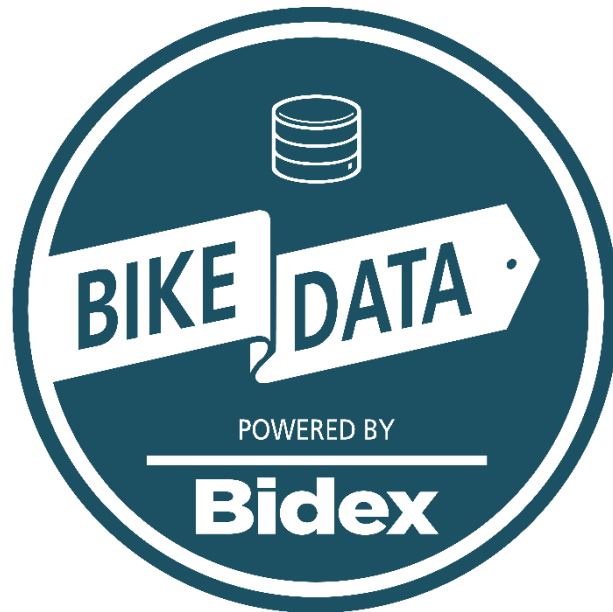




Documentation

BIDEX BikeData

Format specification for the provision of product data in the bicycle industry

Version: 1.6
Author: Lars Röttger

Basic information

What is BIDX?	4
What is BIDX BikeData?	4
Who is allowed to use BIDX BikeData?	4
What does BIDX BikeData cost?	4
What rights of use must be observed?	4
How is BikeData product data transmitted?	5
Which standards are provided by BIDX?	6
Where can I find sample data for the BikeData format?	6

BIDX standards

BIDX product group key	7
BIDX attributes	8
BIDX brand directory	8

BIDX BikeData

Data model	9
Data types	10
Catalogue data (changes in V1.6)	11
Model data	13
Product groups	14
Versions (changes in V1.6)	15
Media data (changes in V1.6)	17
Prices	20
Descriptions	21
Attributes	22
BIDX attributes without key values	22
BIDX attributes with key values	22
Geometry attributes	23
Geometry I	23
Geometry II	24
Geometry III	25

Supplementary notes

Notes on models and designs	26
How should models and designs be formed?	26
How should models be formed with many different variants?	27
How can model building be controlled?	28
How can configurable products be integrated?	29
Notes on media data	29
Requirements for image material	29
Transfer of image material	29

BIDX Services & Support 30

Notes

BIDEX GmbH was founded in 2016 with the aim of establishing standards for the bicycle industry in order to optimize digital processes. The first step was an industry product group key, which is now integrated and recognized in almost all areas. The second step was to set up a uniform product data standard in order to cover the complexity of a bicycle with its many different characteristics and possible applications. This BikeData standard is actively supported today by all associations, many manufacturers and service providers and we would like to take this opportunity to thank you for this support. It shows us that we are on the right track with this technical basis.

In addition to the topic of bicycles and e-bikes, this product data standard is also able to supply all parts, accessories, clothing and services within the industry with a uniform product data format. It cannot be that a specialist dealer can fall back on well-structured data for the sales generator bicycle or e-bike, while he has a high expenditure of time for the digital processing of a simple lock or hose for the integration. This will mean that retailers will not even include these products in the digital distribution channels and as a result the Internet pure players in the parts and accessories sector will become more and more relevant. The loss of this core competence of the specialist trade can only be contained if the accessory and parts brands also support the uniform BikeData format.

Therefore, we appeal in particular to the specialist dealers to demand data delivery in BikeData format from the most important brands. You can always refer to the page www.bikedata.de where this format is described in detail.

Release Notes 1.6

In the current version 1.6, we give for the first time the possibility to integrate other media data such as images, PDF, URLs or videos in addition to the main image of a product. The aim is to provide specialist retailers not only with product data, but also with all forms of digital sales data.

However, this is only possible to a limited extent with an Excel or CSV format. Therefore, we would like to point out at this point that BIDEX provides a powerful REST API, with which even extended data structures with more extensive media and information data can be processed.

All new features and changes in V1.6 are highlighted to enable rapid adaptation to proprietary data systems.

For all questions, customization requests, criticism and praise, we look forward to receiving an e-mail or call.

Good luck with clean data

Lars Röttger
Ennepetal, July 2022

Basic

? What is BDEX?

The company BDEX GmbH was founded in 2016 by well-known companies in the two-wheeler industry. The aim of BDEX is to optimize the digital workflows between specialist retailers and industry through industry-specific standards.

? What is BDEX BikeData?

BDEX BikeData is a public data format for the provision of product data from the bicycle industry and enables the recording of data for all areas of the BDEX product group key (see www.bidex.bike). This applies in particular to the trade areas of bicycles / pedelecs / parts / accessories / clothing. In addition, all products and services that are usually sold by bicycle retailers can also be integrated.

? Who is allowed to use BDEX BikeData?

BDEX BikeData was developed to support specialist dealers and retail brands. The specialist retailer is defined as a regional shop with workshop services. Accordingly, the USE of the BDEX BikeData format is possible for specialist dealers, manufacturers, distributors and service providers (e.g. leasing companies).

The use by service providers or platforms without a specialist trade reference (e.g. Internet pure players) is not permitted. In these cases, BDEX will take legal action without further request and inform both the industrial partners and the specialist dealers about this.

? How much does BDEX BikeData cost?

The use of BDEX BikeData for the above-mentioned market participants is free of charge and without obligation.

? Which rights of use must be observed?

- When providing product data in BDEX BikeData format, the note "BDEX BikeData Format" must always be integrated with the respective BikeData versionnumber.
- A company-specific further development of BDEX BikeData is possible at any time. We ask you to inform BDEX of these extensions in order to check any inclusion in the standard.
- All rights to BDEX BikeData belong to BDEX GmbH, Ennepetal

? How is BikeData product data transmitted?

Manufacturer >> retailer

Normally, a company makes its own product data available in BIDEX BikeData format to the affiliated retailers via CSV or Excel file. This can then be done, for example, by individual e-mail or via a central online platform. However, this data can also be distributed by the field service employees, e.g. via USB sticks, at the retailers.

BIDEX >> Publisher

For complex applications, BIDEX offers a REST API that can be used to transfer product data and attributes fully automatically to external systems. This can be used, for example, to fill eCommerce systems or retail-supporting platforms. Interested publishers should contact [BIDEX Support](#).

BIDEX >> retailer online shops

For the use of BIDEX BikeData in online shop systems, plugins can be developed at project level, which, for example, enable automated filling based on dealer stocks. The development of these plugins can be carried out by the online shop provider or other external service providers. Here, too, the BIDEX REST API is used. Interested retailers should contact [BIDEX Support](#).

Merchandise management software >> specialist dealers

For Wawis, BIDEX offers the possibility at project level to obtain product data from the BIDEX REST API and to make it available to the affiliated specialist retailers for POS or online applications. Veloconnect/Velo.Api can also be taken into account. Interested software providers should contact [BIDEX Support](#).

★ **Recommendation**

Since Excel is widely used, we recommend the data provision of BIDEX BikeData in this format for normal applications. Experience has shown that this drastically increases acceptance both in the company and at the specialist retailer. With this method, it is also possible to deliver the formatted data directly by BIDEX.

? Which standards are provided by BIDEX?

