

# NITRUM NITRUM HYBRID



reddot winner 2022



Rev:11/2024  
Valid:11/2025

## ORDER FORM

Errors and omissions excepted.

Billing Address of Customer-ID			Shipping Address		Identical to Billing Address
C.-ID:			C.-ID:		
Name:			Name:		
Street:			Street:		
Town/PC:			Town / PC:		
E-Mail:			E-Mail:		
Phone:			Phone:		
Order Information			User Weight		
Order	Calculation	Built-4-Me®	<b>NTR010034</b> (max. user weight 125 kg)	<b>NTR010035</b> (max. user weight 140 kg)	
Purchase Order No.:			<b>Art. No.:</b> 66000004	<b>Art. No.:</b> 66000003	
Reimbursement Code: xxx			<b>User Weight:</b>	<b>kg</b>	
Order Date:	Day	Month	Year		

Base Price Nitrum € x.xxx,-  
Base Price Nitrum Hybrid € x.xxx,-

## Please follow this measuring method:

The following method is recommended on the basis of extensive practical experience. Deviations are possible in individual instances.

### Seat width (SW):

- a) For the user: Allow space between sideguard and hip on each side of the chair (approx. 10 - 20 mm altogether).
- b) On the wheelchair: From outside frame tube to outside frame tube.

### Seat depth (SD):

- a) For the user: When sitting upright: leave space for 2 - 3 fingers between front edge of the seat upholstery and back of knee (approx. 30 - 60 mm). Care must be taken with adjustable upholstery.
- b) On the wheelchair: From back tube to front of seat upholstery.
- c) Nitrum with angle-adjustable backrest; use the backrest bracket as base for the measurement and then add 6mm (wall-thickness of the backrest-bracket) to achieve a correct measurement.

### Front seat height:

- a) For the user: When sitting with 90° kneeangle: From back of knee to bottom of shoe sole.
- b) On the wheelchair: From front edge of the seat-upholstry, next to the seat-tube to the ground (min. 30 mm longer than user measurement). Remember to include the cushion height.

### Rear seat height:

On the wheelchair: From rear edge of the seat-upholstery, next to the seat-tube to the ground.

**Note:** Maximum seat height difference rear to front is 130 mm.

### Back height:

- a) For the user: From the seat, including cushion, to be no more than 10 - 20 mm below the lower shoulder blade.
- b) On the wheelchair: From top of the seat-upholstery to upper edge of backrest upholstery.

**Note:** The user's ability to sit upright has a major influence on the back height and it can therefore differ considerably.

### Back angle:

**Important:** The back height depends on the degree of disability.

0° is the angle 90° to the ground. Negative angles are <90°

(-) and positive angles are >90° (+)

## Technical Data

Overall width:		Overall width with: 24" Rear wheel	25" Rear wheel
Overall width:		For 0° camber: SW + 170 mm	SW + 170 mm
Max. overall height:	1120 mm	For 3° camber: SW + 230 mm	SW + 240 mm
Max. overall length:	910 mm	For 6° camber: SW + 290 mm	SW + 300 mm

Please note that the matrix is based on a std configuration:

**Standard wheelchair 400 x 400 mm; 560 mm COG; Seat angle of 8°**

All changes in the configuration might change the seat heights.

Manufacturing tolerances of +/- 10 mm

## Weight

We want to be very transparent on weight. The following information will be a guide to the lightest possible Nitrum: how to achieve a 7,5 kg wheelchair, and how to order the lightest possible configuration for your Nitrum.

### Nitrum: 7,5 kg configuration

**Frame:** high frame, 92°, 30 mm inset, seat width: 360 mm, seat depth: 400 mm. Seat height: front 470 mm, rear 430 mm. Seat-sling Airflow superlight

**Footrest:** tubular footrest

**Forks and casters:** 111 mm carbotechnology fork; 4" Castor, solid (soft), rim: carbon-composite, ultralight



**Backrest:** Lightweight Aluminium backrest, push-bar release, 325mm height; without push-handles

**Sideguards:** Carbon fibre, slim-style

**Axle-tube :** Axle-assembly superlight, Carbon

**Wheel-locks:** Lightweight compact brake EVO

**Rear wheels:** 24" Proton wheels with Aluminium handrims (coated or anodized) and Schwalbe One tyres; quick-release axles superlight, titan

(Please mind that there is a 5% tolerance on all weight specifications due to weight deviations on mounting parts (tyres, caster-wheels etc.)

## Lightweight-Guide for ordering the Nitrum

Sunrise Medical offers a wide variety of options for the Nitrum to suit every user's needs. However, most options add significant weight to the wheelchair. To make this more transparent when filling in the order-form, and to assist you in ordering the lightest possible wheelchair, we indicate the approximate weight-increase of the options on the order form:

- (L) Indicates the lightest possible option within the range of options
- (+) Indicates that this option adds more than 500 g to the wheelchair's weight compared to the lightest option within the range

## Lightweight-Options for the Nitrum

We developed several options for the Nitrum to save weight on the chair without sacrificing daily-use suitability, comfort or durability



// **Seat sling, Airflow, superlight (NTR020019):** fully adjustable seat-sling with composite buckles and lighter straps (max. user weight 85 kg) (-120 g compared to seat sling "airflow")



// **Axle-assembly superlight, Carbon (NTR010403):**(only 0° camber): glued into the axle-tube, no adjustability of the track-width possible (-160 g compared to NTR010402 carbon axle-tube)



// **Castor, solid (soft), rim: carbon-composite, superlight (NTR080060):** lightweight rim, made of carbon-composite material (-80 g compared to Castor, solid (soft), rim: aluminium)



