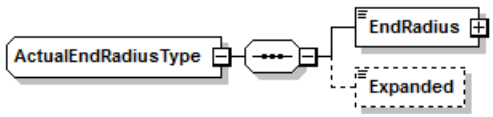
Data dictionary for QIF Library PrimitivesPMI.xsd (normative)

schema location: **..\QIFLibrary\PrimitivesPMI.xsd**
attributeFormDefault: **unqualified**
elementFormDefault: **qualified**
targetNamespace: **http://qifstandards.org/xsd/qif2**

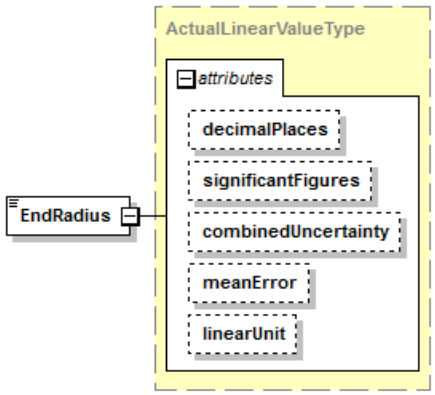
Complex types

Simple types

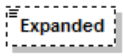
complexType **ActualEndRadiusType**

diagram	
children	**EndRadius** **Expanded**
annotation	documentation The ActualEndRadiusType defines the actual radius of the end of a slot.

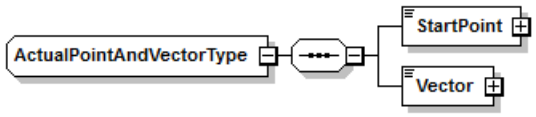
element **ActualEndRadiusType/EndRadius**

diagram	
type	**ActualLinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. combinedUncertainty — **NonNegativeDecimalType** — documentation: The optional combinedUncertainty attribute is a value expressing the combined uncertainty assigned to the SpecifiedDecimalType. meanError — **NonNegativeDecimalType** — documentation: The optional meanError attribute is a value expressing the mean error assigned to the SpecifiedDecimalType. linearUnit — **xs:token** — documentation: The optional linearUnit attribute defines the unit used by LinearValueType.
annotation	documentation The EndRadius element describes the actual end radius of the slot.

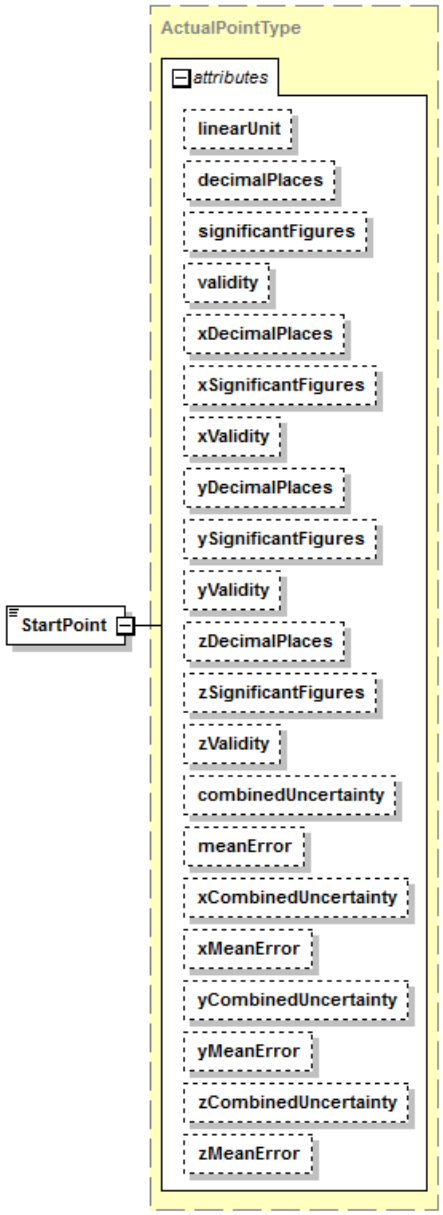
element **ActualEndRadiusType/Expanded**

diagram	
type	**xs:boolean**
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The optional Expanded element when set to "true" indicates that the round end of a slot expands to be larger than the width like the end of a dumbbell.

complexType **ActualPointAndVectorType**

diagram	
children	**StartPoint** **Vector**
annotation	documentation The ActualPointAndVectorType defines a line by its starting point and direction vector.

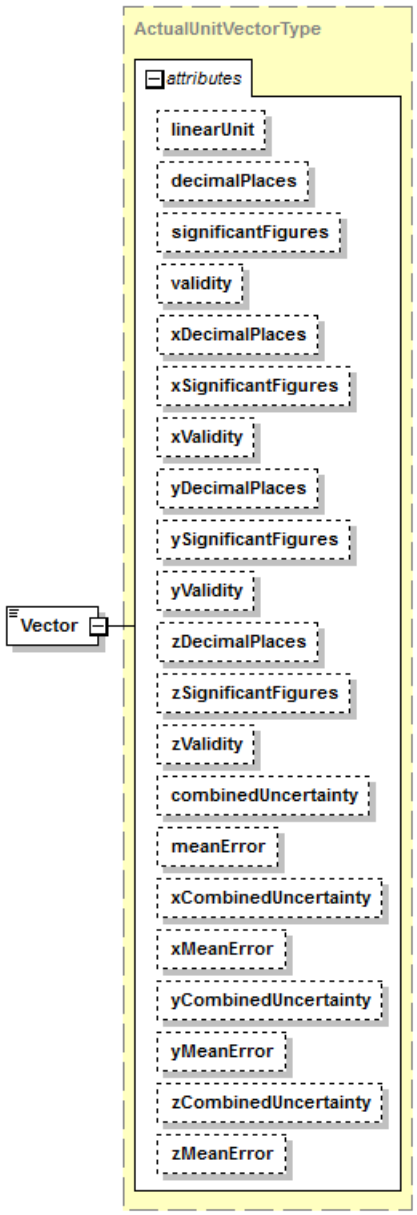
element **ActualPointAndVectorType/StartPoint**

diagram	
type	**ActualPointType**

properties	content complex
facets	Kind Value Annotation length 3
attributes	Name Type Use Default Fixed Annotation linearUnit **xs:token** decimalPlaces **xs:nonNegativeInteger** significantFigures **xs:nonNegativeInteger** validity **ValidityEnumType** xDecimalPlaces **xs:nonNegativeInteger** xSignificantFigures **xs:nonNegativeInteger** xValidity **ValidityEnumType** yDecimalPlaces **xs:nonNegativeInteger** ySignificantFigures **xs:nonNegativeInteger** yValidity **ValidityEnumType** zDecimalPlaces **xs:nonNegativeInteger** zSignificantFigures **xs:nonNegativeInteger** zValidity **ValidityEnumType** combinedUncertainty **xs:decimal** meanError **xs:decimal** xCombinedUncertainty **xs:decimal** xMeanError **xs:decimal** yCombinedUncertainty **xs:decimal** yMeanError **xs:decimal** zCombinedUncertainty **xs:decimal** zMeanError **xs:decimal**
annotation	documentation The StartPoint element is the actual starting point of the line.

element **ActualPointAndVectorType/Vector**

diagram



type **ActualUnitVectorType**

properties content complex

facets

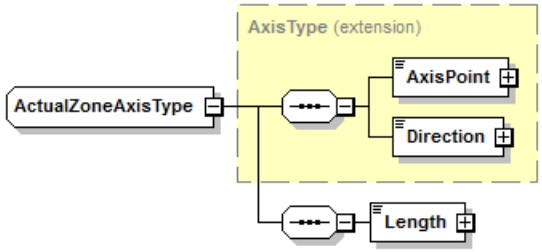
Kind	Value	Annotation
length	3	

attributes

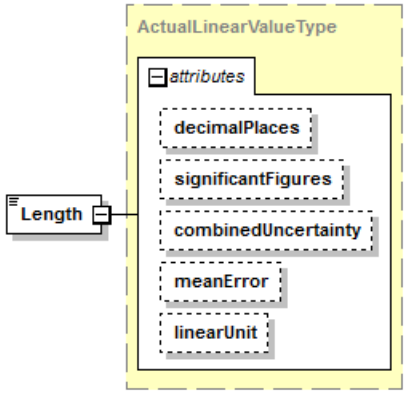
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				

	xValidity	**ValidityEnumType**
	yDecimalPlaces	**xs:nonNegativeInteger**
	ySignificantFigures	**xs:nonNegativeInteger**
	yValidity	**ValidityEnumType**
	zDecimalPlaces	**xs:nonNegativeInteger**
	zSignificantFigures	**xs:nonNegativeInteger**
	zValidity	**ValidityEnumType**
	combinedUncertainty	**xs:decimal**
	meanError	**xs:decimal**
	xCombinedUncertainty	**xs:decimal**
	xMeanError	**xs:decimal**
	yCombinedUncertainty	**xs:decimal**
	yMeanError	**xs:decimal**
	zCombinedUncertainty	**xs:decimal**
	zMeanError	**xs:decimal**
annotation	documentation The Vector element is a unit vector giving the actual direction of the line.	

