

Arto

A dynamic driving experience



IMPORTANT TIPS FOR CHOOSING YOUR MOTORHOME

When buying a motorhome, camper van or urban vehicle (hereafter: motorhome), it is particularly important to choose the right layout and an appealing design. In addition, weight also plays an essential role. Family, friends, optional equipment, accessories and baggage – space must be available for all of these. At the same time, there are legal and technical limits to the configuration and load. Every motorhome is designed for a certain weight, which may not be exceeded during driving. For motorhome buyers, this raises the question: How should I configure my vehicle to accommodate passengers, baggage and accessories according to my needs without the vehicle exceeding this maximum weight? In order to make this decision easier for you, we provide you below with a few tips that are particularly important when selecting your vehicle from our portfolio:

1. The technically permissible maximum laden mass...

... is a value set by the manufacturer which the vehicle may not exceed. Niesmann+Bischoff specifies a layout-related upper limit for the vehicle, which can vary from layout to layout (e.g. 3,500 kg, 4,400 kg). You can find the corresponding specification for each layout in the technical data.

Dimensions and weights (without accessories)		
Overall length	in mm	8.870
Overall width	in mm	2.415
Overall height	in mm	3.340
Technically permissible laden mass*	in kg	7.200 (opt: 7.490)
Mass in running order*	in kg approx.	5.281 (5.017 - 5.54)
Manufacturer-specified mass for optional equipment*	in kg	1.705
Technically permissible towing weightbraked	in kg	3.300
Seats		

2. The mass in running order...

... consists – to put it simply – of the basic vehicle with standard equipment plus a standard weight of **75 kg for the driver**. It is legally permissible and possible for the mass in running order of your vehicle to deviate from the nominal value stated in the sales documents. **The permissible tolerance is \pm 5%.** The **permissible range** in kilograms is given in **brackets** after the mass in running order. In order to provide you with full transparency regarding possible weight deviations, Niesmann+Bischoff weighs each vehicle at the end of the line and informs your trade partner of your vehicle's weighing result for forwarding to you.

Detailed explanations on the subject of mass in running order can be found in the "Legal Information" section.

Dimensions and weights (without accessories)		
Overall length	in mm	8.870
Overall width	in mm	2.415
Overall height	in mm	3.340
Technically permissible laden mass*	in kg	7.200 (opt: 7.490)
Mass in running order*	in kg approx.	5.281 (5.017 - 5.545
Manufacturer-specified mass for optional equipment*	in kg	1.705
Technically permissible towing weightbraked	in kg	3.300
Seats		

3. The permitted number of seats (including driver)...

... is determined by the manufacturer in what is referred to as the type-approval procedure. This results in what is referred to as the mass of the passengers. For this, a standard weight of 75 kg per passenger (without driver) is calculated.

Detailed explanations on the subject of mass of the passengers can be found in the "Legal Information" section

Manufacturer-specified mass for optional equipment*	in kg	3.300	
Technically permissible towing weightbraked	in kg		
Seats			
Seats fitted with 3-point safety belt)*		2 (opt: 3/4 or 5)	
L-shaped sofa (length × width)	in mm	850 x 625	
Seat bench (length × width)	in mm	1.215 x 625	
Beds			
Overhead front bed (length × width)	in mm	1.900 × 1.400	
Rear bed (length × width)	in mm	2.015 x 2.040	
Filling quantities			

4. The manufacturer-specified mass for optional equipment...

... is a value set by Niesmann+Bischoff per layout for the maximum mass of optional equipment that can be ordered. This limit is intended to ensure that the **minimum pay-mass**, i.e. the legally prescribed free mass for baggage and retrofitted accessories, is actually available for the vehicle load capacity of the vehicles delivered by Niesmann+Bischoff. If, in exceptional cases, the weighing at the end of the line nevertheless shows that the actual load capacity falls short of the minimum pay-mass due to a permissible weight deviation, we will check together with your trade partner and you whether we should, for example, increase the load capacity of the vehicle, reduce the number of seats or remove optional equipment before delivering the vehicle.

Detailed explanations on the subject of the effects of the tolerances on the minimum pay-mass and the payload can be found in the "Legal Information" section.

Dimensions and weights (without accessories)		
Overall length	in mm	8.870
Overall width	in mm	2.415
Overall height	in mm	3.340
Technically permissible laden mass*	in kg	7.200 (opt.: 7.490)
Mass in running order*	in kg approx.	5.281 (5.017 - 5.545
Manufacturer-specified mass for optional equipment*	in kg	1.705
Technically permissible towing weightbraked	in kg	3.300
Seats		

5. The additional weight of optional equipment and packages...

... increases the actual mass of the vehicle (= mass in running order plus selected optional equipment) and reduces the pay-mass. The specified value shows the additional weight compared to the standard equipment of the respective layout. The total weight of the selected packages and optional equipment must not exceed the manufacturer-specified mass for optional equipment.

	Additional weight*	Price in euros
	+ 2	
ble warning		1.900
		774
m		580
ancy brake assistant		4.020
ruise control		591
		496
		8.37
		0.400

Contents

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Standard equipment

Chassis

- · Airbag for driver and passenger seat
- Turbo diesel engine with electronically controlled Common Rail Tyre sealant with compressor (Fix + Go)
- · Emission class Euro VI E (heavy duty homologation) with exhaust gas recirculation
- Manual 6-speed transmission
- Electronically controlled anti-lock braking system (ABS)
- ESC with hill holder and traction + and hill descent control
- · Disc brakes on front and rear axle
- · Electronic brake pad wear indicator
- Electronic brake force distribution (EBFD)
- Alternator 14 V / 150 A
- Battery 12 V / 95 Ah

- Tyres with steel wheel rims 225 / 75 R 16
- Tyres on front and rear axle with traction profile, M+S designation
- Independent suspension on front and rear axle
- · AL-KO-lightweight low frame chassis with maximum frame lowering (220 mm)
- Hot-dip galvanised frame elements and wide chassis (1980
- Bracing of the chassis for more driving dynamics and driving comfort by means of highly resistant hollow steel sections for along- and cross-bracings, which are screwed to the AL-KO
- Start / Stop system
- · Automatic air conditioning with pollen filter in driver's cabin
- · cruise control
- comfort springs at the front axle