// **Quick-release axle superlight, Titan (NTR070153):** (-70 g compared to Standard steel quick-release axles)

**Lightweight aluminium backrest, push-bar release (NTR030159):** (-180 g compared to Standard backrest)

**Nitrum** €

NTR010034	Open frame, backrest-angle and CoG adjustable, 125 kg max user weight	XXX,-
NTR010035	Hybrid frame, backrest-angle and CoG adjustable, 140kg max user-weight	XXX,-

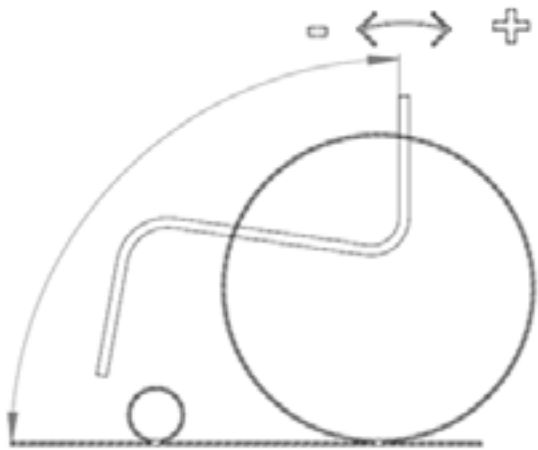
**Pro Options for Nitrum and Nitrum Hybrid: fixed welded center of gravity and backrest-angle**

Important Note: Please check your measurements carefully as a Nitrum Pro is non returnable.  
 No adjustment of rear seat-to-floor height possible; only +/- 10 mm center of gravity adjustment.

NTR010036	Pro: Open frame, fixed welded CoG, 125kg max. user-weight	XXX,-
NTR010037	Pro: Hybrid frame, fixed welded CoG, 140kg max. user-weight	XXX,-

**Backrest-style for Pro versions**

NTR010044	Fixed welded, non angle-adjustable, non foldable (choose angle and backrest-height below. Choose Push handles and Backrest Upholstery in the Backrest-section)								-
Angle (to the ground)	-4° (86°)	-2° (88°)	-0° (90°)	+2° (92°)	+4° (94°)				
Backrest height	275	300	325	350	375	400	425	450	
NTR030404	Backrest cross-tube, wide (78 mm clearance between backrest upholstery and cross-tube)								-
NTR030403	Backrest cross-tube, narrow (48 mm clearance between backrest upholstery and cross-tube)								-
NTR010038	Angle-adjustable, foldable (please choose further backrest options in the "Backrest"- or "Freestyle-backrest"-section- additional upcharges can apply)								-



// Nitrum Hybrid Pro



// Nitrum Pro

**Seat Width** (measured from outside frame tube to outside frame tube)

(mm)	320	340	360	380	400	420	440	460	480	500
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**Seat Depth**

(mm)	340	360	380	400	420	440	460	480	500
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**Front Seat Height** (in mm)

<b>Fork (Length)</b>	<b>Frame (2)</b>	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570
<b>3"</b>																
3" / 111 mm (1)	Low				-	-	-	-	-	-	-	-	-	-	-	-
3" / 111 mm (1)	High	-	-	-	-				-	-	-	-	-	-	-	-
<b>4"</b>																
4" / 111 mm (1)	Low	-					-	-	-	-	-	-	-	-	-	-
4" / 123 mm	Low	-	-					-	-	-	-	-	-	-	-	-
4" / Frog Leg	Low	-	-	-	-				-	-	-	-	-	-	-	-
4" / 111 mm (1)	High	-	-	-	-	-					-	-	-	-	-	-
4" / 123 mm	High	-	-	-	-	-	-					-	-	-	-	-
4" / Frog Leg	High	-	-	-	-	-	-	-	-				-	-	-	-
<b>5"</b>																
5" / 111 mm (1) (3)	Low	-	-	-					-	-	-	-	-	-	-	-
5" / 123 mm	Low	-	-	-	-				-	-	-	-	-	-	-	-
5" / Frog Leg	Low	-	-	-	-	-	-	-	-				-	-	-	-
5" / 111 mm (1) (3)	High	-	-	-	-	-	-	-					-	-	-	-
5" / 123 mm	High	-	-	-	-	-	-	-	-					-	-	-
5" / Frog Leg	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>6"</b>																
6" / 123 mm	Low	-	-	-	-	-					-	-	-	-	-	-
6" / Frog Leg	Low	-	-	-	-	-	-	-	-	-	-			-	-	-
6" / 123 mm	High	-	-	-	-	-	-	-	-	-				-	-	-
6" / Frog Leg	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**Rear Seat Height** (the rear seat height can only be between 0 mm and 130 mm below the selected front seat height)

<b>Rear seat height in mm</b>	370	380	390	400	410	420	430	440	450	460	470	480	490	500
24" rear wheels (4) (6)														-
25" rear wheels (5) (6)	-													

The ordered rear seat height is adjustable  $\pm 10$  mm (Pro-Option: no adjustment possible).