complexType **ActualZoneAxisType**

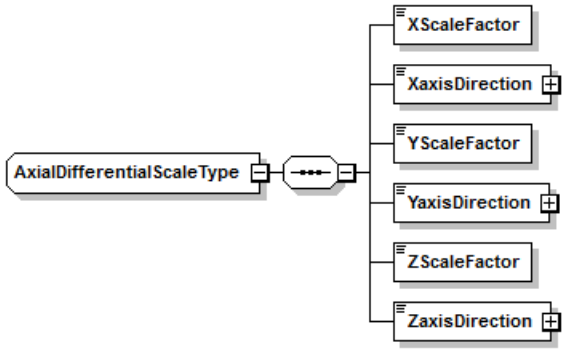
diagram	
type	extension of **AxisType**
properties	base AxisType
children	**AxisPoint Direction Length**
annotation	documentation The ActualZoneAxisType defines an actual axis with a length.

element **ActualZoneAxisType/Length**

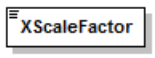
diagram	

type	**ActualLinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** documentation: See documentation of SpecifiedDecimalType. combinedUncertainty **NonNegativeDecimalType** documentation: The optional combinedUncertainty attribute is a value expressing the combined uncertainty assigned to the SpecifiedDecimalType. meanError **NonNegativeDecimalType** documentation: The optional meanError attribute is a value expressing the mean error assigned to the SpecifiedDecimalType. linearUnit **xs:token** documentation: The optional linearUnit attribute defines the unit used by LinearValueType.
annotation	documentation The Length element is the length of an axis or line. A positive value means in the direction of the associated vector and a negative value means in the opposite direction.

complexType **AxialDifferentialScaleType**

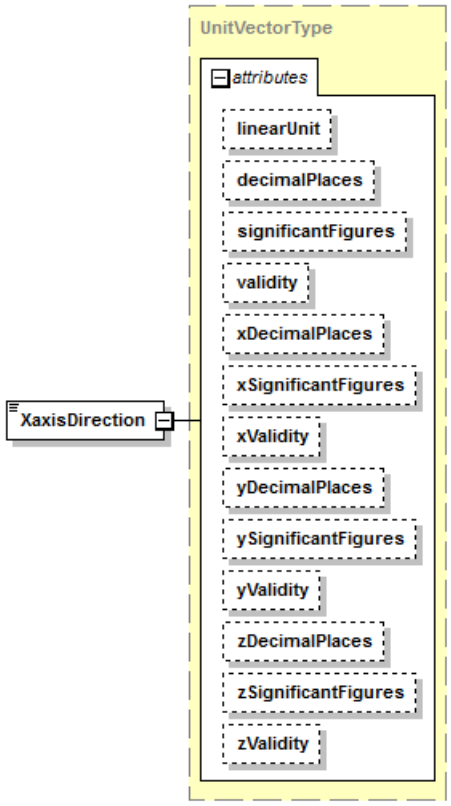
diagram	
children	XScaleFactor XaxisDirection YScaleFactor YaxisDirection ZScaleFactor ZaxisDirection
used by	element ScaleType/AxialDifferentialScale
annotation	documentation The AxialDifferentialScaleType defines three scale factors applied along three specified orthogonal directions.

element **AxialDifferentialScaleType/XScaleFactor**

diagram	
type	**xs:decimal**

properties	content simple
annotation	documentation The XScaleFactor element is the scale factor applied in the specified X direction, a scale factor of 1.0 indicates no change.

element **AxialDifferentialScaleType/XaxisDirection**

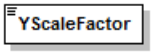
diagram	
type	**UnitVectorType**
properties	content complex
facets	Kind Value Annotation length 3

attributes

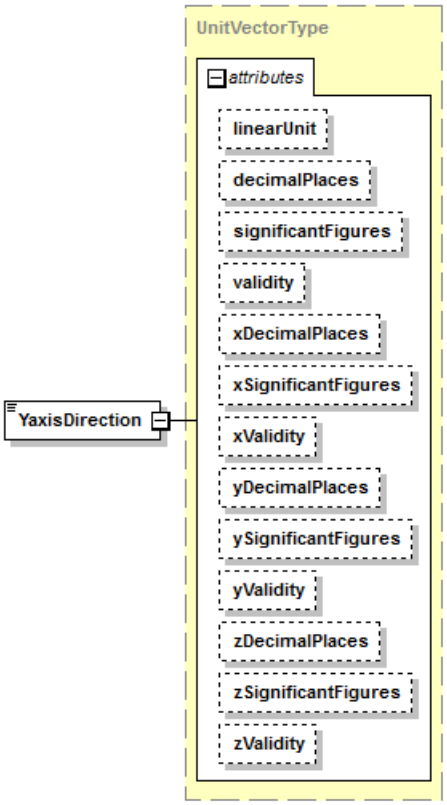
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				

	zValidity **ValidityEnumType**
annotation	documentation The XaxisDirection element specifies the direction of the X axis for differential scaling.

element **AxialDifferentialScaleType/YScaleFactor**

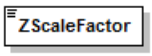
diagram	
type	**xs:decimal**
properties	content simple
annotation	documentation The YScaleFactor element is the scale factor applied in the specified Y direction, a scale factor of 1.0 indicates no change.

element **AxialDifferentialScaleType/YaxisDirection**

diagram	
type	**UnitVectorType**
properties	content complex
facets	Kind Value Annotation length 3
attributes	Name Type Use Default Fixed Annotation linearUnit **xs:token** decimalPlaces **xs:nonNegativeInteger** significantFigures **xs:nonNegativeInteger**

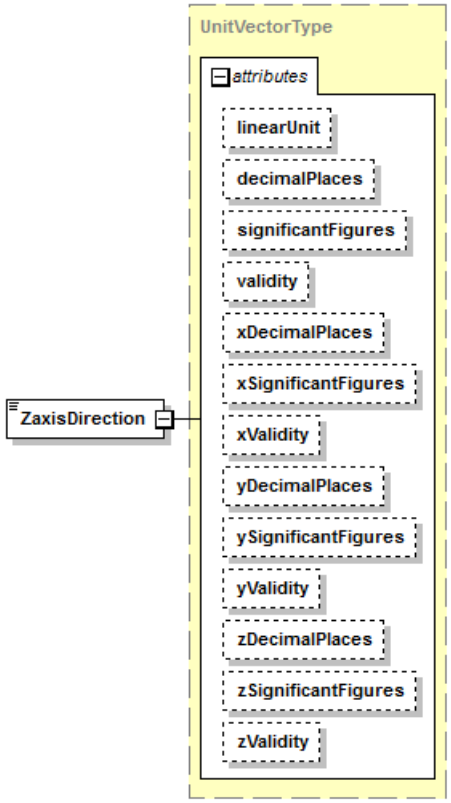
	validity	**ValidityEnumType**
	xDecimalPlaces	**xs:nonNegativeInteger**
	xSignificantFigures	**xs:nonNegativeInteger**
	xValidity	**ValidityEnumType**
	yDecimalPlaces	**xs:nonNegativeInteger**
	ySignificantFigures	**xs:nonNegativeInteger**
	yValidity	**ValidityEnumType**
	zDecimalPlaces	**xs:nonNegativeInteger**
	zSignificantFigures	**xs:nonNegativeInteger**
	zValidity	**ValidityEnumType**
annotation	documentation The YaxisDirection element specifies the direction of the Y axis for differential scaling.	

element **AxialDifferentialScaleType/ZScaleFactor**

diagram	
type	**xs:decimal**
properties	content simple
annotation	documentation The ZScaleFactor element is the scale factor applied in the specified Z direction, a scale factor of 1.0 indicates no change.

element **AxialDifferentialScaleType/ZaxisDirection**

diagram



type **UnitVectorType**

properties
content complex

facets

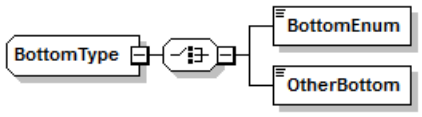
Kind	Value	Annotation
length	3	

attributes

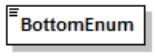
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The ZaxisDirection element specifies the direction of the Z axis for differential scaling.

complexType **BottomType**

diagram	
children	**BottomEnum** **OtherBottom**
annotation	documentation The BottomType defines the bottom type for a 3D internal feature type, a feature created by removing material.

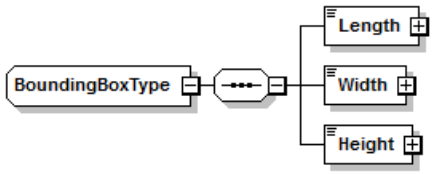
element **BottomType/BottomEnum**

diagram	
type	**BottomEnumType**
properties	content simple
facets	Kind Value Annotation enumeration BLIND enumeration THROUGH enumeration UNDEFINED
annotation	documentation The BottomEnum element describes an often-used bottom type for a 3D internal feature type.

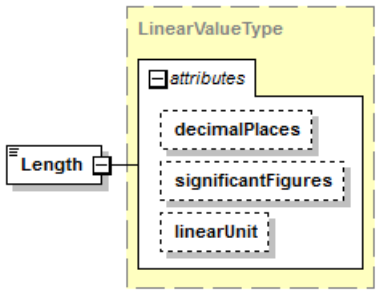
element **BottomType/OtherBottom**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherBottom element describes the bottom type for a 3D internal feature type in natural language.

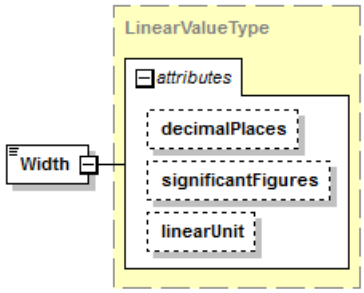
complexType **BoundingBoxType**

diagram	
children	**Length** **Width** **Height**
annotation	documentation The BoundingBoxType defines the dimensions of a box that usually bounds a shape object.