Driver's Cab

- Panoramic windscreen made of laminated safety glass, tinted, Engine bonnet with large opening angle and gas pressure
- Flush-sealed windscreen
- · Laterally suspended exterior rear-view mirrors
- Original Fiat Crashbox

- openina mechanism
- Belt-integrated driver and passenger seat, rotatable by 180°, armrests and lateral parts in real leather
- · Electric steering
- · Height-adjustable steering wheel

Bodyshell

- · Exterior panels including garage doors made of torsionresistant 2-sided-aluminium sandwich construction (30 mm) with styrofoam insulation (RTM)
- Roof in sandwich construction (30 mm), torsion-resistant with and window styrofoam insulation (RTM), inside aluminium, outside corrosion-free GRP High Strength X-treme including gel coat
- · Ceiling-to-wall connections without cold bridges, by means of · Rear garage door, passenger side, with low loading height highly compressed PU hard profiles
- · Box structure completely without wood
- · Lighting protection because of Faraday cage
- · Aluminium roof profiles with rain water channel for reducing side panel soiling
- · Connection of roof plate and front mask free of displacements · Garage walls covered with needle felt prevents accumulation of rain water on the roof
- · Side wall panel smooth, stove-enamelled white
- · Front mask, fenders, wheel cases and rear panel of highly stable and corrosion-free glass fibre composite material
- Side skirts of smooth aluminium profiles, stove-enamelled
- · Heated and insulated central double floor of 290 mm height

- · Water and waste water tank frost-proof integrated in the heatable double floor
- Solid entrance door with electric closing aid, double locking
- Exterior, electrically operated double entrance step, hidden behind a cover plate when closed
- · Spacious rear garage with lighting, heatable
- Rear garage floor coated with highly wear-resistant dimpled
- Insulated bodyshell windows, double- glazed plastic window in outer aluminium frame with PU insulation, with pleated darkening blind and insect protection
- · LED daytime running- and back light
- · Fly screen door for entrance door
- Tie system in the garage including 4 adjustable eyelets in each rail
- Entire roof safe to walk on

Living and Sleeping

- Wall lining made of carpet
- Wear-resistant floor covering in stone tiles look
- One level floor between driver's cab and lounge
- · High quality wear-resistant upholstery in 144 different combinations (plus leather for an additional charge)
- Seat cushions with high comfort thanks to the 3-layer foam concept
- Lounge table with multi-directional displacement mechanism extendable tabletop depends on model
- Block for 3-point-belt built in the lounge
- Shoe compartment in the entrance area
- · Convenient storage space in double floor, accessible from the lounge area

- · Solid handle covered with leather for easy entry
- · Gathered roller blinds on the windows of the seating unit and sleepina area
- Spacious overhead cupboards with push-to-open system (gas pressure buffers) for maximum comfort in use
- Indirect accentuated lighting with LED-technology for lounge area (can be dimmed), rear bed and front bed
- Rear bed with lath frame and comfortable cold foam mattress
- Overhead front bed (1 910 \times 1 320 mm) with lath frame, cold foam mattress and comfortable locking and unlocking system
- Power LED reading spots at the front and rear bed as well as in the living room
- Bed access with night lighting
- Foldable step with storage space function at bed access
- Flexible reading lights at the rear bed, 2 spot lights and a LED light-band under the front bed

Kitchen

- Embedded three-flame gas cooker with a 2.4 kw burner and Kitchen drawers with pull-in mechanism electric ignition, divided glass cover, cast-iron pan supports and stationary mounted glass splashguard on the side panel
- Switch-off function for gas supply when closing the gas hob cover
- Single-lever mixer tap made of metal
- · Central locking of the lower kitchen cabinets
- Wide drawer handles can also be used as tea towel holder
- · Mirror on wall next to kitchen
- Refrigerator 106 I, with freezer, AES automatic
- Waste bin in the lower kitchen cabinet

Bathroom and Toilet

- Spacious bathroom solutions
- High-quality bathroom door with stainless steel door handle
- Generously sized mirror cabinet with shelf
- · Shower tub made of wear-resistant GRP
- Shower grill (optionally orderable for model 77 E)
- Single-lever mixer tap for washbasin made of metal
- · Shower with acrylic alass door and removable clothes rail
- Shower fitting with wall rail and height adjustable shower head
- · Cassette toilet with trolley system and ceramic bowl
- · Bathroom with towel rack and hook
- · Roof-light with insect screen and pleated darkening blind

Heating and Water

- Centralised, heatable water disposal compartment on driver side, discharge cocks for waste water / fresh water tank with large diameter (1 1/4") for comfortable discharge
- Fresh and waste water tank placed in the heatable double
- · Screwable water connection for the pump and the filter
- Air heating from Truma (Combi 6)
- Openings for cleaning on top for fresh and waste water tanks, accessible from the lounge area
- Integrated warm-water heater for the supply of all consuming points
- · Centralized boosted water supply over silent pump including filter system
- Space for 2×11 kg gas bottles and for Euro 14 l gas bottles
- · Heatable double floor
- · Mono control crash sensor for gas pressure regulator

Electronics

- Central electric system in the garage, easy to access
- AGM battery 95 Ah
- · Charging set 16 A with electronic control
- Battery control system with protection against overload and complete discharge
- · 230 V CEE connection on driver's side
- · Automatic fault current circuit breaker
- · Centralised control panel with digital display
- $4 \times 230 \text{ V}$ sockets and $1 \times 12 \text{ V}$ socket and $2 \times \text{USB}$ (depends on model)
- · Lights (roof spots, spots under ceiling cup boards and reading spots) in LED-Technology

Layouts

Arto 77 E¹⁾

Arto 85 E1)





