

File Description

Spectacle Lens Catalog - Version 6.9.3

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1 Introduction

Ladies and Gentlemen,

This file description of the **Spectacle Lens Catalog, Version 6.9.3** is a further development of the standard format version 4.0. The goal of this new file format is to illustrate the product ranges of the lens manufacturers as best as possible.

The catalog format was tested for suitability in the big European markets and was also integrated in the DIN and ISO standardization processes. It will succeed as a useful, high-performance standard throughout Europe.

This is an open format which lives and develops from the help of all users (lens manufacturers and software companies). Although the current version is technically very mature, shortcomings can always be discovered. During data maintenance by the lens manufacturers or data evaluation by the software companies, some questions will certainly arise, for which the Internet forum <http://www.glaeserforum.de> has been established. Here, improvements can be suggested or questions asked about the data contents. The discussions from this forum will be edited and incorporated in this document.

Furthermore, the current file descriptions for this and other formats important for ophthalmic optics can be downloaded at <http://www.fosa.optik.de>.

2 General Specifications

2.1 Version validity and downward compatibility

This is the current version 6.9.3. Minor changes ensuring downward compatibility are indicated in the third position of the release number. For example, the release number is changed from 6.5.1 to 6.5.2 when a new data field is entered into a table without changing existing fields. Changes to the format which require minor changes to the various software packages are indicated in the second position of the release number, e.g. 6.5.5. is changed to 6.6.0. A new structure and format definition (e.g. XML) will be defined in release 7.0.0.

2.2 Delimiters and data set length

The character set used in the text files described below is ISO 8859-x (value x is defined in the Head.Dat file).

(Also see "http://de.wikipedia.org/wiki/ISO_8859-1")

The various sets are separated by the characters CR (ASCII 13) and LF (ASCII 10). In the interest of better downward compatibility, a fixed set length has not been defined. In a new version of the file format, newly defined data fields are simply attached to the existing structure. Software products not yet matched to the current file format can therefore import the new file format nonetheless.

The sets themselves consist of fields with a fixed length without delimiter.

2.3 Field specifications

Text fields (type T) are saved in the data sets in left-aligned form, followed by a BLANK (ASCII 32).

Numeric values (type 9 or B) are right-aligned with leading zeros without decimal delimiter. BLANK is interpreted as "0". (Exceptions: price fields in LensPrice.Dat and OptionsPrice.Dat, where a blank for an EK price field (EK = purchase price) is interpreted as "price on request" and indicates for a VK (= selling price) field that no selling price has been recommended and must be calculated by the eyecare professionals themselves).

Date fields (type D) are displayed in the year, month and day format (4 digits, 2 digits, 2 digits). Optional fields can be filled with a BLANK. (Format: YYYYMMDD)

Boolean fields are defined as 0=No and 1=Yes. BLANK is interpreted as "0". Other definitions are determined as comments in the table structure.

In files with a primary key, the fields making up this key are marked with an asterisk (*). A primary key must not occur several times in one file. Furthermore, it is required that the sets are arranged according to the primary key.

2.4 Product definition in the GPL standard, orderability

A product is something that is identified by a defined and clear manufacturer's order code. A difference is made between base lens products and extras products (coatings). It is assumed that products defined in this way, supplemented with diameters and dioptric powers, enable orders to be transferred to the manufacturer's order system.

2.5 Consistency requirements

The primary key feature must be observed. Several sets with the same primary key must not occur in any file.

All base lens codes appearing in LensPrice.Dat, Combination.Dat, LensRange.Dat, LensGeo.Dat, Information.Dat, OrderOptions.Dat, ProductGroup.dat, CodeSubstitution.Dat and OeCodes.Dat must have been defined in the LensType.Dat file.

All extras codes appearing in OptionsColor.Dat, OptionsPrice.Dat, Combination.Dat, LensRange.Dat, Information.Dat, OrderOptions.Dat, ProductGroup.Dat, CodeSubstitution.Dat and OeCodes.Dat must have been defined in the Options.Dat file.

All extras indices used in the OptionsPrice.Dat file must have been defined in the LensType.Dat file.

All delivery range indices used in the LensPrice.Dat file must have been defined in the LensRange.Dat file.

The product designations specified in the LensType.Dat, Options.Dat and OptionsColor.Dat files must be unambiguous in each file, although they are not contained in the primary key.

3 Manufacturer code

To avoid any confusion between the various price lists, the manufacturer code is determined in the Head.Dat file. This code must be unmistakable for all manufacturers and users. The following list informs you which codes are already used by the various lens manufacturers.

Code	Manufacturer name
AO	American Optical
AVM	AVM
EMO	Emmerich Optik
ESS	Essilor
HLD	Hoya Lens Germany
HHU	Hoya Lens Hungary
IN	Indo
JAI	Jaikudo
KNE	Knecht
MMS	Metzler Mailshop
NI	Nikon
NIK	Nika
NOH	Nordhorn Optik
NOR	Norville
NOV	Novacel
OGE	Optik Ges.m.b.H
OPH	Ophthalmica
OPT	Optovision
OSW	Optiswiss (CH)
PEN	Pentax
REI	Reize Optik (CH)
R+H	Rupp + Hubrach
ROD	Rodenstock
SCE	Schulz

Code	Manufacturer name
SCH	Schneider Optische Werke
SEI	Seiko
SAO	Signet Armorlite
SO	Sola
SV	Starvision
STR	Stratemeyer
TOE	TOE
WET	Wetzlich
CZ	Zeiss (D, Lux)
TL	Technolens (CH)
EYT	Eyeteck (CH)
WEB	Weber
UTO	UNIOPT TRANS OPTIK GmbH
KOS	Opti-Kos

4 Software

This section lists software products permitting the price list data to be processed. A clear ID is allocated to each software product and saved in the Head.Dat file.

Lens price list editor 6x

Source of supply:
COMCEPT GmbH
Hauptstrasse 50
51143 Köln, Germany

Lensedit

Source of Supply:
Schöni Opticsystems GmbH
Langmoosstrasse 10
CH 9552 Bronschhofen, Switzerland

5 Information provision

5.1 General

The price list information is provided in altogether 11 files. All files must be combined in a ZIP file on delivery. **All files must be contained in the ZIP file on delivery.**

5.2 File names in the ZIP file

File name	Contents
Head.Dat (page 14)	General information about the manufacturer and the price list, as well as a definition of the cylinder and prism groups. Furthermore, all parameters occurring on one occasion only are defined here.
LensType.Dat (page 19)	Specification of base lenses. The products are identified by an unambiguous manufacturer code.
LensRange.Dat (page 22)	Production deliverability ranges of products and product combinations.
LensGeo.Dat (page 26)	Description of the position of lens reference points and lines per base lens.
LensPrice.Dat (page 29)	Base lens prices for various power ranges and deliverability options.
Options.Dat (page 30)	Specification of additional extra charges, processes and color groups. The products are identified by an unambiguous manufacturer code.
OptionsColor.Dat (Seite 33)	Specification of the various single colors per color product
OptionsPrice.Dat (page 35)	Prices of additional processes and high or prismatic powers.
Combination.Dat (page 37)	Information about restricted combinability of additional processes
Information.Dat (Seite 44)	Additional product information
OeCodes.Dat (page 45)	Erfa codes and OPC codes for lenses and coatings
OrderOptions.Dat	List of fields that must or can be specified in a lens order
ProductGroup.dat	Serves to combine lenses and options into a product group.
CodeSubstitution.Dat	Allocation of old, invalid IT codes to new IT codes.

5.3 Definition of file names in the ZIP file

The name of the ZIP file is defined as follows:

ManufacturerCode-manufacturerSubcode-languageVersion-countryCode-ValidFrom-Version.zip

Example: HLD-IGA-DE-DE-20040401-1.zip

The version simply is a serial number starting with 1.

If no manufacturer subcode is available, this code is deleted.

Example: HLD--DE-DE-20040401-1.zip

The code for the language version is defined according to **ISO 639-1 Alpha-2**.

Also see http://en.wikipedia.org/wiki/ISO_639

The two-digit country code is defined according to **ISO 3166-1 ALPHA-2**.

Also see http://de.wikipedia.org/wiki/ISO_3166_Kodierliste

5.4 Manufacturer-specific files

It is possible that the existing definition of the deliverability display is not sufficient for a certain delivery line of a manufacturer. In such a case, manufacturer-specific data formats can be integrated.

However, no manufacturer-specific files have been defined so far.

6 The "Head.Dat" file

6.1 Description

In the Head.Dat file, all data occurring only once in the database is saved.

6.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Field name	1	30	T30	Field names are listed in the next paragraph.
2	Field value	31	??		The length is dependent on the field value. The format and therefore the field length is defined under 6.3.

6.3 Field names

No.	Name	Format	Description/Comment
1	version	T10	Version of the data format. The value of this version is always identical to "6.9.3" (without quotation marks)
1a	Software-id	T40	Unambiguous name incl. version of the software with which the price list data were generated.
1b	comment	T200	Brief comment on the price list description
1c	uid-manufacturer	T50	Unique number clearly allocated to manufacturer to clearly mark the database (corresponds to file name in ZIP file)
1d	uid-postedit	T50	Unique number clearly allocated to reprocessing to clearly mark the database. (Note: value or format not yet defined, i.e. evaluation not yet possible).
2	Valid-from	D	
3	Valid-until	D	Open if no expiry date has been specified.