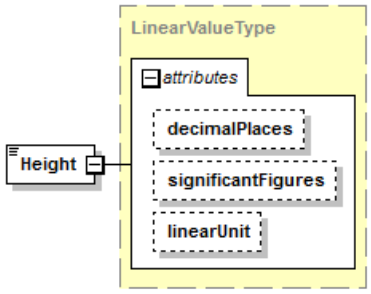
element **BoundingBoxType/Length**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Length element gives the length of the box.

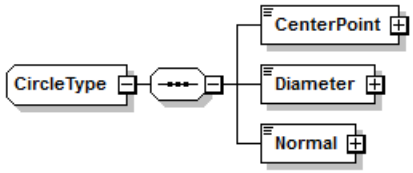
element **BoundingBoxType/Width**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Width element gives the width of the box.

element **BoundingBoxType/Height**

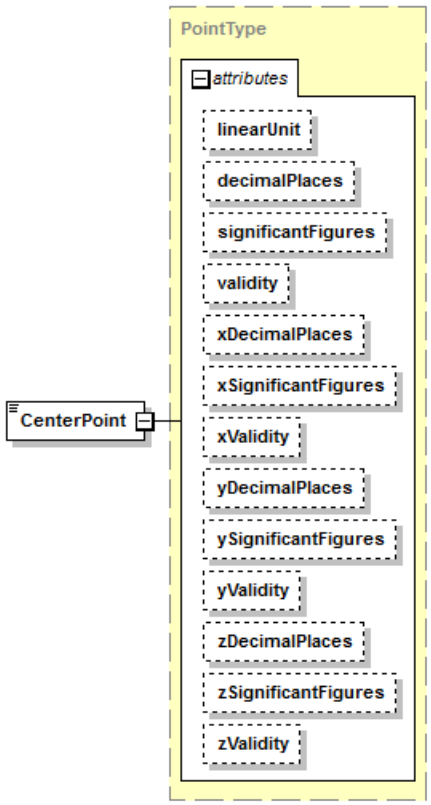
diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Height element gives the height of the box.

complexType **CircleType**

diagram	
children	**CenterPoint** **Diameter** **Normal**
annotation	documentation The CircleType defines a circle to be used as a circular DatumTarget or a circular zone limit. It is not a feature. ASME Y14.5 - 2009 Section 3.3.3.3, Figure 3-6, Figure 3-9

element **CircleType/CenterPoint**

diagram



type **PointType**

properties
content complex

facets

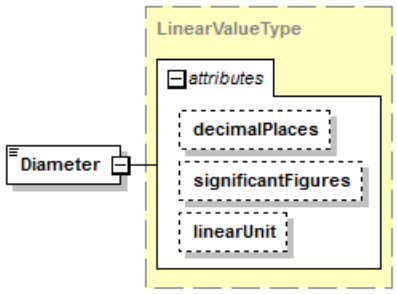
Kind	Value	Annotation
length	3	

attributes

Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

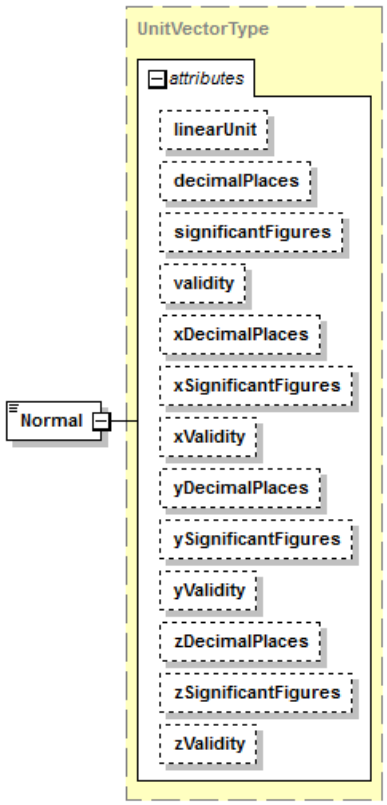
annotation
documentation
The CenterPoint element is the center of the circle.

element **CircleType/Diameter**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Diameter element is the diameter of the circle.

element **CircleType/Normal**

diagram



type **UnitVectorType**

properties

content	complex

facets

Kind	Value	Annotation
length	3	

attributes

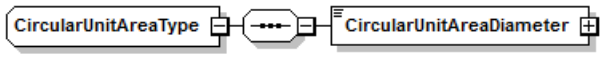
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation

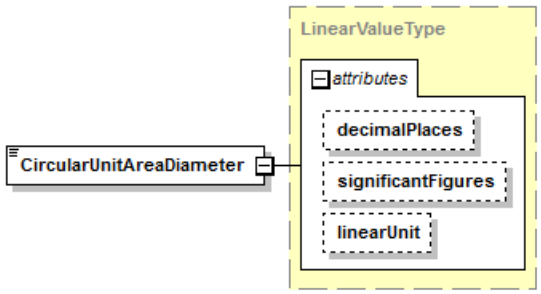
documentation

The Normal element is the unit vector that gives the normal to the plane of the circle.

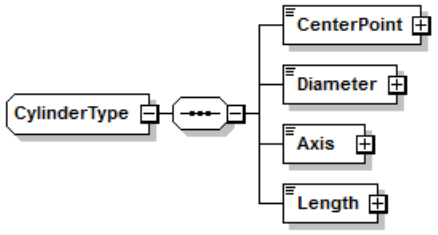
complexType **CircularUnitAreaType**

diagram	
children	**CircularUnitAreaDiameter**
annotation	documentation The CircularUnitAreaType defines a circular region.

element **CircularUnitAreaType/CircularUnitAreaDiameter**

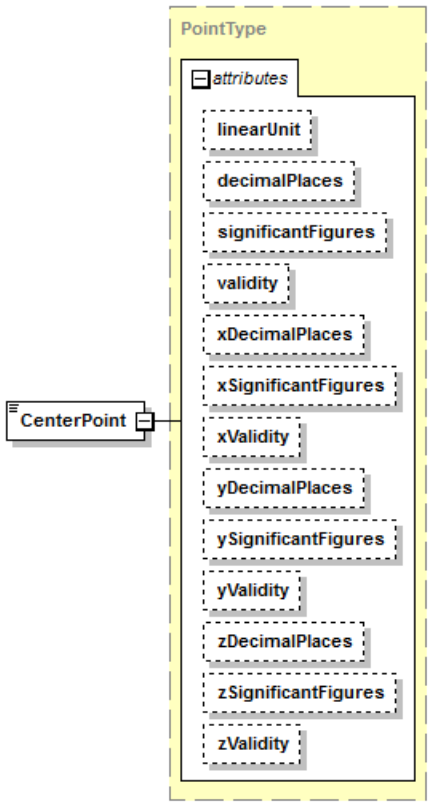
diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit — **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The CircularUnitAreaDiameter element is the length in linear units of the diameter of the circular region.

complexType **CylinderType**

diagram	
children	**CenterPoint Diameter Axis Length**
annotation	documentation The CylinderType defines a cylinder to be used as a cylindrical area DatumTarget. It is not a feature.

element **CylinderType/CenterPoint**

diagram



type **PointType**

properties
content complex

facets

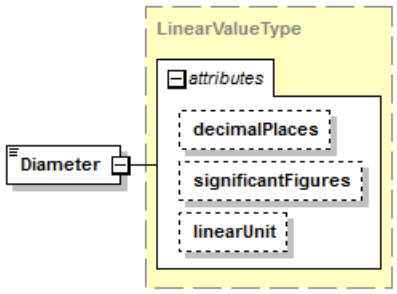
Kind	Value	Annotation
length	3	

attributes

Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

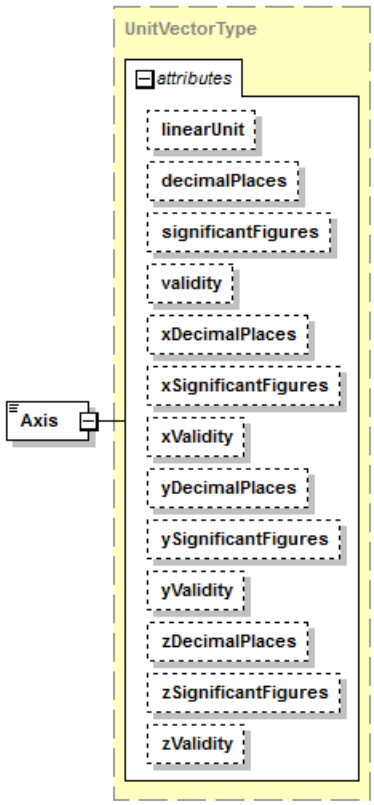
annotation
documentation
The CenterPoint element is the center of the cylinder at one end.

element **CylinderType/Diameter**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Diameter element is the diameter of the cylinder.

element **CylinderType/Axis**

diagram



type **UnitVectorType**

properties
content complex

facets

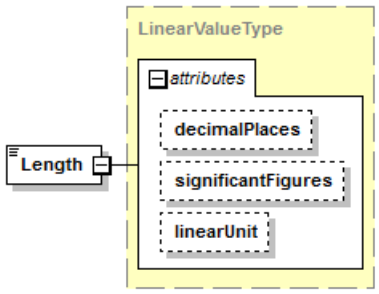
Kind	Value	Annotation
length	3	

attributes

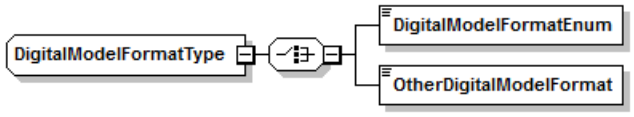
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The Axis element is the unit vector that gives the axis of the cylinder pointing from the end at which the center point is defined to the other end.

element **CylinderType/Length**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Length element is the length of the cylinder along its axis vector.

complexType **DigitalModelFormatType**

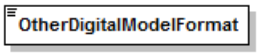
diagram	
children	DigitalModelFormatEnum OtherDigitalModelFormat
annotation	documentation The DigitalModelFormatType defines the format of a digital model.

element **DigitalModelFormatType/DigitalModelFormatEnum**

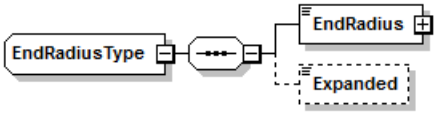
diagram	
type	DigitalModelFormatEnumType
properties	content simple
facets	Kind / Value / Annotation enumeration STEPAP203 enumeration STEPAP203E2 enumeration STEPAP214 enumeration STEPAP242 enumeration JTOPEN enumeration RPC enumeration PDPMI

	enumeration ACIS enumeration PARASOLID enumeration AUTODESK enumeration PTC enumeration NX enumeration SOLIDWORKS enumeration CATIA enumeration NOTDEFINED
annotation	documentation The DigitalModelFormatEnum element describes an often-used format of a digital model.