Base vehicle		Fiat Ducato,Euro VI E	Fiat Ducato,Euro VI E
Chassis / Frame		AL-KO low frame AMC 45H	AL-KO low frame AMC 45H
Engine		Heavy Duty Homologation	Heavy Duty Homologation
Output	in kW / HP	103/140 (opt.: 132/180)	103/140 (opt.: 132/180)
Maximum torque	in Nm	350 (opt.: 450)	350 (opt.:450)
Туре		4-cylinder TD with VGT turbocharger	4-cylinder TD with VGT turbocharger
Engine displacement	in cm ³	2.200	2.200
Chassis / Tyres			
Wheel base	in mm	4.350	4.150 + 800
Number of axles		2	3
Dimensions and weights (without accessories)		-	
Overall length	in mm	7.784	8.427
Overall width	in mm	2.320	2.320
Overall height	in mm	2.950	2.950
Technically permissible laden mass*	in kg	4.500 (opt.: 4.800)	5.000 (opt.: 5.500)
Mass in running order*	in kg approx.	3.726 (3.540 - 3.912)	4.196 (3.986 - 4.406)
Manufacturer-specified mass for optional equipment*	in kg	401	424
Technically permissible towing weightbraked ^{2)/3)/4)}	in kg	1.650	1.700
Seats		-	
Seats fitted with 3-point safety belt*		4 (3, 5)	4 (3, 5)
Couch behind driver (length × width)	in mm	1.295 × 1.065	1.295 × 1.065
Couch behind passenger (length × width)	in mm	880 × 640	880 × 640
Beds			
Overhead front bed (length × width)	in mm	1.910 × 1.320	1.910 × 1.320
Rear bed(s) (length × width)	in mm	1.960 1.960 × 860 860 / 660	2.000 2.000 × 860 860 / 670
Filling quantities			
Fuel tank	in I	90	90
Water tank content in driving / camping mode	in I	20 / 200	20 / 200
Waste water tank	in I	150	150
Storage space for gas cylinder with max. 11 kg filling weight	in kg	2	2
adBlue	in I	19	19
Dimensions of the garage			
Maximum garage height	in mm	1.260	1.260
Maximum available surface (length × width)	in mm	2.175 × 1.400	2.175 × 1.475
Price in EUR, ex works, VAT not included		104.200	112.860

T * INFO

The specified mass in running order is a default value defined in the type-approval procedure. Due to manufacturing tolerances, the actual weighed mass in running order may $deviate from the value stated above. Deviations of up to \pm 5\,\% of the mass in running order are legally permissible and possible. The permissible range in kilograms is given in$ brackets after the mass in running order.

The manufacturer-specified mass for optional equipment is a calculated value for each type and layout that Niesmann+Bischoff uses to determine the maximum weight available for factory-fitted optional equipment. The limitation of optional equipment is intended to ensure that the minimum pay-mass, i.e. the legally prescribed free mass for baggage and retrofitted accessories, is actually available for the vehicle load capacity of the vehicles delivered by Niesmann+Bischoff. The real weight of your vehicle ex works can only be determined when it is weighed at the end of the line. If, in exceptional cases, the weighing shows that the actual load capacity falls below theminimum paymass despite limiting the optional equipment due to a permissible weight deviation, we will check together with your trade partner and you whether we should, for example, increase the load capacity of the vehicle, reduce the number of seats or remove optional equipment before delivering the vehicle

The technically permissible maximum laden mass of the vehicle and the technically permissible maximum mass on the axle must not be exceeded.

Detailed information & explanations on the subject of weight and the configuration of the vehicle can be found in the section Legal information

¹⁾ Also available in the "Face-to-Face" floor plan variant, see code V4044023 (p. 19)

The permissible total towing weight must not exceed 6.000 kg.

The indication regarding the technically permissible towing weight braked represents a maximum value, which depends on the real vehicle mass incl. persons and loading. The technically permissable maximum towable mass shall not be in any case exceeded.

Weight upgrade does not raise the total towing weight. All information concerning the total towing weight is valid for a maximum incline of 12 % at an uphill start.

Layouts

Arto 88 EK¹⁾

Arto 88 LF¹⁾





Base vehicle		Fiat Ducato,Euro VI E	Fiat Ducato,Euro VI E
Chassis / Frame		AL-KO low frame AMC 45H	AL-KO low frame AMC 45H
			_
Engine	:- LAM / LID	Heavy Duty Homologation	Heavy Duty Homologation
Output	in kW / HP	103/140 (opt.: 132/180)	103/140 (opt.: 132/180)
Maximum torque	in Nm	350 (opt.: 450)	350 (opt.: 450)
Type	. 3	4-cylinder TD with VGT turbocharger	4-cylinder TD with VGT turbocharger
Engine displacement	in cm ³	2.200	2.200
Chassis / Tyres			_
Wheel base	in mm	4.500 + 800	4.500 + 800
Number of axles		3	3
Dimensions and weights (without accessories)			
Overall length	in mm	8.763	8.763
Overall width	in mm	2.320	2.320
Overall height	in mm	2.950	2.950
Technically permissible laden mass*	in kg	5.000 (opt.: 5.500)	5.000 (opt.: 5.500)
Mass in running order*	in kg approx.	4.296 (4.081 - 4.511)	4.296 (4.081 - 4.511)
Manufacturer-specified mass for optional equipment*	in kg	321	321
Technically permissible towing weightbraked ^{2)/3)/4)}	in kg	1.700	1.700
Seats			_
Seats fitted with 3-point safety belt*		4 (3, 5)	4 (3, 5)
Couch behind driver (length × width)	in mm	1.295 × 1.065	1.205 × 1.065
Couch behind passenger (length × width)	in mm	1.190 × 640	880 x 640
Beds			
Overhead front bed (length × width)	in mm	1.910 × 1.320	1.910 × 1.320
Rear bed(s) (length × width)	in mm	2.000 2.000 × 860 860 / 670	1.900 × 1.500
Filling quantities			
Fuel tank	in I	90	90
Water tank content in driving / camping mode	in l	20 / 200	20 / 200
Waste water tank	in I	150	150
Storage space for gas cylinder with max. 11 kg filling weight	in kg	2	2
adBlue	in I	19	19
Dimensions of the garage			
Maximum garage height	in mm	1.260	1.260
Maximum available surface (length × width)	in mm	2.175 × 1.475	2.175 × 1.400
Price in EUR, ex works, VAT not included		115.550	115.620

T * INFO

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The manufacturer-specified mass for optional equipment is a calculated value for each type and layout that Niesmann+Bischoff uses to determine the maximum weight available for factory-fitted optional equipment. The limitation of optional equipment is intended to ensure that the minimum pay-mass, i.e. the legally prescribed free mass for baggage and retrofitted accessories, is actually available for the vehicle load capacity of the vehicles delivered by Niesmann+Bischoff. The real weight of your vehicle ex works can only be determined when it is weighed at the end of the line. If, in exceptional cases, the weighing shows that the actual load capacity falls below theminimum paymass despite limiting the optional equipment due to a permissible weight deviation, we will check together with your trade partner and you whether we should, for example, increase the load capacity of the vehicle, reduce the number of seats or remove optional equipment before delivering the vehicl

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Detailed information & explanations on the subject of weight and the configuration of the vehicle can be found in the section Legal information

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The permissible total towing weight must not exceed 6.000 kg.

