2,385 / 2,280	2,231 / 2,025
2.4	Axle loading laden, forks advanced, front / rear	[kg]	719 / 5,252	510 / 4,398	614 / 5,024	675 / 5,495	445 / 6,220	440 / 6,315
2.5	Axle loading laden, forks retracted, front / rear	[kg]	1,906 / 4,065	1,484 / 3,425	1,759 / 3,880	1,785 / 4,385	1,855 / 4,810	1,712 / 5,043
3	WHEELS AND TYRES							
3.1	Tyres, material (R=rubber / U=Urethane / Vul=Vulkollan / P=Powerthane), drive / load side		Vul	P	Vul	Vul	Vul	Vul
3.2	Tyre size, front	[mm]	Ø360*140	Ø360*140	Ø360*140	Ø360*140	Ø360*140	Ø360*140
3.3	Tyre size, rear	[mm]	Ø285*130	Ø285x75	Ø285x75	Ø285*130	Ø285*130	Ø285*130
3.5	Wheels, number front / rear (x = driven wheels)		2/1X	2/1X	2/1X	2/1X	2/1X	2/1X

			NR16N2H	NR16N2C	NR16N2HC	NR20N2H	NR20N2X	NR25N2X
3.7	Track width, rear	b10 [mm]	1,140	1,025	1,025	1,140	1,310	1,310
4	DIMENSIONS							
4.1	Tilt of fork carriage, forward / backward	[]	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4
4.2	Height, mast lowered	h1 [mm]	3,785	2,710	3,785	3,785	5,118	3,785
4.3	Free lift	h2 [mm]	3,135	2,060	3,135	3,135	4,468	3,135
4.4	Lift	h3 [mm]	9,000	6,300	9,000	9,000	13,000	9,000
4.5	Height, mast extended	h4 [mm]	9,830	7,130	9,830	9,830	13,830	9,830
4.7	Height of overhead guard	h6 [mm]	2,200	2,200	2,200	2,200	2,200	2,200
4.8	Seat height related to SIP**	h7 [mm]	1,040	1,040	1,040	1,040	1,040	1,040
4.10	Height of load legs	h8 [mm]	360	360	360	360	360	360
4.15	Fork height, lowered	h13 [mm]	85	85	85	85	85	85
4.19	Overall length	l1 [mm]	2,486	2,458	2,558	2,486	2,496	2,496
4.20	Length to face of forks	l2 [mm]	1,336	1,308	1,408	1,336	1,346	1,346
4.21	Overall width	b1/b2 [mm]	1,270	1,100	1,100	1,270	1,440	1,440
4.22	Fork dimensions DIN ISO 2331	s/e/l [mm]	40 / 100 / 1,150	40 / 100 / 1,150	40 / 100 / 1,150	50 / 100 / 1,150	50 / 100 / 1,150	50 / 100 / 1,150
4.23	Fork carriage ISO 2328 class/type A, B		2A	2A	2A	2A	2A	2A
4.24	Fork carriage width	b3 [mm]	720	720	720	720	720	720
4.25	Distance between fork arms	b5 [mm]	315 - 710	315 - 710	315 - 710	315 - 710	315 - 710	315 - 710
4.26	Distance between load legs	b4 [mm]	900	900	900	900	1,070	1,070
4.28	Reach distance	l4 [mm]	432	510	410	582	572	572
4.32	Ground clearance, center of wheel base	m2 [mm]	75	75	75	75	75	75
4.33	Aisle width for pallets 1,000x1,200 mm, crossways	Ast [mm]	2,755	2,730	2,807	2,784	2,805	2,805
4.34	Aisle width for pallets 800x1,200mm, lengthwise	Ast [mm]	2,826	2,789	2,881	2,830	2,853	2,853

			NR16N2H	NR16N2C	NR16N2HC	NR20N2H	NR20N2X	NR25N2X
4.35	Turning radius	Wa [mm]	1,629	1,629	1,629	1,735	1,749	1,749
4.37	Length across load legs	l7 [mm]	1,793	1,793	1,793	1,893	1,893	1,893
5	PERFORMANCE							
5.1	Travel speed, laden / unladen	[km/h]	14 / 14	12 / 12	12 / 12	14 / 14	11 / 14	11 / 14
5.2	Lift speed, laden / unladen	[m/s]	0.4 / 0.7	0.4 / 0.65	0.4 / 0.7	0.4 / 0.7	0.4 / 0.7	0.3 / 0.7
5.3	Lowering speed, laden / unladen	[m/s]	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5	0.55 / 0.5
5.4	Reaching speed, laden / unladen	[m/s]	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2	0.2 / 0.2
5.8	Maximum gradeability, l laden / unladen	[%]	10 / 15	10 / 15	10 / 15	10 / 15	10 / 15	10 / 15
5.9	Acceleration time, laden / unladen	[s]	4.8 / 4.6	5.0 / 4.5	4.8 / 4.8	4.8 / 4.4	5.2 / 4.4	5.2 / 4.4
5.10	Service brake	[s]	Electric	Electric	Electric	Electric	Electric	Electric
6	MOTORS							
6.1	Traction motor rating S2 60%	[kW]	7.5	7.5	7.5	7.5	7.5	7.5
6.2	Lift motor rating S3 15%	[kW]	14	10	14	14	14	14
6.4	Battery voltage / nominal capacity (5 h)	[V/Ah]	48 / 620, 775	48 / 465, 620	48 / 620	48 / 620, 775, 930	48 / 620, 775, 930	48 / 620, 775, 930
6.5	Battery weight	[kg]	900, 1,100	700, 900	900	900, 1,100, 1,300	900, 1,100, 1,300	900, 1,100, 1,300
8.1	Type of drive unit		Stepless	Stepless	Stepless	Stepless	Stepless	Stepless
10	OTHER							
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work L _{pAZ} ***	[dB (A)]	63	66	63	63	63	63
10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 487, drive / lift / idle L _{WAZ} ***	[dB (A)]	63	58 / 73 / 50	63	63	63	63
	Whole-body vibration according to EN 13 059:2002+A1:2008 ****	[m/s ²]	0.31	0.31	0.31	0.31	0.31	0.31
	Hand-arm vibration according to EN 13 059:2002+A1:2008 ****	[m/s ²]	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5



