geometry (GeometryType)

b2boptic → items → item → pair → lens → geometry

diameter	
type	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

thinningPrism	
description	prism to reduce the thickness

curve	
type	Curve
occurs	0..1
description	lens curve

inset	
type	float
unity	depends on attribut „dimension“
occurs	0..1
description	Horizontal offset from the nasal distance reference point due to the near reference point by the akkomotation in near vision.

ISNEWLO010604 *dimension (attribute of inset)*	
type	insetDimension
use	optional
description	default dimension for inset is MM; for some lens supplier PERCENT is possible too (0% - 100%)

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)

progressionNearVisionShiftDistance	
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

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```

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