Energistics common
Technical Reference Guide v2.3

Energistics common Overview	The Energistics Common Technical Architecture (CTA) is a set of technology, standards, and best practices that provides a common foundation of shared resources for use across Energistics domain standards: RESQML, WITSML, and PRODML The CTA is composed of Energistics *common* (EML), the set of data objects shared by all of the domain standards as well as other technologies and specifications adopted and/or developed by Energistics. For the complete list of CTA resources, see the *Download_Package_READ_ME.pdf*. For more information, see the *Energistics CTA Overview Guide v2.3*.
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Abstract	This document lists and defines packages, data objects, elements, and relationships for Energistics *common*. Its contents are produced from the energyML UML model, the same model used to produce the schemas.
Document type	Technical reference guide
Language	U.S. English
Keywords:	standards, energy, data, information, process, reservoir model, shared earth model

ENERGISTICS

ADOPT > ADVANCE > ACCELERATE

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Standard Version	**Document Version**	**Date**	**Comment**
2.3	1.0	May 16, 2022	For a summary of changes, see the Energistics_CTA_v2.3RC_Release_Notes.PDF

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1 Introduction

This document:

- Lists and defines data objects, elements, and relationships for the data object schemas in the Energistics *common* folder of the energyML download package.
- Is produced from the common package of the UML model from which the Energistics *common* XSDs are produced, using a modeling tool named *Enterprise Architect (EA)*. However, only this document contains the definitions for the data objects, elements, and attributes.

IMPORTANT! This document includes the UML diagrams from EA. In some cases the diagrams are very large and thus appear very small in this standard document size PDF. For better view of the diagrams:

- Use the zoom feature in your PDF viewer.
- View the UML model directly. The XMI file of the UML model is included in the energyML download package (in the common→doc folder). This XMI format can be imported by any UML data modeling tool.

1.1 Audience, Purpose and Scope

This document:

- Is for information technology (IT) professionals—programmers, developers, architects and others—who are implementing Energistics domain standards (e.g., into a software package).
- Lists and defines all classes, complex types, elements, and associations in the XML schemas. Each of the subsequent chapters are generated from the relevant package in the UML model.
  - **Organization.** Each chapter describes one of the main packages that make up the EA project. Each chapter is organized by sub-package (if any), element types, and alpha-order within element type.
  - NOTE: The MeasureType package was moved from its location in the EA model to be the last chapter in this document (Chapter 21) because the list of measure types is very long.

1.2 Resource Set

- For the complete list of resources (schemas, documents, etc.) available for the Energistics Common Technical Architecture, see *Download_Package_READ_ME.pdf*.
- ML-specific resources are listed in that ML's technical usage guide (or release notes).

2 Abstract

Package: xsd_schemas

Notes: The Abstract package contains the base XSD types from which all EnergyML data objects are derived.

«XSDcomplexType»
AbstractGrowingObjectPart
«XSDelement»
+ Creation: TimeStamp
+ ExtensionNameValue: ExtensionNameValue [0..1]
+ LastUpdate: TimeStamp
«XSDattribute»
+ objectVersion: String64 [0..1]
+ uid: String64
«XSDcomplexType»
AbstractObject
«XSDelement»
+ Aliases: ObjectAlias [0..*]
+ BusinessActivityHistory: String64 [0..-1]
+ Citation: Citation
+ CustomData: CustomData [0..1]
+ Existence: ExistenceKindExt [0..1]
+ ExtensionNameValue: ExtensionNameValue [0..*]
+ ObjectVersionReason: String2000 [0..1]
+ OSDUIntegration: OSDUIntegration [0..1]
«XSDattribute»
+ objectVersion: String64 [0..1]
+ schemaVersion: String64
+ uuid: UuidString
«XSDcomplexType»
AbstractMdGrowingPart
«XSDelement»
+ Md: MeasuredDepth
«XSDcomplexType»
AbstractMdIntervalGrowingPart
«XSDelement»
+ MdInterval: MdInterval
«XSDcomplexType»
AbstractTimeGrowingPart
«XSDelement»
+ Time: TimeStamp
«XSDcomplexType»
AbstractTimeIntervalGrowingPart
«XSDelement»
+ TimeInterval: DateTimeInterval
«XSDcomplexType»
AbstractActiveObject
«XSDelement»
+ ActiveStatus: ActiveStatusKind
TypeEnum
«enumeration»
ActiveStatusKind
active
inactive
«XSDcomplexType»
AbstractGrowingObject
«XSDelement»
+ Index: GrowingObjectIndex
«XSDcomplexType»
GrowingObjectIndex
«XSDelement»
+ Datum: AbstractReferencePoint [0..1]
+ Direction: IndexDirection
+ IndexKind: DataIndexKind
+ IndexPropertyKind: PropertyKind [0..1]
+ Uom: UnitOfMeasureExt
«XSDcomplexType»
AbstractMdGrowingObject
«XSDelement»
+ MdInterval: MdInterval [0..1]
«XSDcomplexType»
AbstractTimeGrowingObject
«XSDelement»
+ TimeInterval: DateTimeInterval [0..1]

2.1 AbstractActiveObject

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/3/2021 *Last modified:*11/3/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ActiveStatus	ActiveStatusKind	Describes the active status of the object, whether active or inactive. STORE MANAGED. This is populated by a store on read. Customer provided values are ignored on write

Associations

Association	Notes
From: **AbstractActiveObject.** To: **AbstractObject**	
From: **AbstractActiveObject.** To: **ActiveStatusKind**	
From: **ChannelSet.** To: **AbstractActiveObject**	
From: **Well.** To: **AbstractActiveObject**	
From: **Channel.** To: **AbstractActiveObject**	
From: **AbstractGrowingObject.** To: **AbstractActiveObject**	
From: **WellboreGeology.** To: **AbstractActiveObject**	
From: **Rig.** To: **AbstractActiveObject**	
From: **Wellbore.** To: **AbstractActiveObject**	
From: **Log.** To: **AbstractActiveObject**	
From: **RigUtilization.** To: **AbstractActiveObject**	

2.2 AbstractContextualObject

Type: Class *Stereotype:* «XSDtopLevelElement»
Detail: *Created:* 4/30/2014 *Last modified:*11/12/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes: *Substitution group for contextual data objects.*

Associations

Association	Notes
From**: AbstractContextualObject.** To: **AbstractObject**	

2.3 AbstractDataObject

Type: Class *Stereotype:* «XSDtopLevelElement»
Detail: *Created:* 4/30/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes: *Substitution group for normative data objects.*

Associations

Association	Notes
From**: AbstractDataObject.** To: **AbstractObject**	

2.4 AbstractGrowingObject

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/12/2019 *Last modified:*2/12/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Index	GrowingObjectIndex	Information about the growing object's index.

Associations

Association	Notes
From: **AbstractGrowingObject.** To: **AbstractActiveObject**	
From: **AbstractGrowingObject.** To: **GrowingObjectIndex**	
From: **AbstractTimeGrowingObject.** To: **AbstractGrowingObject**	
From: **AbstractMdGrowingObject.** To: **AbstractGrowingObject**	

2.5 AbstractGrowingObjectPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/28/2018 *Last modified:*3/9/2020 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Creation	TimeStamp	Date and time the document was created in the source application or, if that information is not available, when it was saved to the file. This is the equivalent of the ISO 19115 CI_Date where the CI_DateTypeCode = ”creation" Format: YYYY-MM-DDThh:mm:ssZ[+/-]hh:mm Legacy DCGroup - created
ExtensionNameValue	ExtensionNameValue	
LastUpdate	TimeStamp	An ISO 19115 EIP-derived set of metadata attached to all specializations of AbstractObject to ensure the traceability of each individual independent (top level) element.
objectVersion	String64	
uid	String64	Unique identifier for this instance of a growing part.