4	country	T2	2-digit international country code according to ISO 3166-1 ALPHA-2 DE = Germany EN = England FR = France NL = Netherlands etc. This value is also used in the ZIP file name. (See chapter 5.3)
4a	language	T2	The code for the language version is defined according to ISO 639-1 Alpha-2 . EN = English FR = French DE = German etc. This value is also used in the ZIP file name. (See chapter 5.3)
5	manufacturer-code	T3	Used codes are specified in chapter 3
5a	manufacturer-subcode	T3	Is used to define different price lists of a manufacturer (e.g. for purchasing groups)
6	manufacturer-name	T40	
6a	manufacturer-subname	T40	
7	manufacturer-name-1	T40	Postal address Name1
8	manufacturer-name-2	T40	Postal address Name2
9	street	T40	
10	zip-code	T8	
11	city	T40	
12	po-box-zip-code	T8	Zip code, P.O.Box
13	po-box-text	T40	Text P.O.Box
14	phone	T40	
15	fax	T40	
16	phone-order	T40	
17	fax-order	T40	
18	mail	T40	
19	URL	T40	

20	pricedefinition-cylinder	T1	"+" = the prices are displayed for plus cylinders "- " = the prices are displayed for minus cylinders
21	cylindergroup-base	9	Standard = 4D
22	cylindergroup-1	9	Standard = 6D
23	cylindergroup-2	9	Standard = 8D
24	prismgroup-1	99	Standard = 03
25	prismgroup-2	99	Standard = 06
26	prismgroup-3	99	Standard = 10
27	prismgroup-4	99	Standard = 15
28	prismgroup-5	99	Standard = ' '
29	currencydescription	T3	Euros or country-specific currency
30	currencydescription-decimals	T3	Ct or country-specific currency
31	pricefield-01	99	00 = not filled 10 = EK (purchase price) 20 = recomm. VK (selling price) 21 = recomm. VK incl. insurance 25 = recomm. VK level 1 CH 26 = recomm. VK level 2 (CH) 40 = bonus EK 50 = VK (material price incl. manual processing, or calculated VK) 52 = manual processing 55 = calc. VK level 1 CH 56 = calc. VK level 2 (CH) 90 = other EK 91 = other VK (re fields 90, 91: description is specified in the "pricefield-description-01" field)
32	pricefield-02	99	Like price field 1
33	pricefield-03	99	Like price field 1
34	pricefield-04	99	Like price field 1
35	pricefield-05	99	Like price field 1
36	pricefield-description-01	T40	If the value for price field 01 = 90 or 91, the relevant price type is specified in plain text.
37	pricefield-description-02	T40	See description of price field 1
38	pricefield-description-03	T40	See description of price field 1

39	pricefield-description-04	T40	See description of price field 1
40	pricefield-description-05	T40	See description of price field 1
41	Characteraset	99	The value stands for the number of the ISO 8859 character set used in these files. 1 = ISO 8859-1 (Latin-1) 2 = ISO 8859-2 (Latin-2) 5 = ISO 8859-5 (Cyrillic) etc. Also see http://de.wikipedia.org/wiki/ASCII

6.4 Example:

```

123456789012345678901234567890123456789012345678901234567890
version                6.9.3 Entwurf
valid-from             20031210
valid-until           20031210
country                DE
language              DE
manufacturer-code     GLK
manufacturer-subcode  EKG
manufacturer-name     Glasfabrik Köln
manufacturer-name-1
manufacturer-name-2
street                 Musterstrasse 23
zip-code              51143
usw.....

```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

6.5 Notes

The version is always displayed in the format x.y.z, with x being the major version, y the minor version and z the subminor version. The numbers are not limited to one digit. (6.6.23 is possible).

Five price fields, "pricefield-xx", were defined, specifying the price type in the LensPrice.Dat and OptionsPrice.Dat files. If the value of a "pricefield-xx" price field is 00 or if the price field is not available as a data set in the Head.Dat file, no price is available for this price field in LensPrice.Dat or OptionsPrice.Dat. If a value has been specified for a price field, prices must be specified in LensPrice.Dat and OptionsPrice.Dat or be available as a data set.

"pricedefinition-cylinder" indicates whether the price groups for lenses are displayed as minus or plus cylinders. This field has been added because different displays are used in the various countries and the present format has been developed for international use.

6.6 Higher cylinders

In order to manage a uniform extra charge for all lenses for cylinders from a certain value, the Head.Dat file contains the following fields: „cylindergroup-base“, “cylindergroup-1“ and “cylindergroup-2“.

The following values have been assigned to these fields as a standard:

cylindergroup-base	= 4
cylindergroup-1	= 6
cylindergroup-2	= 8

For cylindergroup-1 and cylindergroup-2, the extra charges are stored in the "OptionsPrice.Dat" file under the IT code Z2 or Z3. See the notes under point 13.3.

Usually, the price groups for the lenses are specified with the maximum of one cylinder which is specified in cylindergroup-base.

Example:

Sph/Cyl

6/0

6/2

6/4

Price group 6/6 is not required, as the extra charge for "higher cylinders" can be used here.

Example: If the price of a lens with Sph 5.25D /cyl 5.50D is to be determined, the price for price group 6/4 is used, and the price from the Options.Dat file with IT code Z2 is then added to this price.

If the extra charge defined in cylindergroup-1 and cylindergroup-2 or Z2 and Z3 is not applicable, price groups with the accordingly high cylinder group can be created for this lens in the LensPrice.Dat file (e.g. 6/6). As soon as a price group with accordingly high values (above the value of cylindergroup-base), is available, this price is automatically used for price determination and the extra charge for higher cylinders is ignored.

Please note that the power range specified in the LensRange.Dat file is always decisive for the deliverability of a lens.

7 The "LensType.Dat" file

7.1 Description

The LensType.Dat file contains all deliverable base lenses.

7.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Man. code base lens	1	6	T6	
2	Designation	7	40	T40	The designation must be clear and must not be used for several IT codes.
3	Deliverable from	47	8	D	Empty = only limited by "deliverable up until"
4	Deliverable up until	55	8	D	Empty = no expiry date
5	Single vision / multifocals	63	1	9	0=single vision 1=bifocals 2=trifocals 3=progressive lenses 4=Workstation / office lens
6	Balancing lens	64	1	9	0 = not available as balancing lens 1 = this lens is also available as balancing lens
7	Balancing lens, lens terms	65	3	999	Balancing lens costs approx. xxx % of the original price
8	Balancing lens, coating terms	68	3	999	Coating of balancing lens costs approx. xxx % of the original price
9	Standard/ brand	71	1	9	0=standard 1=brand 2=Eco
10	Material	72	1	9	1=glass 2=plastic 3=polycarbonate 4=Trivex
11	Refractive index	73	5	99999	9.9999
12	Density (specific gravity)	78	3	999	9.99 g/cm ³
13	Abbe no.	81	4	9999	99.99
14	Aspheric lens	85	1	9	0=spherical 1=aspheric 2=biaspherical

No.	Field name	Pos	Length	Format	Comments
15	Lenticular lens	86	1	B	
16	ET contained	87	1	9	0=no ET 2=single ET 5=multiple ET 8=Super ET 9=back surface ET
17	Colors contained	88	1	9	0=no color 1=filter<15% absorption 2=colored
18	Photochromic	89	1	B	
19	Hard coating incl.	90	1	B	
20	Clean coating incl.	91	1	9	0=no 1=normal Clean 2=Super Clean
21	UV coating	92	1	B	
22	Coating incl.	93	1	B	
23	MDM incl.	94	1	B	
24	non-standard diameters incl.	95	1	9	0=no 1=yes 2=smaller or central diameters in the plus range at no extra charge
25	Non-standard thickness incl.	96	1	B	
26	Insurance incl.	97	1	B	
27	Prism incl.	98	1		1 means that there is no extra charge for the prism in the complete, deliverable power range
28	Filter category	99	1	9	0 to 4 acc. to DIN EN ISO 8930-3
29	Restrictions in traffic	100	1	9	See 20.1, traffic suitability
30	UV edge	101	3	999	999nm
31	UV-A transmission	104	4	9999	99.99%
32	UV-B transmission	108	4	9999	99.99%
33	Extended warranty	112	1	B	
34	Single lens order	113	1	9	0=not possible 1=possible 2=with fictive opposite lens
35	Traveler service	114	1	B	

No.	Field name	Pos	Length	Format	Comments
36	Sorting	115	3	999	ascending number sorting acc. to manufacturer's instructions
37	Brief designation	118	15	T15	Brief designation of the lens
38	N.A	133	2	99	Field was removed
39	N.A	135	2	99	Field was removed
40	Exposed filter category	137	1	9	0 to 4 acc. to DIN EN ISO 8930-3 Value for exposed status of photochromic lenses
41	Office lens Addition/Power decrease				0=no specification required 1=specify distance + addition 2=specify near + power decrease

7.3 Notes

Important: The allocation of the numbers to the colors has changed.

This is now valid:

1=glass 2=plastic 3=polycarbonate 4=Trivex[®]

SF4 had the following definition which is **no longer valid**:

0=glass 1=plastic 2=composite 3=polycarbonate

The new allocation was made to ensure that the numbers for the material are identical for the lenses and the coatings. (Note: Material as such no longer exists in the Options.Dat file. However, the allocation of numbers has remained in the new version)

The fields "Hard coating incl.", "Clean coating incl.", etc. are assigned with value 1 if these extras are supplied automatically, i.e. if no IT code for the option/coating is transferred with the electronic order.

8 The "LensRange.Dat" file

8.1 Description

The LensRange.Dat file contains the description of the production and delivery ranges of base lenses. The production and delivery ranges are described for each base lens and diameter. As many delivery ranges as required can be specified for a base lens with a given diameter. If several power sets are defined for a diameter, the lens can be delivered if the conditions of at least one set are met (no matter whether a diameter has been specified or not).