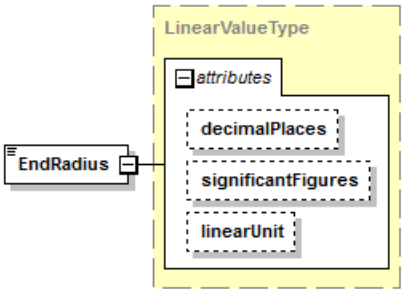
element **DigitalModelFormatType/OtherDigitalModelFormat**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherDigitalModelFormat element describes the format of a digital model in natural language.

complexType **EndRadiusType**

diagram	
children	**EndRadius Expanded**
annotation	documentation The EndRadiusType defines the radius of the end of a slot.

element **EndRadiusType/EndRadius**

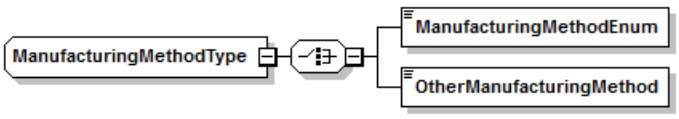
diagram	
type	**LinearValueType**
properties	content complex
attributes	Name Type Use Default Fixed Annotation decimalPlaces **xs:nonNegativeInteger** documentation See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** documentation See documentation of

	linearUnit **xs:token**	SpecifiedDecimalType. documentation The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The EndRadius element describes the end radius of the slot.	

element **EndRadiusType/Expanded**

diagram	
type	**xs:boolean**
properties	minOcc 0 maxOcc 1 content simple
annotation	documentation The optional Expanded element when set to "true" indicates that the round end of a slot expands to be larger than the width like the end of a dumbbell.

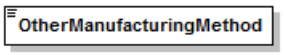
complexType **ManufacturingMethodType**

diagram	
children	ManufacturingMethodEnum OtherManufacturingMethod
annotation	documentation The ManufacturingMethodType defines a manufacturing method for a part.

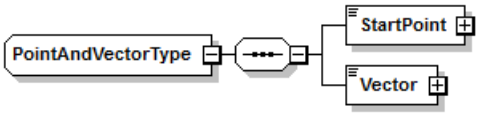
element **ManufacturingMethodType/ManufacturingMethodEnum**

diagram	
type	ManufacturingMethodEnumType
properties	content simple
facets	Kind Value Annotation enumeration ADDITIVE enumeration CASTING enumeration COMPOSITE enumeration FABRICATION enumeration FORMING enumeration JOINING enumeration MACHINING enumeration MOLDING
annotation	documentation The ManufacturingMethodEnum element describes an often-used manufacturing method.

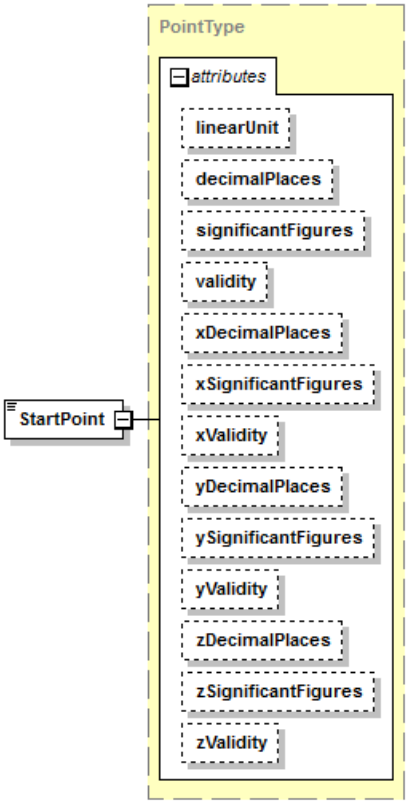
element **ManufacturingMethodType/OtherManufacturingMethod**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherManufacturingMethod element describes a manufacturing method in natural language.

complexType **PointAndVectorType**

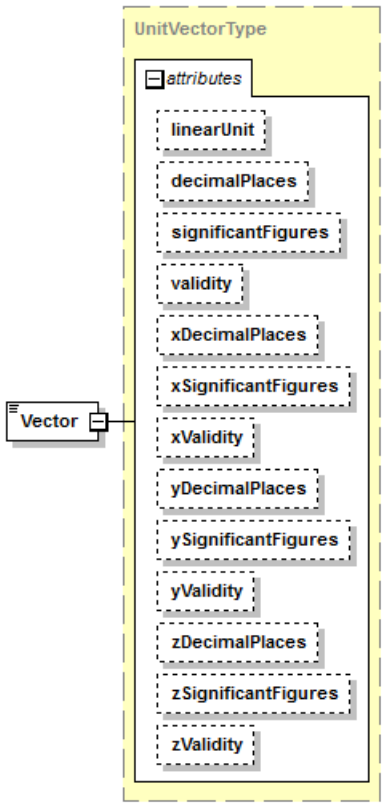
diagram	
children	**StartPoint** **Vector**
annotation	documentation The PointAndVectorType defines a line by its starting point and direction vector.

element **PointAndVectorType/StartPoint**

diagram	
type	**PointType**
properties	content complex
facets	Kind Value Annotation length 3

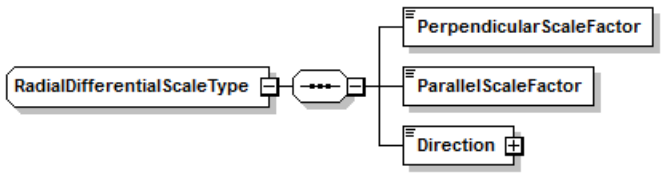
attributes	Name	Type	Use	Default	Fixed	Annotation
	linearUnit	**xs:token**				
	decimalPlaces	**xs:nonNegativeInteger**				
	significantFigures	**xs:nonNegativeInteger**				
	validity	**ValidityEnumType**				
	xDecimalPlaces	**xs:nonNegativeInteger**				
	xSignificantFigures	**xs:nonNegativeInteger**				
	xValidity	**ValidityEnumType**				
	yDecimalPlaces	**xs:nonNegativeInteger**				
	ySignificantFigures	**xs:nonNegativeInteger**				
	yValidity	**ValidityEnumType**				
	zDecimalPlaces	**xs:nonNegativeInteger**				
	zSignificantFigures	**xs:nonNegativeInteger**				
	zValidity	**ValidityEnumType**				
annotation	documentation The StartPoint element is the starting point of the line.					

element **PointAndVectorType/Vector**

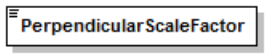
diagram	
type	**UnitVectorType**
properties	content complex
facets	Kind Value Annotation length 3
attributes	Name Type Use Default Fixed Annotation

	linearUnit	**xs:token**
	decimalPlaces	**xs:nonNegativeInteger**
	significantFigures	**xs:nonNegativeInteger**
	validity	**ValidityEnumType**
	xDecimalPlaces	**xs:nonNegativeInteger**
	xSignificantFigures	**xs:nonNegativeInteger**
	xValidity	**ValidityEnumType**
	yDecimalPlaces	**xs:nonNegativeInteger**
	ySignificantFigures	**xs:nonNegativeInteger**
	yValidity	**ValidityEnumType**
	zDecimalPlaces	**xs:nonNegativeInteger**
	zSignificantFigures	**xs:nonNegativeInteger**
	zValidity	**ValidityEnumType**
annotation	documentation The Vector element is a unit vector giving the direction of the line.	

complexType **RadialDifferentialScaleType**

diagram	
children	**PerpendicularScaleFactor** **ParallelScaleFactor** **Direction**
used by	element **ScaleType/RadialDifferentialScale**
annotation	documentation The RadialDifferentialScaleType defines two scale factors applied parallel and perpendicular to a specified direction.