**Nitrum Hybrid and Nitrum Hybrid Pro:**

<b>24":</b>	Min. Rear Seat Height 420mm (only with NTR020012/ 17/ 18/ 19 Seat sling, strap-style (airflow)) ; 430mm with NTR020002/ 3/ 4 Seat sling, nylon, tension adjustable
<b>25":</b>	Min. Rear Seat Height 430mm (only with NTR020012/ 17/ 18/ 19 Seat sling, strap-style (airflow)); 440mm with NTR020002/ 3/ 4 Seat sling, nylon, tension adjustable

(1) Also available as one arm fork; please choose fork type on the following pages

(2) High Frame is 40 mm taller than Low Frame. On lower or medium seat-heights, the high frame gives you the opportunity to choose a shorter fork/smaller caster

(3) 460mm (low frame) and 500mm (high frame) not with one-arm fork

(4) No decline or increase of the seat height possible for rear height 370 and 490 mm

(5) No decline or increase of the seat height possible for rear height 380 and 500 mm

(6) Rear seat height 370mm (24") and 380mm (25") only possible with NTR020012/ 17/ 18 seat-sling strap-style airflow

## Seat €

Seat sling		
NTR020002	Seat sling, nylon, tension adjustable, 1 utility bag	–
NTR020003	Seat sling, nylon, tension adjustable, 2 utility bags (1)	XXX,-
NTR020004	Seat sling, nylon, tension adjustable, 1 utility bag, 1 catheter bag (1)	XXX,-
NTR020012	Seat sling, strap-style (airflow), tension adjustable with 1 utility bag (2) (3)	XXX,-
NTR020017	Seat sling, strap-style (airflow), tension adjustable with 2 utility bag (1) (2) (3)	XXX,-
NTR020018	Seat sling, strap-style (airflow), tension adjustable with utility bag and catheter bag (1) (2) (3)	XXX,-
NTR020019	Seat sling, Airflow, superlight without bag (max user-weight 85 kg) (2) (3) (4) (L)	XXX,-
NTR020000	Without seat sling	–

Seat cushion, cover with zipper, black		
NTR020101	Seat cushion, foam (medium-soft), cover with zipper, black, 30 mm	XXX,-
NTR020102	Seat cushion, foam (medium-soft), cover with zipper, black, 50 mm	XXX,-

Seat accessories		
NTR090018	Lap belt with buckle (5)	XXX,-

JAY Cushions – for complete product range see JAY order forms		
JAY020002	JAY Basic	XXX,-
JAY020003	JAY Soft Combi P	XXX,-
JAY020001	JAY Easy Visco C	XXX,-
JAY020007	JAY Easy Fluid	XXX,-
JAY020004	JAY Lite	XXX,-

## Backrest €

NTR030157	Aluminium backrest, push-bar release (6)	250 - 300	300 - 350	350 - 400	400 - 450	–
		250	300	350	400	
		275	325	375	425	
		300	350	400	450	
NTR030158	Aluminium backrest, twist-lock release (7)	275	350	425	–	
		300	375	450		
		325	400			
NTR030159	Lightweight Aluminium backrest, push-bar release (8) (L)	250	325	400	XXX,-	
		275	350	425		
		300	375	450		

## Backrest

Push handles (1)		
NTR030200	Omit push handles (L)	–
NTR030201	Push handles long (2)	–
NTR030203	Push handles, fold-down (2) (3)	XXX,-
NTR030204	Push handles, height-adjustable (3) (+)	XXX,-
NTR030205	Push handles, height-adjustable for Jay backs (3) (+)	XXX,-
	NTR030404 Backrest cross-tube, wide (78 mm clearance between backrest upholstery and cross-tube) (9)	–
	NTR030403 Backrest cross-tube narrow (48 mm clearance between backrest upholstery and cross-tube) (9)	–
NTR030012	Backrest, angle-adjustable (non foldable) (10)	–
NTR030015	Backrest, angle-adjustable, fold-down. Standard colour: black (10)	–
	Colour of the bracket	Orange      Silver      Red      Blue
NTR030102	Backrest, angle-adjustable, fold-down, locked when folded, colour: black	XXX,-

(1) Only from SW 360 mm

(2) Not possible to convert strap-style upholstery to standard upholstery

(3) Max seat-width 460mm

(4) Max user weight 85kg, max seat-width 400mm

(5) Not with fixed welded backrest

(6) Choose back height factory setting (mm). Height adjustments possible in the range 250 - 300

mm; 300 - 350 mm; 350 - 400 mm; 400 - 450 mm

(7) Not with seat width 320 mm; adjustability +/-10mm; not with NTR030012

(8) Fixed height; not with height-adjustable push handles

(9) Only with NTR030159 Lightweight Aluminium backrest, push-bar release

(10) Adjustable: -17,5° to +10°

**Backrest Upholstery (EXO Evo version)**

NTR030316	EXO Backrest sling, synthetic fibre, padded, adjustable, 1 accessory bag, black						–
	Colour binding tape:	Black	Orange	Silver	Red	Blue	–
NTR030317	EXO PRO Backrest, synthetic fibre, padded, adj., breathable, spacer fabric, 1 accessory bag, black						XXX,-
	Colour binding tape:	Black	Orange	Silver	Red	Blue	–
NTR030300	Without backrest sling						–

**Freestyle Back (Angle adjustable)**

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NTR030090	Freestyle back with J3 Carbon Back (SC)						XXX,-
	Backrest shell height 240 mm (4)						–
	Backrest shell width 320 mm – can be used from SW 320 mm						–
	Backrest shell width 370 mm – can be used from SW 380 mm						–
	Backrest shell width 420 mm – can be used from SW 440 mm						–
	Backrest shell height 310 mm (5)						–
	Backrest shell width 320 mm – can be used from SW 320 mm						–
	Backrest shell width 370 mm – can be used from SW 380 mm						–
	Backrest shell width 420 mm – can be used from SW 440 mm						–
NTR030012	Backrest, angle-adjustable (non foldable) (6)						–
NTR030015	Backrest, angle-adjustable, fold-down. Standard colour: black (6) (7)						–
	Orange	Silver	Red	Blue			XXX,-
NTR030102	Backrest, angle-adjustable, fold-down, locked when folded. Standard colour: black						XXX,-
NTR030211	Push handles removable (8)						XXX,-