BIDEX product group key

The BIDEX product group key is used for the structured data creation of all products in bicycle retail.

BIDEX Attributes

BIDEX attributes provide an additive level of information and use, among other things, key values for a filterable specification. This facilitates automated filter functions in particular.

BIDEX Brand Directory

The BIDEX Brand Directory enables the use of a central brand key for a variety of applications and enables authorization by the manufacturer in the area of selective distribution models.

With BikeData

BIDEX BikeData provides a uniform product data format that can be used by all market participants.

? Where can I find sample data for the BikeData format?

For each BIDEX product group, a set of attributes has been defined with which the description of the products available in this product group for both B2B and B2C applications is made possible.

For example, different attributes are required for the e-bike sector than is required for non-motorized bicycles. In the same way, the description of panniers requires completely different data fields than, for example, circuits or derailleurs.

It therefore makes no sense to offer sample data for all areas of the BIDEX product group key. Instead, BIDEX offers a constantly available online Excel sample file for the important area of complete bikes..

For the product group area bicycles/pedelecs/S-pedelecs you will find a sample file with all available data fields and BIDEX attributes under the following link:

www.bidex.bike/BikeData-Information

★ **More examples**

For examples from other product groups, please contact [BIDEX Support](#) .

★ **XML Web Service / REST API**

As an alternative to the provision of Excel sample files, BIDEX also offers the possibility to retrieve the data fields required for each product group via an XML web service or via the BIDEX REST API. If you have a legitimate interest in providing access to the data for your company, please contact [BIDEX Support](#).

BIDEX product group key

The BikeData product database uses the BIDEX industry product group standard.

This commodity group key is a key system for recording the possible product groups of an industry and thus helps to improve and simplify the electronic data exchange between suppliers and retailers. For retailers and manufacturers, an industry product group key provides the basis for efficient collaboration for a variety of requirements. On the one hand, this applies to the typical B2B applications of merchandise management. In addition, such a key can also be used for the automated filling of online shops and online catalogs.

The 6-digit BIDEX product group key was developed in cooperation with various manufacturers from the bicycle industry and is also implemented in the industry standard Veloconnect.

For the rebuilding of company-specific product group systems, the BIDEX product group key offers a high degree of flexibility for individual adjustments.

★ **Costs**

The BIDEX product group key is available free of charge and permanently at www.bidex.bike. The provision takes place via HTML, Excel, Veloconnect and XML Webservice.

★ **Recommendation**

BIDEX recommends that manufacturers and retailers implement the BIDEX product group key as a uniform industry system in addition to the existing, company-specific product group system. The structure of the BIDEX key allows both a refinement and an extension for own product group systems.

BIDEX Attributes

In addition to the BIDEX product group key, so-called BIDEX attributes are provided free of charge by BIDEX. These attributes open up the possibility of a standardized product specification. On this basis, important parameters for the product description can be defined, which can be used in particular with the usual filter functions.

i Example BIDEX Attributes

BIDEX Attribute FT

<https://www.bidex.bike/Attribut/Fahrrad-Rahmenformen/FT>

The FT attribute standardizes the different frame shapes for all kinds of bicycle models. The value FT11 is therefore a trapezoidal frame, the value FT21 defines a diamond frame.

i BIDEX Multi Attributes

With many BIDEX attributes, it is possible to list several attributes at the same time. This is necessary, for example, to define multi-colored bicycle frames or different braking systems for a complete wheel. In this case, any number of attributes can be listed separated by dial tones. Example: "FC30 FC90" thus describes a red and white wheel.

i Note

The BIDEX attributes are available free of charge and permanently at www.bidex.bike. The deployment is done via HTML, Excel and XML Web service. Please also note the further [notes on the attributes](#)

BIDEX Brand Directory

The brand level is one of the essential requirements for product data for search and filter functions in the B2C area. Therefore, it must be ensured that a uniform brand key is used across all applications. This avoids errors and redundancies, which are caused, for example, by different spellings of brand names.

With the brand directory ,BIDEX provides a standardized key for all private labels in the bicycle industry. A prerequisite for the integration of new brands is the sales use of a brand by at least one affiliated specialist dealer within the meaning of the BIDEX specialist trade definition.

i Note

The BIDEX brand directory is available free of charge and permanently at www.bidex.bike. Deployment is done via Excel and XML Web Service and REST API.

i Recommendation

For the integration of new brands, please write an informal e-mail with the request for inclusion in the BIDEX trademark directory to the e-mail address info@bidex.bike. An integration of a new brand usually takes place within 48 hours if the criteria for inclusion are met.

i BIDEX brand directory for selective distribution models

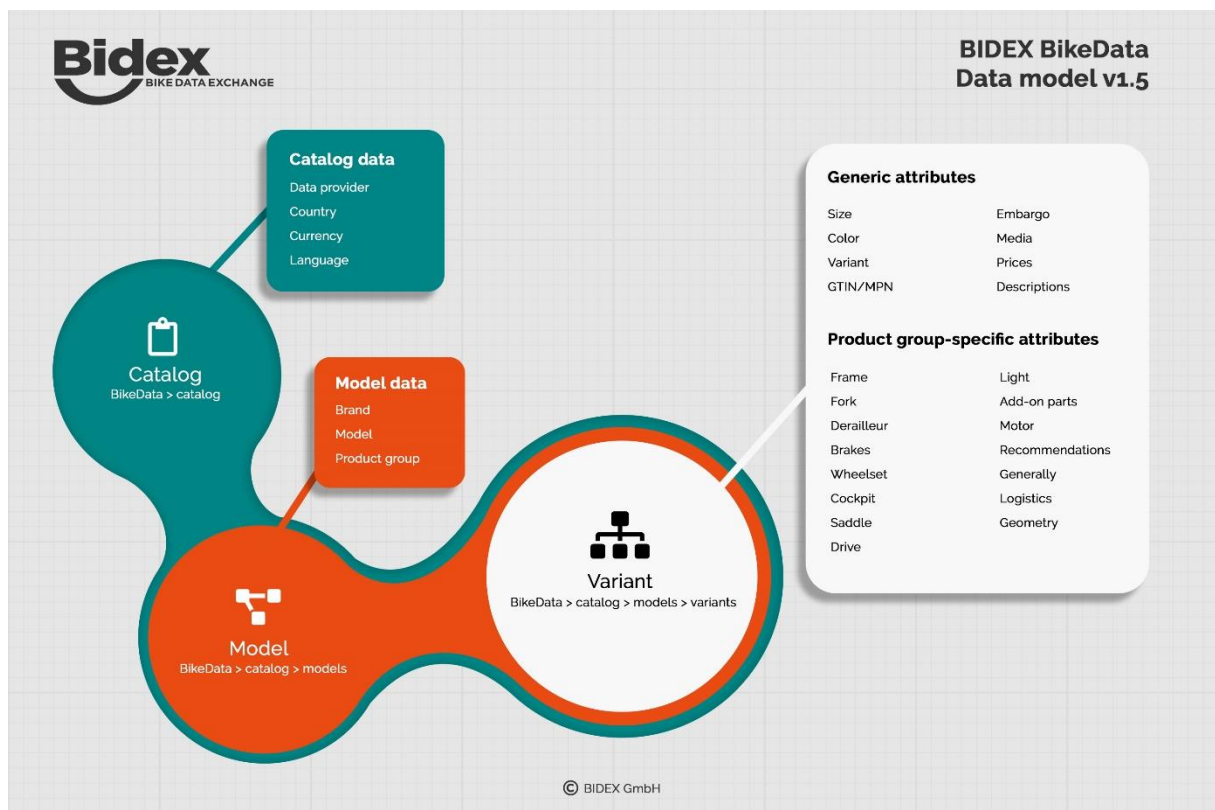
In the area of selective distribution models, the BIDEX trademark directory supports manufacturers or brand owners in the implementation of special requirements of specialist dealer authorization for the product data material provided.