The indication regarding the technically permissible towing weight braked represents a maximum value, which depends on the real vehicle mass incl. persons and loading. The technically permissable maximum towable mass shall not be in any case exceeded.

Weight upgrade does not raise the total towing weight. All information concerning the total towing weight is valid for a maximum incline of 12 % at an uphill start.

Packs

CP - Comfort Pack

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8013090	CP – Comfort Pack	+ 42	
V3012014	Skylight for living room		1.000
V4034015	Froli bed system including cold foam mattress		824
V40310119	142 Tec-Tower + 35 freezer (door opens to both sides) incl. 25 gas oven		1.505
V6014510	Plissé blind for driver and passenger		580
	Sum of the individual prices:		3.909
	Price advantage when buying the entire pack:		- 1.900
	Pack price		2.009

LP - Liner Pack

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8017510	LP – Liner Pack	+ 27	
V2082010	SKA comfort seats for driver and passenger, orientable and adjustable in height		1.252
V2013012	Exterior mirror with wide angle, electrically adjustable and heated, in the same colour as the model		580
V2037710	Double-glazed windows on driver and passenger side		832
V3029114	Body windows with one-hand operation		580
V6031010	Electrical aluminium insulation front blind		1.085
V6000510	Micro fibre lining on ceiling instead of carpet lining		244
	Sum of the individual prices:		4.573
	Price advantage when buying the entire pack:		- 1.892
	Pack price		2.681

DCP - Driving Comfort Pack

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8040098	DCP – Driving Comfort Pack	+1	
V2095099	Comfort springs at the front axle		429
V2054512	Steering wheel and shift knob in leather		286
V2096512	Digital cockpit		916
V2117011	Wireless Phone Charger		345
V20610J	Steering wheel with radio controls		219
	Sum of the individual prices:		2.195
	Price advantage when buying the entire pack:		- 531
	Pack price		1.664

T * INFO

The factory installation of optional equipment increases the actual mass of the vehicle and reduces the pay-mass. The additional weight indicated for packages and optional equipment shows the additional weight compared to the standard equipment of the respective model or layout.

The total weight of the selected optional equipment must not exceed the manufacturer-specified mass for optional equipment shown in the model overviews. This is a calculated value for each type and layout that Niesmann+Bischoff uses to determine the maximum weight available for factory-fitted optional equipment.

LEP – Lithium Energy Pack

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8016510	LEP – Lithium Energy Pack	+ 56	
V5012612	3 x 100 AH Lithium batteries (instead of AGM batteries) incl. charging booster, battery monitor and battery management panel		7.303
V5047024	220W solar system incl. MPPT solar controller		1.925
V5033811	100 A combi charger with 3,000 W inverter and battery management panel		3.286
	Sum of the individual prices:		12.514
	Price advantage when buying the entire pack:		- 4.186
	Pack price		8.328

MMP – Multimedia Pack

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8020012	MMP – Multimedia Pack	+ 44	
V50400128	Navigator unit with 7" touch screen incl. tuner, radio with DAB+, Bluetooth and back-up camera behind lily logo		1.597
V5073014	Radio pre-installation "Sound System" with 4 high-end two-way loud speak- ers, subwoofer, roof antenna		1.126
V5054513	LED TV 22" in media tower, incl. integrated DVB-S2 / DVB-T2 receiver, DVD slot and resonance loudspeaker		748
V50440116	SAT system Oyster Cytrac	-	3.353
	Sum of the individual prices:	-	6.824
	Price advantage when buying the entire pack:		- 1.538
	Pack price		5.286
	Possible upgrades to MMP – Multimedia Pack		
V50400129	Navigator unit with 9" touch screen instead of code V50400128	8	580
V50440117	SAT system Oyster Cytrac Vision Twin	0,5	421
V50440106	SAT system Oyster V Vision	-4	421
V50440109	SAT system Oyster V Twin Vision	-3,5	841
V5054514	Smart TV, 32", incl. triple tuner, Bluetooth 4.2 & Blu-ray player	-1	757

MP1 - Multimedia Pack without SAT system

Code	Designation	Additional weight in kg*	Price in euros VAT excl.
V8020026	MP1 – Multimedia Pack without SAT system	+ 24	
V50400128	Navigator unit with 7" touch screen incl. tuner, radio with DAB+, Bluetooth and back-up camera behind lily logo		1.597
V5073014	Radio pre-installation "Sound System" with 4 high-end two-way loud speak- ers, subwoofer, roof antenna		1.126
V5054513	LED TV 22" in media tower, incl. integrated DVB-S2 / DVB-T2 receiver, DVD slot and resonance loudspeaker		748
	Sum of the individual prices:		3.471
	Price advantage when buying the entire pack:		- 706
	Pack price		2.765
	Possible upgrades to MP1 – Multimedia Pack without SAT system		
V50400129	Navigator unit with 9" touch screen instead of code V50400128	8	580
V5054514	Smart TV, 32", incl. triple tuner, Bluetooth 4.2 & Blu-ray player	-1	757

T * INFO

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The total weight of the selected optional equipment must not exceed the manufacturer-specified mass for optional equipment shown in the model overviews. This is a calculated value for each type and layout that Niesmann+Bischoff uses to determine the maximum weight available for factory-fitted optional equipment.