**JAY Backs (1)**

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<b>JAY J3 Back, Shallow Contour (SC)</b>	<b>Short (S)</b>		<b>Medium (M)</b>		<b>Tall (T)</b>		
Mid Thoracic (MT)			JAY030010	340 mm	JAY030033	380 mm	XXX,-
Upper Thoracic (UT)	JAY030012	420 mm	JAY030019	460 mm	JAY030025	500 mm	XXX,-
Shoulder Height (SH)	JAY030015	530 mm	JAY030022	570 mm	JAY030028	610 mm	XXX,-
<b>JAY J3 Back, Mid Contour (MC)</b>	<b>Short (S)</b>		<b>Medium (M)</b>		<b>Tall (T)</b>		

(1) Not in combination with Freestyle back  
(2) Not with height adjustable push handles  
(3) Only available from 325 mm backrest height  
(4) Backrest height 275 - 350 mm

(5) Backrest height 325 - 425 mm  
(6) -17,5° - +10°  
(7) Always with push-bar release  
(8) Only with NTR030090 Freestyle back with J3 Carbon Back (SC)

## Seat Upholsteries & Cushions



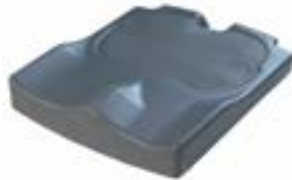
// NTR020002-020004  
Seat sling, nylon, tension adj.



// NTR020012-020018  
Seat sling strap style (airflow)



// JAY020002 JAY Basic  
(pictured without cover)



// JAY020001 JAY Easy Visco  
(pictured without cover)



// JAY020003 JAY Soft Combi P  
(pictured without cover)



// JAY020004 JAY Lite  
(pictured without cover)

## Backrest



// NTR030201 Push handles long



// NTR030203 Push handles, fold-down



// NTR030015 Backrest, angle-adjustable, fold-down



// NTR030090 Freestyle Back mit JAY J3 Carbon Rücken (SC)



// NTR030157 Aluminium backrest, push-bar release



// NTR030158 Aluminium backrest, angle-adjustable, twist-lock release



// NTR030211 Pushhandles removable, for Freestyle Back



// NTR030316 EXO Backrest sling (EXO Evo version)



// NTR030317 EXO PRO Backrest (EXO Evo version)



Mid Thoracic (MT)			JAY030011	340 mm	JAY030018	380 mm	XXX,-
Upper Thoracic (UT)	JAY030013	420 mm	JAY030020	460 mm	JAY030026	500 mm	XXX,-
Shoulder Height (SH)	JAY030016	530 mm	JAY030023	570 mm	JAY030029	610 mm	XXX,-
<b>JAY J3 Carbon Back, Shallow Contour (SC)</b>							
Lower Thoracic	JAY060001	170 mm			JAY060002	240 mm	XXX,-
Mid Thoracic	JAY060003	300 mm			JAY060004	380 mm	XXX,-

**Accessories for JAY J3 Backs**

WHT030415	Whitmyer Headrest, COBRA XTRA, flip back (2)	XXX,-
WHT030416	Whitmyer Headrest, AXYS, Standard (2)	XXX,-
JAY090058	JAY Accessory bag (3)	XXX,-

**Armrests & Sideguards**

NTR040101	Sideguard, carbon fibre, slim, black (4) (5) (L)	XXX,-
NTR040102	Sideguard, aluminium, cold weather protection (in frame colour)	XXX,-
NTR040103	Sideguard, aluminium, cold weather protection, fender (in frame colour) (6)	XXX,-
NTR040104	Sideguard, carbon fibre, fender, cold weather protection, black (6)	XXX,-
NTR040107	Sideguard, composite, removable, 21 cm high (310 mm long), black (7)	XXX,-
NTR040050	Single-post sideguard, height-adjustable, removable, armpad (250 mm) (7) (8) (+)	XXX,-
NTR040051	Single-post sideguard, height-adjustable, removable, armpad long (330 mm) (7) (8) (+)	XXX,-
NTR040052	Single-post sideguard, armpad (330 mm), tool height-, depth-adjustable, removable (8) (9) (+)	XXX,-
NTR040117	Tubular armrest, Alu, swing away (sideways), padded, removable (10) (+)	XXX,-
NTR040000	Without Sideguard	-

**Accessories for Sideguards**

NTR040061	Flip-back option for sideguards (17)	-
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**Footboards**

NTR050029	Footrest, tubular, lightweight, aluminium (11) (L)	-
NTR050030	Footrest, tubular, lightweight, aluminium, with cover (11)	XXX,-
NTR050025	Platform footplate lightweight angle & depth adjustable composite (11)	XXX,-
NTR050024	Platform footplate lightweight angle & depth adjustable aluminium (colour: frame colour) (11)	XXX,-
NTR050026	Platform footplate lightweight angle & depth adjustable carbon (11)	XXX,-
NTR050034	Footboard, platform, lightweight, aluminium, angle and depth-adjustable, <b>high-mount</b> , calf strap, frame colour	XXX,-
NTR050125	Performance footplate angle adjustable (11)	XXX,-
NTR050128	Footboard, platform, plastic, angle and depth adjustable, flip-up (to the back) (12) (14) (+)	XXX,-
NTR050022	Footboard, divided, aluminum, angle-adjustable, flip-up (sideways), heel loop, black (13) (15) (+)	XXX,-

