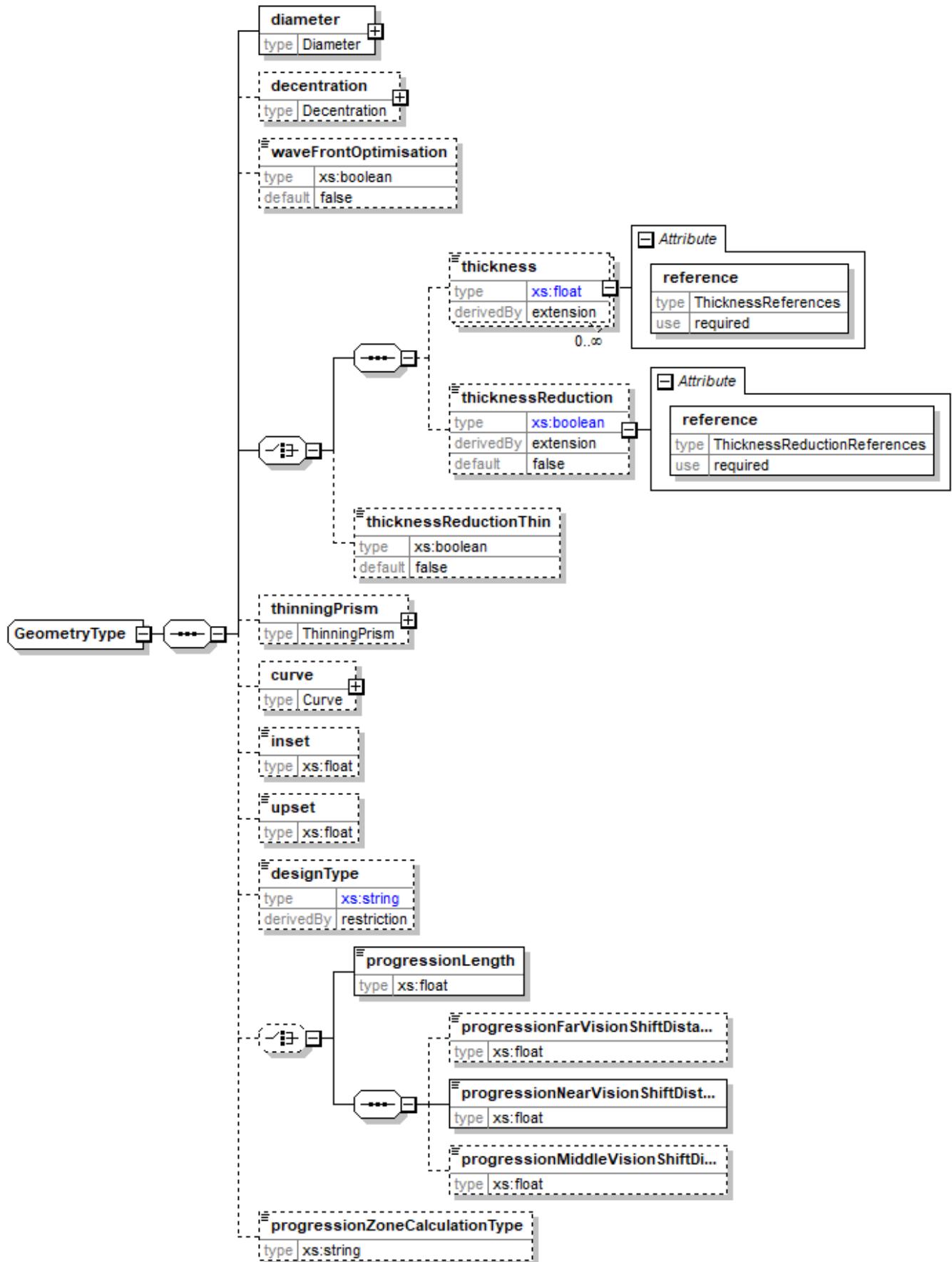


geometry (GeometryType)

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diameter	
type	<code>Diameter</code>

diameter

occurs	1
---------------	---

description	dimension of the lens
--------------------	-----------------------

decentration

type	Decentration
-------------	--------------

occurs	0..1
---------------	------

description	decentration of the lens
--------------------	--------------------------

waveFrontOptimisation

type	boolean
-------------	---------

occurs	0..1
---------------	------

default	false
----------------	-------

description	optimize the lens with the wavefront data
--------------------	-------------------------------------------

thickness

type	float
-------------	-------

unity	mm
--------------	----

occurs	0..n, not together with thicknessReductionThin
---------------	------------------------------------------------

description	the desired thickness of the lens at one or more points
--------------------	---------------------------------------------------------

reference (attribute of thickness)

type	ThicknessReferences
-------------	---------------------

use	required
------------	----------

description	the place of the thickness value
--------------------	----------------------------------