Associations

Association	Notes
From**: AbstractMdGrowingPart.** To: **AbstractGrowingObjectPart**	
From**: AbstractTimeIntervalGrowingPart.** To: **AbstractGrowingObjectPart**	
From**: AbstractTimeGrowingPart.** To: **AbstractGrowingObjectPart**	
From**: AbstractMdIntervalGrowingPart.** To: **AbstractGrowingObjectPart**	

2.6 AbstractMdGrowingObject

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A growing object where the parts are of type eml:AbstractMdGrowingPart or eml:AbstractMdIntervalGrowingPart.*

Attributes

Name	Type	Notes
MdInterval	MdInterval	The measured depth interval for the parts in this growing object. MdTop MUST equal the minimum measured depth of any part (interval). MdBase MUST equal the maximum measured depth of any part (interval). In an ETP store, the interval values are managed by the store. This MUST be specified when there are parts in the object, and it MUST NOT be specified when there are no parts in the object.

Associations

Association	Notes
From: **AbstractMdGrowingObject.** To: **AbstractGrowingObject**	
From: **MudLogReport.** To: **AbstractMdGrowingObject**	
From: **InterpretedGeology.** To: **AbstractMdGrowingObject**	
From: **ShowEvaluation.** To: **AbstractMdGrowingObject**	
From: **Trajectory.** To: **AbstractMdGrowingObject**	
From: **CuttingsGeology.** To: **AbstractMdGrowingObject**	
From: **WellboreGeometry.** To: **AbstractMdGrowingObject**	

2.7 AbstractMdGrowingPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/28/2018 *Last modified:*1/24/2019 *Status:* Proposed *Author:* William McKenzie
Notes:

Attributes

Name	Type	Notes
Md	MeasuredDepth	The measured depth of this object growing part. STORE MANAGED. This is populated by a store on read. Customer provided values are ignored on write

Associations

Association	Notes
From**: AbstractMdGrowingPart.** To: **AbstractGrowingObjectPart**	
From**: TrajectoryStation.** To: **AbstractMdGrowingPart**	

2.8 AbstractMdIntervalGrowingPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/28/2018 *Last modified:*1/24/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MdInterval	MdInterval	The measured depth interval which contains this object growing part. STORE MANAGED. This is populated by a store on read. Customer provided values are ignored on write

Associations

Association	Notes
From: **AbstractMdIntervalGrowingPart.** To: **AbstractGrowingObjectPart**	
From: **CuttingsGeologyInterval.** To: **AbstractMdIntervalGrowingPart**	
From: **ShowEvaluationInterval.** To: **AbstractMdIntervalGrowingPart**	
From: **InterpretedGeologyInterval.** To: **AbstractMdIntervalGrowingPart**	
From: **MudlogReportInterval.** To: **AbstractMdIntervalGrowingPart**	
From: **WellboreGeometrySection.** To: **AbstractMdIntervalGrowingPart**	

2.9 AbstractObject

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/25/2014 *Last modified:*11/12/2016 *Status:* Proposed *Author:* philippe
Notes: *The parent class for all top-level elements across the Energistics MLs.*

Attributes

Name	Type	Notes
Aliases	ObjectAlias	
BusinessActivityHistory	String64	Business processes/workflows that the data object has been through (ex. well planning, exploration).
Citation	Citation	Use the citation data element to optionally add simple authorship metadata to any Energistics object. The citation data object uses attributes like title, originator, editor, last update, etc. from the *Energy Industry Profile of ISO 19115-1 (EIP).*
CustomData	CustomData	
Existence	ExistenceKindExt	A lifecycle state like actual, required, planned, predicted, etc. This is used to qualify any top-level element (from Epicentre 2.1).
ExtensionNameValue	ExtensionNameValue	
objectVersion	String64	
ObjectVersionReason	String2000	An optiona, human-readable reason why this version of the object was created.
OSDUIntegration	OSDUIntegration	
schemaVersion	String64	The version of the Energistics schema used for a data object. The schema version is the first 2 digits of an ML version. EXAMPLES: • For WITSML v2.0 the schema version is 20 • For RESQML v2.0.1 the schema version is 20
uuid	UuidString	A universally unique identifier (UUID) as defined by RFC 4122. For rules and guidelines about the format of UUIDs with the current version of Energistics standards, see the Energistics Identifier Specification v5.0. IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.

Associations

Association	Notes
From: **AbstractObject.** To: **OSDUIntegration**	
From: **AbstractObject.** To: **Citation**	
From: **AbstractObject.** To: **ExistenceKindExt**	
From: **AbstractObject.** To: **ExtensionNameValue**	
From: **AbstractObject.** To: **ObjectAlias**	
From: **AbstractObject.** To: **CustomData**	
From: **BhaRun.** To: **AbstractObject**	
From: **WeightingFunction.** To: **AbstractObject**	
From: **FluidSampleAcquisitionJob.** To: **AbstractObject**	
From: **FluidAnalysis.** To: **AbstractObject**	
From: **WellboreMarker.** To: **AbstractObject**	
From: **ErrorTerm.** To: **AbstractObject**	
From: **Geocentric3dCrs.** To: **AbstractObject**	
1 From: **MemberObject.**ObjectReference To: **AbstractObject**	A reference to an object that is defined within the context of the specified wellbore.
From: **AbstractContextualObject.** To: **AbstractObject**	
From: **DepthRegImage.** To: **AbstractObject**	
From: **WellboreMarkerSet.** To: **AbstractObject**	
From: **Tubular.** To: **AbstractObject**	
From: **DtsInstrumentBox.** To: **AbstractObject**	
From: **ToolErrorModelDictionary.** To: **AbstractObject**	
From: **VerticalCrs.** To: **AbstractObject**	
From: **ProductVolume.** To: **AbstractObject**	
From: **ProductionOperation.** To: **AbstractObject**	
From: **LocalGridSet.** To: **AbstractObject**	
From: **Risk.** To: **AbstractObject**	
From: **DasAcquisition.** To: **AbstractObject**	
From: **ErrorTermDictionary.** To: **AbstractObject**	
From: **ActivityTemplate.** To: **AbstractObject**	
From: **WeightingFunctionDictionary.** To: **AbstractObject**	
From: **DtsMeasurement.** To: **AbstractObject**	
From: **PressureTransientAnalysis.** To: **AbstractObject**	
From: **CollectionsToDataobjectsAssociationSet.** To: **AbstractObject**	
0..1 From: **ChannelSet.**DataSource To: **AbstractObject**	

Association	Notes
From: **AbstractGraphicalInformation.**TargetObject **1..*** To: **AbstractObject**	
From: **BusinessAssociate.** To: **AbstractObject**	
From: **PtaDataPreProcess.** To: **AbstractObject**	
From: **Target.** To: **AbstractObject**	
From: **Activity.** To: **AbstractObject**	
From: **DataAssuranceRecord.** To: **AbstractObject**	
From: **dummy.** To: **AbstractObject**	
From: **DasInstrumentBox.** To: **AbstractObject**	
From: **DtsInstalledSystem.** To: **AbstractObject**	
From: **DownholeComponent.** To: **AbstractObject**	
From: **Facility.** To: **AbstractObject**	
From: **Aggregate.**AggregateMember **1..*** To: **AbstractObject**	A single data object. Note that the objects can be specified in any order but it is recommended that the most independent data objects be specified first (e.g., well before wellbore).
From: **CementJobEvaluation.** To: **AbstractObject**	
From: **ColumnBasedTable.** To: **AbstractObject**	
From: **SidewallCore.** To: **AbstractObject**	
From: **OTDRAcquisition.** To: **AbstractObject**	
From: **PropertyKindDictionary.** To: **AbstractObject**	
From: **StratigraphicColumn.** To: **AbstractObject**	
From: **ChannelSet.** To: **AbstractObject**	
From: **AbstractFeature.** To: **AbstractObject**	
From: **TimeSeries.** To: **AbstractObject**	
From: **LoggingToolKindDictionary.** To: **AbstractObject**	
From: **Channel.**DataSource **0..1** To: **AbstractObject**	The containing data object for the channel set. For example, for a Log, this could be either the wellbore for the log or a LoggingRun
From: **FlowTestActivity.** To: **AbstractObject**	
From: **ToolErrorModel.** To: **AbstractObject**	
From: **FluidSampleContainer.** To: **AbstractObject**	
From: **ConvCore.** To: **AbstractObject**	
From: **StimJobStage.** To: **AbstractObject**	
From: **AbstractDataObject.** To: **AbstractObject**	