Manufacturer reserves the right to make technical changes.	 
* Values of the table according to the smallest size of batteries. ** Measured with standard seat. *** Inaccuracy of 4 dB (A). *** Body tremble measured with air pressured seat.	

2 Energy consumption, noise and vibration

2.1 Engine performance

MODEL	TRACTION MOTOR kW	LIFT MOTOR kW	DRIVE SPEED WITH / WITHOUT* (m/sec)	LIFTING SPEED WITH / WITHOUT (m/sec)	LOWERING SPEED WITH / WITHOUT (m/sec)	ENERGY CONSUMPTION kWh
NR14N2S	7.5	10	12 / 12	0.4 / 0.65	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR14N2HS	7.5	14	12 / 12	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2S	7.5	10	12 / 12	0.4 / 0.65	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2HS	7.5	14	12 / 12	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2	7.5	10	12 / 12	0.4 / 0.65	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2H	7.5	14	12 / 12	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2C	7.5	10	12 / 12	0.4 / 0.65	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR16N2HC	7.5	14	12 / 12	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR20N2H	7.5	14	14 / 14	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR20N2X	7.5	14	14 / 14	0.4 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)
NR25N2X	7.5	14	14 / 14	0.3 / 0.7	0.55 / 0.5	3.7 (Pro) / 3.1 (Eco)

* Drive speed max 9km/h to forks direction

2.2 Level of noise at ear level of the driver according to EN12053 2001 and EN ISO 4871

MODEL	IN WORK, LpA (dB A)	DRIVE / LIFT / IDLE (dB A)
NR14N2S	66	58 / 73 / 50
NR14N2HS	63	61 / 69 / 48
NR16N2S	63	58 / 73 / 50
NR16N2HS	63	61 / 69 / 48
NR16N2	63	58 / 73 / 50
NR16N2H	63	61 / 69 / 48
NR16N2C	63	58 / 73 / 50

MODEL	IN WORK, LpA (dB A)	DRIVE / LIFT / IDLE (dB A)
NRN2HC	63	61 / 69 / 48
NR20N2H	63	61 / 69 / 48
NR20N2X	63	61 / 69 / 48
NR25N2X	63	61 / 69 / 48

2.3 Vibration level according to EN13059 2002

MODEL	WHOLE BODY VIBRATION (m/s ²)	HAND-ARM VIBRATION (m/s ²)
NR14N2S	0.31	< 2.5
NR14N2HS	0.31	< 2.5
NR16N2S	0.31	< 2.5
NR16N2HS	0.31	< 2.5
NR16N2	0.31	< 2.5
NR16N2H	0.31	< 2.5
NR16N2C	0.31	< 2.5
NR16N2HC	0.31	< 2.5
NR20N2H	0.31	< 2.5
NR20N2X	0.31	< 2.5
NR25N2X	0.31	< 2.5

3 Mast availability chart

S	Standard mast
H	Heavy Duty

CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR16N2C	NR16N2HC	NR20N2H	NR20N2X	NR25N2X
ITF480	S	-	S	-	S	-	S	-	H	-	H
ITF540	S	-	S	-	S	-	S	-	H	-	H
ITF570	S	-	S	-	S	-	S	-	H	-	H
ITF590	S	-	S	-	S	-	S	-	H	-	H
ITF630	S	-	S	-	S	-	S	-	H	-	H
ITF700	S	-	S	-	S	-	S	-	H	-	H
ITF750	S	-	S	-	S	-	S	-	H	-	H
ITF800	-	H	-	H	-	H	-	H	H	-	H
ITF850	-	H	-	H	-	H	-	H	H	-	H
ITF900	-	H	-	H	-	H	-	H	H	-	H
ITF950	-	-	-	-	-	H	-	-	H	-	H
ITF1000	-	-	-	-	-	H	-	-	H	-	H
ITF1050	-	-	-	-	-	H	-	-	H	-	H
ITF1100	-	-	-	-	-	H	-	-	H	-	H
ITF1150	-	-	-	-	-	H	-	-	H	-	H
ITF1200	-	-	-	-	-	-	-	-	-	H	-
ITF1250	-	-	-	-	-	-	-	-	-	H	-
ITF1300	-	-	-	-	-	-	-	-	-	H	-

4 Option availability chart



NOTE: Refer to the Option Manual for option specifications!