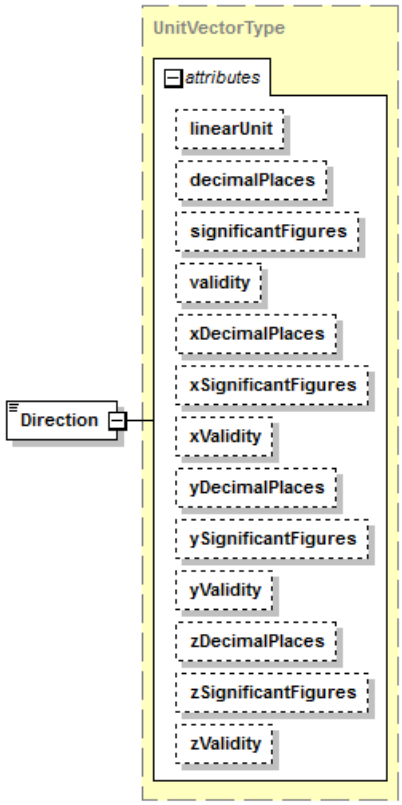
element **RadialDifferentialScaleType/PerpendicularScaleFactor**

diagram	
type	**xs:decimal**
properties	content simple
annotation	documentation The PerpendicularScaleFactor element is the scale factor applied perpendicular to the specified direction, a scale factor of 1.0 indicates no change.

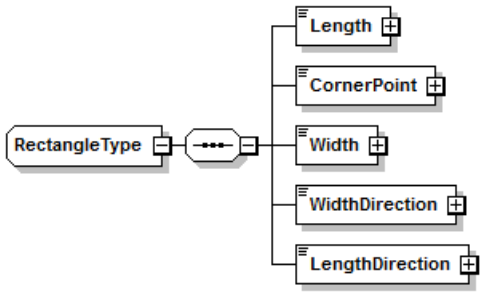
element **RadialDifferentialScaleType/ParallelScaleFactor**

diagram	
type	**xs:decimal**
properties	content simple
annotation	documentation The ParallelScaleFactor element is the scale factor applied parallel to the specified direction, a scale factor of 1.0 indicates no change.

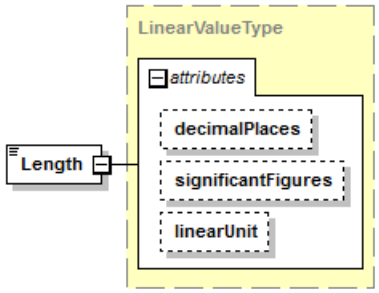
element **RadialDifferentialScaleType/Direction**

diagram	
type	**UnitVectorType**
properties	content complex
facets	Kind Value Annotation length 3
attributes	Name Type Use Default Fixed Annotation linearUnit **xs:token** decimalPlaces **xs:nonNegativeInteger** significantFigures **xs:nonNegativeInteger** validity **ValidityEnumType** xDecimalPlaces **xs:nonNegativeInteger** xSignificantFigures **xs:nonNegativeInteger** xValidity **ValidityEnumType** yDecimalPlaces **xs:nonNegativeInteger** ySignificantFigures **xs:nonNegativeInteger** yValidity **ValidityEnumType** zDecimalPlaces **xs:nonNegativeInteger** zSignificantFigures **xs:nonNegativeInteger** zValidity **ValidityEnumType**
annotation	documentation The Direction element specifies the direction for the differential scaling.

complexType **RectangleType**

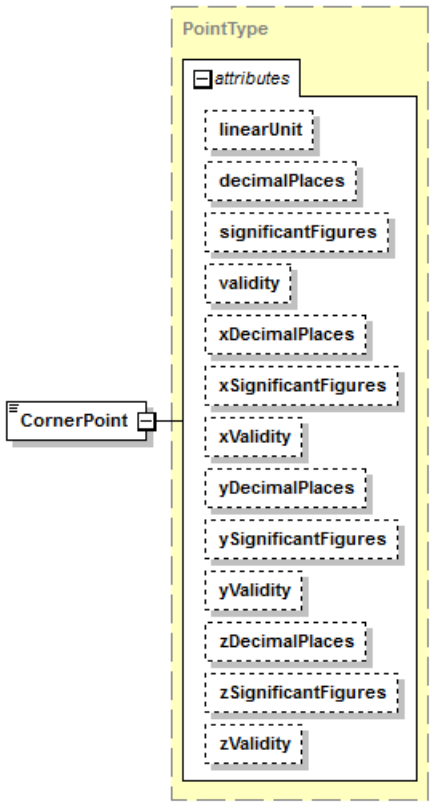
diagram	
children	**Length** **CornerPoint** **Width** **WidthDirection** **LengthDirection**
annotation	documentation The RectangleType defines a rectangle to be used as a datum target or a rectangular zone limit. It is not a feature. ASME Y14.5 - 2009 Section 3.3.3.3, Figure 3-6

element **RectangleType/Length**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures — **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit — **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Length element is the length of the rectangle. One of the two sides of the rectangle whose length is Length proceeds from the CornerPoint in the direction of the LengthDirection.

element **RectangleType/CornerPoint**

diagram



type **PointType**

properties
content complex

facets

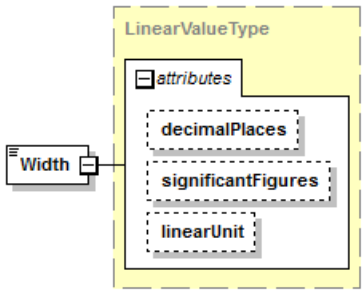
Kind	Value	Annotation
length	3	

attributes

Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

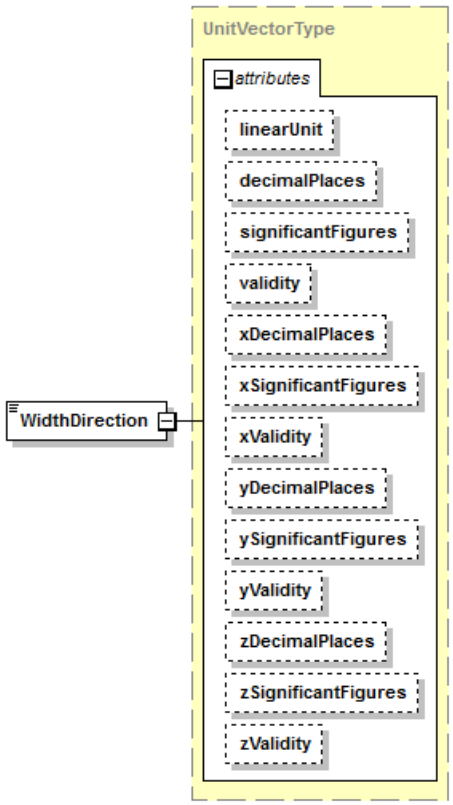
annotation
documentation
The CornerPoint element is the location of a corner of the rectangle.

element **RectangleType/Width**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Width element is the width of the rectangle. One of the two sides of the rectangle whose length is Width proceeds from the CornerPoint in the direction of the WidthDirection.

element **RectangleType/WidthDirection**

diagram



type **UnitVectorType**

properties
content complex

facets

Kind	Value	Annotation
length	3	

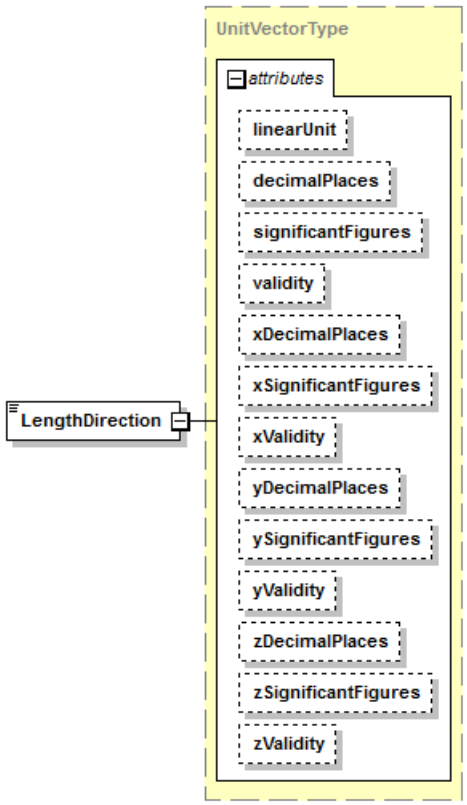
attributes

Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The WidthDirection element is a unit vector that gives the direction of the width of the rectangle.

element **RectangleType/LengthDirection**

diagram



type **UnitVectorType**

properties
content complex

facets

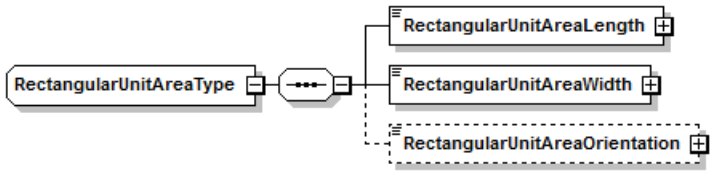
Kind	Value	Annotation
length	3	

attributes

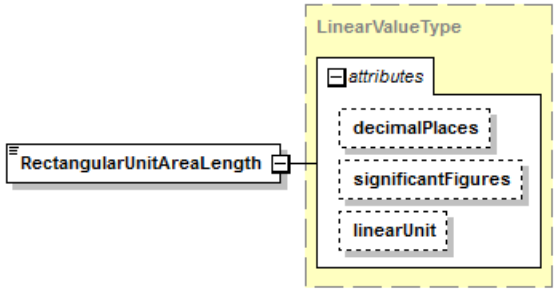
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The LengthDirection element is a unit vector that gives the direction of the length of the rectangle.