To do so, please contact [BIDEX Support](#).

BIDEX BikeData

With BIDEX BikeData, the industry has a standardized product data format at its disposal in which all product information can be stored and published via various APIs.

Model



DATA TYPES	
The following data types are used	
Datentyp	Description
text (255)	Default text box specifying the maximum number of possible characters. Unless otherwise stated, encoding is done by utf-8.
HTML-Text (MAX)	To include text with HTML formatting, by default only the basic html tags are •
 Line break • <p> paragraph • or bold • <i> italics • <u> underlined • , , for lists with the corresponding end tag. All other HTML tags are filtered out during import for security and compatibility reasons.
bool	For true/false values. NULL values are possible
date	For dates format: ISO-8601 (YYYY-MM-DD)
integer	Integer values (for example, 1200)
decimal	Values with floating-point numbers (e.g. 2,8g)
BIDEX-Attribut [prefix][number]	Alphanumeric value with prefix. The BIDEX attributes standardize essential product properties, especially in the complete wheel sector. Examples: - FT21 (FT=Frame type/Frame Shape / 21= Diamond Frame Shape) - WS28 (WS=Wheelsize/wheel size / 28=28"/622mm) All BIDEX attribute values are available at www.bidex.bike.
BIDEX-Attribut [prefix][number] multi	Multiple selection is possible for many BIDEX attributes. Example: The BIDEX attribute TG (Target-Group=Target Group) allows multiple selection in order to be able to specify different target groups. When transferring BIDEX attributes via Excel/CSV, these attribute values are specified separated by a space (e.g. "TG10 TG20")

[BikeData](#) >> catalog

CATALOG DATA

The catalogue data contains all the information required to assign the data supplied to a sales region, supplier and version date. The catalogue data is therefore necessary if the delivered products or product data are used in different countries with different currencies and languages. When creating data in Excel, it is recommended to create a separate file for each catalogue and to name it accordingly.

Example:

VELOMANUFAKTUR_DE_AT_de_EUR_2022-05-25.xlsx

VELOMANUFAKTUR_CH_de_CHF_2022-05-25.xlsx

Important Notice: The catalogue data should only be used if this is necessary for distribution reasons. If the data fields for the catalogue data are not available, the standard settings for the areas language and and currency are used.

dataprovder		
	Mandatory field?	no
	Type / Length	text (255)
	Number	0-1
	Description	Name of the company responsible for the preparation and delivery of the product data provided in this catalogue. This does not necessarily have to be the product supplier but can also be the distributor or manufacturer. The company named should be able to competently answer questions from specialist dealers about the product data.
	Example	VELOMANUFAKTUR GmbH
gln		
	Mandatory field?	no
	Type / Length	New in V1.6: text (13) (Up to version 1.5 data type integer)
	Number	0-1
	Description	GLN number of the data supplier (see field supplier) according to the GS1 system. The GLN of the data supplier helps the participating companies with the clear identification of the data supplier.
	Example	3830001398687
country		
	Mandatory field?	no
	Type	text (2)
	Number	0-n
	Format	ISO 3166-2 Format (z.B. "DE", "AT"). Write in capital letters!
	Description	GLN number of the data supplier (see field supplier) according to GS1 system. The GLN of the data provider helps the participating companies to uniquely identify the data provider. New in V1.6: Synchronous to the GTIN, the data type has been changed to text.
	Rule	If there is no value, it is assumed that the values are the same for all countries in which the product is distributed.
	Example	DE AT

	EXCEL Note	Several countries are to be separated by spaces.
currency		
	Mandatory field?	no
	Type	text (3)
	Number	0-1
	Format	Format Currency code ISO 4217. Write in capital letters!
	Description	Name of the currency for which the following product data is provided.
	Rule	If there is no value, it is assumed that all prices are in price quotations apply to EUR. For currencies not included in the ISO standard (e.g. crypto currencies), other 3-digit abbreviations can be used as a substitute. (e.g. XBT for Bitcoin).
	Example	EUR
language		
	Mandatory field?	no
	Typ	text (2)
	Format	Language code ISO 639-1. Note lower case!
	Number	0-n
	Description	Designation of the language in which the following product data is provided. In principle, it is also possible to specify several languages here. This makes sense, for example, if the same product specifications are to be used on the English and German-speaking markets.
	Rule	If no value exists, it is assumed that all descriptions are in German (de).
	Example	de
	EXCEL Note	Several countries shall be separated by spaces.
version		
	Mandatory field?	no
	Typ	date
	Format	ISO 8601 (YYYY-MM-DD)
	Number	0-1
	Description	Indication of the version date that applies to the following product data. The information is used for data updates to determine whether the content is up to date.
	Example	2022-05-25
	EXCEL Note	For a correct display, the data type of the column should be set to "Text".

[BikeData](#) >> catalog >> models

MODEL DATA

A model contains the uniform information on a group of different versions of a product. The model thus identifies the series, while the version identifies the product delivered to the end customer. See below for examples and notes on models and versions. 1-n models are possible per catalogue.

Data Fields

year

	Mandatory field?	yes
	Type / Length	integer (4)
	Format	ISO 8601 (YYYY)
	Anzahl	1
	Description	Designation of the model year of a product.
	Rule	In the case of runners without specification changes and identical GTIN or article numbers, the first model year is listed here.
	Example	2022

brand-id

	Mandatory field?	no
	Type / Length	integer
	Number	0-1
	Beschreibung	ID of the trademark according to the BIDEX trademark directory. https://www.bidexbike/BikeBrands-Information
	Rule	The trademark must be available in the BIDEX trade mark directory.
	Example	4711

brand

	Mandatory field?	yes
	Type / Length	text (50)
	Number	1
	Description	Indication of the trademark under which the product is available on the market. https://www.bidexbike/BikeBrands-Information
	Rule	The trademark must be available in the BIDEX trademark directory. If this is not the case, please contact the BIDEX Support in order to include the trademark.
	Example	MyBrand

model-no

	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	Normally the numerical designation of the model series by the manufacturer. This information is used to group the same models together despite possible model designation.
	Example	0815

model

	Mandatory field?	yes
	Type / Length	text (50)
	Number	1
	Description	In contrast to the article number or GTIN, the model does not describe the article in stock but the superordinate series of this article. Example: "City 1.0", "City 2.0", "E-Class", "Golf". A model can contain an arbitrary number of variants that differ in at least one attribute value (e.g. colour, size, equipment).

	Examples	City 2.0 City 3.0 Sprint Ultegra Sprint 105
--	----------	--

[BikeData](#) >> catalog >> models >> productgroup

PRODUCT GROUPS

The Product group classification serves to classify a model in a uniform taxonomy. For this purpose BIDEX product group key is available for this purpose in order to be able to record all products and services of the industry. In the BIDEX data model, the specification of the product group also serves to provide the attributes and specifications matching the respective product group.