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

4.1 Outlook

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Special color labels (inform RAL code)		SP/COLOR	•	•	•	•	•	•	•	•	•	•	•
Customer design labels (material provided by the customer)		DSG/COV	•	•	•	•	•	•	•	•	•	•	•

4.2 Wheel options

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Powerthane traction and load wheels		PT/DW	O	N/A	O	N/A	O	N/A	N/A	O	N/A	N/A	N/A
Vulkollan traction and load wheels		VUL/DW	•	O	•	O	•	O	O	•	O	O	O
Power friction traction wheel		PF/DW	•	•	•	•	•	•	•	•	•	•	•
Grooved vulkollan traction wheel and vulkollan load wheels		GRV/DW	•	•	•	•	•	•	•	•	•	•	•

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Antistatic vulkollan traction wheel and vulkollan load wheels		EC/DW	•	•	•	•	•	•	•	•	•	•	•

4.3 Temperature protection modifications

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Cold store modification (Class III)		MODCS	•	•	•	•	•	•	•	•	•	•	•
Cold storage cabin > -35°C NOTE: Available in the 3 rd quarter of 2015	1)	CAB/CS	•	•	•	•	•	•	•	N/A	N/A	•	•
2-way intercom NOTE: Available in the 3 rd quarter of 2015	2)	INTERCOM	•	•	•	•	•	•	•	N/A	N/A	•	•
Hot store modification > 40°C		MODHS	•	•	•	•	•	•	•	•	•	•	•

NOTE:

- 1) Not in combination with the MODHS option.
2) Requires the CAB/CS option.

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

4.4 Load handling equipment

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Active Sway Control		ASC	•	•	•	•	•	•	•	•	•	•	•
Extra valve with hosing to fork carriage	3)	+VPT	•	•	•	•	•	•	•	•	•	•	•
Fork positioner with sideshift	4)	SS/FP	•	•	•	•	•	•	•	•	•	•	•
Fork carriage strengthening part	5)	FRKC/S	•	•	•	•	•	•	•	•	•	•	•
Fork camera with 7" LCD color display	6)	F/CAM/LCD	•	•	•	•	•	•	•	•	•	•	•
Telescopic forks 1,350 / 1,000 mm	7)	TELE/FRK	•	•	•	•	•	•	•	•	•	•	•
Sideshift and tilt centering	8)	SS/CENTR	•	•	•	•	•	•	•	•	•	•	•
Pre-selector with F2 button	9)	LHP	•	•	•	•	•	•	•	•	•	•	•
Load weight indicator, steps of 50 kg		LWI	•	•	•	•	•	•	•	•	•	•	•

NOTE:

3) Not available in combination with the TELE/FRK, F/CAM/LCD or LHP options for standard machines, available for heavy duty H and X machines.

4) Not available in combination with the TELE/FRK, SS/CENTR, F/CAM/LCD or LHP options on standard machines, available for heavy duty H and X machines only.

5) Required always when the truck is equipped with additional equipment.

6) Requires the BAR and DC053W options. Not available in combination with the SS/FP, TELE/FRK and +VPT options on standard models, available on Heavy Duty H and X machines only.

7) Requires the FRKC/S option and not in combination with the SS/FP and F/CAM/LCD options.

8) Not available in combination with the SS/FP option.

9) Not available in combination with the SS/FP option for standard machines, available for heavy duty H and X machines.

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

4.5 Safety accessories

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Blue spot rear light	10)	FLR/SPOT/R	•	•	•	•	•	•	•	•	•	•	•
Warning light (yellow) on the roof (selecting switch)	11)	STRB	•	•	•	•	•	•	•	•	•	•	•
Warning lights flexible mounted	12)	STRB/F	•	•	•	•	•	•	•	•	•	•	•
Working lights		WORK/L	•	•	•	•	•	•	•	•	•	•	•
Drive alarm (programmable)		D/ALARM	•	•	•	•	•	•	•	•	•	•	•
Rear view mirror	13)	RVM	•	•	•	•	•	•	•	•	•	•	•
Overhead guard steel safety net	14)	HG/NET	•	•	•	•	•	•	•	•	•	•	•
Plexiglass safety cover for overhead guard	15)	HG/COV	•	•	•	•	•	•	•	•	•	•	•
Left shoulder protection plate	16)	LSP	•	•	•	•	•	•	•	-	-	•	•
Fire extinguisher		P/EXT	•	•	•	•	•	•	•	•	•	•	•
Electric load wheel brakes	17)	LW/BR	•	O	•	O	•	O	O	•	O	O	O
Lowering cut-off at +/- 500 mm		LOW/STOP	•	•	•	•	•	•	•	•	•	•	•

NOTE:

- 10) Not in combination with the D/ALARM and STRB/P options.
 11) Overhead guard height + 95 mm.
 12) Not in combination with the D/ALARM and FLR/SPOT/R options.
 13) Requires the BAR option.
 14) Not in combination with the HG/COV option.
 15) Not in combination with the HG/NET option.
 16) Not available on the C-model
 17) Standard feature in X models.

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

4.6 Driver's seat and accessories

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Grammer MSG20		SEAT	O	O	O	O	O	O	O	O	O	O	O
Grammer MSG65 (mechanical suspension, includes safety belt)		SEAT/C	•	•	•	•	•	•	•	•	•	•	•
Grammer MSG65 with seat belt interlock switch		SEAT/C/SB	•	•	•	•	•	•	•	•	•	•	•
Grammer MSG65 with heating		S/HEAT/C	•	•	•	•	•	•	•	•	•	•	•
Grammer MSG75 (air suspension, includes safety belt, arm rest and backrest extension)		SEAT/LX	•	•	•	•	•	•	•	•	•	•	•
Grammer MSG75 with seat belt interlock switch		SEAT/LX/SB	•	•	•	•	•	•	•	•	•	•	•
Grammer MSG75 with heating		S/HEAT/LX	•	•	•	•	•	•	•	•	•	•	•
Arm rest • For MSG20 seat • For MSG65 seat		ARM/ST ARM/C	•	•	•	•	•	•	•	•	•	•	•
Backrest extension for MSG65 seat		BR/C	•	•	•	•	•	•	•	•	•	•	•
Seat belt for MSG20 seat		S/BELT	•	•	•	•	•	•	•	•	•	•	•