Weight upgrade

Weight upgrade

Code	Designation	Additional weight in kg**	Incl. in pack	Price in euros VAT excl.
V201104800	Weight upgrade to 4,8 t (only available for twin axle modelsin combination with 180 HP) only in combination with code V2O21033 alloy wheels with high load tyres. When choosing Goldschmitt air suspension, this position is without extra charge			1.424
V201105500	Weight upgrade to 5,5 t (only available for models with 3 axles)			1.235

-T- ** INFO

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 $Detailed \ information \ and \ explanations \ on \ the \ subject \ of \ weight \ can \ be \ found \ in \ the \ \textbf{Legal information section.}$

An increase of load capacity increases the manufacturer-specified mass for optional equipment. The increase results from the higher pay-mass due to the alternative chassis. The increased tare weight of the alternative chassis and, in particular, the weight for any mandatory heavier engine variants (e.g. 180 hp) must be deducted from the

Chassis

Chassis

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V100601607	2.2 l engine (180 HP)	16		3.774
V2007111	Towing attachment (detachable)	35		1.589
V2021027	16" alloy wheels (4 pieces)	-5		1.168
V2009111	Dashboard decor in satine chrome	0,5		138
V2021033	16" alloy wheels (4 pieces) including high load tyres	-5		1.588
V2021027	16" alloy wheels (6 pieces)	-7,5		1.840
V20420A	Automatic gear box ZF AT9	30		3.353
V2045510	Rear axle supports (manuel operability)	10		273
V2045511	Hydraulic steady legs (AL-KO HY4) with automatic levelling, incl. weighing function	70		5.874
V2082010	SKA comfort seats for driver and passenger, orientable and adjustable in height		LP	1.252
V2035116	16" spare wheel (steel) instead of Tire-Fit	25		378
V2035127	16" spare wheel as alloy wheel incl. high load tyre instead of Tire-Fit (only in combination with alloy wheels, code V2O21O33)	23		558
V2082012	Comfort seats with heating and electrical lumbar support (only in combination with option V2082010)	2		730
V2077116	LED front and fog lights			1.455
V20610J	Steering wheel with radio controls	0,5	DCP	219
V2054512	Steering wheel and shift knob in leather		DCP	286
V2058022	Goldschmitt full air suspension incl. automatic levelling for twin axle	40		6.967
V2058022	Goldschmitt full air suspension incl. automatic levelling for 3 axle models	60		8.302
V2058021	Goldschmitt rear air suspension incl. lifting and lowering device for twin axle	30		4.613
V2058021	Goldschmitt rear air suspension incl. lifting and lowering device for 3 axle models	30		5.639
V2092510	Exterior sliding out storage case on left side	6		588
V2092511	Exterior sliding out storage case on right side (only available for models 88 EK)	6		588
V2090510	Wide track for front axle (30 mm each side)	2		327
V2096512	Digital cockpit		DCP	916
V2117011	Wireless Phone Charger	0,5	DCP	345
V20391J	Heated windscreen			584

CP Comfort Pack, LP Liner Pack, DCP Driving Comfort Pack, LEP Lithium Energy Pack, MP1 Multimedia Pack without SAT system, MMP Multimedia Pack

T * INFO

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Exterior

ClouLine-Design

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.	
V8011311	Clou Line Design (black painted radiator grille with chrome elements, flat side windows for driver and passenger, chrome decoration around the front lights and on the back)	2			1.496

Exterior colour

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V3003028	"Eifel grey" exterior colour, roof in white colour only available in combination with Clouline Design, code V8011311	3		10.076

Exterior decoration "Maxi"

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V7004038	Exterior decoration Maxi "Rhodium silver" (decor foil on sidewall)	1		1.505
V7004035	Exterior decoration Maxi "Lava Orange" (decor foil on sidewall)	1		1.505
V7004039	Exterior decoration Maxi "Carbon Optik" (decor foil on sidewall)	1,5		1.589

Personalisation

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V7004119	Accent decoration "Green Elox" (Design sticker on front and rearpanel, skirts and mirror covers)	0,5		587
V7004114	Accent decoration "Lava Orange" (Design sticker on front and rearpanel, skirts and mirror covers)	0,5		671
V7004116	Accent decoration "Carbon Optik" (Design sticker on front and rearpanel, skirts and mirror covers)	0,5		714

Interior

Furniture decor

Code
Designation
Additional weight in kg*
Price in euros VAT excl.

V100907004
Furniture decor Verade Oak, "Modern-Line" Ceiling cupboards in matte finish white

T * INFO

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 $\label{periodical} \mbox{Detailed information and explanations on the subject of weight can be found in the {\bf Legal information section.}$

Seat cushions including driver and passenger's seats

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V100707006		Grey (textile, grey)			
V100707002		Shadow (textile, anthracite)			
V100707003		Temptation (leather, beige)	2		2.513
V100707004		Attraction (leather, anthracite)	2		2.513
V100707008		Sensation (leather, brown)	2		2.513

Backrest cushions, style "Cloud"

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V100807001		Grand Cru No. 1, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807003		Grand Cru No. 3, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807004		Grand Cru No. 4, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm			

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V100807006	-0-	Grand Cru No. 6, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807007		Grand Cru No. 7, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807010	Ċ.	Grand Cru No. 10, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807030		Grand Cru No. 14, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807031		Grand Cru No. 15, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807032	· • • • • • • • • • • • • • • • • • • •	Grand Cru No. 16, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm		
V100807011	- \$-	Beige leather, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm	2	832
V100807012	-¢	Anthracite leather, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm	2	 832
V100807036	-6-	Brown leather, "Cloud" including cushion 40 \times 40 cm and 30 \times 30 cm	2	832

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Backrest cushions, style "Kiss"

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V100807013		Grand Cru no. 1, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807015		Grand Cru no. 3, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			•
V100807016		Grand Cru no. 4, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			•
V100807018		Grand Cru no. 6, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807019		Grand Cru no. 7, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807022		Grand Cru no. 10, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807033		Grand Cru no. 14, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807034		Grand Cru no. 15, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			
V100807035		Grand Cru no. 16, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm			

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V100807026	Beige leather, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm	2	832
V100807027	Anthracite leather, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm	2	832
V100807037	Brown leather, "Kiss" including cushion 40 \times 40 cm and 30 \times 30 cm	2	832

Covers

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.	
V6025210	Back covers for driver and passenger seats with practical storage pockets (not available with leather backrest cushions)	1			251

Decor ceiling cupboards

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V4018017		Ceiling cupboards in living room in matte finish white			
/4018011		Ceiling cupboards in living room in high-gloss white instead of matte finish white	-		

Decor ceiling cupboards in bedroom

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V4018214		Ceiling cupboards in bedroom in matte finish white			
/4018211		Ceiling cupboards in bedroom in high-gloss white instead of matte finish white			_