Association	Notes
From: **WellCompletion.** To: **AbstractObject**	
From: **SurveyProgram.** To: **AbstractObject**	
From: **LoggingToolKind.** To: **AbstractObject**	
From: **ProductFlowModel.** To: **AbstractObject**	
From: **AbstractFeatureInterpretation.** To: **AbstractObject**	
From: **OpsReport.** To: **AbstractObject**	
From: **PropertyKind.** To: **AbstractObject**	
From: **RepresentationIdentitySet.** To: **AbstractObject**	
From: **AbstractRepresentation.** To: **AbstractObject**	
From: **WellboreCompletion.** To: **AbstractObject**	
From: **Channel.** To: **AbstractObject**	
From: **ReportingHierarchy.** To: **AbstractObject**	
From: **WellCMLedger.** To: **AbstractObject**	
From: **dummy2.** To: **AbstractObject**	
From: **AbstractProperty.** To: **AbstractObject**	
From: **CementJob.** To: **AbstractObject**	
From: **Risk.**ObjectReference **0..*** To: **AbstractObject**	A reference to an object that is defined within the context of a wellbore.
From: **Attachment.** To: **AbstractObject**	
From: **StimPerforationCluster.** To: **AbstractObject**	
From: **Aggregate.** To: **AbstractObject**	
From: **DataobjectCollection.** To: **AbstractObject**	
From: **AbstractActiveObject.** To: **AbstractObject**	
From: **ChannelKindDictionary.** To: **AbstractObject**	
From: **Report.** To: **AbstractObject**	
From: **Geographic3dCrs.** To: **AbstractObject**	
From: **AbstractReferencePoint.** To: **AbstractObject**	
From: **FluidCharacterization.** To: **AbstractObject**	
From: **FluidSample.** To: **AbstractObject**	
From: **StimJob.** To: **AbstractObject**	
From: **FluidSystem.** To: **AbstractObject**	
From: **AbstractCompoundCrs.** To: **AbstractObject**	
From: **FluidsReport.** To: **AbstractObject**	
From: **TimeSeriesStatistic.** To: **AbstractObject**	

Association	Notes
From**: AbstractColorMap.** To: **AbstractObject**	
From**: PtaDeconvolution.** To: **AbstractObject**	
From**: ReportingEntity.** To: **AbstractObject**	
From**: Attachment.**ObjectReference **0..1** To: **AbstractObject**	
From**: ColorMapDictionary.** To: **AbstractObject**	
From**: TimeSeriesData.** To: **AbstractObject**	
From**: AbstractSimpleProductVolume.** To: **AbstractObject**	
From**: DataAssuranceRecord.**ReferencedData To: **AbstractObject**	This holds a GUID which is a reference to the data object whose conformance with the policy is being assessed.
From**: FlowTestJob.** To: **AbstractObject**	
From**: Abstract2dCrs.** To: **AbstractObject**	
From**: ChannelKind.** To: **AbstractObject**	
From**: GraphicalInformationSet.** To: **AbstractObject**	
From**: DrillReport.** To: **AbstractObject**	
From**: SingleCollectionAssociation.**Dataobject **1..*** To: **AbstractObject**	
From**: FiberOpticalPath.** To: **AbstractObject**	

2.10 AbstractTimeGrowingObject

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A growing object where the parts are of type eml:AbstractTimeGrowingPart or eml:AbstractTimeIntervalGrowingPart.*

Attributes

Name	Type	Notes
TimeInterval	DateTimeInterval	The time interval for the parts in this growing object. StartTime MUST equal the minimum time of any part (interval). EndTime MUST equal the maximum time of any part (interval). In an ETP store, the interval values are managed by the store. This MUST be specified when there are parts in the object, and it MUST NOT be specified when there are no parts in the object.

Associations

Association	Notes
From**: AbstractTimeGrowingObject.** To: **AbstractGrowingObject**	

2.11 AbstractTimeGrowingPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/11/2019 *Last modified:*2/11/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Time	TimeStamp	STORE MANAGED. This is populated by a store on read. Customer provided values are ignored on write

Associations

Association	Notes
From**: AbstractTimeGrowingPart.** To: **AbstractGrowingObjectPart**	

2.12 AbstractTimeIntervalGrowingPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/11/2019 *Last modified:*2/12/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
TimeInterval	DateTimeInterval	STORE MANAGED. This is populated by a store on read. Customer provided values are ignored on write

Associations

Association	Notes
From**: AbstractTimeIntervalGrowingPart.** To: **AbstractGrowingObjectPart**	

2.13 ActiveStatusKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 4/28/2015 *Last modified:*11/3/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies the active status of the object: active or inactive.*

Attributes

Name	Type	Notes
active		Currently active. For channels and growing objects, data or parts are being added, updated or deleted. For other objects, channels or growing objects associated with them are active.
inactive		Currently inactive. For channels and growing objects, no data or parts have been recently added, updated or deleted. For other objects, no channels or growing objects associated with them are currently active.

Associations

Association	Notes
From**: ActiveStatusKind.** To: **TypeEnum**	
From**: Channel.** To: **ActiveStatusKind**	
From**: AbstractActiveObject.** To: **ActiveStatusKind**	

2.14 AliasIdentifierKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
abbreviation		A shortened form of a word or phrase.
acronym		An abbreviation formed from the initial letters of the full name and often pronounced as a word.
common name		A common name by which a person, company, or other entity is known.
industry code		Short identifier from industry standard register.
industry name		Name from industry standard register.
lease identifier		A name usually associated with the lease or block, the leaseholder, or other entity associated with the lease.
local language name		An alias name in local language.
preferred name		Preferred name assigned by the firm.
project number		This is the number by which a project is known.
regulatory identifier		The identifier assigned and used by the regulatory agency that permitted the facility (e.g. well, wellbore, completion).
regulatory name		The name assigned and used by the regulatory agency that permitted the facility (e.g. well).
short name		A short name or abbreviated name.
subscription well name		Well name supplied by subscription organisation.
unique identifier		Unique company identifier tagged to an object throughout its lifecycle (e.g. well, wellbore).
wellbore number		A wellbore identifier in context of a regulatory agency, e.g. NPD, OGA.