8.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Man. code base lens	1	6	T6	
2*	Diameter	7	4	9999	7080 or two digits followed by two blanks
3*	Elliptic	11	1	T1	blank=round "E"=elliptic
4*	Strongest principal meridian from	12	5	+9999	+99.99
5*	Strongest principal meridian to	17	5	+9999	+99.99
6*	Cylinder from	22	4	9999	99.99
7*	Cylinder to	26	4	9999	99.99 Please mind the "pricedefinition-cylinder" specification in the Head.Dat file. If minus cylinder is specified, it is assumed that the value in this field is automatically negative. No sign is indicated. The same applies to field 6, Cylinder from)
8*	Cylinder power for "Strongest principal meridian from"	30	3	999	0 to 100%. See "Various definitions".
9*	Cylinder power for "Strongest principal meridian to"	33	3	999	0 to 100%. See "Various definitions".
10*	Prism to	36	4	9999	99.99 cm/m
11*	From Add	40	4	9999	99.99 D
12*	To Add	44	4	9999	99.99 D

No.	Field name	Pos	Length	Format	Comments
13	Add step	48	1	9	1=1.00D 2=0.50D 4=0.25D 8=0.125D
14*	Man. code coating 1	49	6	T6	Code from Options.Dat
15*	Man. code coating 2	55	6	T6	Code from Options.Dat
16*	Man. code coating 3	61	6	T6	Code from Options.Dat
17*	Man. code coating 4	67	6	T6	Code from Options.Dat
18*	Man. code coating 5	73	6	T6	Code from Options.Dat
19	Price of "Man. code coatings 1-5" contained in the lens price	79	1	B	Does not apply to coatings resulting from the specification of wildcards "*****". See 8.3.5, Coating range (Man. code coatings 1-5)
20	Deliverable from	80	8	D	Empty = only limited by "deliverable until"
21	Deliverable until	88	8	D	Empty = no expiry date
22	Stock lens	96	1	B	
23	Expected delivery time	97	3		Value 000 means that no information was provided about the delivery time
24	Not completed	100	1		
25	Bonusable	101	1	B	
26	RDT discount	102	1	B	1=RDT discount is granted for electronically placed orders
27	Online order possible	103	1	B	
28	Delivery range index of lens	104	3	999	Index for lens pricing
29	Smallest diameter in this power range	107	4	9999	7080 or two digits followed by two blanks. Can remain empty if field 30 has value 0.
30	Graduation down to smallest diameter in mm	111	2	99	0 = smaller diameters not possible >1 = graduation in mm For a description, see the notes.

8.3 Notes

In LensRange.Dat, not the extras already contained in the base lens are defined, but only the deviating prices and/or delivery conditions for the base lens product / power range / extras combinations.

8.3.1 Elliptic:

If a lens is available in elliptic and round shape in the same power range, the power range must be defined twice.

8.3.2 Power range overlaps:

Power ranges can overlap. If the power range of two entries overlaps, priority is given to the entry (incl. its definitions such as delivery time) for which a coating with "man. code coating 1-5" was defined and/or features a delivery index >000.

8.3.3 Principal meridians

For the definition, please see 20.2, Cylinder power

8.3.4 Delivery range index of lens

This value is used to determine a price that deviates from the standard price of a lens because of a special power range or a certain combination of lens and coating. The price in LensPrice.Dat is determined by means of the combination from lens IT code and delivery range index.

8.3.5 Coating range (Man. code coatings 1-5)

The power range applies to the lens including the coatings specified in Man. code coatings 1-6. Wildcards are permitted or even required. Blanks are defined as "no coating".

The field "Price of man. code coatings 1-5 contained in the lens price" indicates whether the coating specified in the "man code coatings 1-5" is contained in the lens price. This only applies for directly defined coatings. Coatings resulting from wildcards are not contained in the price.

Examples:

If the power range is deliverable with all coatings, the fields "Man. code coatings 1-5" are filled with '*****'.

If the power range applies for only one coating and no further coating is permitted, "Man. code coating 1" is assigned with the IT code of the coating. The fields "Man. code coatings 2-5" are filled with blanks.

If the power range applies for a certain coating in combination with all further coatings (as far as permissible in Combination.Dat), "Man. code coating 1" is assigned with the IT code of the coating. The fields "Man. code coatings 2-6" are filled with '*****'.

8.3.6 (Man. code coatings 1-5) and Combination.dat

If a coating is completely excluded for a lens in the Combination.dat file, this coating is deliverable nonetheless if it is specified in LensRangeDat in the "Man. code coatings 1-5" field.

8.3.7 Field 29/30: smaller diameters in the power range

Field 29, "Smallest diameters in this power range", is required to enable further smaller diameters in the same delivery range to be specified in addition to the determined (principal) diameter (for example, diameter 65 also contains diameters 61 to 64 in the same delivery range). This information is important to enable the software to allocate these **interim diameters** to a delivery range.

Example:

Field 2 = 60 / Field 29 = 56 / Field 30 = 1.

This means that diameters 56,57,58,59 and 60 belong to the same power range.

8.4 Examples relating to the LensRange.Dat file

Question:

In some countries, the prices are different for the price groups in the plus and minus ranges. However, the LensPrice.Dat file only permits price groups to be specified regardless of minus or plus ranges.

Answer:

Two power ranges are specified in the LensRange.Dat file, one in the plus range, the other in the minus range. Price index=0 is allocated to the plus range, and price index=1 to the minus range. Different prices for the same price group can now be specified in the LensPrice.Dat file.

9 The "LensGeo.Dat" file

9.1 Description

The geometric base data, reference points, centration lines and near portions are defined in the LensGeo.Dat file.

9.2 Table structure

No.	Field name	Pos	Length	Format	Comments	
1*	Man. code base lens	1	6	T6		
2*	Diameter of base lens	7	4	9999	9999 or 99 with 2 blanks 00 with 2 blanks = geometry applies to all not separately listed centric diameters 0000 = geometry applies to all not separately listed non-centric diameters	
3*	Elliptic	11	1	T1	blank=round "E"=elliptic	
4*	Strongest principal meridian from	12	5	+9999	+99.99D	Empty = geometry applies to all delivery ranges not specified
5*	Strongest principal meridian to	17	5	+9999	+99.99D	
6	Exact diameter in the vertical semiaxis	22	4	9999	99.99mm	Empty if value "0000" is indicated under Pos. 2, "Diameter of base lens".
7	Exact diameter in the horizontal semiaxis	26	4	9999	99.99mm	
8	Near portion type	30	1	9	0=C 1=S 2=Panto 3=round 4=Executive	
9	Vertical distance to distance reference point	31	5	+9999	+99.99mm: vertical distance from the geometric center of the base lens to the distance reference point. Superior positive	
10	Horizontal distance to distance reference point	36	5	+9999	+99.99mm: horizontal distance from the geometric center of the base lens to the distance reference point. Nasal positive	

No.	Field name	Pos	Length	Format	Comments
11	Vertical distance to dividing edge (Bifo / Trifo)	41	5	+9999	+99.99mm: Vertical distance from the geometric center of the base lens to extreme point T of the near portion Inferior positive.
12	Horizontal distance to dividing edge (Bifo / Trifo)	46	5	+9999	+99.99mm: Horizontal distance from the geometric center of the base lens to extreme point T of the near portion. Nasal positive
13	Vertical distance to the near portion center (Bifo / Trifo)	51	5	+9999	Vertical distance from the geometric center of the base lens to the center of the circle describing the lower radius of the near portion. Inferior positive.
14	Lower radius of near portion	56	4	9999	99.99 mm for bifocals /trifocals
15	Upper radius of near portion	60	4	9999	99.99 mm for bifocals /trifocals
16	Width of near portion	64	4	9999	99.99 mm for bifocals /trifocals
17	Height of near portion	68	4	9999	99.99 mm for bifocals /trifocals
18	Height of intermediate portion	72	4	9999	99.99 mm for trifocals
19	Vertical distance to distance centering cross (progressive lens)	76	4	9999	99.99mm vertical distance from the geometric center of the base lens to the distance centering cross. Superior positive.
20	Centering to zero gaze direction or principal visual direction (progressive lens)	80	1	9	0=zero gaze direction 1=principal visual direction
21	Maximum vertical distance to near reference point (progressive lens)	91	4	9999	99.99mm vertical distance from the geometric center of the base lens to the near reference point. Inferior positive
22	Minimum vertical distance to near reference point (progressive lens)	95	4	9999	99.99mm minimum vertical distance from the geometric center of the base lens to the near reference point. Inferior positive

No.	Field name	Pos	Length	Format	Comments
23	Maximum horizontal distance to near reference point (progressive lens)	89	4	9999	99.99mm maximum horizontal distance from the geometric center of the base lens to the near reference point. Nasal positive
24	Minimum horizontal distance to near reference point (progressive lens)	93	4	9999	99.99mm minimum horizontal distance from the geometric center of the base lens to the near reference point. Nasal positive

9.3 Notes

If the diameter (Field 2) is specified with "0000" or "00" and is therefore applicable to all diameters, the values for "Exact diameter" (Field 6/7) are not used or are also filled with "0000".

10 The "LensPrice.Dat" file

10.1 Description

The LensPrice.Dat file contains the various prices of the base lenses.

10.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Man. code base lens	1	6	T6	
2*	Diameter	7	4	9999	7080 or two digits followed by two blanks
3*	Elliptic	11	1	T1	blank=round "E"=elliptic
4*	Sph group	12	2	99	
5*	Cyl. group	14	2	99	Please mind the "pricedefinition-cylinder" specification in the Head.Dat file. Before determining the prices, please convert to "plus cylinder" or "minus cylinder", as required.
6*	Delivery range index	16	3	999	
7	Price 1	19	7	9999999	For definition, see Head.Dat
8	Price 2	26	7	9999999	For definition, see Head.Dat
9	Price 3	33	7	9999999	For definition, see Head.Dat
10	Price 4	40	7	9999999	For definition, see Head.Dat
11	Price 5	47	7	9999999	For definition, see Head.Dat

10.3 Notes

The delivery range index is defined in the LensRange.Dat file. It permits differentiated pricing of a product in various power ranges and coating combinations. The delivery range index is part of the key, i.e. different prices can be specified for a product with given diameter and Sph/cyl power in dependence of the delivery range index.