Fields

bidex		
	Mandatory field?	yes
	Type / Length	integer (6)
	Number	1
	Description	6-digit BIDEX product group key (see www.bidex.bike)
	Rule	Only the public BIDEX product group keys are permitted here. Manufacturer-specific extensions (e.g. end number 1-9 instead of 0 or 8th/9th digit) are to be corrected.
	Example	101010
manufacturer-category-no		
	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	Product key number of the manufacturer. Here, the product group key modified or extended by the manufacturer could be integrated (e.g. end number 1-9 instead of 0).
	Example	8990099
manufacturer-category		
	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	Product group designation of the manufacturer.
	Example	City>>Classic

[BikeData](#) >> catalog >> models >> variants

VARIANTS

The version represents all information on a stockable trade unit sold to the end customer. There can be 1-n variants per model. With the 3 levels of size, colour and variant, BIDEX offers a flexible possibility to create sensible versions. See below for examples and notes on models and versions.

Fields

size		
	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	General size indication for the product. Any size unit can be used (XS-XXL, cm, inches, etc.). For complete bicycles, it is recommended to include in this field frame shape, frame height and, if required, wheel size (if the model is available with different wheel sizes). For complete bicycles, the BIDEX attribute BS (Body Size) should also be filled in to enable filtering according to body size.
	Examples	- 58cm Gent 28" - Trapez M - 60cm Diamant
color		
	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	General colour indication for the product. Depending on the surface, optical effects should be specified.
	Examples	-cobaltblue metallic -curry gloss
variant		
	Mandatory field?	no
	Type / Length	text (50)
	Number	0-1
	Description	General execution specifications that cannot be explicitly integrated in the fields size and colour.
	Regel	The field remains empty if there are no deviating designs for the model except for size and colour.
	Examples	- Freewheel - 500Wh / 625 Wh - XIOX / NYON
mpn		
	Mandatory field?	no, if GTIN is present
	Type / Length	text (50)
	Number	0-1
	Description	Manufacturer Product Number- Manufacturer article number. In many cases it is common for the MPN to be composed of a model number and a designation.
	Rule	If no valid GTIN is available, the specification of an article number is mandatory.
	Examples	0815-XL-Blue 081548839
gtin		
	Mandatory field?	no, if MPN is present
	Type / Length	New in V1.6: text (13) (Up to version 1.5 data type integer)
	Number	0-1

	Description	GTIN-13 Code of the manufacturer according to GS1 system.
	Rule	If there is no valid GTIN, the indication of an article number is mandatory. UPC codes (12 digits) can be integrated by generating a valid 13-digit GTIN code by prefixing a 0. For this reason, the text data type is also used here. This should be taken into account, especially for Excel files, by selecting text as the column format.
	Examples	4049441002026 0114411002087 (UPC became a GTIN with leading 0)
upc		Neu in V 1.6
	Mandatory field?	Mandatory field?
	Type / Length	text (12)
	Number	0-1
	Description	UPC Code of the manufacturer.
	Examples	449441002026 114411002087
	Rule	A UPC code is normally converted to a valid GTIN by prefixing a leading 0. Since the BikeData standard uses the GTIN and/or article number (in combination with brand ID) as a unique identifier, it is not necessary to carry the UPC additionally. - In the case a manufacturer has both UPC and a possibly completely different GTIN ready, the UPC can be entered here. - In the case the GTIN can be formed from the UPC, it is recommended to refrain from additional indication of the UPC.
embargo		
	Mandatory field?	no
	Type / Length	datetime
	Format	ISO 8601 Possible formats: Date only: YYYY-MM-DD Date / time without time zone (UTC): YYYY-MM-DDThh:mm Date / time with time zone: YYYY-MM-DDThh:mm±hh
	Number	0-1
	Description	Indication of the date from which the product data can be used by traders. Alternatively, the time can be specified in addition to the date. If there is no time zone, UTC is to be assumed (time zone +0 hours). Otherwise, the time zone deviation is to be indicated in hours.
	Example	2022-05-25 2022-05-25T12:00 2022-05-25T10:00+02
	EXCEL Note	For a correct display, the data type of the column should be set to "Text".

[BikeData](#) >> catalog >> models >> variants >> media

MEDIA

In the current BikeData version, the recording of a maximum of one main image as well as other product images (e.g. for detailed shots), videos and PDFs per version is currently supported. At the project level, however, it is possible to integrate arbitrarily extensive content per model and execution.

Fields

image

	Mandatory field?	no
	Type / Length	text (255)
	Format	Upon data delivery: File name with extension For media servers: Complete external URL with schematic name (e.g. https://)
	Number	0-1
	Description	Indication of which <u>main product image</u> should be used for the respective version. There are 3 options: 1. The picture shows the exact execution with consideration of all information of size, color and variant. A different image is defined for each execution of a model. This option is only recommended if the versions actually differ visually recognizable. In the standard case, this option is not recommended in the complete wheel area, as although there are often shots of the different frame shapes and colors, but not shots for each frame height. 2. The photograph shows the respective version as far as possible and is used for several versions. This is the recommended way for complete wheels where the mounts are for different frame shapes and colors, but not for the different frame heights. 3. The photograph shows an example of a model and is then used in all versions of this model. This option is usually used in mtB and race, where a model is often offered with the same color and frame shape but in different frame heights.
	Recommendations	- The margin between the product and the edge of the image should be about 1% of the total width on all sides. - The product should be clearly recognizable and as free as possible. - Product images should have a pure white background (RGB 255, 255, 255). - Especially for complete wheels, we recommend the use of a neutral right side view - The photo should offer a realistic color reproduction - Flashes of light and transitions must be avoided - Special effects and filters should be avoided - Props, advertising texts or other disturbances must be avoided - Copyright notices and watermarks should be avoided - Note the Notes on media data
	Rule	- Images must be at least 6MP (e.g. 3000px * 2000px). - Images must have a resolution of at least 72 dpi. - Allowed image formats: are JPG, TIFF, PNG. - Allowed file extensions are .jpg, .tiff, .png

image-transparent

New in V 1.6

	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (z.B. https://)
	Number	0-1
	Description	<u>Main product image with transparency</u> The descriptions of the main product image (image) apply
	Recommendations	The recommendations of the image field apply
	Rule	The rules of the image field apply By way of derogation, the following rules apply: 1. Allow image formats are WebP, PNG, TIFF 2. Allowed file extensions are .webp, .png, .tiff

image-detail-1/ image- detail-2/ image-detail-3

New in V 1.6

	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (e.g. https://)
	Number	0-1
	Description	<u>Additional product images</u> . Here, both detailed shots and complete product views can be integrated in different perspectives.