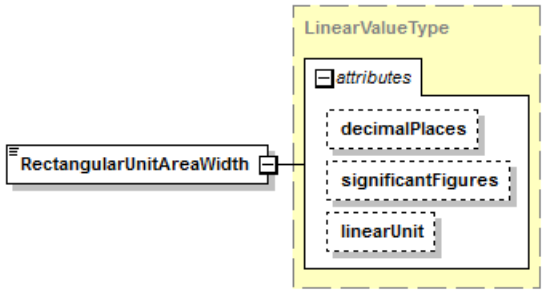
complexType **RectangularUnitAreaType**

diagram	
children	RectangularUnitAreaLength RectangularUnitAreaWidth RectangularUnitAreaOrientation
annotation	documentation The RectangularUnitAreaType defines a rectangular region.

element **RectangularUnitAreaType/RectangularUnitAreaLength**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The RectangularUnitAreaLength element is the length in linear units of the rectangular region.

element **RectangularUnitAreaType/RectangularUnitAreaWidth**

diagram	
type	**LinearValueType**

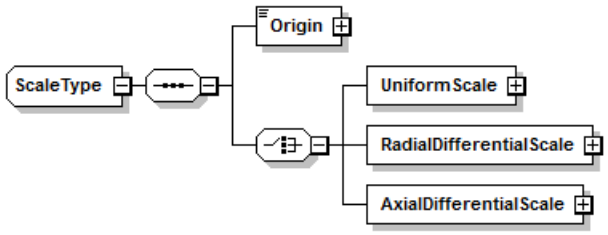
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The RectangularUnitAreaWidth element is the width in linear units of the rectangular region.

element **RectangularUnitAreaType/RectangularUnitAreaOrientation**

diagram	
type	**UnitVectorType**
properties	minOcc 0 maxOcc 1 content complex
facets	Kind / Value / Annotation length 3
attributes	Name / Type / Use / Default / Fixed / Annotation linearUnit **xs:token** decimalPlaces **xs:nonNegativeInteger** significantFigures **xs:nonNegativeInteger** validity **ValidityEnumType**

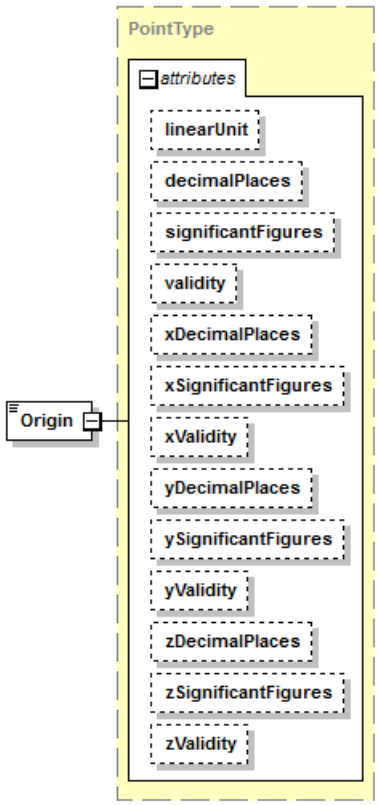
	xDecimalPlaces	**xs:nonNegativeInteger**
	xSignificantFigures	**xs:nonNegativeInteger**
	xValidity	**ValidityEnumType**
	yDecimalPlaces	**xs:nonNegativeInteger**
	ySignificantFigures	**xs:nonNegativeInteger**
	yValidity	**ValidityEnumType**
	zDecimalPlaces	**xs:nonNegativeInteger**
	zSignificantFigures	**xs:nonNegativeInteger**
	zValidity	**ValidityEnumType**
annotation	documentation The optional RectangularUnitAreaOrientation element is the direction of the rectangle's axis along the length of the rectangle.	

complexType **ScaleType**

diagram	
children	**Origin** **UniformScale** **RadialDifferentialScale** **AxialDifferentialScale**
annotation	documentation The ScaleType defines scaling about an origin point.

element **ScaleType/Origin**

diagram



type **PointType**

properties
content complex

facets

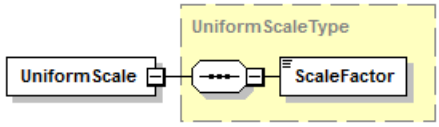
Kind	Value	Annotation
length	3	

attributes

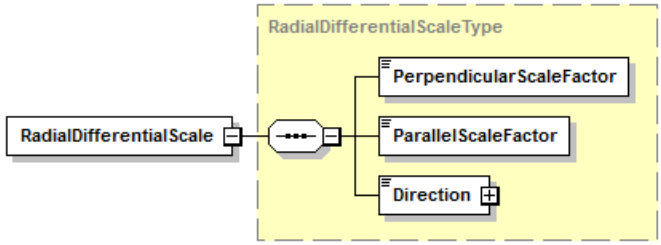
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The Origin element is the origin for the scaling.

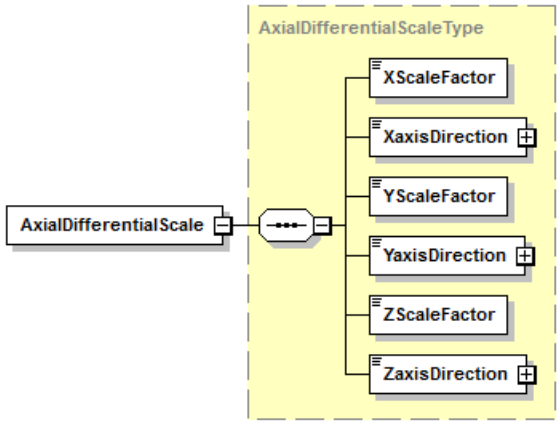
element **ScaleType/UniformScale**

diagram	
type	**UniformScaleType**
properties	content complex
children	**ScaleFactor**
annotation	documentation The UniformScale element signifies uniform scaling about the origin point.

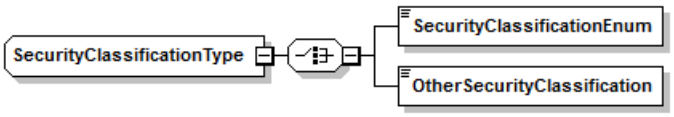
element **ScaleType/RadialDifferentialScale**

diagram	
type	**RadialDifferentialScaleType**
properties	content complex
children	**PerpendicularScaleFactor** **ParallelScaleFactor** **Direction**
annotation	documentation The RadialDifferentialScale element signifies radial differential scaling about the origin point

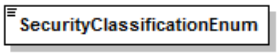
element **ScaleType/AxialDifferentialScale**

diagram	
type	**AxialDifferentialScaleType**
properties	content complex
children	**XScaleFactor** **XaxisDirection** **YScaleFactor** **YaxisDirection** **ZScaleFactor** **ZaxisDirection**
annotation	documentation The AxialDifferentialScale element signifies axial differential scaling about the origin point

complexType **SecurityClassificationType**

diagram	
children	**SecurityClassificationEnum** **OtherSecurityClassification**
annotation	documentation The SecurityClassificationType defines a security classification.

element **SecurityClassificationType/SecurityClassificationEnum**

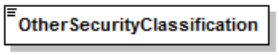
diagram	
type	**SecurityClassificationEnumType**
properties	content simple

facets

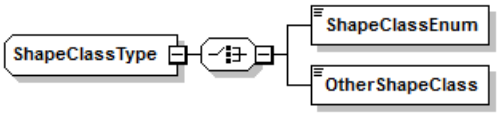
Kind	Value	Annotation
enumeration	NONE	
enumeration	UNCLASSIFIED	
enumeration	RESTRICTED	
enumeration	EU_RESTRICTED	
enumeration	WEU_RESTRICTED	
enumeration	FOR_OFFICIAL_USE_ONLY	
enumeration	PROTECTED	
enumeration	PROTECTED_A	
enumeration	PROTECTED_B	
enumeration	PROTECTED_C	
enumeration	CONFIDENTIAL	
enumeration	EU_CONFIDENTIAL	
enumeration	WEU_CONFIDENTIAL	
enumeration	SECRET	
enumeration	SECRET_NATIONAL_SECURITY_INFORMATION	
enumeration	SECRET_FORMERLY_RESTRICTED_DATA	
enumeration	SECRET_RESTRICTED_DATA	
enumeration	SECRET	
enumeration	EU_SECRET	
enumeration	WEU_SECRET	
enumeration	TOP_SECRET_NATIONAL_SECURITY_INFORMATION	
enumeration	TOP_SECRET_FORMERLY_RESTRICTED_DATA	
enumeration	TOP_SECRET_RESTRICTED_DATA	
enumeration	EU_TOP_SECRET	
enumeration	FOCAL_TOP_SECRET	
enumeration	COMPANY_CONFIDENTIAL	
enumeration	OFFICAL_USE_ONLY	
enumeration	TRADE_SECRET	
enumeration	TRADEMARK	
enumeration	REGISTERED_TRADEMARK	

	enumeration PATENT enumeration UNDEFINED
annotation	documentation The SecurityClassificationEnum element describes an often-used security classification.

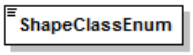
element **SecurityClassificationType/OtherSecurityClassification**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherSecurityClassification element describes a security classification in natural language.

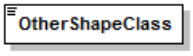
complexType **ShapeClassType**

diagram	
children	**ShapeClassEnum** **OtherShapeClass**
annotation	documentation The ShapeClassType defines the shape class of a part.

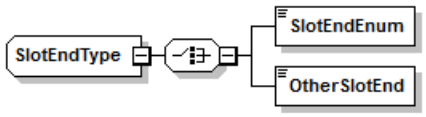
element **ShapeClassType/ShapeClassEnum**

diagram	
type	**ShapeClassEnumType**
properties	content simple
facets	Kind Value Annotation enumeration GEAR enumeration FREEFORM enumeration PRISMATIC enumeration ROTATIONAL enumeration THINWALLED
annotation	documentation The ShapeClassEnum element describes an often-used shape class.