The field "Price of Man. code coatings 1-5 contained in the lens price" in LensRange.Dat indicates whether the coatings defined in the LensRange.Dat file are contained in the lens price.

If only Price 1 and Price 2 are defined (see Head.Dat), the data fields (Price1, Price2 and Price3) can be deleted. As a result, the data set becomes shorter.

11 The "Options.Dat" file

11.1 Description

The Options.Dat file contains the description and classification of extras and coatings.

11.2 Table structure

No	Field name	Pos	Length	Format	Comments
1*	Man. code coating	1	6	T6	
2	Designation	7	40	T40	The designation may occur only once in the database.
3	Deliverable from	47	8	D	Empty = only limited by "deliverable until"
4	Deliverable until	55	8	D	Empty = no expiry date
5	Standard/ brand	63	1	9	0=standard 1=brand 2=Eco 9=same category as lens
6	For glass	64	1	B	
7	For plastic	65	1	B	
8	For polycarbonate	66	1	B	
9	For Trivex	67	1	B	
10	ET	68	1	9	0=no ET 2=single ET 5=multiple ET 8=Super ET 9=back surface ET
11	Color	69	1	9	0=none 1=filter<15% absorption 2=colored 4=1-color graduated tint 5=2-color graduated tint 6=3-color graduated tint
12	Photochromic	70	1	B	
13	Hard coating	71	1	B	

No	Field name	Pos	Length	Format	Comments
14	Clean coating	72	1	9	0=none 1=normal Clean 2=Super Clean
15	UV coating	73	1	B	
16	AR coating	74	1	B	
17	End edging	75	1	9	0=none 1=traced form 2=frame provided
18	Deviating diameter	76	1	9	0=no 1=smaller 2=larger 3=optimized 4=smaller/larger
19	Deviating thickness	77	1	9	0=no 1=deviating thickness 2=thickness reduction system / MDM
20	Deviating base curve	78	1	B	
21	Deviating addition	79	1	B	
22	Deviating shape	80	1	9	0=no 1=oval instead of round 2=round instead of oval 3=cut off
23	Power outside the delivery range	81	1	B	
24	Decentration	82	1	B	
25	Prismatic vertical balance	83	1	B	
26	Matting	84	1	B	
27	Remove coating	85	1	B	
28	Bi-lenses	86	1	B	
29	outer toric	87	1	B	
30	Bonusable	88	1	9	0 = No 1 = Yes 2 = Depends on lens
31	Insurance	89	1	B	
32	Restrictions in traffic	90	1	9	See chapter 20.1, Traffic suitability (page 47)
33	Filter category	91	1	9	0 to 4 acc. to DIN EN ISO 8930-3

No	Field name	Pos	Length	Format	Comments
34	UV edge	92	3	999	999nm
35	UV-A transmission	95	4	9999	99,99%
36	UV-B transmission	99	4	9999	99,99%
37	Base lens - str. princ. mer. of	103	5	+9999	-99.99 = standard value
38	Base lens - str. princ. mer. to	108	5	+9999	+99.99 = standard value
39	Diameter from	113	2	99	0 = standard value
40	Diameter to	115	2	99	99 = standard value
41	Sorting	117	3	999	ascending number
42	Brief name	120	15	T15	Brief name of option
43	Exposed filter category	135	1	9	0 to 4 acc. to DIN EN ISO 8930-3 Value for exposed status of photochromic lenses
44	Online order possible	136	1	B	

11.3 Notes

Fields 37 and 38 were added in order to display coatings which are only deliverable in a certain power range. The definition is the same as for entries 4 and 5 in the LensGeo.Dat file (power in the str. princ. meridian from/to).

Field 11 Color: as soon as value 2 or higher is indicated in field 11, at least one color must be defined in the OptionsColor.Dat file.

12 The "OptionsColor.Dat" file

12.1 Description

The "OptionsColor.Dat" file contains the description of single colors within a color group and the allocation of a coating code.

12.2 Table structure

<i>No</i>	<i>Field name</i>	<i>Pos</i>	<i>Length</i>	<i>Format</i>	<i>Comments</i>
1*	Man. code color	1	3	T3	
2	Man. code coating	4	6	T6	
3	Designation	10	40	T40	
4	Absorption, top	50	2	99	99%
5	Absorption, bottom.	52	2	99	99%
6	RGB value red, top	54	3	999	Top: 0 - 255 Center / bottom:
7	RGB value green, top	57	3	999	0 – 255
8	RGB value blue, top	60	3	999	Empty if there is one color. The RGB values "top" then indicate the color.
9	RGB value red, center	63	3	999	
10	RGB value green, center	66	3	999	
11	RGB value blue, center	69	3	999	
12	RGB value red, bottom	72	3	999	
13	RGB value green, bottom	75	3	999	
14	RGB value blue, bottom	78	3	999	

No	Field name	Pos	Length	Forma t	Comments
15	Restrictions in traffic	81	1	9	See chapter 20.1, Traffic suitability (page 47) Empty = data from Options.Dat file is used Data entered here has priority over data in the Options.Dat file
16	Filter category	82	1	9	0 to 4 acc. to DIN EN ISO 8930-3
17	UV edge	83	3	999	999nm
18	UV-A transmission	86	4	9999	99.99%
19	UV-B transmission	90	4	9999	99.99%

12.3 Notes

The coating codes specified must be defined in Options.Dat.

13 The "OptionsPrice.Dat" file

13.1 Description

The "OptionsPrice.Dat" file contains the various prices of extras defined in the Options.Dat file.

13.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Man. code coating	1	6	T6	
2*	Man. code base lens	7	6	T6	Specify a lens IT code if the price of the coating for a certain lens deviates from the standard price. Otherwise empty.
3*	Spherical / toric	13	1	9	0=unimportant 1=spherical 2=toric
4*	Single vision / multifocals	14	1	9	0=unimportant 1=single vision base lens 2=multifocal base lens
5*	For glass	15	1	B	
6*	For plastic	16	1	B	
7*	For polycarbonate	17	1	B	
8*	For Trivex	18	1	B	
9	Price 1	19	7	9999999	For definition, see Head.Dat
10	Price 2	26	7	9999999	For definition, see Head.Dat
11	Price 3	33	7	9999999	For definition, see Head.Dat
12	Price 4	40	7	9999999	For definition, see Head.Dat
13	Price 5	47	7	9999999	For definition, see Head.Dat

13.3 Notes

The man. code coating must either be defined in Options.Dat or belong to one of the following, predefined groups.

a) Higher cylinder powers. For higher cylinder powers, the IT codes Z1, Z2, and Z3 are predefined. The price allocated to these IT codes must be added to the lens price if the cylinder exceeds the value in the *cylinder group base* in the Head.Dat file. (See note on the Head.Dat file).

Z1 = (cylinder > *cylindergroup-base*) and (cylinder <= *cylindergroup-1*)

Z2 = (cylinder > *cylindergroup-1*) and (cylinder <= *cylindergroup-2*)

Z3 = (cylinder > *cylindergroup-2*) and (cylinder <= *cylindergroup-3*)

b) Prismatic powers

For prismatic powers, the IT codes P1, P2, P3, P4, P5 and P6 are pre-defined. The price allocated to these IT codes must be added to the lens price if the lens has a prismatic power.

P1 = (prism > 0) and (prism <=*prismgroup-1*)

P2 = (prism > *prismgroup-1*) and (prism <=*prismgroup-2*)

P3 = (prism > *prismgroup-2*) and (prism <=*prismgroup-3*)

P4 = (prism > *prismgroup-3*) and (prism <=*prismgroup-4*)

P5 = (prism > *prismgroup-4*) and (prism <=*prismgroup-5*)

P6 = (prism > *prismgroup-5*)

14 The "Combination.Dat" file

14.1 Description

The Combination.Dat file defines the deliverability of subsequent processes per base lens and the combinability of processes.

14.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Man. code base lens	1	6	T6	
2*	Deliverability	7	1	9	0=not deliverable 1 = deliverable (but no obligatory coating) 2=only deliverable (obligatory coating, also see 14.3.5, Notes on obligatory coating)
3*	Man. code coating 1	8	6	T6	
4*	Man. code coating 2	14	6	T6	
5*	Man. code coating 3	20	6	T6	
6*	Man. Code color	26	3	T3	

14.3 Rules of Combination.Dat

14.3.1 All coatings can be delivered

In general, all coatings can be delivered for every lens of the same material. This requires no entries in the Combination.Dat.

Exceptions: see "14.3.7 Required exclusions".

14.3.2 Non-deliverable combinations must be specified

If a coating is not deliverable for a base lens, this combination must be specified in the Combination.Dat file.

Example:

123456789012345678901234567890

ggggg0aaaaa*****

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this example, lens "gggggg" cannot be delivered with coating "aaaaaa". The fields "Man. code coating 2" and "Man. code coating 3" are wildcards which stand for all coatings.

14.3.3 Using wildcards

Wildcards can be used to be able to define several exclusions with an entry in the Combination.Dat file. The asterisk ("*") stands for any character in the IT code.

6 blanks mean "no coating" or "no lens".

Important: 6 wildcards "*" stand for each lens or each deliverable (non-excluded) coating. In brief: wildcards enable exclusion of all coatings. A wildcard cannot be used to mark excluded coatings as deliverable again.