O Option to select, no add-on price

• Available option

N/A Not available

** Please, specify on order

** NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.

*** Overhead guard height + 95 mm

4.7 General accessories

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Reading lamp	14)	R/L	•	•	•	•	•	•	•	•	•	•	•
Audio system	15)	AUDIO/S	•	•	•	•	•	•	•	•	•	•	•
Current output		DC053W	•	•	•	•	•	•	•	•	•	•	•
Accessory rack		BAR	•	•	•	•	•	•	•	•	•	•	•
A4 list bracket	16)	LBA4	•	•	•	•	•	•	•	•	•	•	•
Computer rack	17)	PCS	•	•	•	•	•	•	•	•	•	•	•
Operator compartment fan		HG/FAN	•	•	•	•	•	•	•	•	•	•	•
PIN code access with Start switch		PIN	•	•	•	•	•	•	•	•	•	•	•

NOTE:

- 14) Requires the **DC053W** option.
 15) Requires the DC053W option.
 16) Requires the BAR option.
 17) Requires the BAR option.

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

4.8 Power supply accessories

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Quick battery locking, seat side		QBL RH	•	•	•	•	•	•	•	•	•	•	•
Quick battery locking, steering wheel side		QBL LH	•	•	•	•	•	•	•	•	•	•	•
Battery changing system for two batteries, 465 Ah battery		BCP465	•	•	•	•	•	•	•	•	•	•	•
Battery changing system for two batteries, 620 Ah battery		BCP620	•	•	•	•	•	•	•	•	•	•	•
Battery changing system for two batteries, 775 Ah battery		BCP775	•	•	•	•	•	•	•	•	•	•	•
Battery connector and cables		DIN48B	•	•	•	•	•	•	•	•	•	•	•
Charger connector		DIN48C	•	•	•	•	•	•	•	•	•	•	•

O Option to select, no add-on price

• Available option

N/A Not available

** Please, specify on order

** NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.

*** Overhead guard height + 95 mm

4.9 Display language

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
English – E N		DEN	O	O	O	O	O	O	O	O	O	O	O
Dutch – Nederlands - NL		DNL	O	O	O	O	O	O	O	O	O	O	O
Bulgarian - български (Bălgarski) - BG		DBG	O	O	O	O	O	O	O	O	O	O	O
Czech - Čeština - Cz		DCZ	O	O	O	O	O	O	O	O	O	O	O
Danish - Dansk - DA		DDA	O	O	O	O	O	O	O	O	O	O	O
German - Deutsch - DE		DGE	O	O	O	O	O	O	O	O	O	O	O
Estonian - Eesti - ET		DET	O	O	O	O	O	O	O	O	O	O	O
Greek - Elinika - EL		DEL	O	O	O	O	O	O	O	O	O	O	O
Spanish - Español - ES		DSP	O	O	O	O	O	O	O	O	O	O	O
French - Français - FR		DFR	O	O	O	O	O	O	O	O	O	O	O
Italian - Italiano - IT		DIT	O	O	O	O	O	O	O	O	O	O	O
Latvian - Latviesu valoda - LV		DLV	O	O	O	O	O	O	O	O	O	O	O
Lithuanian - Lietuvių kalba - LT		DLT	O	O	O	O	O	O	O	O	O	O	O
Hungarian - Magyar – HU		DHU	O	O	O	O	O	O	O	O	O	O	O
Polish - Polski - PL		DPL	O	O	O	O	O	O	O	O	O	O	O
Portuguese - Português - PT		DPO	O	O	O	O	O	O	O	O	O	O	O
Romanian - Română - RO		DRO	O	O	O	O	O	O	O	O	O	O	O

	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR20N2H	NR16N2C	NR16N2HC	NR20N2X	NR25N2X
Slovak - Slovenčina - SK		DSK	O	O	O	O	O	O	O	O	O	O	O
Slovene - Slovenščina - SL		DSL	O	O	O	O	O	O	O	O	O	O	O
Finnish - Suomi - FI		DFI	O	O	O	O	O	O	O	O	O	O	O
Swedish - Svenska - SV		DSW	O	O	O	O	O	O	O	O	O	O	O
Norwegian - Norsk - NO		DNO	O	O	O	O	O	O	O	O	O	O	O
Russian - Russkiy - RU		DRU	O	O	O	O	O	O	O	O	O	O	O
Turkish - Türkçe - TR		DTR	O	O	O	O	O	O	O	O	O	O	O

O Option to select, no add-on price

• Available option

N/A Not available

** Please, specify on order

** NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.

*** Overhead guard height + 95 mm

5 Forks and carriages



NOTE: Fork length options are not available in combination with the TELE/FRK option.

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

FORK LENGTH	*	CODE	NR14N2S	NR14N2HS	NR16N2	NR16N2H	NR16N2S	NR16N2HS	NR16N2C	NR20N2H	NR20N2X	NR25N2X
Without forks		FX	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
800 mm		L800	•	•	•	•	•	•	•	•	•	•
1,000 mm		L1000	•	•	•	•	•	•	•	•	•	•
1,150 mm		L1150	•	•	•	•	•	•	•	•	•	•
1,200 mm		L1200	•	•	•	•	•	•	•	•	•	•
1,400 mm		L1400	•	•	•	•	•	•	•	•	•	•
1,500 mm		L1500	•	•	•	•	•	•	•	•	•	•
801 mm – 1,149 mm, intermediate lengths	¹⁾	LXXA	•	•	•	•	•	•	•	•	•	•
1,151 – 1,499 mm, intermediate lengths	¹⁾	LXXB	•	•	•	•	•	•	•	•	•	•

NOTE:

1) Please specify fork length on order.