	Recommendations	The recommendations of the image field apply
	Rule	The rules of the image field apply In addition, the following rules apply: - The recordings should be directly related to the product. - BRAND logos or general motifs without product reference are NOT included
image-test-1/ image- test-2/ image-test-3		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (e.g. https://)
	Number	0-1
	Description	<u>Awards and rewards.</u> All awards that explicitly affect the product can be integrated here. - Award symbols of magazines and test portals (e.g. Active Cycling Price Tip, etc.) - Screenshots of opinion portals
	Recommendations	The recommendations of the image field apply
	Rule	The rules of the image field apply. In addition, the following rules apply: - The recordings should be directly related to the product. - GENERAL awards of the brand or manufacturer (e.g. "Brand of the Year") are NOT included here.
pdf-test-1 / pdf-test-2 / pdf-test-3		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	Upon data delivery: File name with extension For media servers: Complete external URL with schematic name (e.g. https://)
	Number	0-1
	Description	<u>Reviews</u> Field for recording test results in PDF format
	Recommendations	BIDEX assumes that the rights of use of the test reports lie with the manufacturer. Otherwise, the rights of use must be clarified with the publisher.
	Rule	- Only PDF according to ISO 32000 - Open unencrypted or without a user password - A single PDF per test
pdf-manual		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (e.g. https://)
	Number	0-1
	Description	<u>Manuals</u> Field for recording operating instructions in PDF format
	Rule	- Only PDF according to ISO 32000 - Open unencrypted or without a user password - Several operating instructions for a product are to be summarized in the PDF
pdf-technical		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (e.g. https://)
	Number	0-1
	Description	Field for recording technical documentation in PDF format
	Rule	- Only PDF according to ISO 32000 - Open unencrypted or without a user password - Several documentations for a product are to be summarized in the PDF
pdf-guaranty		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	For data delivery: File name with extension For media servers: Complete external URL with schema name (e.g. https://)
	Number	0-1

	Description	Warranty Conditions Field for inclusion of warranty information or warranty conditions in PDF format
	Rule	- Only PDF according to ISO 32000 - Open unencrypted or without a user password - Several warranty conditions for a product are summarized in the PDF
video-1 / video-2 / video-3		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	External URL with schematic name (e.g. https://)
	Number	0-1
	Description	ProductVideos Field for recording video URLs from streaming services such as Youtube or Vimeo. Example Youtube: https://youtu.be/gaDEq3u5huA Example Vimeo: https://vimeo.com/37950618
	Rule	- The specified URL of the streaming service must be publicly accessible and must not be protected by a user password. - Prior registration or registration of the end user on the video platform may be necessary. - The URL must be permanently retrievable. (without end date)
url-detail		New in V 1.6
	Mandatory field?	no
	Type / Length	text (255)
	Format	Complete external URL with schematic name (e.g. https://)
	Number	0-1
	Description	URL of the detail page / Micropage Here the URL can be stored under which end customers receive further information about the product.
	Recommendations for Dataprovider	- The detail page can normally be found on the brand homepage of the brand in question. - The URL should only be specified if there is no direct reference option for end customers (e.g. online shop) on the relevant detail page.
	Recommendations for Publisher	To avoid 4XX and 5XX errors, publishers are recommended to regularly test this field for valid HTTP status code (200 and 2XX respectively). see Rules.
	Rule	- The specified URL must be permanently publicly accessible. - The URL must not be protected by a user password. - The URL must be in the access of the manufacturer (e.g. brand homepage) - Under the URL you can find information about the corresponding product (column model) - URLs of marketplaces or auctions are not permitted - The following HTTP status codes are allowed when calling the URL: 200 OK: Standard status code for a valid product detail page 2XX: Additional 2 status codes are possible if the user receives the expected information at the URL 3XX: Redirects are possible if the user receives the expected information under the new URL. If possible, the new URL should be included in the reply (e.g. if it has moved permanently) 4XX: Client errors should only be delivered if the requested resource is permanently unavailable. This can be the case, for example, with products that are no longer sold or are no longer on the market. In the best case, the error code is presented in combination with a corresponding error page. e.g. with the note: "This product is no longer available". Recommendation for publishers: In the case of 4xx errors, the URL should be deleted in order to avoid future error messages on the part of end customers. 5XX: Server errors should be corrected by the website operator as soon as possible. Recommendation for publishers: In the case of 5xx errors, the requested resource should be checked again after X days.

BikeData >> catalog >> models >> variants >> prices

PRICES

dealer-base-price		
Mandatory field?	no	
Type / Length	decimal	
Format	2 comma or dot-separated decimal places - Without thousands separators - Without currency indication	
Number	0-1	
Description	Dealer base purchase price for the respective version net. Quantity scales and dealer-specific discounts are always not taken into account.	
Rule	- The price refers to the specified currency from the catalog segment. - In the case of packaging units, the price of the entire packaging unit shall be indicated. - The value must be positive - Missing decimal places are replaced by 0. Other decimal places are not taken into account. - Thousands separators and currencies are not taken into account.	
Examples	455.55 1155.00	
EXCEL Note	For a correct representation, the data type of the column should be set to "Number" with 2 decimal places. The thousands separator feature should be disabled.	

rrp		
Mandatory field?	no	
Type / Length	decimal	
Format	2 comma or dot-separated decimal places - Without thousands separators - Without currency indication	
Number	0-1	
Description	RRP=recommended retail price. Corresponds to the suggested retail consumer price (MSRP) or recommended retail price that a manufacturer defines for a product regardless of the sales channel for the current model year. (Including VAT)	
Rule	- The price refers to the specified currency and the defined country from the catalog segment. - In the case of packaging units, the price of the entire packaging unit shall be indicated. If, despite the packaging unit, only individual sales are made to end customers, no RRP should be specified. - The value must be positive - Missing decimal places are replaced by 0. Other decimal places are not taken into account. - Thousands separators and currencies are not taken into account.	
Examples	455.55 1155.00	
EXCEL Note	For a correct representation, the data type of the column should be set to "Number" with 2 decimal places. The thousands separator feature should be disabled.	

vat		
Mandatory field?	no	
Type / Length	decimal	
Format	2 comma or dot-separated decimal places - Without percent sign	
Number	0-1	
Description	VAT rate applicable to the respective execution	
Rule	- The tax rate refers to the specified country from the catalog segment. - The value must be positive - Missing decimal places are replaced by 0. Other decimal places are not taken into account. - Percent signs are not taken into account.	
Examples	19.00 15.50	
EXCEL Note	For a correct representation, the data type of the column should be set to "Number" with 2 decimal places. The thousands separator feature should be disabled.	

[BikeData](#) >> catalog >> models >> variants >> texts

DESCRIPTIONS

long-description

Mandatory field?	no
Type / Length	HTML-text (MAX)
Kodierung	utf-8
Anzahl	0-1
Description	Extensive description text / advertising text for end customers.
Rule	- The text must be written in the language defined in the catalog segment. - Allowed HTML elements: - Paragraph formatting: <p> </p>

 - List formatting: - Text formatting: <i> </i> <u> </u> - Special characters are allowed - HTML elements not listed are not allowed. - Incorrect (e.g. not closed) HTML elements are not allowed. - HTML attributes (e.g. <p align="center">) are not allowed. - Script elements are not allowed. - Link information with <a> element is not allowed. - Image references with element are not allowed.
Examples	<p>The new C2.0 with resignation</p> <p>Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. </p> <p>Highlights:</p> Top-Highlight 1 Top-Highlight 2 Top-Highlight 3
EXCEL Note	For correct display the data type of the column should be set to "text".

short-description

Mandatory field?	no
Type / Length	text (255)
Kodierung	utf-8
Number	0-1
Description	Short description for end customers. The short description can, for example, contain the first sentences of the long description.
Rule	- The text must be written in the language defined in the catalog segment. - Special characters are not allowed - HTML elements are not allowed
Examples	Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor
EXCEL Note	For a correct representation, the data type of the column should be set to "Number" with 2 decimal places. The thousands separator feature should be disabled.

receipt-text

Mandatory field?	no
Type / Length	text(50)
Coding	utf-8
Anzahl	0-1
Description	Bontext. Short text for issue on receipts and invoices. The receipt text should contain all relevant information of the model and the execution in a strongly shortened form. These include brand, model, size and variant.
Examples	C2.0 D 50cm blue

[BikeData](#) >> catalog >> models >> variants

ATTRIBUTES

❓ What attributes are there?