Partial masks (e.g. "120**" or "****123") are not permitted.**

Example:

```
123456789012345678901234567890  
*****0bbbbbb*****  
*****0cccccc  
gggggg0*****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this example, it is generally not possible to deliver a coating for lens "gggggg".

The coating "bbbbbb" is not available for any lens. (Exceptions are specified in the next section).

Coating "cccccc" cannot be delivered without a second coating. (Please mind the blanks for Coating2 and coating3. Their meaning: "no coating")

14.3.4 Value of the deliverability field

If, as in the above example, all coatings were excluded for a lens, single coatings can be admitted again subsequently. For this purpose, the values in the deliverability field are organized hierarchically. The hierarchy is defined according to the numerical value of the "deliverability" field. Value 1 (deliverable) has priority over value 0 (not deliverable).

Example:

```
123456789012345678901234567890  
gggggg0*****  
gggggg1aaaaaa  
gggggg1bbbbbb*****  
gggggg1cccccc*****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this example, it is generally not possible to deliver a coating for lens "gggggg". Exception: coating "aaaaaa", which can be delivered on its own, without any further coating. Coating "bbbbbb" can be delivered for this lens alone and with any other (deliverable) coating. The same applies to coating "cccccc".

Example:

```
123456789012345678901234567890  
*****0bbbbbb*****  
gggggg1bbbbbb*****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this example, coating "bbbbbb" is not available for any lens. Exception: lens "gggggg", for which coating "bbbbbb" can be delivered, also in combination with other coatings. If there were no asterisks beside coating "bbbbbb" in line 2, coating "bbbbbb" alone would be available for this lens.

Example:

```
123456789012345678901234567890  
gggggg0*****  
gggggg1MDM *****  
gggggg2ET *****  
gggggg2MET *****  
gggggg2SET *****  
gggggg2Hart *****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

Lens "gggggg" is not available with any coating. Exception: ET, MET, SET or Hard are specified as compulsory coating. MDM is specified as possible coating.

14.3.5 Note on obligatory coatings

To simplify evaluation of the Combination.Dat file, the following rule applies to compulsory coatings: **If the requirement for an entry with compulsory coating has been met, the following entries with compulsory coating can be ignored.** This is basically an "OR" operation. In the previous example, ET, MET, SET or Hard must be selected for the lens. However, if only "Hard" is available, this must be saved as combination in a separate data set.

Example:

```
123456789012345678901234567890  
gggggg0*****  
gggggg1MDM *****  
gggggg2ET Hart *****  
gggggg2MET Hart *****  
gggggg2SET Hart *****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this case, the lens is only available with one coating "and" Hard.

14.3.6 Exclusion of coating combinations

In the case of exclusions of coating combinations, the lens IT code field is filled with "" (wildcards) regardless of the lens. This exclusion applies to all lenses and need not be listed separately for each lens.

Example:

```
123456789012345678901234567890  
*****0aaaaaBBBBBB*****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

In this example, coating "aaaaa" cannot be delivered with coating "BBBBB". This excluded coating can be made available again for certain lenses with "1=deliverable".

14.3.7 Evident exclusions

Exclusions of material A coatings from material B lenses need not be specified because they are evident.

Coatings of the same type (ET, multiple ET and Super ET) are not combinable. The following combination exclusions need therefore not be specified because they are evident:

- AR coatings with other AR coatings or mirror coatings
- Hard coatings with other hard coatings
- Clean coatings with other clean coatings
- UV coatings with other UV coatings.
- Insurance options with other insurance options

In other words: it is not possible to supply a lens with two coatings with the same features (listed above).

The exclusion also applies if a feature for a lens has been defined in the LensType.Dat file.

Example: If "1" is specified in field 19 "Clean incl." of the LensType.Dat file, all coatings with the "Clean" feature are automatically excluded. Exclusion in the Combination.Dat file is no longer required for this combination.

Note: two color coatings are possible.

Furthermore, coatings defined as coating for the lens in the LensType.Dat file are generally not deliverable. (If, for example, "ET incl." was specified in the LensType.Dat file, all ETs from Options.Dat are generally not deliverable.

14.3.8 Combinations and coating range (Man. code coatings 1-5) in LensRange.Dat.

If coatings (man. code coatings 1-5) are specified in LensRange.Dat which were excluded in Combination.Dat, the coatings for the power range specified in LensRange.Dat are deliverable nonetheless, and precisely for this power range. For all other power ranges, the coating remains unavailable.

Example:

Lens xxx is available between -10.00D and +10.00D with diameters 60, 65 and 70. The "SET"

option is not available for this lens, except for diameter 60 in the power range between -2.00D and +2.00D.

Here, the "SET" option would be completely excluded for this lens in Combination.Dat.

```
ManCode lens:      xyz
Availability:      not available
ManCode coating 1: SET
ManCode coating 2: *****
ManCode coating 3: *****
```

Furthermore, a new power range is added to the LensRange.Dat in which the "SET" option is specified under "ManCode coating 1".

```
...
ManCode base lens: xyz
...
Princ. mer. from:  -2.00
Princ. mer. to:    +2.00
...
ManCode coating 1: SET
...
```

14.3.9 Further examples for Combination.Dat

From the forum:

There are coatings in the Rupp + Hubrach line which must under all circumstances be combined with other coatings and can otherwise not be selected. For example, the hydrophobic "PL" coating must be combined with a 2-side AR coating. The customer decides which AR coating is used. Similarly, the back surface multi AR coating makes the combination with any color absolutely necessary.

The following solution is possible:

```
123456789012345678901234567890
*****0PL      *****
*****1PL      ET      *****
*****1PL      MET     *****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

Explanation:

In the first line, PL is excluded for each lens, no matter whether no coating or a further coating is available. The second and third lines indicate that PL with ET or MET is available for all lenses.

From the forum:

Myoplast from Rupp + Hubrach. This lens is available without hard coating. As soon as an AR coating is selected, however, this is only possible in combination with hard coating.

The following solution is possible:

123456789012345678901234567890

```
MYOPLA0Hart *****  
MYOPLA0ET *****  
MYOPLA0MET *****  
MYOPLA1Hart ET *****  
MYOPLA1Hart MET *****
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

Explanation:

In the first three lines, Hard, ET and MET are excluded for the MYOPLA lens. The fourth and fifth lines indicate that MYOPLA is available with ET or MET and Hard.

From the forum:

There are coatings (extras) that are available for a lens only in combination with a further coating for the lens.

Example Essilor: XPress (entered as coating) is only available for "Varilux Comfort Min 1.6" in combination with "Super-Diafal"; further extras, e.g. color, are not permitted. Without "Super-Diafal", "XPress" is not available for this lens.

The following solution is possible:

123456789012345678901234567890

```
*****0Xpress*****  
4801001XpressSupDia
```

(Note: The first, underlined line merely serves for a better overview and is not available in the file).

Explanation:

In the first line, XPress is excluded for each lens, no matter whether no coating or a further coating is available. The second line indicates that XPress is available with SuperDiafal, but with no further coating (because there are blanks for coating code 3 and no wildcards)

14.3.10 Colors

Various colors can be excluded for certain lenses.

Example:

```
123456789012345678901234567890  
ABCDEF0*****123
```

(Note: The first underlined line merely serves for a better overview and is not available in the file).

In this example, color "123" is not available for lens "ABCDEF".

Colors can be excluded for certain coatings/options.

Example:

```
123456789012345678901234567890  
*****0EEEEEE*****123
```

(Note: The first underlined line merely serves for a better overview and is not available in the file).

In this example, color "123" is not available for option "EEEEEE". This applies to all lenses.

Individual colors can be specified as available after exclusion of a complete color group.

Example:

```
123456789012345678901234567890  
ABCDEF0FFFFFF*****  
ABCDEF1*****123
```

(Note: The first underlined line merely serves for a better overview and is not available in the file).

In this example, it is assumed that option "FFFFFF" is a color group containing color "123".

The option/color group "FFFFFF" with all the appertaining colors is not available for lens ABCDEF. In the second step, color "123" is specified as available for lens ABCDEF.

15 The "Information.Dat" file

15.1 Description

The Information.Dat file optionally contains the text and image information also contained in the printed price lists.

15.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Product type	1	1	9	0=base lens 1=coating
2*	Manufacturer code lens / coating	2	6	T6	
3*	Information type	8	2	99	02=Technical product description 03=Marketing description 05=Order information 06=Delivery notes 07=Delivery range restrictions 09=MDD note 30=Image file 40=URL to image file 42=URL to technical description file 43=URL to marketing description 45=URL to order information 46=URL to delivery notes 47=URL to delivery range additions 49=URL to MDD note 80-99 is reserved for internal information from the manufacturers
4*	Line number	10	3	999	Consecutive numbers starting with 001
5	Information line	13	250	T250	Describing text or file name or URL

Note: With "Information type = 30", the image file must be available in the ZIP file. Directory paths must not be specified in the ZIP file. Valid image files include BMP, JPG and WMF formats.

16 The "OeCodes.Dat" file

16.1 Description

The "OeCodes.Dat" file contains the OPC and ERFA codes for lenses and coatings.

16.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Product type	1	1	9	0=base lens 1=coating
2*	Manufacturer code lens / coating	2	6	T6	
3*	Type	8	1	9	0=OPC 1=ERFA
4*	Code	9	20	T20	ERFA or OPC code

17 The "OrderOptions.Dat" file

17.1.1 Descriptions

The OrderOptions.Dat file contains data that must be specified in orders for lenses or coatings.

17.1.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Product type	1	1	9	0=base lens 1=coating
2*	Manufacturer code lens / coating	2	6	T6	
3*	Field type	8	4	9999	(See attachment)
4	Priority	12	1	9	1 = Field/value must be specified by phone/fax 5 = Field/value must be transmitted via RDT/Tel/Fax 6 = Field/value must be transmitted via RDT 8 = Field/value can be transmitted via RDT/Tel/Fax

17.1.3 Values for field type

10	BVD
20	Normal PD
21	glazing PD
22	single PD
30	pantoscopic angle, degree or mm
31	pantoscopic angle, degree
32	pantoscopic angle, mm
40	wrap angle
50	horizontal box dimension
51	vertical box dimension
52	DbL
53	glazing height
60	object distance
65	Inset
70	head inclination
80	first name of customer
81	last name of customer

82	initials
100	preference (focus of use)
110	progression length
111	progression length (Framefit value)
120	Head / Eyemover Quotient
121	Stability coefficient
130	addition measuring technique
140	shape
200	engraved text

18 The "ProductGroup.Dat" file

18.1 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Product type	1	1	9	0=base lens 1=coating
2*	Manufacturer code lens / coating	2	-{}-6	T6	
3*	Product group name	8	30	T30	

The ProductGroup.Dat file allows lenses and options to be combined into a group.