Associations

Association	Notes
From: **AliasIdentifierKind.** To: **TypeEnum**	
From: **AliasIdentifierKindExt.** To: **AliasIdentifierKind**	

2.15 AliasIdentifierKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: AliasIdentifierKindExt.** To: **AliasIdentifierKind**	
From**: AliasIdentifierKindExt.** To: **EnumExtensionPattern**	
From**: ObjectAlias.** To: **AliasIdentifierKindExt**	

2.16 Citation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/30/2014 *Last modified:*11/10/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes: *An ISO 19115 EIP-derived set of metadata attached to all specializations of AbstractObject to ensure the traceability of each individual independent (top level) element.*

Attributes

Name	Type	Notes
Creation	TimeStamp	Date and time the document was created in the source application or, if that information is not available, when it was saved to the file. This is the equivalent of the ISO 19115 CI_Date where the CI_DateTypeCode = ”creation" Format: YYYY-MM-DDThh:mm:ssZ[+/-]hh:mm Legacy DCGroup - created
Description	String2000	User descriptive comments about the object. Intended for end-user use (human readable); not necessarily meant to be used by software. This is the equivalent of the ISO 19115 abstract.CharacterString Legacy DCGroup - description
DescriptiveKeywords	String2000	Key words to describe the activity, for example, history match or volumetric calculations, relevant to this object. Intended to be used in a search function by software. This is the equivalent in ISO 19115 of descriptiveKeywords.MD_Keywords Legacy DCGroup - subject
Editor	String64	Name (or other human-readable identifier) of the last person who updated the object. This is the equivalent in ISO 19115 to the CI_Individual.name or the CI_Organization.name of the citedResponsibleParty whose role is "editor". Legacy DCGroup - contributor

EditorHistory	String64	The history of editors for this object. If provided, the first editor should be equivalent to Originator and the last editor should be equivalent to Editor.
Format	String2000	Software or service that was used to originate the object and the file format created. Must be human and machine readable and unambiguously identify the software by including the organization name, software application name and software version. The intent is that these values should be provided by the application that creates or edits the data object and NOT a store that receives the data object. The format is as follows: organizationName:applicationName:applicationVersion/format When appropriate, these values should match those provided in ETP via the ServerCapabilities record and the RequestSession and OpenSession messages.
LastUpdate	TimeStamp	Date and time the document was last modified in the source application or, if that information is not available, when it was last saved to the RESQML format file. This is the equivalent of the ISO 19115 CI_Date where the CI_DateTypeCode = ”lastUpdate" Format: YYYY-MM-DDThh:mm:ssZ[+/-]hh:mm Legacy DCGroup - modified
Originator	String64	Name (or other human-readable identifier) of the person who initially originated the object or document in the source application. If that information is not available, then this is the user who created the format file. The originator remains the same as the object is subsequently edited. This is the equivalent in ISO 19115 to the CI_Individual.name or the CI_Organization.name of the citedResponsibleParty whose role is "originator". Legacy DCGroup - author

Title	String256	One line description/name of the object. This is the equivalent in ISO 19115 of CI_Citation.title Legacy DCGroup - title

Associations

Association	Notes
From**: AbstractObject.** To: **Citation**	
From**: StimJob.** To: **Citation**	

2.17 CustomData

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/18/2014 *Last modified:*12/17/2018 *Status:* Proposed *Author:* wsmckenz
Notes: WITSML - Custom or User Defined Element and Attributes Component Schema.
Specify custom element, attributes, and types in the custom data area.

Associations

Association		Notes
0..*	From**: CustomData.**CustomDataValue To: **CustomDataValue**	
	From**: AbstractObject.** To: **CustomData**	

2.18 CustomDataValue

Type: Class *Stereotype:* «XSDany»
Detail: *Created:* 5/18/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes: Any element or attribute in any namespace.
It is strongly recommended that all custom data definitions be added to a unique namespace.

Associations

Association	Notes
From**: CustomData.**CustomDataValue **0..*** To: **CustomDataValue**	

2.19 ExistenceKind

Type: Enumeration Stereotype:
Detail: Created: 2/26/2016 *Last modified:*7/9/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A list of lifecycle states like actual, required, planned, predicted, etc. These are used to qualify any top-level element (from Epicentre 2.1).*

Attributes

Name	Type	Notes
actual		The data describes a concrete, real implementation currently setup in the field.
planned		The data describes a planned implementation of an object under study and/or analysis, subject to evolve, prior to being concretely deployed.
simulated		The data is generated as a result of a simulation.
test		The data describes a concrete implementation currently setup in the field for test purpose.

Associations

Association	Notes
From**: ExistenceKind.** To: **TypeEnum**	
From**: ExistenceKindExt.** To: **ExistenceKind**	

2.20 ExistenceKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/8/2021 *Last modified:*12/2/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: An Energistics modeling pattern that allows an implementation to extend the ExistenceKind enumeration.
A writer can use this field to write a string (enumeration) that is not part of the official enumeration.
A reader must accept this text but is not required to understand or process it.

Associations

Association	Notes
From: **ExistenceKindExt.** To: **EnumExtensionPattern**	
From: **ExistenceKindExt.** To: **ExistenceKind**	
From: **AbstractObject.** To: **ExistenceKindExt**	

2.21 ExtensionNameValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*12/12/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Extension values Schema. The intent is to allow standard ML domain "named" extensions without having to modify the schema. A client or server can ignore any name that it does not recognize but certain metadata is required to allow generic clients or servers to process the value.*

Attributes

Name	Type	Notes
Description	String2000	A textual description of the extension.
DTim	TimeStamp	The date-time associated with the value.
Index	long	Indexes things with the same name. That is, 1 indicates the first one, 2 indicates the second one, etc.
MeasureClass	MeasureClass	The kind of the measure. For example, "length". This should be specified if the value requires a unit of measure.
Name	String64	The name of the extension. Each standard name should document the expected measure class. Each standard name should document the expected maximum size. For numeric values the size should be in terms of xsd types such as int, long, short, byte, float or double. For strings, the maximum length should be defined in number of characters. Local extensions to the list of standard names are allowed but it is strongly recommended that the names and definitions be approved by the respective SIG Technical Team before use.
Value	StringMeasure	The value of the extension. This may also include a uom attribute. The content should conform to constraints defined by the data type.

Associations

Association	Notes
From**: AbstractObject.** To: **ExtensionNameValue**	

Association		Notes
1	From: **CustomPvtModelParameter.**CustomParameterValue To: **ExtensionNameValue**	WITSML - Extension values Schema. The intent is to allow standard WITSML "named" extensions without having to modify the schema. A client or server can ignore any name that it does not recognize but certain meta data is required in order to allow generic clients or servers to process the value.
0..*	From: **DtsCalibration.**ExtensionNameValue To: **ExtensionNameValue**	WITSML - Extension values Schema. The intent is to allow standard WITSML "named" extensions without having to modify the schema. A client or server can ignore any name that it does not recognize but certain meta data is required in order to allow generic clients or servers to process the value.

2.22 GrowingObjectIndex

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/10/2021 *Last modified:*12/2/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: Common information about the index for a growing object.

IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error. None of the sub-elements can be changed.

Attributes

Name	Type	Notes
Datum	AbstractReferencePoint	For depth indexes, this is a pointer to a reference point defining the datum to which all of the index values are referenced. IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.
Direction	IndexDirection	The direction of the index, either increasing or decreasing. Index direction may not change within the life of a growing object. IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.
IndexKind	DataIndexKind	The kind of index (date time, measured depth, etc.). IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.
IndexPropertyKind	PropertyKind	An optional value pointing to a PropertyKind. Energistics provides a list of standard property kinds that represent the basis for the commonly used properties in the E&P subsurface workflow. This PropertyKind enumeration is in the external PropertyKindDictionary XML file in the Common ancillary folder. IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.

Uom	UnitOfMeasureExt	The unit of measure of the index. Must be one of the units allowed for the specified IndexKind (e.g., time or depth). IMMUTABLE. Set on object creation and MUST NOT change thereafter. Customer provided changes after creation are an error.