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Shale surface

Code	Designation		dditional eight in kg*	Incl. in pack	Price in euros VAT excl.	
V3017512	Sha	surface on TV furniture in "Black Star" look				412

Accent lights

Code	Designation		Additional weight in kg*	Incl. in pack	Price in euros VAT excl.	
V3001612		"Green Grass" ambiance lighting in the living room door can be dimmed	5			521
V3001611		"Reed" ambiance lighting in the living room door can be dimmed	5			521

Cabin

Cabin

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V3020510	Door for driver's cabin (only available with ClouLine Design, code V8011311)	24		1.931
V3009011	Fresh-air fan above kitchen	5		335
V3010011	Fresh air fan in bathroom (only available in models 85, 88 EK / LF)	5		335
V3012014	Skylight for living room instead of standard skylight	19	CP	1.000
V3011014	Panoramic skylight over rear bed instead of normal skylight	12		664
V30522170M	Manual awning, 5 m, incl. dimmable LED lights (for 77)	50		1.673
V30522170E	Electrical awning, 5 m, incl. dimmable LED lights (for model 77, without inverter, code V5033811, operation only with external power possible)	52		2.244
V30522180M	Manual awning, 5.5 m, incl. dimmable LED lights (for models 85 and longer)	55		1.883
V30522190E	Electrical awning, 6 m, incl. dimmable LED lights (only for models 85 & 88, without inverter, code V5033811, operation only with external power possible)	63		2.765
V3031510	Lateral door for garage on left side	7		739
V3023510	Bike rack in the garage	8	-	345

CP Comfort Pack, LP Liner Pack, DCP Driving Comfort Pack, LEP Lithium Energy Pack, MP1 Multimedia Pack without SAT system, MMP Multimedia Pack

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Living room

Living room

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V6031010	Electrical aluminium insulation front blind (can also be used as sun visor)	15	LP	1.085
V4052016	Extendable table (standard from 85 models on)	14		419
V4034015	Froli bed system including cold foam mattress		CP	824
V4017510	Wall cupboards in front part, instead of folding bed	-20		458
V40220E	Front bed with electrical function	5		898
V30420J	Insulation mats for dashboard and floor around driver and passenger seats (not in combination with code V3O2O510, door for drivers cabin)	2		416
V4044023	"Face to Face" floor plan (straight kitchen and seat bench) reduction of belt seats to 3	-5		
V4062616	Preparation of folding seat on passenger side	5		496
V4062612	Additional belt seat in seat bench on right side including ISOFIX	36		1.253
V4001510	Surface made of mineral material with built-in sink for kitchen and bath instead of laminate	15		1.253
V5030010	230 V capsule coffee machine including lift mechanism from the ceiling cupboard in the kitchen and storage compartment for coffee capsules	2		743
V4018411	Upper cabinet flaps of the Mediatower in white high gloss			118
V4018412	Upper cabinet flaps of the Mediatower in matte finish white			118
V4048016	Lowerable and extendible table with roll mattress to turn the couch into a bed	4		828
V4012598	Storage space system in double floor	1		307
V3053810	Gooseneck light as second reading light above the front bed (not in combination with front cupboards, code V4017510)	0,5		67
V40310119	142 Tec-Tower + 35 freezer (door opens to both sides) incl. 25 gas oven	22	CP	1.505
V602107001	Carpet (loose mats)	10		671
V6014510	Plissé blind for driver and passenger	1	СР	580
V6001014	Front plissé (variable sight protection for the windscreen)	3		588
V60260J	Additional mattress with Froli bed system between single beds	5		167

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Gas, Water, Sanitary

Gas, Water, Sanitary

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V50100J	Shower in the garage	1		332
V50230J	Gas supply connection in side wall	1		248
V40210J	Grill for shower base (only for model 77, standard in models 85, 88)	3		179
V5026013	Truma DuoControl CS gas flow control	1		239
V3064012	SOG toilet ventilation	1		248
V50250J	Gas filter (two units) for camping gas bottles (only in combination with Truma DuoControl, code V5O26013)	1		171
V50270J	Narcotic gas alarm	1		416
V5003510	Hose for waste water disposal in storing tube	2		152
V5053013	120 I fixed toilet tank with electrical function and ceramic toilet bowl (only for models 85, 88 EK / LF)	20		1.341
V3063610	Toilet brush	0,5		25
V7006011	Fire extinguisher	3		108

Heating, Air Conditioning System

Heating, Air Conditioning System

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V5028014	Warm water heating with thermostat. control and heating cartridge (Alde 3020) with touch screen control panel	20		2.597
V5027510	Towel dryer in the toilet room (only available in models 85, 88 EK / LF, only in combination with warm water heating, code V5028014)	10		496
V5062010	Engine heat exchanger (uses the engine cooling water to heat the living area, only in combination with warm water heating system, code V5028014)	6		1.000
V5028210	Extended heating for warm water heating in the driver's cab (original Fiat ventilation connected with warm water heating, only in combination with warm water heating and engine heat exchanger, operable over separate touch screen panel)	8,5		1.336
V5028013	Heating system Truma with heating cartouche Combi 6 E			566

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 ${\sf Detailed \ information \ and \ explanations \ on \ the \ subject \ of \ weight \ can \ be \ found \ in \ the \ \textbf{Legal \ information \ section.}}$

Electric Installation

Electric Installation

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V3001410	Indirect lighting in media tower (different colours, can be dimmed)	2		189
V3001812	"Green Grass" ambiance lighting in the rear bedroom	3		390
V3001811	"Reed" ambiance lighting in the rear bedroom	3		390
V5005012	Alarm system (body door and garage doors, control of the interior room can be switched off)	3		1.164
V5012612	3 x 100 AH Lithium batteries (instead of AGM batteries) incl. charging booster, battery monitor and battery management panel (only in combination with 100A combi charger, code V5033811)	28	LEP	7.303
V5012511	Additional AGM battery for living room, 95 Ah (2 batteries in total)	27		293
V5012611	Additional AGM battery for living room, 95 Ah (only in combination with code V5012511, 3 batteries in total)	27		293
V5047024	220W solar system incl. MPPT solar controller	13	LEP	1.925
V5047027	Extended solar system by 220W (only available in combination with solar system, code V5047024, 440W in total, not available for model 77 E)	8		1.504
V5047026	Extended solar system by 110W (only available in combination with solar system, code V5047024, 330W in total, only available for model 77 E)	7		1.252
V5034012	Strengthened battery charger, 32 A	8		271
V5047010	Cabling for solar system	0,5		176
V20650J	Reverse driving alarm	1		345
V5033811	100 A combi charger with 3,000 W inverter and battery management panel (only in combination with AGM batteries, code V5012511 and V5012611, or Lithium batteries, code V5012612)	14	LEP	3.286
V5033611	Underfloor Saphir Comfort RC air conditioning, 2.400 W	33		3.101
V5033612	Precabling underfloor air conditioning	2		500
V3071017	Central locking for body and garage doors	2		1.085
V5050510	230 V plug in the garage	0,5		206