thicknessReduction

type	boolean
-------------	---------

occurs	0..1, not together with thicknessReductionThin
---------------	------------------------------------------------

description	thickness reduction of edge and center (e.g. Essilor: Precal; Hoya: METS; Rodenstock: MDM; Zeiss: Optima)
--------------------	-----------------------------------------------------------------------------------------------------------

reference (attribute of thicknessReduction)

type	ThicknessReductionReferences
-------------	------------------------------

use	required
------------	----------

description	thickness reduction based on frame shape or raw lens
--------------------	------------------------------------------------------

thicknessReductionThin

type	boolean
-------------	---------

occurs	0..1, not together with thickness or thicknessReduction
---------------	---------------------------------------------------------

default	false
----------------	-------

description	the lens should be as thin as possible
--------------------	----------------------------------------

thinningPrism

type	ThinningPrism
-------------	---------------

occurs	0..1
---------------	------

description	prism to reduce the thickness
--------------------	-------------------------------

curve

type	Curve
-------------	-------

occurs	0..1
---------------	------

description	lens curve
--------------------	------------

inset

type	float
-------------	-------

unity	mm
--------------	----

inset	
occurs	0..1
description	Horizontal offset from the distance reference point to the near reference point (normally in nasal direction), resulting from the convergence of the eye linked to the accommodation during near vision.
upset	
type	float
unity	mm
occurs	0..1
description	Vertical distance from the distance reference point to the top of the near zone (only for multifocal lenses)
designType	
type	string (enum)
occurs	0..1
description	type of lens design
values description	
A	different for each lens manufacturer
B	different for each lens manufacturer
C	different for each lens manufacturer
progressionLength	
type	float
unity	mm
occurs	0..1 (not together with progression(Far/Middle/Near)VisionShiftDistance)
description	for progressive lenses with variable length of progressionzone
progressionFarVisionShiftDistance	
type	float
unity	mm
occurs	0..1 (not together with progressionLength; progressionNearVisionShiftDistance is required)
description	Far Vision Vertical Shift distance Bz to Bf
progressionNearVisionShiftDistance	
type	float
unity	mm
occurs	0..1 (not together with progressionLength)
description	Near Vision Vertical Shift distance Bz to Bn
progressionMiddleVisionShiftDistance	
type	float
unity	mm
occurs	0..1 (not together with progressionLength; progressionNearVisionShiftDistance is required)
description	Middle Vision Vertical Shift distance
progressionZoneCalculationType	
type	string
occurs	0..1
description	Type of calculation of the progression zone length

```
<xs:complexType name="GeometryType">
  <xs:sequence>
    <xs:element name="diameter" type="Diameter" />
    <xs:element minOccurs="0" name="decentration" type="Decentration" />
    <xs:element minOccurs="0" default="false" name="waveFrontOptimisation"
      type="xs:boolean" />
    <xs:choice>
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="thickness">
          <xs:complexType>
            <xs:simpleContent>
              <xs:extension base="xs:float">
                <xs:attribute name="reference" type="ThicknessReferences"
                  use="required" />
              </xs:extension>
            </xs:simpleContent>
          </xs:complexType>
        </xs:element>
        <xs:element minOccurs="0" default="false" name="thicknessReduction">
          <xs:complexType>
            <xs:simpleContent>
              <xs:extension base="xs:boolean">
                <xs:attribute name="reference"
                  type="ThicknessReductionReferences" use="required" />
              </xs:extension>
            </xs:simpleContent>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
      <xs:element minOccurs="0" default="false"
        name="thicknessReductionThin" type="xs:boolean" />
    </xs:choice>
    <xs:element name="thinningPrism" type="ThinningPrism" minOccurs="0"/>
    <xs:element minOccurs="0" name="curve" type="Curve" />
    <xs:element minOccurs="0" name="inset" type="xs:float" />
    <xs:element minOccurs="0" name="upset" type="xs:float" />
    <xs:element minOccurs="0" name="designType">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="A" />
          <xs:enumeration value="B" />
          <xs:enumeration value="C" />
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:choice minOccurs="0">
      <xs:element name="progressionLength" type="xs:float" />
      <xs:sequence>
        <xs:element minOccurs="0" name="progressionFarVisionShiftDistance"
          type="xs:float" />
        <xs:element name="progressionNearVisionShiftDistance" />
```

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en:lensorder:version010603:complextypes:geometrytype https://wiki.b2boptic.com/en:lensorder:version010603:complextypes:geometrytype

```
type="xs:float" />
    <xs:element minOccurs="0"
name="progressionMiddleVisionShiftDistance" type="xs:float" />
</xs:sequence>
</xs:choice>
<xs:element minOccurs="0" name="progressionZoneCalculationType"
type="xs:string" />
</xs:sequence>
</xs:complexType>
```

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