Associations

Association	Notes
From**: AbstractGrowingObject.** To: **GrowingObjectIndex**	

2.23 ObjectAlias

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/30/2014 *Last modified:*11/12/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes: *Use this to create multiple aliases for any object instance. Note that an Authority is required for each alias.*

Attributes

Name	Type	Notes
authority	String64	
Description	String2000	
EffectiveDateTime	TimeStamp	The date and time when an alias name became effective.
Identifier	String64	
IdentifierKind	AliasIdentifierKindExt	
TerminationDateTime	TimeStamp	The data and time when an alias name ceased to be effective.

Associations

Association	Notes
From**: ObjectAlias.** To: **AliasIdentifierKindExt**	
From**: Column.**Aliases **0..*** To: **ObjectAlias**	Aliases which are used for this column (title).
From**: FluidCharacterizationParameter.**KeywordAlias **0..*** To: **ObjectAlias**	Use this to create multiple aliases for any object instance. Note that an Authority is required for each alias.
From**: FluidCharacterizationTableColumn.**KeywordAlias **0..*** To: **ObjectAlias**	Use this to create multiple aliases for any object instance. Note that an Authority is required for each alias.
From**: AbstractObject.** To: **ObjectAlias**	

3 Activities

Package: xsd_schemas

Notes: The Activities package contains the classes related to the Activity model schemas. Activities allow you to define activities and reference affected data object(s). Their purpose is to capture:

- The activities (tasks or actions) that occurred to create and edit an object, for example, a subsurface model in RESQML.

How the activities relate to the data being exchanged.

3.1 AbstractActivityParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *General parameter value used in one instance of activity*

Attributes

Name	Type	Notes
Index	long	When parameter is an array, used to indicate the index in the array
IsUncertain	boolean	Used to indicate that a parameter is not necessarily deterministic but can be replaced by a stochastic method to generate a value.
Selection	String2000	Textual description about how this parameter was selected.
Title	String2000	Name of the parameter, used to identify it in the activity. Must have an equivalent in the activity descriptor parameters.

Associations

Association	Notes
From**: AbstractActivityParameter.**Key **0..*** To: **AbstractParameterKey**	
From**: StringParameter.** To: **AbstractActivityParameter**	
From**: IntegerQuantityParameter.** To: **AbstractActivityParameter**	
From**: TimeIndexParameter.** To: **AbstractActivityParameter**	
From**: DoubleQuantityParameter.** To: **AbstractActivityParameter**	
From**: ParameterTemplate.**DefaultValue **0..*** To: **AbstractActivityParameter**	
From**: DataObjectParameter.** To: **AbstractActivityParameter**	
From**: Activity.**Parameter **1..*** To: **AbstractActivityParameter**	

3.2 AbstractParameterKey

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*12/11/2021 *Status:* Proposed *Author:* deny
Notes: Abstract class describing a key used to identify a parameter value. When multiple values are provided for a given parameter, provides a way to identify the parameter through its association with an object, a time index, etc.

Associations

Association	Notes
From**: ObjectParameterKey.** To: **AbstractParameterKey**	
From**: TimeIndexParameterKey.** To: **AbstractParameterKey**	
From**: AbstractActivityParameter.**Key **0..*** To: **AbstractParameterKey**	

3.3 Activity

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Instance of a given activity*

Associations

Association		Notes
	From**: Activity.** To: **AbstractObject**	
0..1	From**: Activity.**Parent To: **Activity**	
	From**: Activity.**ActivityDescriptor To: **ActivityTemplate**	
1..*	From**: Activity.**Parameter To: **AbstractActivityParameter**	
0..1	From**: Activity.**Parent To: **Activity**	

3.4 ActivityParameterKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 12/10/2014 *Last modified:*8/6/2018 *Status:* Proposed *Author:* deny
Notes:

Attributes

Name	Type	Notes
dataObject		
double		
integer		
string		
timestamp		
subActivity		

Associations

Association	Notes
From: **ActivityParameterKind.** To: **TypeEnum**	
From: **ParameterTemplate.** To: **ActivityParameterKind**	

3.5 ActivityTemplate

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Description of one type of activity.*

Associations

Association	Notes
From**: ActivityTemplate.** To: **AbstractObject**	
1..* From**: ActivityTemplate.**Parameter To: **ParameterTemplate**	
From**: Activity.**ActivityDescriptor To: **ActivityTemplate**	

3.6 DataObjectParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Parameter referencing to a top level object.*

Attributes

Name	Type	Notes
DataObject	DataObjectReference	

Associations

Association	Notes
From**: DataObjectParameter.** To: **AbstractActivityParameter**	

3.7 DoubleQuantityParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Parameter containing a double value.*

Attributes

Name	Type	Notes
CustomUnitDictionary	DataObjectReference	
Uom	UnitOfMeasureExt	Unit of measure associated with the value
Value	double	Double value

Associations

Association	Notes
From: **DoubleQuantityParameter.** To: **AbstractActivityParameter**	

3.8 IntegerQuantityParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Parameter containing an integer value.*

Attributes

Name	Type	Notes
Value	long	Integer value

Associations

Association	Notes
From**: IntegerQuantityParameter.** To: **AbstractActivityParameter**	

3.9 ObjectParameterKey

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes:

Attributes

Name	Type	Notes
DataObject	DataObjectReference	

Associations

Association	Notes
From**: ObjectParameterKey.** To: **AbstractParameterKey**	

3.10 ParameterTemplate

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Description of one parameter that participate in one type of activity.*

Attributes

Name	Type	Notes
AllowedKind	ActivityParameterKind	If no allowed type is given, then all kind of datatypes is allowed.
Constraint	String2000	Textual description of additional constraint associated with the parameter. (note that it will be better to have a formal description of the constraint)
DataObjectContentType	String2000	When parameter is limited to data object of given types, describe the allowed types. Used only when ParameterType is dataObject
IsInput	boolean	Indicates if the parameter is an input of the activity. If the parameter is a data object and is also an output of the activity, it is strongly advised to use two parameters : one for input and one for output. The reason is to be able to give two different versions strings for the input and output dataobject which has got obviously the same UUID.
IsOutput	boolean	Indicates if the parameter is an output of the activity. If the parameter is a data object and is also an input of the activity, it is strongly advised to use two parameters : one for input and one for output. The reason is to be able to give two different versions strings for the input and output dataobject which has got obviously the same UUID.
KeyConstraint	String2000	Allows to indicate that, in the same activity, this parameter template must be associated to another parameter template identified by its title.
MaxOccurs	long	Maximum number of parameters of this type allowed in the activity. If the maximum number of parameters is infinite, use -1 value.
MinOccurs	long	Minimum number of parameter of this type required by the activity. If the minimum number of parameters is infinite, use -1 value.
Title	String2000	Name of the parameter in the activity. Key to identify parameter.

Associations

Association	Notes
From**: ParameterTemplate.** To: **ActivityParameterKind**	
From**: ParameterTemplate.**DefaultValue **0..*** To: **AbstractActivityParameter**	
From**: ActivityTemplate.**Parameter **1..*** To: **ParameterTemplate**	

3.11 StringParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Parameter containing a string value.*

Attributes

Name	Type	Notes
Value	String2000	String value

Associations

Association	Notes
From: **StringParameter.** To: **AbstractActivityParameter**	

3.12 TimeIndexParameter

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Parameter containing a time index value.*

Associations

Association	Notes
From**: TimeIndexParameter.**TimeIndex To: **TimeIndex**	
From**: TimeIndexParameter.** To: **AbstractActivityParameter**	

3.13 TimeIndexParameterKey

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/10/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes:

Associations

Association	Notes
From**: TimeIndexParameterKey.**TimeIndex To: **TimeIndex**	
From**: TimeIndexParameterKey.** To: **AbstractParameterKey**	

4 Aggregate

Package: xsd_schemas

Notes: The Aggregate package contains the class that supports aggregation of arbitrary objects in a single XML document.