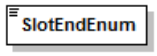
element **ShapeClassType/OtherShapeClass**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherShapeClass element describes a shape class in natural language.

complexType **SlotEndType**

diagram	
children	**SlotEndEnum** **OtherSlotEnd**
annotation	documentation The SlotEndType defines the shape of the end of a slot.

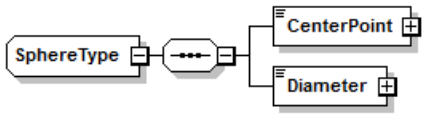
element **SlotEndType/SlotEndEnum**

diagram	
type	**SlotEndEnumType**
properties	content simple
facets	Kind Value Annotation enumeration ROUND enumeration FLAT enumeration OPEN enumeration UNDEFINED
annotation	documentation The SlotEndEnum element describes an often-used shape of the end of a slot.

element **SlotEndType/OtherSlotEnd**

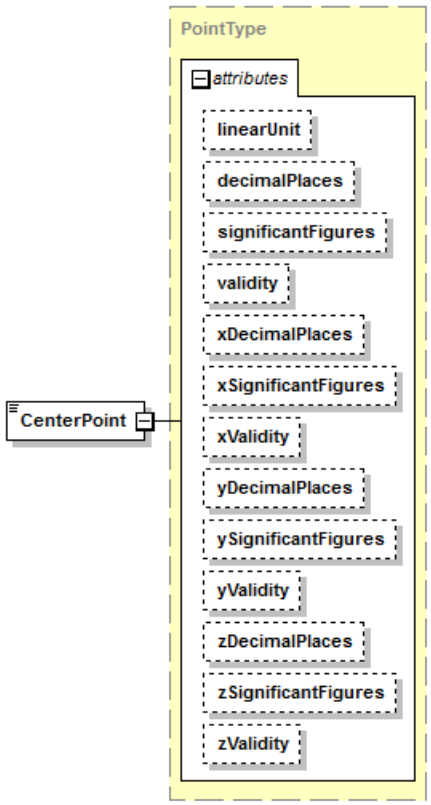
diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherSlotEnd element describes the shape of the end of a slot in natural language.

complexType **SphereType**

diagram	
children	**CenterPoint** **Diameter**
annotation	documentation The SphereType defines a sphere to be used as a spherical DatumTarget. It is not a feature.

element **SphereType/CenterPoint**

diagram



type **PointType**

properties
content complex

facets

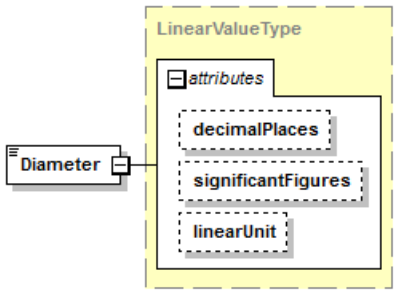
Kind	Value	Annotation
length	3	

attributes

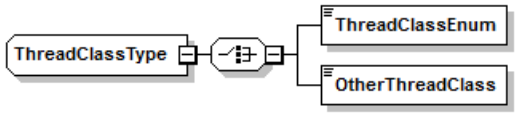
Name	Type	Use	Default	Fixed	Annotation
linearUnit	**xs:token**				
decimalPlaces	**xs:nonNegativeInteger**				
significantFigures	**xs:nonNegativeInteger**				
validity	**ValidityEnumType**				
xDecimalPlaces	**xs:nonNegativeInteger**				
xSignificantFigures	**xs:nonNegativeInteger**				
xValidity	**ValidityEnumType**				
yDecimalPlaces	**xs:nonNegativeInteger**				
ySignificantFigures	**xs:nonNegativeInteger**				
yValidity	**ValidityEnumType**				
zDecimalPlaces	**xs:nonNegativeInteger**				
zSignificantFigures	**xs:nonNegativeInteger**				
zValidity	**ValidityEnumType**				

annotation
documentation
The CenterPoint element is the center of the sphere.

element **SphereType/Diameter**

diagram	
type	**LinearValueType**
properties	content complex
attributes	Name / Type / Use / Default / Fixed / Annotation decimalPlaces **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. significantFigures **xs:nonNegativeInteger** — documentation: See documentation of SpecifiedDecimalType. linearUnit **xs:token** — documentation: The optional linearUnit attribute defines the UnitName for the LinearValueType.
annotation	documentation The Diameter element is the diameter of the sphere.

complexType **ThreadClassType**

diagram	
children	ThreadClassEnum OtherThreadClass
annotation	documentation The ThreadClassType defines a thread class.

element **ThreadClassType/ThreadClassEnum**

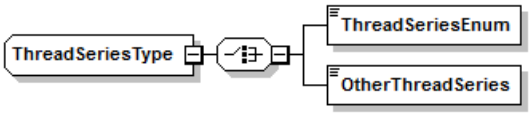
diagram	
type	ThreadClassEnumType
properties	content simple
facets	Kind / Value / Annotation enumeration 1A enumeration 1B enumeration 2A enumeration 2AG enumeration 2B enumeration 3A enumeration 3B

	enumeration EXT_3E enumeration EXT_3F enumeration EXT_3G enumeration EXT_3H enumeration EXT_4E enumeration EXT_4F enumeration EXT_4G enumeration EXT_4H enumeration 4G enumeration 4H enumeration EXT_5E enumeration EXT_5F enumeration EXT_5G enumeration EXT_5H enumeration 5G enumeration 5H enumeration EXT_6E enumeration EXT_6F enumeration EXT_6G enumeration EXT_6H enumeration 6G enumeration 6H enumeration EXT_7E enumeration EXT_7F enumeration EXT_7G enumeration EXT_7H enumeration 7G enumeration 7H enumeration EXT_8E enumeration EXT_8F enumeration EXT_8G enumeration EXT_8H enumeration 8G enumeration 8H enumeration EXT_9E enumeration EXT_9F enumeration EXT_9G enumeration EXT_9H enumeration INT enumeration EXT enumeration SE enumeration G enumeration UNDEFINED
annotation	documentation The ThreadClassEnum element describes an often-used thread class.

element **ThreadClassType/OtherThreadClass**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherThreadClass element describes a thread class in natural language.

complexType **ThreadSeriesType**

diagram	
children	**ThreadSeriesEnum** **OtherThreadSeries**
annotation	documentation The ThreadSeriesType defines a thread series.

element **ThreadSeriesType/ThreadSeriesEnum**

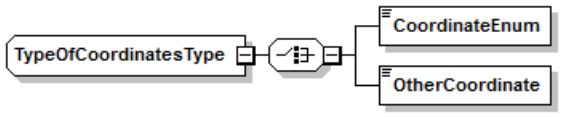
diagram	
type	**ThreadSeriesEnumType**
properties	content simple
facets	Kind Value Annotation enumeration ACME enumeration ACME_C enumeration ACME_G enumeration AMO enumeration ANPT enumeration BUTT enumeration PUSH_BUTT enumeration F_PTF enumeration M enumeration MJ enumeration MJS enumeration NC5_HF enumeration NC5_CSF enumeration NC5_ONF enumeration NC5_IF enumeration NC5_INF enumeration NGO enumeration NGS enumeration NGT enumeration NH enumeration NHR enumeration NPSC

	enumeration NPSF enumeration NPSH enumeration NPSI enumeration NPSL enumeration NPSM enumeration NPT enumeration NPTF enumeration PTF_SAE_SHORT enumeration PTF_SPL_SHORT enumeration PTF_SPL_EXTRA_SHORT enumeration SGT enumeration SPL_PTF enumeration STUB_ACME enumeration UN enumeration UNC enumeration UNF enumeration UNEF enumeration UNJ enumeration UNJC enumeration UNJF enumeration UNJEF enumeration UNR enumeration UNRC enumeration UNRF enumeration UNREF enumeration UNM enumeration UNS enumeration G enumeration R enumeration RC enumeration RP enumeration S enumeration TR enumeration UNDEFINED
annotation	documentation The ThreadSeriesEnum element describes an often-used thread series.

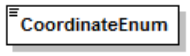
element **ThreadSeriesType/OtherThreadSeries**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherThreadSeries element describes a thread series in natural language.

complexType **TypeOfCoordinatesType**

diagram	
children	**CoordinateEnum** **OtherCoordinate**
annotation	documentation The TypeOfCoordinatesType defines a coordinate system type.

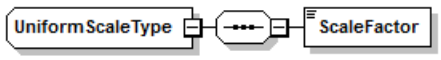
element **TypeOfCoordinatesType/CoordinateEnum**

diagram	
type	**CoordinateEnumType**
properties	content simple
facets	Kind Value Annotation enumeration CARTESIAN_2D enumeration POLAR_2D enumeration CARTESIAN_3D enumeration CYLINDRICAL_3D enumeration SPHERICAL_3D enumeration UNDEFINED
annotation	documentation The CoordinateEnum element describes an often-used coordinate system type.