CP Comfort Pack, LP Liner Pack, DCP Driving Comfort Pack, LEP Lithium Energy Pack, MP1 Multimedia Pack without SAT system, MMP Multimedia Pack

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 $\label{thm:permutation} \mbox{Detailed information and explanations on the subject of weight can be found in the {\bf Legal information section.}$

Multimedia

Multimedia

Code	Designation	Additional weight in kg*	Incl. in pack	Price in euros VAT excl.
V50400128	Navigator unit with 7" touch screen incl. tuner, radio with DAB+, Bluetooth and back-up camera behind lily logo (only in combination with radio precabling, code V5073013 or V5073014)	8	MMP, MP1	1.597
V50400129	Navigator unit with 9" touch screen incl. tuner, radio with DAB+, Bluetooth and back-up camera behind lily logo (only in combination with radio preca- bling, code V5073013 or V5073014)	8		2.265
V5073013	Radio pre-installation "Basic" consisting of 4 loud speakers and roof antenna	5		579
V5073014	Radio pre-installation "Sound System" with 4 high-end two-way loud speak- ers, subwoofer, roof antenna	10	MMP, MP1	1.126
V50440116	SAT system Oyster Cytrac (without receiver)	20	MMP	3.353
V50440117	SAT system Oyster Cytrac Twin (without receiver)	20,5		3.773
V50440106	SAT system Oyster V Vision (without receiver)	16		3.773
V50440109	SAT system Oyster V Twin Vision (without receiver)	16,5		4.193
V5054513	LED TV 22" in media tower, incl. integrated DVB-S2 / DVB-T2 receiver, DVD slot and resonance loudspeaker	6	MMP, MP1	748
V5055098	LED TV 22", incl. integrated DVB-S2 / DVB-T2 receiver, DVD slot on bedroom wall	6		748
V5054514	Smart TV, 32", incl. triple tuner, Bluetooth 4.2 and Blu-ray player in media tower	5		1.504

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 $\label{periodical} \mbox{Detailed information and explanations on the subject of weight can be found in the {\bf Legal information section.}$

LEGAL INFORMATION ON WEIGHT-RELATED INFORMATION

The weight specifications and tests for motorhomes are uniformly regulated throughout the EU in EU Implementing Regulation No. 2021/535 (until December 2022: EU Implementing Regulation No. 1230/2012). We have summarised and explained the key terms and legal requirements from this regulation for you below. Our dealers and the Niesmann+Bischoff configurator on our website offer you additional assistance in configuring your vehicle.

1. Technically permissible maximum laden mass

The technically permissible maximum laden mass of the vehicle (e.g. 3.500 kg) is a mass specification set by the manufacturer which the vehicle must not exceed. Information on the technically permissible maximum laden mass of the model you have chosen can be found in the technical data. If the vehicle exceeds the technically permissible maximum laden mass in everyday driving, this constitutes an administrative offence which may result in a fine.

2. Mass in running order

In simple terms, the mass in running order is the basic vehicle with standard equipment plus a legally fixed standard weight of 75 kg for the driver. This essentially includes the following items:

- · the unladen weight of the vehicle together with the bodywork, including operating fluids such as greases, oils and coolants;
- the standard equipment, i.e. all equipment items that are included as standard in the factory-fitted scope of delivery:
- the fresh water tank filled to 100 % in driving mode (driving fill according to manufacturer's specifications; 20 litres) and an aluminium gas cylinder filled to 100 % with a weight of 16 kg;
- · the fuel tank, which is 90 % full, including fuel;
- the driver, whose weight regardless of the actual weight is generally specified as 75 kg in accordance with EU law.

Information on the mass in running order can be found for each model in our sales documents. It is important to note that the value for mass in running order given in the sales documents is a default value determined in the type-approval procedure and verified by the authorities. It is legally permissible and possible for the mass in running order of the vehicle delivered to you to deviate from the nominal value stated in the sales documents. The legally permissible tolerance is \pm 5%. In this way, the EU legislator accounts for the fact that certain fluctuations in the mass in running order occur due to variations in the weight of supplied parts as well as due to processes and weather conditions.

These weight deviations can be illustrated by means of an example calculation:

- Mass in running order acc. to sales documents: 2.850 kg
- Legally permissible tolerance of ± 5 %: 142,50 kg
- Legally permissible range of mass in running order: 2.707,50 kg to 2.992,50 kg

The specific range of permissible weight deviations can be found for each model in the technical data. Niesmann+Bischoff makes great efforts to reduce weight variations to the minimum that is unavoidable for production reasons. Deviations at the upper and lower end of the range are therefore very rare; however, they cannot be completely ruled out technically, even with all optimisations. The real weight of the vehicle and compliance with the permissible tolerance is therefore checked by Niesmann+Bischoff by weighing each vehicle at the end of the line.

3. Mass of the passengers

The mass of the passengers is set a standard value of 75 kg for each seat provided by the manufacturer, regardless of the actual weight of the passengers. The mass of the driver is already included in the mass in running order (see no. 2 above) and is therefore not included again. In the case of a motorhome with four permitted seats, the mass of the passengers is therefore 3 * 75 kg = 225 kg.

4. Optional equipment and actual mass of the vehicle

Optional equipment (also: additional equipment) includes, according to the legal definition, all optional equipment parts not included in the standard equipment which are fitted to the vehicle under the responsibility of the manufacturer – i.e. ex works – and can be ordered by the customer (e.g. awning, bicycle or motorbike carrier, satellite system, solar system, oven, etc.). Information on the individual or package weights of the optional equipment that can be ordered can be found in our sales documents. Optional equipment in this sense does not include other accessories that are retrofitted by the dealer or you personally after the vehicle has been delivered ex works.