6 Wheels

O	Option to select, no add-on price
•	Available option
N/A	Not available
**	Please, specify on order
**	NOTE: With NR20N2H and NR25N2X, h1 and h2 + h13 = +20 mm on mast heights of 7,500 mm or less.
***	Overhead guard height + 95 mm

WHEEL OPTIONS	*	CODE	NR14N2S	NR14N2HS	NR16N2S	NR16N2HS	NR16N2	NR16N2H	NR16N2C	NR16N2HC	NR20N2H	NR20N2X	NR25N2X
Powerthane wheels		PT/DW	•	-	•	-	•	-	•	-	-	-	-
Vulkollan wheels		VUL/DW	•	O	•	O	•	O	•	O	O	O	O
Power friction wheels		PF/DW	•	•	•	•	•	•	•	•	•	•	•
Grooved traction wheel		GRV/DW	•	•	•	•	•	•	•	•	•	•	•
Anti-static wheel set		EC/DW	•	•	•	•	•	•	•	•	•	•	•

7 Point loadings

		WITH LOAD [kg / cm ²]	WITH LOAD [kg / cm ²]	WITHOUT LOAD [kg / cm ²]
		MAST RETRACTED	MAST FORWARD	
NR14N2S	Front (drive)	45	28	49
	Rear (load)	68	78	46
NR14N2HS	Front (drive)	48	30	53
	Rear (load)	73	84	53
NR16N2	Front (drive)	45	28	50
	Rear (load)	55	63	37
NR16N2H	Front (drive)	49	30	53
	Rear (load)	59	67	42
NR16N2S	Front (drive)	44	27	49
	Rear (load)	71	81	46
NR16N2HS	Front (drive)	44	27	49
	Rear (load)	71	81	46
NR16N2C	Front (drive)	43	25	48
	Rear (load)	71	81	47
NR16N2HC	Front (drive)	47	28	51
	Rear (load)	76	86	53
NR20N2H	Front (drive)	47	29	52
	Rear (load)	61	68	41
NR20N2X	Front (drive)	49	32	54
	Rear (load)	61	68	41
NR25N2X	Front (drive)	46	23	53
	Rear (load)	65	73	41

8 Battery dimensions

MODEL	BATTERY CAPACITY	BATTERY WEIGHT	4.33		4.34		L4	L2	X
	[aH]	[kg]	Ast [mm]	Ast3 [mm]	Ast [mm]	Ast3 [mm]	4.28 [mm]	4.20 [mm]	1.8 [mm]
NR14N2S	465	700	2,684	2,466	2,750	2,666	463	1,254	281
	620	900	2,740	2,538	2,816	2,738	391	1,326	209
	775	1,100	2,798	2,610	2,883	2,810	319	1,398	137
NR14N2HS	620	900	2,748	2,548	2,825	2,748	382	1,336	199
	775	1,100	2,806	2,620	2,892	2,820	310	1,408	127
NR16N2S	465	700	2,702	2,459	2,752	2,659	563	1,254	381
	620	900	2,755	2,531	2,817	2,731	491	1,326	309
	775	1,100	2,798	2,610	2,883	2,810	319	1,398	137
NR16N2HS	620	900	2,748	2,548	2,825	2,748	382	1,336	199
	775	1,100	2,806	2,620	2,892	2,820	310	1,408	127
NR16N2C	465	700	2,730	2,502	2,789	2,702	510	1,308	327
	620	900	2,799	2,592	2,872	2,792	420	1,398	237
NR16N2HC	620	900	2,807	2,602	2,881	2,802	410	1,408	228
NR16N2	465	700	2,693	2,463	2,751	2,663	513	1,254	331
	620	900	2,748	2,535	2,817	2,735	441	1,326	259
	775	1,100	2,804	2,607	2,883	2,807	369	1,398	187
NR16N2H	620	900	2,755	2,545	2,826	2,745	432	1,336	249
	775	1,100	2,812	2,617	2,892	2,817	360	1,408	177
NR20N2H	620	900	2,784	2,536	2,830	2,736	582	1,336	399
	775	1,100	2,837	2,608	2,895	2,808	510	1,408	327
	930	1300	2,892	2,680	2,961	2,880	438	1,480	255
NR20N2X	620	900	2,805	2,560	2,853	2,760	572	1,346	389
	775	1,100	2,858	2,632	2,918	2,832	500	1,418	317
	930	1,300	2,913	2,704	2,984	2,904	428	1,490	245
NR25N2X	620	900	2,805	2,560	2,853	2,760	572	1,346	389
	775	1,100	2,858	2,632	2,918	2,832	500	1,418	317
	930	1,300	2,913	2,704	2,984	2,904	428	1,490	245