BIDEX distinguishes data fields and data values into attributes with and without key values.

- **Attributes without a key value** are, for example, normal text fields in which a product component is described (e.g. data field circuit with the value "Shimano Ultegra"). These attributes are very important for B2B and B2C applications, but only allow the automated use of filter and search functions to a limited extent and with great effort.
- **Attributes with key values** are filterable and searchable specification specifications and thus an essential prerequisite for the use of product data in virtually all IT systems and online applications. These special BIDEX attributes can be recognized by a unique prefix and a subsequent 2-digit number and enable a language-neutral specification specification for certain attributes. For example, in addition to the text value (e.g. "Shimano Ultegra"), a BIDEX attribute value can also be integrated when specifying the gearshift. (e.g. GS10 = Gear System 10 = Deraillleur).
The available BIDEX attribute values are language-neutral to ensure international use. For the data type [prefix|number] multi, any number of entries is possible for this attribute. Example: The target audience for a product can often include both men and women. In the case of Excel data, "TG10 TG20" is then entered in the field.

★ Recommendation

If no BIDEX attributes are specified, later filtering according to these values is not possible or only possible with great effort. We therefore recommend that you enter the attributes completely.

❓ Which attributes are required for different products?

Which data fields can be provided for a product depends on the product product group. Depending on the product group, different data fields must then be entered. a sample file for the complete wheels area is published in excel form under <https://www.bidex.bike/BikeData-Information> .

At project level, the appropriate attributes for each product group can be provided in the BIDEX product group key via the BIDEX REST API. For data entry in other product groups, please contact the [BIDEX Support](#)

BIDEX data fields / attributes without key values

Mandatory field?	no
Type / Length	Different data types possible (text / HTML / Integer / Decimal / Boolean)
Coding	utf-8
Number	0-1
Description	

BIDEX Attribute mit Schlüsselwerten

Mandatory field?	no
Type / Length	[prefix number] [prefix number] multi
Coding	utf-8
Number	0-1
Description	BIDEX attributes are used to record filterable and searchable product information All available BIDEX attributes are published : https://www.bidex.bike/BikeData-Attributes . For all attributes, the values are available as Excel and/or XML Web service. At project level, all values can be provided via the BIDEX REST API.
Examples	BIDEX Attribut BR (Brake type): BR10 = rim brake, BR20 = disc brake, etc.. BIDEX Attribut FC (Frame color): FC10 = yellow, FC50 = blue, etc.

[BikeData](#) >> catalog >> models >> variants

GEOMETRY ATTRIBUTES

For the area of complete bicycles and e-bikes, data fields are available for the acquisition of frame geometries.

BIDEX subdivides 3 geometry levels depending on the application or application:

- **Geometry I:** Geometric frame data for basic applications in the field of automated frame height determination based on end customer body measurements.
- **Geometry II:** Geometric data for advanced applications in the field of professional bike fitting based on body measurements of the end customer.
- **Geometry III:** Geometric data that significantly influence driving and comfort behaviour. In some cases, this data also provides a basis for further adjustments to the requirements of the end customer.

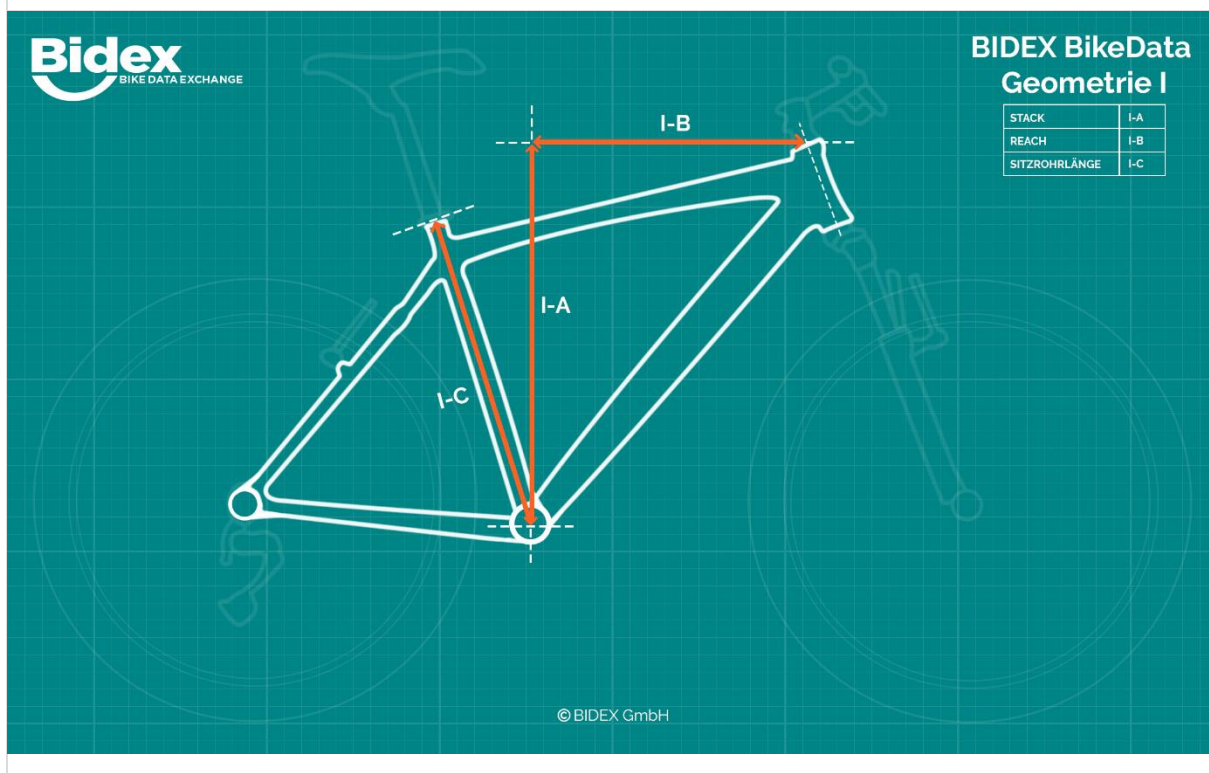


Recommendations

The geometry data is available as attributes for all product groups in the area of bicycle (product group 10...), e-bike (product group 12...) and S-pedelec (product group 13...). In principle, these are not mandatory fields. However, we would like to point out that in the absence of geometry data, use in many application scenarios is not possible.