Example:

Essilor = Smile, Nikon, Standard.

Zeiss = Smart, Premium etc.

The ProductGroup.Dat file also contains combination features.

The following rules have been defined:

If no dataset is available for a product, this corresponds to a dataset in which the "Product group name" field has not been filled (is empty).

If a dataset is available for a lens in which the "Product group name" field is not filled, every coating is available for this lens (except if this combination is explicitly excluded in the combination.dat file).

If a dataset is available for an option in which the "Product group name" field is not filled, this coating is available for every lens (except if this combination is explicitly excluded in the combination.dat file).

In all other cases, the following applies: a coating is only available for a lens if a dataset with the same product group is available for each of them.

This file allows the Combination.Dat file to be reduced considerably, as there is no longer any need to mutually exclude complete product groups

19 The "CodeSubstitution.Dat" file

19.1 Description

The CodeSubstitution.Dat file has three functions:

- 1) It contains the allocation of IT codes in file format version 4 (g.Besch.dat) to the IT codes in file format version 6 (Options.Dat).
- 2) For lenses or coatings, the IT code of which has changed, the new code can be specified in addition to the old code. This makes it easier for merchandise companies to use an old order as a template for a new order.
- 3) If a product is no longer available, the lens manufacturer can store a suggestion for a comparable product in this file.

19.2 Table structure

No.	Field name	Pos	Length	Format	Comments
1*	Product type	1	1	9	0=base lens 1=coating 2=color
2*	Manufacturer code lens / old coating	2	6	T6	
3*	Action	7	1	1	1=replace code 2=product suggestion
4*	Manufacturer code lens / coating (new 1)	8	6	T6	
5*	Manufacturer code lens / coating (New 2)	14	6	T6	Empty if no further coating is available
6*	Manufacturer code lens / coating (New 3)	20	6	T6	Empty if no further coating is available

Note: options (coatings) from file format 6 now partly feature other IT codes than options from file format 4. This is due to the fact that version 4 permitted only one material to be selected per IT code or per coating. Version 6, however, permits several materials to be allocated to an IT code or option. This is why a coating previously selected several times (e.g. ET) is now only available once.

Example:

Essilor Diafal. In file format 4, Diafal was entered with IT code 140101 or 240101. In file format 6, only IT code 101 exists.

Allocations from the old and new IT codes can be specified here.

Example:

11401011101

1=Besch

140101= old IT code:

1 = replace code

101= new IT code:

12401011101

1=Besch

240101= old IT code:

1 = replace code

101= new IT code:

Furthermore, there are lens manufacturers who specified certain coatings as combinations with a special IT code.

Example:

R+H Vapalit Extra+GH+PL IT Code 721. This example combines three options. Of course, these options can also be specified separately with the IT codes 2 (Vapalit Extra), 50 (GH) and 20 (PL).

Example:

1721 12 50 20

1=Besch

721= old IT code:

1=replace

2 = Vapalit Extra

50 = GH

20 = PL

Combination entries (e.g. IT 721) can now be deleted completely. This also facilitates maintenance and evaluation of the Combination.Dat file.

If a lens is no longer available, an alternative lens can be suggested.

Example:

0AltEdv2NeuEdv

0=lens

AltEDV= old IT code

1=product suggestion

NeuEDV = new IT code:

20 Various definitions

20.1 Traffic suitability

Definition of values

0=no information provided

1=no restriction

2=not suitable for traffic

3=not suitable for night driving

5=depends on center thickness and coating

Not suitable for use in traffic

With eyeglasses for near and medium distances, the eyecare professional must inform the user that the glasses "are not suitable for use in traffic". The manufacturer of such eyeglasses must inform the eyecare professional about such restrictions in use.

With eyeglasses, the tint of which does not ensure traffic light recognition in accordance with DIN EN ISO 14880, the manufacturer must inform the eyecare professional about this restriction in use.

Not suitable for night driving

As regards eyeglasses, the lenses of which feature light reduction of more than 25%, the eyecare professional must inform the user that these glasses are not suitable for night driving. The manufacturer of eyeglass lenses featuring light reduction of more than 25% (in accordance with DIN EN ISO 14889) must inform the eyecare professional about such restrictions in use.

20.2 Cylinder power

The cylinder power fields have been defined in the LensRange.Dat file. They define the effect of the cylinder on the availability of the base lens. In this context, please see the attached graphic examples (page 49)

All five examples have the following delivery range:

sph	-1.00 to +2.00
cyl	0.00 to 2.00

Although the delivery range is identical in all examples, there are differences in the details of the actual delivery ranges (actually available Sph/Cyl ranges: black squares in the delivery range grid). All five possibilities shown in the examples also occur in practice!

An easy way of displaying this is the specification of a percentage factor at which the cylinder effects the strongest principal meridian. The percentage factor is specified for the lowest ("cyl power from" on "strongest principal meridian from") and highest ("cyl power to" on "strongest principal meridian to") value of the principal meridians. The smallest value is determined by means of a number line. -9.00 is smaller than -2.00, +2.00 is smaller than +5.00).

Therefore, the formula for the resulting principal meridian is: **Pr.Mer. = Sph+Cyl*power%**

Example 1: (Cyl power on "st. pr.mer. from"=0% Cyl power on "st.pr.mer. to"=100%). In Fig. 1, the cylinder in the upper range is taken into consideration, and the cylinder in the lower range is not taken into consideration. Here, the typical steps are available in the upper range (plus range) and the lower range (minus range).

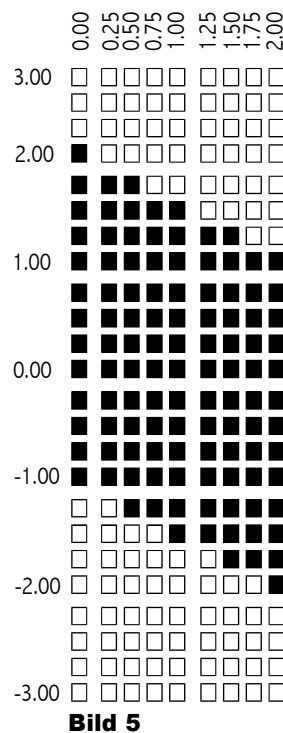
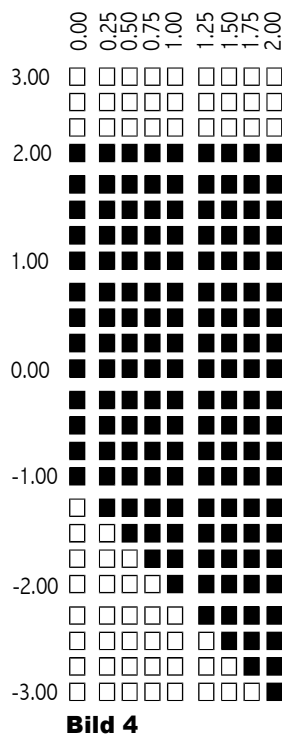
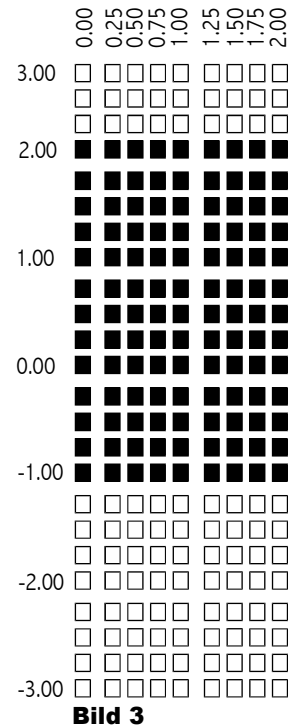
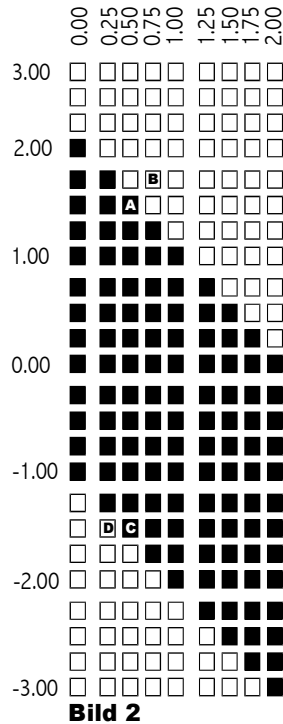
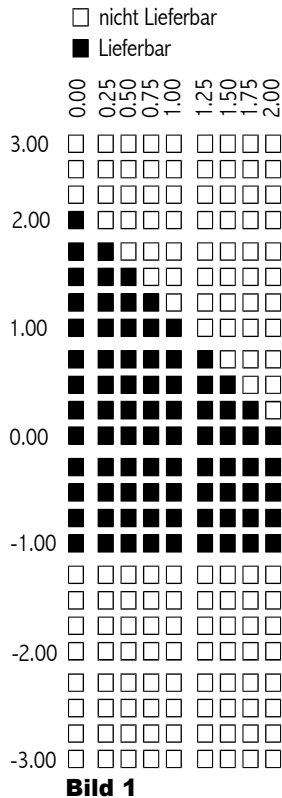
Example 2: (Cyl power on "st. pr.mer. from"=100% Cyl power on "st.pr.mer. to"=100%). In both cases, the cylinder effect is 100%. The value "Sph+1.50/Cyl0.50 (marking A) is available, as the resulting strongest principal meridian +2.00 (+1.50+0.50) fits the specified delivery range. The value "Sph+1.75/Cyl0.75" (marking B) is not available. The resulting strongest principal meridian +2.50 (+1.75+0.75) is higher than the Sph value specified as maximum (+2.00). The value "Sph-1.50/Cyl0.50 (marking C) is available, as the resulting strongest principal meridian -1.00 (-1.50+0.50) fits the specified delivery range. The value "Sph-1.50/Cyl0.25" (marking D) is not available. The resulting strongest principal meridian -1.25 (-1.50+0.25) is lower than the Sph value specified as minimum (-1.00).