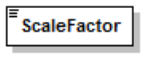
element **TypeOfCoordinatesType/OtherCoordinate**

diagram	
type	**xs:string**
properties	content simple
annotation	documentation The OtherCoordinate element describes a coordinate system type in natural language.

complexType **UniformScaleType**

diagram	
children	**ScaleFactor**
used by	element **ScaleType/UniformScale**
annotation	documentation The UniformScaleType defines a scale factor applied uniformly in all directions.

element **UniformScaleType/ScaleFactor**

diagram	

type	**xs:decimal**
properties	content simple
annotation	documentation The ScaleFactor element is the scale factor, a scale factor of 1.0 indicates no change.

simpleType **BottomEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **BottomType/BottomEnum**
facets	Kind Value Annotation enumeration BLIND enumeration THROUGH enumeration UNDEFINED
annotation	documentation The BottomEnumType enumerates values that describe the bottom type for a 3D internal feature type, a feature created by removing material.

simpleType **CoordinateEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **TypeOfCoordinatesType/CoordinateEnum**
facets	Kind Value Annotation enumeration CARTESIAN_2D enumeration POLAR_2D enumeration CARTESIAN_3D enumeration CYLINDRICAL_3D enumeration SPHERICAL_3D enumeration UNDEFINED
annotation	documentation The CoordinateEnumType enumerates values that describe a coordinate system. CARTESIAN_2D is a two dimensional Cartesian coordinate system with orthogonal X and Y axes. POLAR_2D is a two dimensional polar coordinate system with a radius from the origin and an angle from a starting direction. CARTESIAN_3D is a three dimensional right handed Cartesian coordinate system with orthogonal X, Y, and Z axes. CYLINDRICAL_3D is a three dimensional cylindrical coordinate system with a polar coordinate system where the XY Cartesian plane would be plus height. SPHERICAL_3D is a three dimensional spherical coordinate system with an axis perpendicular to a plane at the origin. It has a radius extending from the origin, an angle that is the angle between the radius and the axis, and an angle that is the angle between a starting direction in the plane and the projection of the radius on the plane.

simpleType **DigitalModelFormatEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **DigitalModelFormatType/DigitalModelFormatEnum**
facets	Kind Value Annotation enumeration STEPAP203 enumeration STEPAP203E2 enumeration STEPAP214 enumeration STEPAP242 enumeration JTOPEN enumeration RPC enumeration PDPMI enumeration ACIS enumeration PARASOLID enumeration AUTODESK enumeration PTC enumeration NX enumeration SOLIDWORKS enumeration CATIA enumeration NOTDEFINED
annotation	documentation The DigitalModelFormatEnumType enumerates values that describe the format of a digital model.

simpleType **DimensionCountEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
facets	Kind Value Annotation enumeration TWODIMENSIONAL enumeration THREEDIMENSIONAL
annotation	documentation The DimensionCountEnumType enumerates values that describe whether a feature or a characteristic is two dimensional or three dimensional.

simpleType **InternalExternalEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
facets	Kind Value Annotation enumeration INTERNAL enumeration EXTERNAL enumeration NOT_APPLICABLE
annotation	documentation The InternalExternalEnumType enumerates values that describe whether a feature is inside or outside of material. INTERNAL = feature is inside of material, e.g., surface of a cylindrical hole EXTERNAL = feature is outside of material, e.g., surface of a cylindrical peg NOT_APPLICABLE = the concept of internal or external does not

	apply, e.g., a plane

simpleType **ManufacturingMethodEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **ManufacturingMethodType/ManufacturingMethodEnum**
facets	Kind / Value / Annotation enumeration ADDITIVE enumeration CASTING enumeration COMPOSITE enumeration FABRICATION enumeration FORMING enumeration JOINING enumeration MACHINING enumeration MOLDING
annotation	documentation The ManufacturingMethodEnumType enumerates values that describe the methods of manufacturing a part. ADDITIVE means additive manufacturing. COMPOSITE manufacturing includes lay-up and filament winding. FABRICATION fabricates existing components. FORMING includes forging, rolling, extrusion, pressing, bending, and shearing. JOINING includes welding, brazing, sintering, bonding, fastening, and press fitting. MACHINING includes all operations that may be done on a machining center or other machine that subtracts material such as milling, turning, drilling, reaming, boring, sawing, hobbing, and electron beam machining. MOLDING includes injection molding.

simpleType **SecurityClassificationEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **SecurityClassificationType/SecurityClassificationEnum**
facets	Kind / Value / Annotation enumeration NONE enumeration UNCLASSIFIED enumeration RESTRICTED enumeration EU_RESTRICTED enumeration WEU_RESTRICTED enumeration FOR_OFFICIAL_USE_ONLY enumeration PROTECTED enumeration PROTECTED_A enumeration PROTECTED_B enumeration PROTECTED_C enumeration CONFIDENTIAL enumeration EU_CONFIDENTIAL enumeration WEU_CONFIDENTIAL enumeration SECRET enumeration SECRET_NATIONAL_SECURITY_INFORMATION enumeration SECRET_FORMERLY_RESTRICTED_DATA enumeration SECRET_RESTRICTED_DATA

	enumeration SECRET enumeration EU_SECRET enumeration WEU_SECRET enumeration TOP_SECRET_NATIONAL_SECURITY_INFORMATION enumeration TOP_SECRET_FORMERLY_RESTRICTED_DATA enumeration TOP_SECRET_RESTRICTED_DATA enumeration EU_TOP_SECRET enumeration FOCAL_TOP_SECRET enumeration COMPANY_CONFIDENTIAL enumeration OFFICAL_USE_ONLY enumeration TRADE_SECRET enumeration TRADEMARK enumeration REGISTERED_TRADEMARK enumeration PATENT enumeration UNDEFINED
annotation	documentation The SecurityClassificationEnumType enumerates values that describe various government and corporate classifications used to protect sensitive information from being improperly disseminated. Security Classification Enumerations for various countries are designated in a table at www.wikipedia.org/wiki/Classified_information

simpleType **ShapeClassEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **ShapeClassType/ShapeClassEnum**
facets	Kind Value Annotation enumeration GEAR enumeration FREEFORM enumeration PRISMATIC enumeration ROTATIONAL enumeration THINWALLED
annotation	documentation The ShapeClassEnumType enumerates values that describe the shape class of a part. FREEFORM includes curved shapes such as turbine blades. PRISMATIC parts are non-rotational. THINWALLED is also known as sheet metal.

simpleType **SlotEndEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **SlotEndType/SlotEndEnum**
facets	Kind Value Annotation enumeration ROUND enumeration FLAT enumeration OPEN enumeration UNDEFINED
annotation	documentation The SlotEndEnumType enumerates values that describe whether a slot has a round, flat (square), or open end.

simpleType **ThreadClassEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **ThreadClassType/ThreadClassEnum**
facets	Kind Value Annotation enumeration 1A enumeration 1B enumeration 2A enumeration 2AG enumeration 2B enumeration 3A enumeration 3B enumeration EXT_3E enumeration EXT_3F enumeration EXT_3G enumeration EXT_3H enumeration EXT_4E enumeration EXT_4F enumeration EXT_4G enumeration EXT_4H enumeration 4G enumeration 4H enumeration EXT_5E enumeration EXT_5F enumeration EXT_5G enumeration EXT_5H enumeration 5G enumeration 5H enumeration EXT_6E enumeration EXT_6F enumeration EXT_6G enumeration EXT_6H enumeration 6G enumeration 6H enumeration EXT_7E enumeration EXT_7F enumeration EXT_7G enumeration EXT_7H enumeration 7G enumeration 7H enumeration EXT_8E enumeration EXT_8F enumeration EXT_8G enumeration EXT_8H enumeration 8G enumeration 8H

	enumeration EXT_9E enumeration EXT_9F enumeration EXT_9G enumeration EXT_9H enumeration INT enumeration EXT enumeration SE enumeration G enumeration UNDEFINED
annotation	documentation The ThreadClassEnumType enumerates values that describe a standard thread class or a thread tolerance class for the thread fit. Thread tolerance class enumerations are designated in ASME B1.1-2003, Section 4.1 and ISO 965-1. ISO external thread tolerance classes such as "3e" are implemented as "EXT_3E" in QIF.

simpleType **ThreadSeriesEnumType**

type	restriction of **xs:NMTOKEN**
properties	base xs:NMTOKEN
used by	element **ThreadSeriesType/ThreadSeriesEnum**
facets	Kind Value Annotation enumeration ACME enumeration ACME_C enumeration ACME_G enumeration AMO enumeration ANPT enumeration BUTT enumeration PUSH_BUTT enumeration F_PTF enumeration M enumeration MJ enumeration MJS enumeration NC5_HF enumeration NC5_CSF enumeration NC5_ONF enumeration NC5_IF enumeration NC5_INF enumeration NGO enumeration NGS enumeration NGT enumeration NH enumeration NHR enumeration NPSC enumeration NPSF enumeration NPSH enumeration NPSI enumeration NPSL enumeration NPSM

	enumeration NPT enumeration NPTF enumeration PTF_SAE_SHORT enumeration PTF_SPL_SHORT enumeration PTF_SPL_EXTRA_SHORT enumeration SGT enumeration SPL_PTF enumeration STUB_ACME enumeration UN enumeration UNC enumeration UNF enumeration UNEF enumeration UNJ enumeration UNJC enumeration UNJF enumeration UNJEF enumeration UNR enumeration UNRC enumeration UNRF enumeration UNREF enumeration UNM enumeration UNS enumeration G enumeration R enumeration RC enumeration RP enumeration S enumeration TR enumeration UNDEFINED
annotation	documentation The ThreadSeriesEnumType enumerates values that describe a standard thread series. Thread series enumerations are designated in ASME B1.7-2006, Table 3 - Thread Series Designations and Table 4 - ISO Thread Series Designations. Note: Table 4 references ISO 228-1, ISO 7-1, ISO/R1501, ISO 2901, ISO 2902, ISO 2903, and ISO 2904.