GEOMETRY I

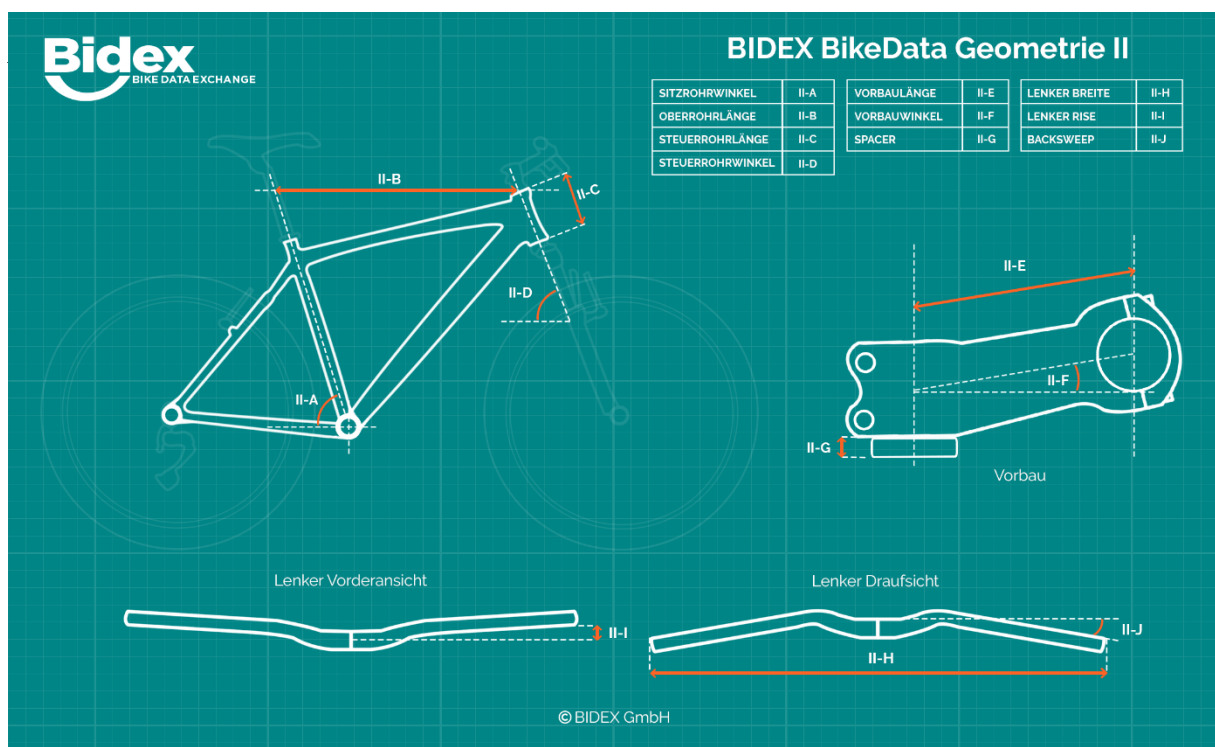
Definition	Geometric frame data for basic applications in the field of automated frame height determination based on end customer body measurements.		
Designation	Field	Unit	Definition
STACK	stack	mm	Vertically measured distance from bottom bracket center to middle of the top edge of the head tube
REACH	reach	mm	Horizontally measured distance from bottom bracket center to center of the control ear
SITZROHRLÄNGE	seat-tube-length	mm	Distance from bottom bracket center to upper edge of the seat tube.



GEOMETRY II

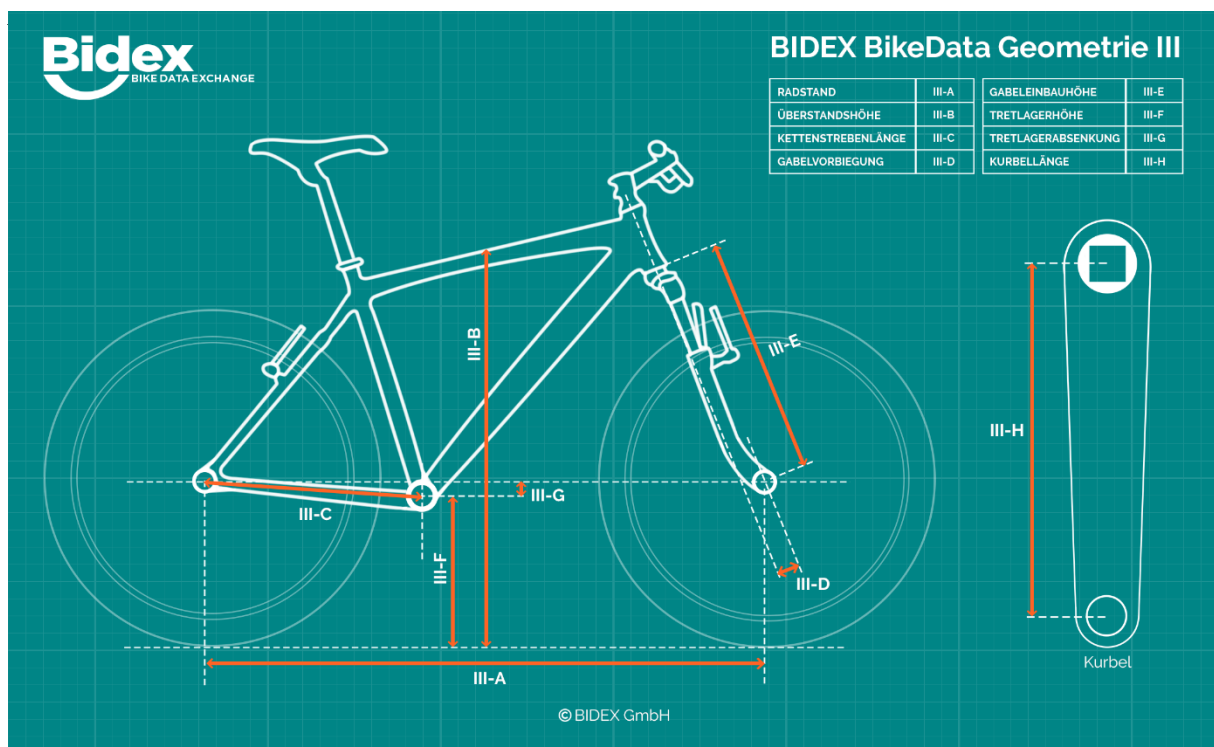
Definition Geometric data for advanced applications in the field of professional bike fitting based on body measurements of the end customer.

Designation	Field	Unit	Definition
SEAT TUBE ANGLE	seat-tube-angle	Degree	Angle between seat tube and horizontal
TOP TUBE LENGTH	top-tube-length	mm	Horizontally measured distance from center top edge head tube to center seat tube. (Definition according to BIKE / TOUR magazine)
HEAD TUBE LENGTH	head-tube-length	mm	Distance between the bottom and top of the head tube without bearing shells and spacer. (Definition according to BIKE / TOUR magazine)
HEAD TUBE ANGLE	head-tube-angle	Degree	Angle between the head tube and the horizontal
STEM LENGTH	stem-length	mm	Distance from the center of the fork shaft to the center of the handlebar.
STEM ANGLE	stem-angle	Degree	Angle between fork shaft and stem
SPACER	spacer	mm	Total height of the spacers / spacer rings
HANDLEBAR WIDTH	handlebar-width	mm	Normal handlebars: Distance between pipe ends of the handlebar. Racing handlebar: Distance from center to center of the tube in the middle of the drop.
HANDLEBAR RISE	handlebar-rise	mm	Increase of the handlebar ends in relation to the stem
HANDLEBAR BACKSWEEP	handlebar-backsweep	Grad	Degree angle of the crank or bending of the handlebar backwards