Example 3: (Cyl power on "st. pr.mer. from"=0% Cyl power on "st.pr.mer. to"=0%). In Fig. 2, the cylinders in the upper and lower ranges are not taken into consideration.

Example 4: (Cyl power on "st. pr.mer. from"=100% Cyl power on "st.pr.mer. to"=0%). In Fig. 4, the cylinder in the upper range is not taken into consideration, while it is taken into consideration in the lower range.

Example 5: (Cyl power on "st. pr.mer. from"=50% Cyl power on "st.pr.mer. from"=50%). In Fig. 5, the cylinders in the upper and lower ranges are taken into consideration with 50%. The value "Sph+1.75/Cyl0.50 is available, as the resulting strongest principal meridian +2.00 (+1.75+(0.50*50%)) fits the specified delivery range. The value "Sph+1.75/Cyl0.75" is not available. The resulting strongest principal meridian +2.125 (+1.75+(0.75*50%)) is higher than the Sph value specified as maximum (+2.00).

20.3 Attachment 1 – graphics on cylinder power



Für alle Beispiele gilt:
 Sph von -1.00 bis +2.00
 Zyl von 0.00 bis 2.00

Bild 1:
 Zyl-Wirkung (von Sph) = 0%
 Zyl-Wirkung (bis Sph) = 100%

Bild 2:
 Zyl-Wirkung (von Sph) = 100%
 Zyl-Wirkung (bis Sph) = 100%

Bild 3:
 Zyl-Wirkung (von Sph) = 0%
 Zyl-Wirkung (bis Sph) = 0%

Bild 4:
 Zyl-Wirkung (von Sph) = 100%
 Zyl-Wirkung (bis Sph) = 0%

Bild 5:
 Zyl-Wirkung (von Sph) = 50%
 Zyl-Wirkung (bis Sph) = 50%

Hinweis:

Zyl-Wirkung (von Sph) bezieht sich auf den kleineren Wertebereich der Sphäre (hier -1.00).
 Zyl-Wirkung (bis Sph) bezieht sich auf den grösseren Wertebereich der Sphäre (hier +2.00).

21 How to evaluate the files

By means of examples, this section explains how the various files can be evaluated.
(The section is not yet complete).

22 Version changes

22.1 Changes from Version 4.0 to 6.0

This section is still being written.

22.2 Change from Version 6.3 to 6.4

22.2.1 General Specifications

Variable data set length

The various data sets are no longer defined in length and restricted only by the characters CR (ASCII13) and LF (ASCII10). This ensures downward compatibility particularly in the case of minor extensions to the file format. It is possible to add data fields to this file format without the need for all software companies to react immediately.

All files obligatory.

All files listed under "Information provision" are now obligatory. This is to simplify implementation by the software companies, as it is now no longer necessary to check whether a file is actually available. Particularly the Combination.Dat and LensRange.Dat files are absolutely vital for the evaluation of availability.

22.2.2 Head.Dat file structure

The file structure has been changed completely. **Only two fields (field name and field value) remain.** Each field of the earlier version is now imaged in a separate data set. This facilitates extension of the file format.

Five price fields are now available which can be defined as required, e.g. EK (purchase price), VK (selling price), etc. (See page 17, 6.5 Notes)

22.2.3 LensType.Dat file structure

Changing the original definition of the extras index:

The "extras index" field only still exists as "Lens IT code" field in the OptionsPrice.Dat file.

Important: The allocation of the numbers to the colors has changed.

This is now valid:

1=glass 2=plastic 3=polycarbonate

SF4 had the following definition which is NO LONGER VALID:

0=glass 1=plastic 2=composite 3=polycarbonate

Composite is no longer supported.

22.2.4 LensGeo.Dat file structure

Exact diameter (first semiaxis/second semiaxis: these fields were added and removed from LensRange.Dat. For the reason, please see LensRange.Dat file structure

22.2.5 LensRange.Dat file structure

Exact diameter (first semiaxis/second semiaxis): these fields were moved to the LensGeo.Dat file, as – strictly speaking - they have a geometric aspect and have no relevance to the power range.

The delivery time position has been moved and can now be found directly behind "stock lens" (This is only a suggestion).

22.2.6 LensPrice.Dat file structure

Price fields 1-5 have been introduced. A certain price type can be allocated to each price field. The price type is determined in the Head.Dat file.

A price field is defined as follows: "If a price field is filled with blanks, this refers to a price on request". It should also be mentioned that this applies to a purchase price. As regards a selling price, this means that a recommended selling price exists and that the eyecare professionals must calculate the prices themselves. (For lens manufacturers not specifying recomm. prices for ECO lenses)

22.2.7 Options.Dat file structure

Each material in Options.Dat is now listed separately as Boolean field.

The fields "Base lens – st.princ.mer. from" and "Base lens str.princ.mer. to" were added in order to display coatings which are only deliverable in a certain power range.

22.2.8 OptionsColor.Dat file structure

The fields "Use in traffic", UV edge, UV-A and UV-B have been added. If these fields are filled with a blank, the same data is used as in Options.Dat. Data entered here has priority over data in the Options.Dat file

22.3 Changes from Version 6.4 to 6.5

22.3.1 General Specifications

The alternative names xxxxxx.gph etc. are not used.

All files should generally be made available in a zip file.

22.3.2 LensType.Dat file structure

The new "Trivax" material has been added.

Only the values 0 to 2 exist for field 15, "Colors contained". Values 4-% (1-color graduated tint, 2-color graduated tint and 3-color graduated tint) are deleted.

The OPC and ERFA code fields are deleted from LensType.Dat, while OeCodes.Dat has been added. For the definitions, please see chapter 16 on page 45.

22.3.3 LensPrice.Dat file structure

The field for elliptical has been removed.

22.3.4 Options.Dat file structure

As soon as value 2 or higher is indicated in the color field, at least one color must be defined in the OptionsColor.Dat file.

Note on base lens Sph from/to: the definition corresponds to the strongest principal meridian as specified in LensGeo.Dat.

22.3.5 OptionsColor.Dat file structure

The absorption field has been split into "Absorption, top" and "Absorption, bottom".

The fields for RGB center have been added.

The filter category field has been added.

22.3.6 OeCodes.Dat file structure

This file has been newly defined. ERFA and OPC codes are saved with the lens or the coating.

22.4 Changes from Version 6.5 to 6.51

22.4.1 Head.Dat file structure

The fields now have English names. The "field name" field was extended from 20 to 30

characters in order to enable longer identifiers.

22.4.2 LensRange.Dat file structure

The definition of Man. code coating 1 has been changed. Wildcards are supported.

The field "Man. code coatings 1-5 contained in the lens price" has been added.

22.5 Changes from Version 6.51 to 6.6.0

Version 6.51 has remained unchanged.

To obtain an officially final version number, version 6.6.0 has been determined as the final file format.

22.6 Changes from Version 6.6.0 to 6.6.1

22.6.1 Version number structure

The version number structure (see chapter 2.1) has been changed. An additional subversion number has been added. 6.60 has been changed to 6.6.0. Should further, slight changes become necessary, the restriction to 10 part versions has thus been abolished. (For example, 6.6.13 is now possible. This is easier to remedy from the data processing viewpoint.

22.6.2 Head.Dat

Field version has been changed from type 999 to type T10. (See chapter 17.6.1)

manufacturer-subcode – This field has been added to enable different price lists from one lens manufacturer (e.g. for purchasing groups).

uid-manufacturer and uid-postedit These fields contain unambiguous and unique numbers and descriptions.

uid-manufacturer	Clearly allocated unique number of manufacturer to clearly mark the database
uid-postedit	Clearly allocated unique number for reprocessing to clearly mark the database.

These UIDs can be transferred with a lens order. This enables lens manufacturers to recognize whether a customer uses wrong price list data. This data will probably be integrated into the new order format from Mr. Kraus.

22.6.3 LensType.Dat – Single vision / multifocals

The definition has been extended by point 4 (office lens).

22.7 Changes from Version 6.6.1 to 6.7.0

22.7.1 File names now in English

These are the new file names:

glhead.dat -> Head.dat

gltyp.dat -> LensType.dat

glWirk.dat -> LensRange.dat

glgeo.dat -> LensGeo.dat

glPreis.dat -> LensPrice.dat

glBesch.dat -> Options.dat

glFarb.dat -> Optionscolor.dat

glZusch.dat -> OptionsPrice.dat

glKombi.dat -> Combination.dat

glInfo.dat -> Information.dat

glOe.dat -> oeCodes.dat

22.7.2 Wildcards

Wildcards were originally defined as "?". In ISO sorting, however, the question mark (HEX 3F) appears only **after** the characters 0-9 (HEX 30-39). To ensure correct sorting in the files, wildcards are now displayed with an asterisk, "*" (HEX 2A), where each asterisk represents **one** character (0-9, a-z, A-Z) and **not** a sequence of characters, unlike in the search for file names (example: *.txt).

22.7.3 Head.Dat

The "comment" field has been added which allows the price list to be described briefly. Detailed descriptions will still be provided in Information.Dat.

The "pricefield-xx": definition has been extended. Value 40/90/91 has been redefined.