4.1 Aggregate

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/22/2021 *Last modified:*12/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: An Energistics data object that is an aggregate of other data objects. Use Case: You want to email someone several different Energistics data objects (which are each separate XML files) from one or more of the Energistics domain standards. You can group those data objects together using Aggregate.

This object is NOT INTENDED for use within an ML (e.g. a WITSML) data store, even though it is constructed similarly to the standard data object pattern. The anticipated normal usage is for collecting an aggregate of object messages for transport outside the context of an ML store.

This data object was first developed by WITSML but has been "promoted" to Energistics common for use by any of the Energistics domain standards.

Associations

Association		Notes
1..*	From**: Aggregate.**AggregateMember To: **AbstractObject**	A single data object. Note that the objects can be specified in any order but it is recommended that the most independent data objects be specified first (e.g., well before wellbore).
	From**: Aggregate.** To: **AbstractObject**	

5 Attachment

Package: xsd_schemas

Notes: The Attachment schema allows you to "attach" any non-EnergyML file (e.g., PDF, Excel, TIFF, DLIS, etc.) to any EnergyMl data object (i.e., anything that inherits from AbstractObject).

«XSDcomplexType»
Abstract::AbstractObject
«XSDelement»
+ Aliases: ObjectAlias [0..*]
+ BusinessActivityHistory: String64 [0..-1]
+ Citation: Citation
+ CustomData: CustomData [0..1]
+ Existence: ExistenceKindExt [0..1]
+ ExtensionNameValue: ExtensionNameValue [0..*]
+ ObjectVersionReason: String2000 [0..1]
+ OSDUIntegration: OSDUIntegration [0..1]
«XSDattribute»
+ objectVersion: String64 [0..1]
+ schemaVersion: String64
+ uuid: UuidString
+ObjectReference
0..1
«XSDcomplexType,XSDtopLevelElement»
Attachment
«XSDelement»
+ Category: String64 [0..1]
+ Content: base64Binary
+ ContentUri: anyURI [0..1]
+ FileName: String64 [0..1]
+ FileType: String64 [0..1]
+ IndexableElementIndex: long [0..1]
+ IndexableElementType: IndexableElement [0..1]
+ Md: MeasuredDepth [0..1]
+ MdBit: MeasuredDepth [0..1]
+ SubObjectReference: ComponentReference [0..1]
TypeEnum
«enumeration»
CommonEnumerations::
IndexableElement
cells
intervals from datum
column edges
columns
contacts
coordinate lines
edges
edges per column
enumerated elements
faces
faces per cell
interval edges
intervals
I0
I0 edges
J0
J0 edges
layers
lines
nodes
nodes per cell
nodes per edge
nodes per face
patches
pillars
regions
representation
subnodes
triangles

5.1 Attachment

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*11/5/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *A dedicated object used to attach digital supplemental data (for example, a graphic or PDF file) to another data object. The attachment is captured as a base 64 binary type.*

Attributes

Name	Type	Notes
Category	String64	Used to categorize the content when you have multiple attachments of the same file type. EXAMPLE: If you have attached a JPEG picture of cuttings at a specific depth, you can tag it with Category="CuttingsPicture".
Content	base64Binary	The actual content of the attachment.
ContentUri	anyURI	A URI pointing to the location of the attached content.
FileName	String64	A file name associated with the attachment content. Note this is NOT a file path and should contain a name only.
FileType	String64	The content file type. This field SHOULD be a registered mime type as cataloged at http://www.iana.org/assignments/media-types/media-types.xhtml.
IndexableElementIndex	long	Index in an indexable element array for an attachment.
IndexableElementType	IndexableElement	The type of indexable element that the attachment is applicable to. If used, it must be one of the enumerated values in IndexableElement.
Md	MeasuredDepth	The along-hole measured depth within the RepresentedObject where the attachment is indexed.
MdBit	MeasuredDepth	The along-hole measured depth of the bit.
SubObjectReference	ComponentReference	A reference to a sub-object that is defined within the context of the ReferencedObject. This should normally refer to recurring components of a growing object. The string content is the uid of the sub-object.

Associations

Association		Notes
	From: **Attachment.** To: **IndexableElement**	
	From: **Attachment.** To: **AbstractObject**	
0..1	From: **Attachment.**ObjectReference To: **AbstractObject**	

6 BaseTypes

Package: xsd_schemas

Notes: The BaseTypes package contains the common re-usable structures and types commonly used by EnergyML Schemas.

These types are specializations of normal XML schema datatypes with special purposes, for example, specific maximum lengths for string types. They provide consistency and protect consumers of the standard documents from potentially unlimited-length strings appearing in documents.

long
«XSDsimpleType»
NonNegativeLong
dateTime
«XSDsimpleType»
TimeStamp
string
«XSDsimpleType»
AbstractString
long
«XSDsimpleType»
PositiveLong
double
«XSDsimpleType»
PositiveDouble
«XSDsimpleType»
UuidString
«XSDsimpleType»
String256
«XSDsimpleType»
String2000
«XSDsimpleType»
UomEnum
«XSDsimpleType»
EnumExtensionPattern
«XSDsimpleType»
String64
«XSDsimpleTyp...
QualifiedType
«XSDcomplexType»
StringMeasure
«XSDattribute»
+ uom: UnitOfMeasureExt [0..1]
«XSDcomplexType»
MeasuredDepth
«XSDelement»
+ Datum: AbstractReferencePoint [0..1]
+ MeasuredDepth: LengthMeasureExt
AbstractInterval
«XSDcomplexType»
MdInterval
«XSDelement»
+ Datum: AbstractReferencePoint [0..1]
+ MdMax: double
+ MdMin: double
+ Uom: LengthUomExt
«XSDcomplexType»
AuthorityQualifiedName
«XSDattribute»
+ authority: String64
+ code: String64 [0..1]
«XSDsimpleType»
TypeEnum
«XSDsimpleType»
TimeZone
«XSDcomplexType»
AbstractVerticalDepth
«XSDelement»
+ Trajectory: DataObjectReference [0..1]
+ VerticalDepth: LengthMeasureExt
AbstractInterval
«XSDcomplexType»
AbstractTvdInterval
«XSDelement»
+ Trajectory: DataObjectReference [0..1]
+ TvdMax: double
+ TvdMin: double
+ Uom: LengthUomExt
double
«XSDsimpleType»
AbstractMeasure
«XSDcomplexType»
DatumVerticalDepth
«XSDelement»
+ Datum: VerticalCrs [0..1]
«XSDcomplexType»
ReferencePointVerticalDepth
«XSDelement»
+ ReferencePoint: AbstractReferencePoint
«XSDcomplexType»
DatumTvdInterval
«XSDelement»
+ Datum: VerticalCrs [0..1]
«XSDcomplexType»
ReferencePointTvdInterval
«XSDelement»
+ ReferencePoint: AbstractReferencePoint
«XSDcomplexType»
GenericMeasure
«XSDattribute»
+ uom: UomEnum
«XSDcomplexType»
Cost
«XSDattribute»
+ currency: String64
«XSDcomplexType»
AbstractElevation
«XSDelement»
+ Elevation: LengthMeasureExt
«XSDcomplexType»
DatumElevation
«XSDelement»
+ Datum: VerticalCrs
«XSDcomplexType»
ReferencePointElevation
«XSDelement»
+ ReferencePoint: AbstractReferencePoint