**Accessories for Footboards**

NTR050127	Adjustable side protection, to create a side-stop on the footboard (16)	XXX,-
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**Lower Leg Length (LLL) (LLL has to be 25 mm less than front seat height, measurements in mm)**

220	230	240	250	260	270	280	290	300	310	320
330	340	350	360	370	380	390	400	410	420	430
440	450	460	470	480	490	500	510	520		

(1) Not with NTR030090 Freestyle back with J3 Carbon Back (SC)

(2) Only with JAY J3 backs

(3) Only with JAY J3 Carbon Backs

(4) With 24" rear wheel min. rear seat height 410 mm; with 25" rear wheel min. rear seat height 430 mm

(5) Slim style, carbon fibre

(6) Minimum seat height 390 mm

(7) Quickie style

(8) Not with tubular armrest

(9) Not with COG 92 mm &amp; 104 mm

(10) Not in combination with handbike axle, not in combination with fixed welded PRO backrest

(11) LLL 360 mm - 520 mm

(12) LLL from 330 mm, not with 4" castor, min. seat-width 340 mm

(13) LLL from 380 mm with low frame, from 420 mm with high frame, not with 4" &amp; 6" castor

(14) 125 kg max user weight

(15) Only up to 480 mm seat width

(16) Only for platform footplates lightweight angle &amp; depth adjustable

(17) Only with NTR040102 Sideguard aluminium, not with Pro option in combination with fixed welded backrest, not in combination with NTR030158 Backrest, twist-lock

**JAY J3 Backs** (More JAY products available on separate JAY order forms)



// JAY J3 Back Heights from Left to Right: Lower Thoracic, Mid Thoracic, Upper Thoracic, Shoulder Height



// Shallow Contour (SC)



// Mid Contour (MC)

**Sideguard & Armrest**



// NTR040101 Sideguard, carbon fibre, slim, black



// NTR040102 Sideguard, aluminium, cold weather protection (in frame colour)



// NTR040103 Sideguard, aluminium, cold weather protection, fender (in frame colour)



// NTR040104 Sideguard, carbon fibre, fender, cold weather protection (black)



// NTR040061 Flip-up Sideguard in combination with NTR040102



**Footrest**



// NTR050029 Footrest, tubular, lightweight, aluminium



// NTR050030 Footrest, tubular, lightweight, aluminium, with cover



// NTR050034 Footboard, platform, lightw., alum., angle & depth-adj., high-mount, frame colour



// NTR050125 Footboard, platform, Performance, aluminium, angle-adj.



// NTR050026 Footboard, platform, lightweight, carbon fibre, angle and depth-adj.



// NTR050127 Foot positioning plate



// NTR010040 Design frame protection

Low frame: LLL 220 - 350 mm only with high mounted footrest; for all other footrests from LLL 360 - 500 mm.  
High Frame: LLL 220 - 390 mm only with high mounted footrest; for all other footrests from LLL 400 - 520 mm.

## Frame Characteristics

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### Frame length

NTR010206	Frame standard	-
NTR010207	Frame long (1)	-

### Frame angle

NTR010012	100° frame (2)	-
NTR010013	92° Performance frame (2)	XXX,-
NTR010009	88° Performance compact frame (2)(3)	XXX,-

### Frame inset

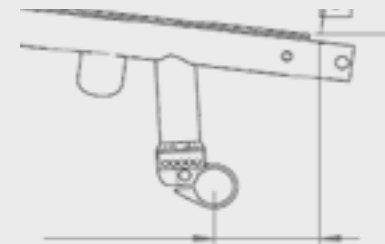
NTR010100	Inset: Standard (0 mm)	-
NTR010101	Inset: Small (10 mm) (4)	-
NTR010103	Inset: Performance (30 mm) (5)	XXX,-

### Accessories

NTR010040	Design Frame protection	XXX,-
NTR110156	Twin-LED light (mounted on caster links, battery and controller on calf-strap)	XXX,-
NTR010500	Wheelbase extension for add-on bike (6) (+)	XXX,-

## Centre of Gravity (COG; all measurements are in mm; measured from front of back post; choose only one option)

COG20	Centre of Gravity 20 mm
COG32	Centre of Gravity 32 mm
COG44	Centre of Gravity 44 mm
COG56	Centre of Gravity 56 mm
COG68	Centre of Gravity 68 mm
COG80	Centre of Gravity 80 mm
COG92	Centre of Gravity 92 mm
COG104	Centre of Gravity 104 mm



## Frame Accessories (15)

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NTR090031	Suspension (up to 70 kg) (7) (8) (+)	XXX,-
NTR090032	Suspension (up to 120 kg) (7) (8) (+)	XXX,-

### Tip assist (step tube)

NTR090001	Tip assist, left	XXX,-
NTR090002	Tip assist, right	XXX,-
NTR090003	Tip assist, pair (9) (+)	XXX,-
NTR090009	Crutch holder (10)	

### Anti-tip tubes swing-away

NTR090004	Anti-tip tubes, swing-away, left (+)	XXX,-
NTR090005	Anti-tip tubes, swing-away, right (+)	XXX,-
NTR090006	Anti-tip tubes, swing-away, pair (11) (+)	XXX,-
NTR090007	Anti-tip tubes, plug-in, pair (+)	XXX,-

## Frame Accessories

### Anti-tip flip up (user operated)

NTR090033	Anti-tip tubes, flip-up (upwards), LH (12) (+)	XXX,-
NTR090008	Anti-tip tubes, flip-up (upwards), RH (12) (+)	XXX,-

(1) 20 mm additional frame length between front edge of seat upholstery and knee bend

(2) No change from 3" & 4" castor to 5" & 6" afterwards possible

(3) Only with 0 mm and 30 mm inset, minimum seat-height difference front / rear: 30 mm

(4) Not in combination with 88° frame angle

(5) Not available for seat width 320 mm

(6) Always 3° more than the standard axle camber. Not in Combination with Pro option.