9 Mast capacity charts

9.1 NR14N2S, NR14N2HS, NR16N2, NR16N2H, NR16N2S and NR16N2HS

TRIPLEX WITH FULL FREE LIFT					INTEGRAL SIDESHIFT			FORK POSITIONER		
LIFT HEIGHT (mm)	OVERALL LOWERED HEIGHT (mm)	FREE LIFT (mm)	RAISED MAST HEIGHT (mm)	FORK TILT FWD / BWD (°)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)
NR14N2S										
4,800	2,210	1,645	5,630	2/4	1,400	1,400	1,400	1,400	1,400	1,400
5,400	2,410	1,845	6,230	2/4	1,400	1,400	1,400	1,400	1,400	1,400
5,700	2,510	1,945	6,530	2/4	1,400	1,400	1,400	1,350	1,400	1,400
5,900	2,577	2,012	6,730	2/4	1,400	1,400	1,400	1,350	1,400	1,400
6,300	2,710	2,145	7,130	2/4	1,400	1,400	1,400	1,350	1,350	1,400
7,000	2,943	2,378	7,830	2/4	1,400	1,400	1,400	1,250	1,300	1,400
7,500	3,110	2,545	8,330	2/4	1,300	1,400	1,400	1,150	1,250	1,350
NR14N2HS										
8,000	3,297	2,732	8,830	2/4	-	1,400	1,400	-	1,250	1,300
8,500	3,463	2,813	9,330	2/4	-	1,400	1,400	-	1,150	1,250
9,000	3,785	3,220	9,830	2/4	-	1,400	1,400	-	1,150	1,250
NR16N2										
4,800	2,210	1,645	5,630	2/4	1,600	1,600	1,600	1,600	1,600	1,600
5,400	2,410	1,845	6,230	2/4	1,600	1,600	1,600	1,600	1,600	1,600
5,700	2,510	1,945	6,530	2/4	1,600	1,600	1,600	1,550	1,600	1,600
5,900	2,577	2,012	6,730	2/4	1,600	1,600	1,600	1,500	1,550	1,600
6,300	2,710	2,145	7,130	2/4	1,600	1,600	1,600	1,450	1,500	1,550
7,000	2,943	2,378	7,830	2/4	1,600	1,600	1,600	1,550	1,450	1,500
7,500	3,110	2,545	8,330	2/4	1,500	1,600	1,600	1,350	1,450	1,450
NR16N2H										
8,000	3,297	2,732	8,830	2/4	-	1,500	1,600	-	1,350	1,450

8,500	3,463	2,813	9,330	2/4	-	1,450	1,500	-	1,300	1,350
9,000	3,785	3,220	9,830	2/4	-	1,400	1,450	-	1,250	1,300
9,500	3,952	3,387	10,330	2/4	-	1,350	1,400	-	1,200	1,250
10,000	4,118	3,553	10,830	2/4	-	1,300	1,300	-	1,150	1,200
10,500	4,285	3,720	11,330	2/4	-	900	1,000	-	800	900
11,000	4,452	3,887	11,830	2/4	-	700	750	-	600	650
11,500	4,618	4,053	12,330	2/4	-	600	650	-	500	550
NR16N2S										
4,800	2,210	1,645	5,630	2/4	1,600	1,600	1,600	1,500	1,600	1,600
5,400	2,410	1,845	6,230	2/4	1,550	1,600	1,600	1,400	1,500	1,600
5,700	2,510	1,945	6,530	2/4	1,500	1,600	1,600	1,350	1,450	1,500
5,900	2,577	2,012	6,730	2/4	1,500	1,550	1,600	1,350	1,400	1,450
6,300	2,710	2,145	7,130	2/4	1,500	1,500	1,600	1,350	1,350	1,400
7,000	2,943	2,378	7,830	2/4	1,400	1,450	1,550	1,250	1,300	1,400
7,500	3,110	2,545	8,330	2/4	1,300	1,400	1,500	1,150	1,250	1,350
NR16N2HS										
8,000	3,297	2,732	8,830	2/4	-	1,400	1,450	-	1,250	1,300
8,500	3,463	2,813	9,330	2/4	-	1,300	1,400	-	1,150	1,250
9,000	3,785	3,220	9,830	2/4	-	1,300	1,400	-	1,150	1,250

9.2 NR16N2C, NR16N2HC, NR20N2H, NR20N2X and NR25N2X

TRIPLEX WITH FULL FREE LIFT					INTEGRAL SIDESHIFT				FORK POSITIONER			
LIFT HEIGHT (mm)	OVERALL LOWERED HEIGHT (mm)	FREE LIFT (mm)	RAISED MAST HEIGHT (mm)	FORK TILT FWD / BWD (°)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)	930 Ah 1,300 kg @ 600 mm (kg)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1100 kg @ 600 mm (kg)	930 Ah 1,300 kg @ 600 mm (kg)
NR16N2C												
4,800	2,210	1,645	5,630	2/4	1,600	1,600	-	-	1,600	1,600	-	-
5,400	2,410	1,845	6,230	2/4	1,600	1,600	-	-	1,550	1,600	-	-
5,700	2,510	1,945	6,530	2/4	1,600	1,600	-	-	1,500	1,550	-	-
5,900	2,577	2,012	6,730	2/4	1,600	1,600	-	-	1,450	1,500	-	-
6,300	2,710	2,145	7,130	2/4	1,500	1,600	-	-	1,350	1,450	-	-
7,000	2,943	2,378	7,830	2/4	1,500	1,600	-	-	1,350	1,450	-	-
7,500	3,110	2,545	8,330	2/4	1,100	1,400	-	-	1,000	1,300	-	-
NR16N2HC												
8,000	3,297	2,732	8,830	2/4	-	1,400	-	-	-	1,300	-	-
8,500	3,463	2,813	9,330	2/4	-	1,000	-	-	-	900	-	-
9,000	3,785	3,220	9,830	2/4	-	700	-	-	-	600	-	-
NR20N2H												
4,800	2,230	1,665	5,630	2/4	-	2,000	2,000	2,000	-	2,000	2,000	2,000
5,400	2,430	1,865	6,230	2/4	-	2,000	2,000	2,000	-	2,000	2,000	2,000
5,700	2,530	1,965	6,530	2/4	-	2,000	2,000	2,000	-	2,000	2,000	2,000
5,900	2,597	2,032	6,730	2/4	-	2,000	2,000	2,000	-	2,000	2,000	2,000
6,300	2,730	2,165	7,130	2/4	-	2,000	2,000	2,000	-	1,950	2,000	2,000
7,000	2,963	2,398	7,830	2/4	-	2,000	2,000	2,000	-	1,800	2,000	2,000
7,500	3,130	2,565	8,330	2/4	-	1,950	2,000	2,000	-	1,750	1,950	2,000
8,000	3,297	2,732	8,830	2/4	-	1,850	2,000	2,000	-	1,650	1,800	1,950
8,500	3,463	2,813	9,330	2/4	-	1,700	1,900	2,000	-	1,600	1,700	1,900
9,000	3,785	3,220	9,830	2/4	-	1,400	1,800	1,900	-	1,300	1,700	1,800
9,500	3,952	3,387	10,330	2/4	-	1,100	1,300	1,800	-	1,000	1,200	1,500