«XSDcomplexType»
AbstractInterval
«XSDelement»
+ Comment: String2000 [0..1]
«XSDcomplexType»
ElapsedTimeInterval
«XSDelement»
+ EndElapsedTime: TimeMeasure
+ StartElapsedTime: TimeMeasure
«XSDcomplexType»
DateTimeInterval
«XSDelement»
+ EndTime: TimeStamp
+ StartTime: TimeStamp
«XSDcomplexType»
ScalarInterval
«XSDelement»
+ MaxValue: GenericMeasure
+ MinValue: GenericMeasure
«XSDcomplexType»
TemperatureInterval
«XSDelement»
+ MaxTemperature: ThermodynamicTemperatureMeasureExt
+ MinTemperature: ThermodynamicTemperatureMeasureExt
«XSDcomplexType»
AbstractPressureInterval
«XSDcomplexType»
GaugePressureInterval
«XSDelement»
+ MaxPressure: GaugePressure
+ MinPressure: GaugePressure
«XSDcomplexType»
RelativePressureInterval
«XSDelement»
+ MaxPressure: RelativePressure
+ MinPressure: RelativePressure
«XSDcomplexType»
AbsolutePressureInterval
«XSDelement»
+ MaxPressure: AbsolutePressure
+ MinPressure: AbsolutePressure
«XSDcomplexType»
AbstractTvdInterval
«XSDelement»
+ Trajectory: DataObjectReference [0..1]
+ TvdMax: double
+ TvdMin: double
+ Uom: LengthUomExt
«XSDcomplexType»
DatumTvdInterval
«XSDelement»
+ Datum: VerticalCrs [0..1]
«XSDcomplexType»
ReferencePointTvdInterval
«XSDelement»
+ ReferencePoint: AbstractReferencePoint
«XSDcomplexType»
MdInterval
«XSDelement»
+ Datum: AbstractReferencePoint [0..1]
+ MdMax: double
+ MdMin: double
+ Uom: LengthUomExt
«XSDcomplexType»
Log::PassIndexedDepthInterval
«XSDelement»
+ Datum: AbstractReferencePoint [0..1]
+ End: PassIndexedDepth
+ Start: PassIndexedDepth

6.1 AbsolutePressureInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaxPressure	AbsolutePressure	
MinPressure	AbsolutePressure	

Associations

Association	Notes
From**: AbsolutePressureInterval.** To: **AbstractPressureInterval**	

6.2 AbstractBooleanArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Approved *Author:* deny
Notes: *Generic representation of an array of Boolean values. Each derived element provides a specialized implementation to allow specific optimization of the representation.*

Attributes

Name	Type	Notes
Statistics	BooleanArrayStatistics	

Associations

Association	Notes
From: **AbstractBooleanArray.** To: **BooleanArrayStatistics**	
From: **AbstractBooleanArray.** To: **AbstractValueArray**	
From: **BooleanExternalArray.** To: **AbstractBooleanArray**	
From: **BooleanXmlArray.** To: **AbstractBooleanArray**	
From: **BooleanConstantArray.** To: **AbstractBooleanArray**	
From: **BooleanArrayFromDiscretePropertyArray.** To: **AbstractBooleanArray**	
From: **BooleanArrayFromIndexArray.** To: **AbstractBooleanArray**	

6.3 AbstractElevation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Elevation	LengthMeasureExt	

Associations

Association	Notes
From**: DatumElevation.** To: **AbstractElevation**	
0..1 From**: DrillReportStatusInfo.**ElevKelly To: **AbstractElevation**	Elevation of the rotary kelly bushing.
0..1 From**: Well.**WellheadElevation To: **AbstractElevation**	Elevation of wellhead relative to the well surface location datum The referenced Wellbore can be any wellbore, since they all share the same surface location
0..1 From**: Well.**GroundElevation To: **AbstractElevation**	Elevation of ground level (land rigs). This is given as MD relative to the well surface location and is likely 0.0 The referenced Wellbore can be any wellbore, since they all share the same surface location
From**: ReferencePointElevation.** To: **AbstractElevation**	

6.4 AbstractFloatingPointArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Approved *Author:* deny
Notes: *Generic representation of an array of double values. Each derived element provides specialized implementation to allow specific optimization of the representation.*

Attributes

Name	Type	Notes
Statistics	FloatingPointArrayStatistics	

Associations

Association	Notes
From: **AbstractFloatingPointArray.** To: **AbstractNumericArray**	
From: **AbstractFloatingPointArray.** To: **FloatingPointArrayStatistics**	
From: **FloatingPointExternalArray.** To: **AbstractFloatingPointArray**	
From: **FloatingPointLatticeArray.** To: **AbstractFloatingPointArray**	
From: **FloatingPointConstantArray.** To: **AbstractFloatingPointArray**	
From: **FloatingPointXmlArray.** To: **AbstractFloatingPointArray**	

6.5 AbstractIntegerArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Approved *Author:* deny
Notes: *Generic representation of an array of integer values. Each derived element provides specialized implementation to allow specific optimization of the representation.*

Attributes

Name	Type	Notes
Statistics	IntegerArrayStatistics	

Associations

Association	Notes
From: **AbstractIntegerArray.** To: **AbstractNumericArray**	
From: **AbstractIntegerArray.** To: **IntegerArrayStatistics**	
From: **IntegerXmlArray.** To: **AbstractIntegerArray**	
From: **IntegerLatticeArray.** To: **AbstractIntegerArray**	
From: **IntegerArrayFromBooleanMaskArray.** To: **AbstractIntegerArray**	
From: **IntegerConstantArray.** To: **AbstractIntegerArray**	
From: **IntegerExternalArray.** To: **AbstractIntegerArray**	

6.6 AbstractInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Generic representation of a value interval.*

Attributes

Name	Type	Notes
Comment	String2000	A descriptive remark about the interval.

Associations

Association	Notes
From**: PassIndexedDepthInterval.** To: **AbstractInterval**	
From**: MdInterval.** To: **AbstractInterval**	
From**: TemperatureInterval.** To: **AbstractInterval**	
From**: AbstractPressureInterval.** To: **AbstractInterval**	
From**: AbstractTvdInterval.** To: **AbstractInterval**	
From**: DateTimeInterval.** To: **AbstractInterval**	
From**: ElapsedTimeInterval.** To: **AbstractInterval**	
From**: ScalarInterval.** To: **AbstractInterval**	

6.7 AbstractMeasure

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes: The intended abstract supertype of all quantities that have a value with a unit of measure. The unit of measure is in the uom attribute of the subtypes.

This type allows all quantities to be profiled to be a 'float' instead of a 'double'.