(7) Not with COG 68 - 104 mm. Not with seat height 370 - 420 mm and 24" & 370 - 430 mm with

25". Not with carbon axle tube. Not with sport anti-tip & tip-assist

(8) Not for handbike use, only up to seat width 460 mm. Not in combination with Hybrid frame or Pro

versions

(9) Not available with anti-tip

(10) Only in combination with tip assist

(11) Not available with tip assist

(12) Not in combination with handbike axle

(13) Not with carbon axle; not with COG 20 mm

(14) 3" wheels

(15) No frame accessories possible in combination with NTR010403 Axle-assembly superlight, Carbon

**Frame Versions**

	Inset (in mm per side)		
Angle ( $\alpha$ )	0 mm	10 mm	30 mm
100°	x	x	x
92°	x	x	x
88°	x	-	x

// NTR010207 Frame long: Additional 20 mm frame-length ("x") between front-edge of seat-upholstery and the knee-bend

Width between frame-tubes ("y") at the footrest: use the following formula: seat-width - 50 mm - 2x inset  
 Example for 400 mm seat-width and 30 mm inset:  
 400 mm - 50 mm - (2 x 30 mm) = 290 mm



**Twin-LED light**



// NTR110156 Twin-LED light (mounted on caster stems, battery and controller on calf-strap)

Integrated Li-Ion Battery (3.6V, 2600mAh), on-off-button on controller-box, 3 modes: full power, low power, flash-mode, incl. USB to micro-USB cable for charging

**Frame Accessories**



// NTR090001 Tip assist left



// NTR090004 Anti-tip tubes, swing-away



// NTR090007 Anti-tip tubes, plugin



// NTR090035 Anti-tip tubes, aluminium, sport, plug-in



// NTR090008 Anti-tip tubes, flip-up (upwards), user operated



COG	Sitzhöhe							
	140	150	160	170	180	190	200	210
20	OK	OK	OK	OK	OK	OK	OK	OK
22	OK	OK	OK	OK	OK	OK	OK	OK
24	OK	OK	OK	OK	OK	OK	OK	OK
26	OK	OK	OK	OK	OK	OK	OK	OK
28	OK	OK	OK	OK	OK	OK	OK	OK
30	OK	OK	OK	OK	OK	OK	OK	OK
32	OK	OK	OK	OK	OK	OK	OK	OK
34	OK	OK	OK	OK	OK	OK	OK	OK

// NoGo Matrix for Emulse F55 Bundling

NTR090035	Anti-tip tubes, aluminium, sport, plug-in (13) (+)	XXX,-
NTR090010	Transit wheels (14) (+)	XXX,-

### Preparation for ATTITUDE Add-on bike

€

NTR090211	Preparation for ATTITUDE, w/o ATTITUDE order (1)	XXX,-
NTR090212	Preparation for ATTITUDE, with ATTITUDE order (2)	-

### Empulse F55 Bundling

€

EMO000101	With Empulse F55* order, not mounted to the wheelchair (3)	-
EMO000102	With Empulse F55* order, mounted to the wheelchair (3) - Additional cost XXX - Attach F55* OF	XXX,-

### Empulse F35 Bundling

€

EMO000301	With Empulse F35 order, not mounted to the wheelchair (14) (Please use separate OF to order F35)	-
EMO000302	With Empulse F35 order, mounted to the wheelchair (14) (Please use separate OF to order F35)	-

### Forks (Compare with your choice on the first page)

€

NTR080013	Castor fork, Carbotechnology ® (not suitable / approved for power add-ons), black (4) (L)	-
	Orange      Silver      Red (5)      Blue (5)	XXX,-
NTR080029	Castor fork, Aluminium, black (6)	-
	Orange      Silver	XXX,-
NTR080008	Castor fork, aluminium, one-arm. Standard colour: black (7)	XXX,-
	Orange      Silver      Red      Blue	XXX,-
NTR080007	Castor fork, aluminium, suspension (Frog Legs ®), black (8) (+)	XXX,-

### Castor Wheels (Compare with your choice on the first page)

€

NTR080301	Castor, solid (hard), rim: composite, black (9)	-
NTR080302	Castor, solid (soft), rim: composite, black (10)	-
NTR080303	Castor, solid (hard), light-up, rim: composite, black (11)	XXX,-
NTR080304	Castor, solid (hard), rim: aluminium (12)	XXX,-
NTR080306	Castor, solid (soft), rim: aluminium, silver (12)	XXX,-
	Colour rim:      Black      Orange      Red      Blue	XXX,-
NTR080060	Castor, solid (soft), rim: carbon-composite, ultralight (13) (L)	XXX,-