10,000	4,118	3,553	10,830	2/4	-	800	1,100	1,450	-	700	1,000	1,400
10,500	4,285	3,720	11,330	2/4	-	700	900	1,100	-	600	800	1,000
11,000	4,452	3,887	11,830	2/4	-	350	550	800	-	250	450	700
11,500	4,618	4,053	12,330	2/4	-	200	350	600	-	100	250	500
NR20N2X												
12,000	4,785	4,135	12,830	2/4	-	700	900	1,000	-	600	800	900
12,500	4,952	4,302	13,330	2/4	-	500	750	1,000	-	400	650	900
13,000	5,118	4,468	13,830	2/4	-	400	600	600	-	300	500	800
NR25N2X												
4,800	2,230	1,665	5,630	2/4	-	2,300	2,500	2,500	-	2,100	2,300	2,350
5,400	2,430	1,865	6,230	2/4	-	2,250	2,400	2,500	-	2,050	2,200	2,300
5,700	2,530	1,965	6,530	2/4	-	2,200	2,300	2,450	-	2,000	2,100	2,250
5,900	2,597	2,032	6,730	2/4	-	2,200	2,250	2,400	-	2,000	2,050	2,200
6,300	2,730	2,165	7,130	2/4	-	2,100	2,200	2,350	-	1,900	2,000	2,150
7,000	2,963	2,398	7,830	2/4	-	2,000	2,100	2,300	-	1,800	1,950	2,100
7,500	3,130	2,565	8,330	2/4	-	1,950	2,050	2,200	-	1,750	1,900	2,000
8,000	3,297	2,732	8,830	2/4	-	1,900	2,050	2,100	-	1,700	1,850	1,900
8,500	3,463	2,813	9,330	2/4	-	1,850	2,000	2,050	-	1,650	1,800	1,850
9,000	3,785	3,220	9,830	2/4	-	1,800	1,900	2,000	-	1,650	1,700	1,800
9,500	3,952	3,387	10,330	2/4	-	1,700	1,800	1,900	-	1,550	1,600	1,700
10,000	4,118	3,553	10,830	2/4	-	1,450	1,600	1,800	-	1,350	1,500	1,700
10,500	4,285	3,720	11,330	2/4	-	1,300	1,350	1,500	-	1,200	1,250	1,400
11,000	4,452	3,887	11,830	2/4	-	1,100	1,100	1,200	-	1,000	1,100	1,100
11,500	4,618	4,053	12,330	2/4	-	1,000	1,000	1,100	-	900	900	1000

9.3 Telescopic forks with NR14N2S, NR14N2HS, NR16N2, NR16N2H, NR16N2S and NR16N2HS



NOTE: Telescopic forks not available for NR16N2HS!

TRIPLEX WITH FULL FREE LIFT					REACHED IN			REACHED OUT		
LIFT HEIGHT (mm)	OVERALL LOWERED HEIGHT (mm)	FREE LIFT (mm)	RAISED MAST HEIGHT (mm)	FORK TILT FWD / BWD (°)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)	465 Ah 700 kg @ 1,750 mm (kg)	620 Ah 900 kg @ 1,750 mm (kg)	775 Ah 1,100 kg @ 1,750 mm (kg)
NR14N2S										
4,800	2,210	1,645	5,630	2/4	1,400	1,400	1,400	650	700	750
5,400	2,410	1,845	6,230	2/4	1,400	1,400	1,400	600	650	700
5,700	2,510	1,945	6,530	2/4	1,350	1,400	1,400	550	600	650
5,900	2,577	2,012	6,730	2/4	1,350	1,400	1,400	550	550	600
6,300	2,710	2,145	7,130	2/4	1,350	1,350	1,400	550	550	600
7,000	2,943	2,378	7,830	2/4	1,300	1,300	1,350	500	550	600
7,500	3,110	2,545	8,330	2/4	1,150	1,250	1,350	500	500	550
NR14N2HS										
8,000	3,297	2,732	8,830	2/4	-	1,250	1,300	-	550	550
8,500	3,463	2,813	9,330	2/4	-	1,150	1,250	-	500	550
9,000	3,785	3,220	9,830	2/4	-	1,150	1,250	-	500	550
NR16N2										
4,800	2,210	1,645	5,630	2/4	1,600	1,600	1,600	750	800	850
5,400	2,410	1,845	6,230	2/4	1,500	1,600	1,600	700	750	800
5,700	2,510	1,945	6,530	2/4	1,450	1,500	1,600	650	700	750
5,900	2,577	2,012	6,730	2/4	1,450	1,450	1,500	600	650	700
6,300	2,710	2,145	7,130	2/4	1,450	1,450	1,450	600	600	650
7,000	2,943	2,378	7,830	2/4	1,450	1,450	1,450	600	600	600