Field „Software-id" has been added. This makes it possible to recognize which software (version) was used for the latest processing of data.

22.7.4 LensType.Dat

The "Prism incl." field has been added.

The field "*Online order possible*" has been deleted and added to LensRange.Dat, as it can be used more flexibly in this file.

The field "*Balancing lens, lens terms*" has been added.

The field "*Balancing lens, coating terms*" has been added.

22.7.5 LensRange.Dat

The fields "*from add*" and "*to add*" have been extended to 4 places (2 places in front and 2 places after the decimal point).

The *Add step* field has been extended. It is now also possible to display 1/8D. The numbering has been changed.

The *RDT discount* field has been added. (This field was added to LensRange.Dat, as this file allows more flexible use than the LensType.Dat file.

The field "*Online order possible*" has been added and removed from LensType.Dat in the interest of more flexible use.

Note added to *Delivery time* field: 0=no information provided about delivery time.

22.7.6 LensGeo.Dat

Note added: If the diameter (field 2) is specified with "0000" and is therefore applicable to all diameters, the values for "Exact diameter" (Field 6/7) are not used or are also filled with "0000".

22.7.7 Options.Dat

Diameter from / to has been added. This allows the availability of coatings to be restricted with certain diameters.

22.7.8 Information.Dat

The values for the information type have been extended or reallocated.

One "field number acc. to ISO/DIN" is specified per data set.

The original definition – "The field numbers are separated by blanks in the information lines of a gllInfo set of information type 61 or 62" – is no longer applicable.

The data field length of the information line has been extended from 50 to 250. This should also enable a long URL.

22.8 Changes from Version 6.7.0 to 6.7.1

22.8.1 LensType.Dat

Filed 33, extended service, has been deleted and the two options it contained have been added as Boolean field. This was necessary because there are also lenses that can be delivered with both options.

22.8.2 LensRange.Dat

The length of the field was erroneously specified with 5 characters. However, a field length with

4 characters is correct. This mistake has been corrected. As a result, however, all starting points of the following fields have been moved by one position.

22.9 Changes from Version 6.7.1 to 6.7.2

22.9.1 Combination.Dat

Chapter 14.3.8, **Combinations and coating range (Man. code coatings 1-5) in LensRange.Dat., has been added in the interest of better understanding.**

22.9.2 LensRange.Dat

The following sentence in section 8.1 was wrong and has been deleted:
"If no diameters are specified, the terms apply to all diameters"

22.10 Changes from Version 6.7.2 to 6.7.3

22.10.1 Higher cylinders – detailed description

To explain the "Higher cylinder" function, section 6.6 has been added.

22.10.2 LensRange.Dat Strongest principal meridian instead of Sph

To avoid misunderstandings, the designations "Sph from" and "Sph to" are renamed into "Strongest principal meridian from" and "Strongest principal meridian to". The cylinder power principle has remained unchanged, however. (

22.10.3 Combination.dat – Additional notes

In Combination.dat, section 14.3.5 – Note on obligatory coatings – has been added. Please see these notes to ensure that you receive a correct evaluation of Combination.dat.

22.11 Changes from Version 6.7.3 to 6.7.4

22.11.1 Index in OptionsPrice.Dat

Until now, the index was only specified for fields 1-4. The material (fields 5-8) was unfortunately not included in the index. This was a mistake. To display different prices for different materials, the index must, of course, also include the material fields. This has been corrected. The index now includes fields 1-8.

22.12 Changes from Version 6.7.4 to 6.8.1 / 6.8.2

Versions 6.8.1 / 6.8.2 were sample and correction templates. All changes are described in the following sections

22.13 Changes from Version 6.7.4 to 6.8.3

22.13.1 Changes to the Head.Dat file

The value in uid-manufacturer now corresponds to the file name in the zip file. (Not defined before)

The language field has been added. This field indicates in which language the data is available.

The charset field has been added.

22.13.2 Changes to the "LensType.Dat" file

Field "aphakic spectacle correction lens" has been changed to "Lenticular lens" After this change, minus lenses are now also taken into consideration.

New field: sorting.

New field: brief designation

New fields: "smallest possible diameter" and "graduation"

New field: "exposed filter category"

22.13.3 Changes to the "LensGeo.Dat" file

The "elliptical" field in LensGeo.Dat has been specified as Boolean field. As the "elliptic" field is specified as T1 field in LensRange.Dat, the file type for the "elliptic" field has been changed to T1.

The "diameter base lens" field can now be specified for all centric or all non-centric lenses. Previously, validity applied to all lenses (if 0000 was specified). This resulted in dimensioning problems concerning fields 9 and 10.

Caution: the definition of fields 9 to 24 has been revised completely.

22.13.4 Changes to the "Options.Dat" file

New field: sorting.

New field: brief designation

New field: "exposed filter category"

New field: online order possible

Field type for "bonusable" was changed from B to 9 in Options.Dat.

The following values are now possible:

0 = No

1 = Yes

2 = Depends on lens

Field 18, "deviating diameter", was extended with value "4=smaller/larger".

22.13.5 Changes to the "Information.Dat" file

The notes on traffic suitability have been deleted, since this information must be provided in the MPG position anyway.

The list of fields (pos. 61 and 62) has been deleted completely and moved to the new OrderOptions.Dat file.

22.13.6 New sorting field in LensType.Dat and Options.Dat

Normally, lenses and coatings in the software packages are offered to the optician in alphabetical order. This sorting enables products belonging together acc. to marketing aspects to be displayed in various positions in a list. The new "sorting" field allows the lens manufacturer to suggest a sorting option of the products.

22.13.7 New "brief designation" field in LensType.Dat and Options.Dat

Here, the manufacturer defines brief designations, e.g. to print a uniform code on lens certificates (little space)

22.13.8 New "exposed filter category" field in LensType.Dat and Options.Dat

Here, the value of tinted filters of photochromic lenses / options is specified.

22.13.9 New OrderOptions.Dat table

In the future, all parameters that can/must be transferred with a lens order will be specified in this table.

22.13.10 New ProductGroup.Dat table

Because of the wide variety of lenses available, it is becoming increasingly difficult for the eyecare professional to select lenses from a long list. In printed price lists, products are therefore combined into groups. (e.g. Essilor = Smile, Nikon, Standard. Zeiss = Smart, Premium etc.)

This is why this table was defined.

22.13.11 New CodeSubstitution.Dat table

This file was defined to enable allocation of old IT codes from file format 4 to format 6.

22.13.12 The ET field has been extended

In the ET fields of the LensType.Dat and Options.Dat files, value 9 for "back surface ET" has been added.

22.13.13 Field type for Clean coating changed from B to 9

The following values are now possible:

0=none

1=normal Clean

2=Super Clean

In the traffic suitability definition, the option "not suitable for driving" has been deleted, as it is covered by the definition "not suitable for traffic".

22.14 Changes from Version 6.8.3 to 6.8.4

22.14.1 Miscellaneous

Manufacturer codes from Technolens and Eyetechn have been added.

22.14.2 Head.Dat

The values for price fields 01 to 05 have been extended. The following values have been added:

25 = recommended VK level 1 (CH)

26 = recommended VK level 2 (CH)

55 = calculated VK level 1 (CH)

56 = calculated VK level 2 (CH)

In Switzerland, there will be two different recommended selling prices (VK) in the future. The fields have been added to allow their correct allocation.

22.14.3 LensGeo.Dat

In this file, the positions as from field 19 were calculated incorrectly. This mistake has been corrected.

22.14.4 OrderOptions.Dat

Value for position for field 4 was calculated incorrectly.
Field 4 was removed from the index.

22.14.5 ProductGroup.dat

Format for field 3 incorrectly specified.

22.14.6 CodeSubstitution.Dat

Wrong numbering of fields

22.15 Changes from Version 6.8.4 to 6.9.1

22.15.1 LensPrice.Dat

A severe error has been eliminated. The field "elliptic" was missing. This field has now been added. Please note that all the following fields are moved to the back by one position.

22.16 Changes from Version 6.9.1 to 6.9.3

22.16.1 LensType.Dat

Field 24 have been renamed from "smaller diameter incl." to "deviating diameter incl.".

Fields 38 (smallest possible diameter) and 39 (smallest diameter / graduation) have been deleted. This data has been moved to the LensRange.Dat file.

Field 14 (aspheric lens): the field type has been changed from "B" to "9". This now also enables "biaspherical" to be specified.

22.16.2 LensRange.Dat

Field 23, "delivery time", is deleted, since it is never possible to specify exact dates. The "stock lens" field is fully sufficient for this purpose.

Field 24, "extended delivery range", is deleted, as the standard delivery range can normally be ordered online. This is defined with field 27, "online order possible". Everything that cannot be ordered online therefore automatically represents an extended delivery range.

Field 29, "Smallest diameter in this power range", has been added.

Field 30, "Graduation for smallest diameter", has been added.

For a description of fields 29 and 30, please see notes in the LensRange.Dat file.

22.16.3 Options.Dat

Value "9=same category as lens", has been added to field 5, "Standard/brand",

22.16.4 OrderOptions.Dat

The values for field 4, "Priority", have been extended. The description of this field has been changed in order to avoid misunderstandings.

The field type "111 progression length FrameFit value" has been added.

The field type "200 engraved text" has been added.

22.16.5 CodeSubstitution.Dat

The value "Color" has been added to field 1, "product type", to enable the IT code to be replaced also in the OptionsColor.Dat file.

22.16.6 Head.Dat

Field "6b manufacturer subname" has been added. As the "manufacturer subcode" field exists, it was logical to specify a describing name for the subcode.

22.16.7 Information.Dat

Field "3 information type" has been extended with "80-99 reserved for internal information from the manufacturers". This is to give the manufacturers the opportunity to freely define data for in-house IT purposes.

FAQ

Space for personal notes

