

# geometry (GeometryType)

b2bOpticJobData → items → item → pair → lens → geometry



<b>diameter</b>	
<b>type</b>	Diameter
<b>occurs</b>	1
<b>description</b>	dimension of the lens

<b>decentration</b>	
<b>type</b>	Decentration
<b>occurs</b>	0..1
<b>description</b>	decentration of the lens

<b>waveFrontOptimisation</b>	
<b>type</b>	boolean
<b>occurs</b>	0..1
<b>default</b>	false
<b>description</b>	optimize the lens with the wavefront data

<b>thickness</b>	
<b>type</b>	float
<b>unity</b>	mm
<b>occurs</b>	0..n, not together with thicknessReductionThin
<b>description</b>	the desired thickness of the lens at one or more points

<b>reference (attribute of thickness)</b>	
<b>type</b>	ThicknessReferences
<b>use</b>	required
<b>description</b>	the place of the thickness value

<b>thicknessReduction</b>	
<b>type</b>	boolean
<b>occurs</b>	0..1, not together with thicknessReductionThin
<b>description</b>	thickness reduction of edge and center (e.g. Essilor: Precal; Hoya: METS; Rodenstock: MDM; Zeiss: Optima)

<b>reference (attribute of thicknessReduction)</b>	
<b>type</b>	ThicknessReductionReferences
<b>use</b>	required
<b>description</b>	thickness reduction based on frame shape or raw lens

<b>thicknessReductionThin</b>	
<b>type</b>	boolean
<b>occurs</b>	0..1, not together with thickness or thicknessReduction
<b>default</b>	false
<b>description</b>	the lens should be as thin as possible

<b>thinningPrism</b>	
<b>type</b>	ThinningPrism
<b>occurs</b>	0..1

## thinningPrism

<b>description</b>	prism to reduce the thickness
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### curve

<b>type</b>	Curve
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<b>occurs</b>	0..1
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<b>description</b>	lens curve
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### inset

<b>type</b>	float
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<b>unity</b>	depends on attribut "dimension"
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<b>occurs</b>	0..1
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<b>description</b>	Horizontal offset from the nasal distance reference point due to the near reference point by the akkomotation in near vision.
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### New! dimension (attribute of inset)

<b>type</b>	insetDimension
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<b>use</b>	optional
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<b>description</b>	default dimension for inset is MM; for some lens supplier PERCENT is possible too (0% - 100%)
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### upset

<b>type</b>	float
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<b>unity</b>	mm
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<b>occurs</b>	0..1
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<b>description</b>	Vertical distance from the distance reference point to the top of the near zone (only for multifocal lenses)
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### designType

<b>type</b>	string (enum)
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<b>occurs</b>	0..1
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<b>description</b>	type of lens design
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### values

#### description

A	different for each lens manufacturer
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B	different for each lens manufacturer
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C	different for each lens manufacturer
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### progressionLength

<b>type</b>	float
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<b>unity</b>	mm
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<b>occurs</b>	0..1 (not together with progression(Far/Middle/Near)VisionShiftDistance)
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<b>description</b>	for progressive lenses with variable length of progressionzone
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### progressionFarVisionShiftDistance

<b>type</b>	float
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<b>unity</b>	mm
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<b>occurs</b>	0..1 (not together with progressionLength; progressionNearVisionShiftDistance is required)
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<b>description</b>	Far Vision Vertical Shift distance Bz to Bf
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### progressionNearVisionShiftDistance

<b>type</b>	float
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<b>unity</b>	mm
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**progressionNearVisionShiftDistance**

<b>occurs</b>	0..1 (not together with progressionLength)
<b>description</b>	Near Vision Vertical Shift distance Bz to Bn

**progressionMiddleVisionShiftDistance**

<b>type</b>	float
<b>unity</b>	mm
<b>occurs</b>	0..1 (not together with progressionLength; progressionNearVisionShiftDistance is required)
<b>description</b>	Middle Vision Vertical Shift distance

**progressionZoneCalculationType**

<b>type</b>	string
<b>occurs</b>	0..1
<b>description</b>	Type of calculation of the progression zone length

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```

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