### Rear Wheels (Compare with your choice on the first page) (14)

€

NTR070000	Without rear wheel	-
NTR070001	Rear wheel, Universal, 36 spokes (silver), cross-wise spokes (15) (+)	-
NTR070002	Rear wheel, Design, 36 spokes (silver), straight spokes (15)	-
NTR070003	Rear wheel, Lightweight, 24 spokes (silver), straight spokes (16)	-
NTR070004	Rear wheel, Proton, 24 spokes (black), straight spokes (17) (L)	XXX,-
NTR070005	Rear wheel, Spinergy, 18 spokes (black), straight spokes; hub: silver	XXX,-
NTR070007	Rear wheel, Spinergy, 12 spokes (black), straight spokes, hub black	XXX,-
NTR070009	Rear wheel, Mountainbike, 36 spokes (silver), straight spokes (15)	XXX,-
NTR070010	Mountainbike wheel, replacement kit incl. tyre (extra coarse profile) (15)	XXX,-

(1) Docking pins assembled; not with suspension, not with lightweight compact brake  
(2) Docking pins assembled; not with suspension, not with lightweight compact brake; ATTITUDE order on separate order form  
(3) Please use separate OF to order F55. Not with suspension, not with Lightweight Compact brake EVO. Please consult NoGo matrix on previous page.  
(4) Only 111 mm  
(5) Red and Blue only in combination with soft castor  
(6) Only 123 mm  
(7) Only 111 mm length & only with 4" & 5" aluminium soft, aluminium solid or 4" composite, ultralight  
(8) Only in combination with 4" & 5" solid & all aluminium castors. Only black

(9) 3" - 6"; not with one arm fork  
(10) Only 5" & 6"; not with one arm fork  
(11) Not available for 3" and 6"; not with one arm fork  
(12) Only for 4" & 5"  
(13) Only 4"  
(14) For users with higher user weight than 100 kg, we recommend cross spoked wheels  
(15) Only 24"  
(16) See colour options on last page  
(17) User weight limit 100 kg  
(18) Standard, stainless steel  
(19) Not with Universal wheel, Red Button

## Rear Wheels



// NTR070001 Rear wheel, Universal, 36 spokes (silver), cross-wise spokes



// NTR070002 Rear wheel, Design, 36 spokes (silver), straight spokes



// NTR070003 Rear wheel, Lightweight, 24 spokes (silver), straight spokes



// NTR070004 Rear wheel, Proton, 24 spokes (black), straight spokes



// NTR07010 Mountainbike wheel



// NTR07003 Rear wheel, Lightweight, 24 spokes in combination with color selection on last page (NTR100336 - NTR100338)

## Tyres &amp; Forks



// NTR070101 Schwalbe Right Run



// NTR070107 Schwalbe One



// NTR070104 Schwalbe Marathon Plus Evolution



// NTR070102 Tyre, puncture proof, tread



// NTR080013 & NTR080306 Castor fork, Carbotecture & Castor solid (soft) aluminum



// NTR080008 Castor fork, aluminum, one-arm, blue

**Quick Release Axle** €

NTR070150	Quick-release axle (18)	–
NTR070153	Quick-release axle superlight, Titan (19) (L)	XXX,-

**Tyres** €

NTR070101	Tyre, pneumatic, fine profile, Schwalbe Right Run	–
NTR070107	Tyre, pneumatic, slick, Schwalbe One (L)	XXX,-
NTR070102	Tyre, puncture proof, tread (+)	–
NTR070104	Tyre, pneumatic, puncture proof, tread, Schwalbe Marathon Plus Evolution (+)	XXX,-

**Handrims** €

NTR070201	Handrims, aluminium, powder-coated, clear (L)	–
NTR070202	Handrims, aluminium, anodised, silver (L)	–
NTR070203	Handrims, aluminium, powder-coated, coloured (1) (L)	XXX,-
NTR070204	Handrims, stainless steel, silver (+)	–
NTR070205	Handrims, titanium, untreated	XXX,-
NTR070206	Handrims, titanium, powder-coated, clear	XXX,-
NTR070207	Handrims, Supergrip® (+)	XXX,-
NTR070208	Handrims, Maxgripp® (2) (+)	XXX,-
NTR070212	Handrims, Ellipse 3R, black (+)	XXX,-
NTR070250	Handrim cover, rubber (3)	XXX,-
B4M	Handrims, Carbolife QUADRO (2) (4) (+)	XXX,-
B4M	Handrims, Carbolife GEKKO (4) (+)	XXX,-

**Handrim mounting**

NTR070307	Handrim mount, super narrow (7 mm) (5)	XXX,-
NTR070317	Handrim mount, narrow (17 mm)	–
NTR070327	Handrim mount, wide (27 mm)	–

**Axle Tube**

NTR010401	Axle tube, aluminium, black	–
NTR010402	Axle tube, carbon, black (6)	XXX,-
NTR010403	Axle-assembly superlight, Carbon (6) (7) (L)	XXX,-

**Wheel Camber**

NTR070600	0°	–
NTR070603	3°	–
NTR070606	6° (8)	–
NTR070609	9° (9)	–

**Spoke Guards (2)** €

NTR070831	Transparent	NTR070813	Galaktica		XXX,-
NTR070823	Princess	NTR070818	Jungle Fever		XXX,-
NTR070816	Happy Lions	NTR070811	Feather		XXX,-
NTR070819	Monkeys	NTR070821	Pirates		XXX,-
NTR070820	Oriental	NTR070806	Chrome		XXX,-
NTR070829	Superhero	NTR070814	Graffiti		XXX,-
NTR070817	Hot Wheels	NTR070802	Basketball		XXX,-

(1) Select colour on last page

(2) Only 24"

(3) Not with 25" and 26" and Ellipse

(4) B4M leadtimes and conditions apply

(5) Only with stainless steel and Ellipse

(6) Add-ons (push-devices, trailers etc.) must not be clamped to the carbon tubes

(7) Not with WheelDrive; only 0° camber, no adjustment of track-width possible. Not in combination with Pro option. No anti-tips or tip-assist possible.