GEOMETRY III

Definition	Geometric data that significantly influence driving and comfort behaviour. In some cases, this data also provides a basis for further adjustments to the requirements of the end customer.		
Designation	Field	Unit	Definition
WHEELBASE	wheelbase	mm	Distance from the middle rear axle to the middle of the front axle.
PROTRUSION HEIGHT	standover	mm	Vertically measured distance between the bottom and center of the top tube (for diamond frames)
CHAINSTAY LENGTH	chainstay-length	mm	Distance from center rear axle to bottom bracket center
FORK BENDING	fork-rake	mm	Distance between impeller axle and imaginary extension of the centre axle of the head tube
FORK HEIGHT	fork-installation-length	mm	Distance between the contact surface of the control bearing and the center of the hub axis
BOTTOM BRACKET HEIGHT	bottom-bracket-height	mm	Vertically measured distance between the ground and the middle of the bottom bracket axis. (Bottom-Bracket-Height)
BOTTOM BRACKET LOWERING	bottom-bracket-drop	mm	Vertically measured distance between bottom bracket center and horizontal connecting line of both wheel axes. (Bottom Bracket Drop)
CRANK LENGTH	crank-length	mm	Distance between the middle of the bottom bracket axle to the middle of the pedal axle.
New in V1.6: SEATPOST ADJUSTMENT	dropper -travel	mm	Maximum adjustment distance of lowerable seatposts (mm)



Notes on models and designs

? How should models and designs be formed?

The model designation is used to describe a series, while the execution represents the physically available trading unit sold to the final shipper. A model has at least 1 version, which contains the exact sizes, colors and variants of the respective version.

Here are some examples to explain the principle:

Example 1: Bicycle model with different frame heights and frame shapes			
Model name	Size	Colour	Variant
City C2.0	50cm unisex 28"	black	
City C2.0	55cm unisex 28"	black	
City C2.0	48cm Wave 26"	black	
City C2.0	53cm Wave 26"	black	
Example 2: Bicycle model with uniform frame height, different colors and equipment			
Model name	Size	Colour	Variant
Compact Travel	unisex 20"	black	500Wh
Compact Travel	unisex 20"	red	625Wh
Compact Travel	unisex 20"	black	500Wh
Compact Travel	unisex 20"	red	625Wh
Example 3: Cycling shorts in different sizes			
The colour specification is already included in the model name and can therefore be omitted in the Color column.			
Model name	Size	Colour	Variant
Single Track Hose black	S		
Single Track Hose black	M		
Single Track Hose black	L		
Single Track Hose black	XL		
Example 4: Bicycle lock in different lengths and variants			
In this case, one of the versions with a different security level is available. therefore the normal execution specifies "default".			
Model name	Size	Colour	Variant
Bordo	120cm		Standard
Bordo	180cm		Standard
Bordo	120cm		High-Security-Level

? How should models be formed for many different variants?

In the complete wheel area, a model is offered as standard at least in different sizes and frame shapes. Often also in different colors and other variants such as different battery powers. With many different designs, it can make sense to specify the model name more precisely in order to achieve a clearer presentation for dealers and end customers.

★ Since normally each product is photographed only once and not in all available sizes, colors and variants (e.g. different batteries), the rule "The picture is the mother of the model" can often be applied.

Example: Multi-variant bicycle model			
For each of the 3 different models (men/trapeze/wave) there is a picture.			
Model name	Size	Colour	Variant
Sparky 29" Gent	50cm	black	
Sparky 29" Gent	55cm	black	
Sparky 29" Gent	60cm	black	
Sparky 29" Gent	50cm	blue	
Sparky 29" Gent	55cm	blue	
Sparky 29" Gent	60cm	blue	
Sparky 29" Trapez	48cm	black	
Sparky 29" Trapez	53cm	black	
Sparky 29" Trapez	58cm	black	
Sparky 29" Trapez	50cm	red	
Sparky 29" Trapez	55cm	red	
Sparky 29" Trapez	60cm	red	
Sparky 29" Wave	48cm	black	
Sparky 29" Wave	53cm	black	
Sparky 29" Wave	58cm	black	
Sparky 29" Wave	50cm	red	
Sparky 29" Wave	55cm	red	
Sparky 29" Wave	60cm	red	

? How can modeling be controlled?

Recommendation for Excel:

The values of the Model, Size, Color, and Variant fields must be unique in the respective catalog. To check this, you can insert a control column in which you can enter the formula

=[Spalte_model]&[Spalte_size]&[Spalte_color]&[Spalte_variant]

You can then use the Excel

Conditional Formatting function >>

rules for highlighting cells >>

duplicate values to

simply color-code possible duplicate values and thus edit them conveniently.

? How can configurable products be integrated?

For configurable products such as Custom Made Bikes, the variants can only be defined in a blurred manner because some of the attributes do not allow fixed values and are freely configurable. In these cases, the configurable fields must be marked with the note "configurable", "Various equipment possible" or similar note.

For configurable products, it is normally not possible to specify a unique GTIN or MPN because the number of possible configurations is very high. Instead, the article number of the not yet configured base model is used, which is only completed after ordering or configuration.

If you have any questions about the integration of configurable models, please contact BIDEX Support.

Notes on media data

Requirements for image material

Basically, each product must be provided with a main image at variant level. This image can be identical for all variants of a model or different per variant.

In addition, detailed shots as well as test symbols or awards can be integrated for each variant.

1. Minimum Requirements

1. Images must be at least 6MP (e.g. 3000px * 2000px).
2. Images must have a resolution of at least 72 dpi.
3. The format should be JPG, TIFF or PNG.
4. Main images may only represent a view of a product.
5. The margin between the product and the edge of the image should be about 1% of the total width on all sides.



- The product should be clearly recognizable and as free as possible.
- Product images should have a pure white background (RGB 255, 255, 255).
- Especially for complete wheels, we recommend the use of a neutral right side view
- The photo should offer a realistic color reproduction
- Flashes of light and transitions must be avoided
- Special effects and filters should be avoided
- Props, advertising texts or other disturbances must be avoided
- Copyright notices and watermarks should be avoided

Transmission of image material

At project level, it is necessary to define how the image material and other media elements are transmitted to the BIDEX database. The following options are available:

- Postal delivery by CD/DVD to BIDEX GmbH
- Provision of data via FTP server of the manufacturer
- Provision of an FTP server by BIDEX
- Provision via the manufacturer's PIM system/cloud
- Transfer via WeTransfer (<https://bidex.wetransfer.com>) to info@bidex.bike
- Integration via BIDEX online administration

BIDEX Services & Support

1. **BIDEX Data Service**

We process the product data in BIDEX BikeData format including the BIDEX attributes for a large number of manufacturers. We would be happy to make you a concrete offer.

2. **BIDEX Consulting**

For complex applications in the field of ERP and PIM systems, we also work together with external consultants. Please write us briefly which requirements have to be mastered.

3. **BIDEX BikeLocal**

With BIDEX BikeLocal, the stock levels of your Fachhandels partners can be displayed on your own brand website. Here, too, the data in BikeData format is required. Please do not hesitate to contact us if you have any questions about BIDEX BikeLocal.

For more information, see www.bikelocal.de

4. **BIDEX BikeBrand**

In the area of selective distribution models, we support specialist retail brands in the implementation of digital authorization strategies for authorized sales partners. We are happy to answer any further questions you may have.

BIDEX GmbH

Talsperrenweg 72, 58256 Ennepetal

Contact for BIDEX BikeData: Lars Röttger (l.roettger@rim.de)

Contact for BIDEX BikeLocal: Thomas Groß (t.gross@bidex.bike)

E-Mail: info@bidex.bike

Internet: www.bidex.bike