7,500	3,110	2,545	8,330	2/4	1,350	1,450	1,450	550	600	600
NR16N2H										
8,000	3,297	2,732	8,830	2/4	-	1,350	1,400	-	600	650
8,500	3,463	2,813	9,330	2/4	-	1,300	1,350	-	550	600
9,000	3,785	3,220	9,830	2/4	-	1,250	1,300	-	550	550
NR16N2S										
4,800	2,210	1,645	5,630	2/4	1,450	1,500	1,600	650	700	750
5,400	2,410	1,845	6,230	2/4	1,400	1,450	1,500	600	650	700
5,700	2,510	1,945	6,530	2/4	1,350	1,450	1,450	550	600	650
5,900	2,577	2,012	6,730	2/4	1,350	1,400	1,450	550	550	600
6,300	2,710	2,145	7,130	2/4	1,350	1,350	1,450	550	550	600
7,000	2,943	2,378	7,830	2/4	1,250	1,300	1,400	500	550	600
7,500	3,110	2,545	8,330	2/4	1,150	1,250	1,350	500	500	550

9.4 Telescopic forks with NR16N2C, NR16N2HC, NR20N2H, NR20N2X and NR25N2X

TRIPLEX WITH FULL FREE LIFT					REACHED IN				REACHED OUT			
LIFT HEIGHT (mm)	OVERALL LOWERED HEIGHT (mm)	FREE LIFT (mm)	RAISED MAST HEIGHT (mm)	FORK TILT FWD / BWD (°)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)	930 Ah 1,300 kg @ 600 mm (kg)	465 Ah 700 kg @ 600 mm (kg)	620 Ah 900 kg @ 600 mm (kg)	775 Ah 1,100 kg @ 600 mm (kg)	930 Ah 1,300 kg @ 600 mm (kg)
NR16N2C												
4,800	2,210	1,645	5,630	2/4	1,550	1,600	-	-	650	700	-	-
5,400	2,410	1,845	6,230	2/4	1,500	1,550	-	-	600	650	-	-
5,700	2,510	1,945	6,530	2/4	1,450	1,500	-	-	600	600	-	-
5,900	2,577	2,012	6,730	2/4	1,450	1,450	-	-	600	600	-	-
6,300	2,710	2,145	7,130	2/4	1,350	1,450	-	-	550	600	-	-
7,000	2,943	2,378	7,830	2/4	1,350	1,450	-	-	550	600	-	-
7,500	3,110	2,545	8,330	2/4	950	1,250	-	-	400	550	-	-

NR16N2HC												
8,000	3,297	2,732	8,830	2/4	-	1,250	-	-	-	550	-	-
8,500	3,463	2,813	9,330	2/4	-	850	-	-	-	350	-	-
9,000	3,785	3,220	9,830	2/4	-	550	-	-	-	200	-	-
NR20N2H												
4,800	2,230	1,665	5,630	2/4	-	2,000	2,000	2,000	-	850	850	850
5,400	2,430	1,865	6,230	2/4	-	2,000	2,000	2,000	-	850	850	850
5,700	2,530	1,965	6,530	2/4	-	1,900	2,000	2,000	-	850	850	850
5,900	2,597	2,032	6,730	2/4	-	1,850	1,900	2,000	-	850	850	850
6,300	2,730	2,165	7,130	2/4	-	1,850	1,850	1,900	-	850	850	850
7,000	2,963	2,398	7,830	2/4	-	1,850	1,850	1,850	-	850	850	850
7,500	3,130	2,565	8,330	2/4	-	1,800	1,850	1,850	-	800	850	850
8,000	3,297	2,732	8,830	2/4	-	1,700	1,850	1,850	-	750	850	850
8,500	3,463	2,813	9,330	2/4	-	1,550	1,750	1,850	-	700	800	850
9,000	3,785	3,220	9,830	2/4	-	1,250	1,650	1,750	-	550	750	800
NR25N2X												
4,800	2,230	1,665	5,630	2/4	-	2,100	2,300	2,400	-	850	850	850
5,400	2,430	1,865	6,230	2/4	-	2,050	2,200	2,300	-	850	850	850
5,700	2,530	1,965	6,530	2/4	-	2,000	2,100	2,250	-	850	850	850
5,900	2,597	2,032	6,730	2/4	-	2,000	2,050	2,200	-	850	850	850
6,300	2,730	2,165	7,130	2/4	-	1,950	2,000	2,150	-	850	850	850
7,000	2,963	2,398	7,830	2/4	-	1,850	2,000	2,100	-	800	850	850
7,500	3,130	2,565	8,330	2/4	-	1,800	1,950	2,050	-	800	850	850
8,000	3,297	2,732	8,830	2/4	-	1,750	1,900	1,950	-	800	850	850
8,500	3,463	2,813	9,330	2/4	-	1,700	1,850	1,900	-	750	850	850
9,000	3,785	3,220	9,830	2/4	-	1,650	1,750	1,850	-	750	800	850
9,500	3,952	3,387	10,330	2/4	-	1,450	1,550	1,650	-	650	700	750
10,000	4,118	3,553	11,830	2/4	-	1,200	1,350	1,550	-	550	600	700
10,500	4,285	3,720	12,330	2/4	-	1,050	1,100	1,250	-	450	500	550

For more information on this range visit:

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