(8) Not with carbon axle tube. Not with WheelDrive

(9) Not with carbon axle tube. Not with handbike axle &amp; WheelDrive

## Handrims



// NTR070208 Handrim Maxgrepp®



// NTR070212 Handrim Ellipse 3R

## Axle Tubes



// NTR010403 Axle assembly super-light

// NTR010402 Carbon axle-tube  
// NTR100553 Axle-stem clamp colour, red

// NTR010036 Nitrum Hybrid Pro



// NTR010037 Nitrum Pro

## Wheel Locks



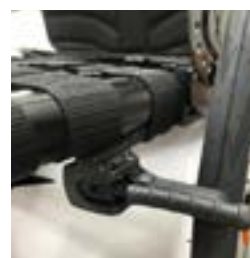
// NTR060001 Standard brake



// NTR060002 Knee-lever brake



// NTR060023 Compact brake EVO



// NTR060004 Lightweight Compact brake EVO

## Accessories



// NTR090000 Tool kit



// NTR090024 High pressure pump



// NTR090025 Air pump



// NTR090030 Back pack



// NTR090026 Mobile phone pocket



NTR070822	Pool	NTR070812	Flying Water			XXX,-
NTR070827	Silk	NTR070828	Space			XXX,-
NTR070830	Tiger	NTR070833	Zebra			XXX,-

### Wheel Locks

€

NTR060001	Standard brake					–
NTR060002	Knee-lever brake					XXX,-
NTR060023	Compact brake EVO (1)					XXX,-
NTR060024	Lightweight compact brake EVO (1)(2) (L)					XXX,-
NTR060010	Brake lever extension, knee-lever brake, fold-down (3)					XXX,-
NTR060006	Compact one-arm brake, left actuation (+)					XXX,-
NTR060007	Compact one-arm brake, right actuation (+)					XXX,-

### Accessories

€

NTR090000	Tool kit					–
NTR090024	High pressure pump (0 - 11 bar)					XXX,-
NTR090025	Air pump					XXX,-
NTR090030	Back pack					XXX,-
NTR090100	Tie down brackets for transportation (9)					XXX,-
NTR090014	Frame reinforcement kit for add on bike (6)					XXX,-
NTR090026	Mobile phone pocket					XXX,-

### Frame Colours (7)

	Frame	Handrim	Hub/Rim (8)		Frame	Handrim	Hub/Rim (8)
02 Brillant Silver			26 Silver Texture				
03 Silver Matt			27 Graphitemetallic				
06 Sun Yellow			29 Black				
14 Blue			31 Matt Black				
15 Brillant Marine			32 Signal White				
16 Matt Marine			33 Pink				
19 Brillant Purple			34 Dark Chocolate Metallic				
21 Red Ruby			35 Skyblue				
22 Brillant Red			36 Cyan-Metallic				
23 Matt Red			37 Marsred (Orange)				
24 Tutti Frutti Orange			46 Mamba Green				
			40 Kiwi				
			41 Flamingo-Glitter				
			42 Matt Anthracite				
			43 Azure Blue				
		XXX,-	XXX,-			XXX,-	XXX,-

### Sticker Colours „NITRUM“ & „QUICKIE“

€

NTR100550	Black					–
NTR100551	Silver					–
NTR100552	Orange					–

(1) Not available with 6° &amp; 9° camber

(2) Adjustment of COG ±20 mm on a wheelchair in the field. Not for use with add-on bikes

(3) Only with NTR060002

(4) Not in combination with high mounted footrest

(5) Not with LLL 220 - 360 mm

(6) Not necessary in combination with ATTITUDE handbikes. Not possible and not necessary for

Nitrum Hybrid.

(7) Please consult our colour catalogue to review your colour choice

(8) Only with rear wheel, universal

(9) In combination with Pro option only possible with NTR010038 backrest angle-adjustable, foldable

NTR100553	Red	–
NTR100554	Blue	–

**Axle Stem Clamp Colours (3)**

€

NTR100560	Silver	–
NTR100561	Orange	XXX,-
NTR100562	Red	XXX,-
NTR100563	Blue	XXX,-

**Frame Graphic "Floating Dots" Colours (1)**

€

NTR100570	Black	XXX,-
NTR100575	Matt Black	XXX,-
NTR100571	Silver (Grey)	XXX,-
NTR100572	Orange	XXX,-
NTR100573	Red	XXX,-
NTR100574	Blue	XXX,-

**24" Lightweight Wheel Colours**

€

	Black	–
NTR100336	Orange anodised (2)	XXX,-
NTR100337	Blue anodised (2)	XXX,-
NTR100338	Red anodised (2)	XXX,-

(1) No choice of sticker colours (NTR100550-554) in combination with frame graphic "Floating Dots" possible. The "Nitrum" sticker on the caster-link is always the same colour as the chosen Floating Dots- colour

(2) Anodised colours for hub and rim, black spokes. Only with lightweight wheel in 24"

(3) No choice in combination with Pro option

## Frame Graphics



// Frame Graphics "Floating Dots"



// NTR100336  
Lightweight wheel, anodized orange



// NTR100337  
Lightweight wheel, anodized blue



// NTR100338  
Lightweight wheel, anodized red

Comments

Empty box for comments.

Nitrum €

<b>Base Price</b>	<b>00,000.00</b>
Total Of Additional Equipment	
Packaging And Transport	
Exclusive VAT	
VAT	
<b>Total Price</b>	

Date Signature

Day Month Year



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