The mass of the vehicle in running order (see no. 2 above) and the mass of the optional equipment fitted to a specific vehicle at the factory are together referred to as the actual mass. You will find the corresponding information for your vehicle after handover under item 13.2 of the Certificate of Conformity (CoC). Please note that this specification also represents a standardised value. Since the mass in running order – as an element of the actual mass – is subject to a legally permissible tolerance of \pm 5 % (see no. 2), the actual mass may also deviate accordingly from the stated nominal value.

5. Pay-mass and minimum pay-mass

The installation of optional equipment is also subject to technical and legal limits: Only so much optional equipment can be ordered and fitted at the factory that sufficient free weight remains for baggage and other accessories ("pay-mass") without exceeding the technically permissible maximum laden mass. The pay-mass is calculated by subtracting the mass in running order (nominal value according to sales documents, see no. 2 above) and the mass of the passengers (see no. 3 above) from the technically permissible maximum laden mass (see no. 1 above). The EU regulations stipulate a fixed minimum pay-mass for motorhomes, which must remain as a minimum for baggage or other non-factory-fitted accessories. This minimum pay-mass is calculated as follows:

Minimum pay-mass in kg \geq 10 * (n + L)

Where: "n" is the maximum number of passengers plus the driver and "L" is the overall length of the vehicle in metres. For a motorhome with a length of 6 m and 4 approved seats, the minimum pay-mass is therefore e.g. $10 \text{ kg} \times (4 + 6) = 100 \text{ kg}$. To ensure that the minimum pay-mass is maintained, there is a maximum combination of optional equipment that can be

To ensure that the minimum pay-mass is maintained, there is a maximum combination of optional equipment that can be ordered for each vehicle model. In the above example with a minimum pay-mass of 100 kg, the total mass of optional equipment for a vehicle with four permitted seats and a mass in running order of 2.850 kg should not exceed 325 kg:

- 3.500 kg technically permissible maximum laden mass
- - 2.850 kg mass in running order
- -3*75 kg mass of the passengers
- · 100 kg minimum pay-mass
- = 325 kg maximum permissible mass of optional equipment

It is important to note that this calculation is based on the default value for mass in running order as defined in the type-approval procedure, without taking into account the permissible weight deviations for mass in running order (see no. 2 above). If the maximum permissible value for the optional equipment of (in the example) 325 kg is almost or completely exhausted, an upward weight deviation can therefore result in the minimum pay-mass of 100 kg being met mathematically using the default value for the mass in running order, although in fact there is no corresponding load capacity. Here, too, an example calculation for a vehicle with four seats, whose real weighed mass in running order is 2 % above the nominal value:

- 3.500 kg technically permissible maximum laden mass
- 2.907 kg real weighed mass in running order (+ 2 % compared to the stated value of 2.850 kg)
- · 3*75 kg mass of the passengers
- - 325 kg optional equipment (maximum permissible value)
- = 43 kg actual load capacity (< minimum pay-mass of 100 kg)

In order to avoid such a situation, Niesmann+Bischoff further reduces the maximum permissible weight of the total optional equipment that can be ordered on a model-specific basis. The limitation of optional equipment is intended to ensure that the minimum pay-mass, i.e. the legally prescribed free mass for baggage and retrofitted accessories, is actually available for the vehicle load capacity of the vehicles delivered by Niesmann+Bischoff.

Since the weight of a specific vehicle can only be determined when it is weighed at the end of the line, in very rare cases a situation may arise in which the minimum pay-mass at the end of the line is not guaranteed, despite this limitation of optional equipment. In order to guarantee the minimum pay-mass even in these cases, Niesmann+Bischoff will check together with your trade partner and you before delivery of the vehicle whether, for example, the vehicle is loaded up, seats are reduced or optional equipment is removed.

6. Effects of tolerances of the mass in running order on the pay-mass

Regardless of the minimum pay-mass, you should note that unavoidable production-related fluctuations in the mass in running order – both upwards and downwards – have a mirror-image effect on the remaining load capacity: If you order our example vehicle (see no. 3. above), for example, with optional equipment with a total weight of 150 kg, the calculated pay-mass based on the default value for the mass in running order is 275 kg. The load capacity actually available may deviate from this value due to tolerances and may be higher or lower. If the mass in running order of your vehicle is, for example, permissibly 2 % higher than stated in the sales documents, the load capacity is reduced from 275 kg to 218 kg:

- 3.500 kg technically permissible maximum laden mass
- 2.907 kg real weighed mass in running order (+ 2% compared to the stated value of 2.850 kg)
- 3*75 kg mass of the passengers
- $\,$ 150 kg optional equipment ordered for the specific vehicle
- = 218 kg actual load capacity

As a precaution to ensure that the calculated pay-mass is actually given, you should therefore take the possible and permissible tolerances for the mass in running order into account when configuring your vehicle.

We also recommend that you weigh the laden motorhome on a non-automatic scale before each journey and, taking the individual weight of the passengers into account, determine whether the technically permissible maximum laden mass and the technically permissible maximum mass on the axle are observed.

Further information

Important information

This brochure is subject to change without notice. After the copy deadline of this price list (6/2023) changes as to models and products, floor plans, technical data, equipments, etc. may have occurred. The illustrations also contain optional features, and / or accessories which are not included in the standard equipment and decoration respectively which is not included in Niesmann+Bischoff's range of supply. Descriptions may have been garbled due to graphic conversion, photographic processing or technical reasons. All data on range of supply, appearance, performance, weights and measures, as well as fuel consumption of the vehicles are in compliance with the knowledge existing at the time of the copy deadline and are valid for all purchase and licensing in the Federal Republic of Germany. Deviations of the values within a range of \pm 5 % are possible. The measures of the mattress may slightly vary from the given bed measures. E. g. data on the capacity of the refrigerators refer to producer information. Prices for optional features are only valid when installed during production. In case of subsequent installation additional installation and servicing expenditures are accrued at cost. We reserve the right to change prices, construction and equipment without notice. With the issue of this brochure all previously issued information and price lists become void.

Imprint

Publisher

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Tech. Presentation + Renderings Studio SYN, Rüsselsheim

Status: December 2023