Associations

Association	Notes
From: **IlluminanceMeasure. 1..1** To: **AbstractMeasure**	
From: **QuantityOfLightMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerTimeMeasure.** To: **AbstractMeasure**	
From: **TimePerLengthMeasure.** To: **AbstractMeasure**	
From: **EnergyMeasureExt.** To: **AbstractMeasure**	
From: **ForceLengthPerLengthMeasure.** To: **AbstractMeasure**	
From: **BinaryInteractionCoefficient.** To: **AbstractMeasure**	
From: **LightExposureMeasure.** To: **AbstractMeasure**	
From: **ForceMeasure. 1..1** To: **AbstractMeasure**	
From: **AreaPerAreaMeasure. 1..1** To: **AbstractMeasure**	
From: **VolumePerTimePerTimeMeasureExt.** To: **AbstractMeasure**	
From: **PowerPerAreaMeasure.** To: **AbstractMeasure**	
From: **TimePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **DimensionlessMeasureExt.** To: **AbstractMeasure**	
From: **PowerPerAreaMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **TimePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **UnitlessMeasure.** To: **AbstractMeasure**	
From: **PressurePerFlowrateSquaredMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **TemperatureIntervalMeasure.** To: **AbstractMeasure**	
From: **VolumePerLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **ReciprocalMassMeasure.** To: **AbstractMeasure**	
From: **ElectromagneticMomentMeasureExt.** To: **AbstractMeasure**	
From: **MagneticVectorPotentialMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **MassMeasureExt.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **MolarVolumeMeasureExt.** To: **AbstractMeasure**	
From: **APIGammaRayMeasure.** To: **AbstractMeasure**	
From: **EnergyLengthPerAreaMeasure.** To: **AbstractMeasure**	
From: **GenericMeasure.** To: **AbstractMeasure**	
From: **DipoleMomentMeasure.** To: **AbstractMeasure**	
From: **HeatTransferCoefficientMeasure.** To: **AbstractMeasure**	
From: **DataTransferSpeedMeasure.** To: **AbstractMeasure**	
From: **HeatCapacityMeasure.** To: **AbstractMeasure**	
From: **DiffusionCoefficientMeasure.** To: **AbstractMeasure**	
From: **InductanceMeasureExt.** To: **AbstractMeasure**	
From: **PermittivityMeasure.** To: **AbstractMeasure**	
From: **KinematicViscosityMeasure.** To: **AbstractMeasure**	
From: **MagneticFluxMeasure.** To: **AbstractMeasure**	
From: **TimePerVolumeMeasure.** To: **AbstractMeasure**	
From: **KinematicViscosityMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFluxDensityMeasureExt.** To: **AbstractMeasure**	
From: **ActivityOfRadioactivityMeasure.** To: **AbstractMeasure**	
From: **EnergyPerMassPerTimeMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **EnergyLengthPerAreaMeasureExt.** To: **AbstractMeasure**	
From: **ActivityOfRadioactivityPerVolumeMeasure.** To: **AbstractMeasure**	
From: **PressurePerFlowrateMeasure.** To: **AbstractMeasure**	
From: **ForcePerLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **ElectricalResistivityMeasureExt.** To: **AbstractMeasure**	
From: **APINeutronMeasureExt.** To: **AbstractMeasure**	
From: **PowerPerPowerMeasureExt.** To: **AbstractMeasure**	
From: **PressureSquaredPerForceTimePerAreaMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimePerLengthMeasure.** To: **AbstractMeasure**	
From: **AnglePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFieldStrengthMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalPressureMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerMassMeasureExt.** To: **AbstractMeasure**	
From: **ThermalDiffusivityMeasure.** To: **AbstractMeasure**	
From: **RadianceMeasure.** To: **AbstractMeasure**	
From: **EnergyMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **AngularAccelerationMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimePerPressureLengthMeasure.** To: **AbstractMeasure**	
From: **AreaPerMassMeasure.** To: **AbstractMeasure**	
From: **ForcePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **ElectricalResistivityMeasure.** To: **AbstractMeasure**	
From: **ThermalInsulanceMeasureExt.** To: **AbstractMeasure**	
From: **MomentumMeasure.** To: **AbstractMeasure**	
From: **PressurePerFlowrateMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **TimePerMassMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalPressureMeasure. 1..1** To: **AbstractMeasure**	
From: **LengthPerMassMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerAmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerPressureMeasureExt.** To: **AbstractMeasure**	
From: **EnergyPerAreaMeasureExt.** To: **AbstractMeasure**	
From: **MassPerVolumePerTemperatureMeasureExt.** To: **AbstractMeasure**	
From: **MobilityMeasure.** To: **AbstractMeasure**	
From: **LuminousIntensityMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalLengthMeasureExt.** To: **AbstractMeasure**	
From: **AreaMeasure. 1..1** To: **AbstractMeasure**	
From: **MassPerTimePerLengthMeasure.** To: **AbstractMeasure**	
From: **MassPerVolumePerTemperatureMeasure.** To: **AbstractMeasure**	
From: **VolumePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **SolidAngleMeasureExt.** To: **AbstractMeasure**	
From: **TemperatureIntervalPerTimeMeasure.** To: **AbstractMeasure**	
From: **LengthPerVolumeMeasure.** To: **AbstractMeasure**	
From: **VolumetricThermalExpansionMeasureExt.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerAmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	
From: **DimensionlessMeasure. 1..1** To: **AbstractMeasure**	
From: **ReciprocalMassTimeMeasureExt.** To: **AbstractMeasure**	
From: **LuminousEfficacyMeasureExt.** To: **AbstractMeasure**	
From: **ForceAreaMeasureExt.** To: **AbstractMeasure**	
From: **ElectricConductivityMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **IlluminanceMeasureExt.** To: **AbstractMeasure**	
From: **HeatFlowRateMeasure.** To: **AbstractMeasure**	
From: **LengthPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **VolumetricThermalExpansionMeasure.** **1..1** To: **AbstractMeasure**	
From: **VolumePerAreaMeasure.** To: **AbstractMeasure**	
From: **ElectricChargePerAreaMeasure.** To: **AbstractMeasure**	
From: **PressureMeasureExt.** To: **AbstractMeasure**	
From: **TimeSeriesDoubleSample.** To: **AbstractMeasure**	
From: **APIGravityMeasure.** To: **AbstractMeasure**	
From: **ReciprocalLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **TemperatureIntervalPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **PressureSquaredPerForceTimePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **AttenuationPerFrequencyIntervalMeasure.** To: **AbstractMeasure**	
From: **ReciprocalForceMeasureExt.** To: **AbstractMeasure**	
From: **LengthPerLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **VolumeMeasureExt.** To: **AbstractMeasure**	
From: **LuminousEfficacyMeasure.** To: **AbstractMeasure**	
From: **ThermalResistanceMeasure.** To: **AbstractMeasure**	
From: **ElectricChargePerVolumeMeasure.** To: **AbstractMeasure**	
From: **ReciprocalMassMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFluxDensityPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **ForcePerVolumeMeasure. 1..1** To: **AbstractMeasure**	
From: **TemperatureIntervalMeasureExt.** To: **AbstractMeasure**	
From: **LengthMeasureExt.** To: **AbstractMeasure**	
From: **DiffusionCoefficientMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **MassPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **PowerPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerPressureMeasure.** To: **AbstractMeasure**	
From: **VolumePerPressureMeasure.** To: **AbstractMeasure**	
From: **MomentOfInertiaMeasure.** To: **AbstractMeasure**	
From: **ForcePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **ElectricChargePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **MassPerEnergyMeasureExt.** To: **AbstractMeasure**	
From: **InductanceMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstanceMeasure.** To: **AbstractMeasure**	
From: **SecondMomentOfAreaMeasureExt.** To: **AbstractMeasure**	
From: **MomentOfForceMeasure. 1..1** To: **AbstractMeasure**	
From: **MolarVolumeMeasure.** To: **AbstractMeasure**	
From: **DoseEquivalentMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerCountMeasureExt.** To: **AbstractMeasure**	
From: **ElectricFieldStrengthMeasureExt.** To: **AbstractMeasure**	
From: **PowerPerVolumeMeasure.** To: **AbstractMeasure**	
From: **PressurePerVolumeMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerTimeMeasureExt.** To: **AbstractMeasure**	
From: **MassPerEnergyMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerAreaMeasure.** To: **AbstractMeasure**	
From: **MagneticDipoleMomentMeasureExt.** To: **AbstractMeasure**	
From: **ElectricChargePerMassMeasure.** To: **AbstractMeasure**	
From: **AnglePerVolumeMeasure.** To: **AbstractMeasure**	
From: **ActivityOfRadioactivityPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerVolumeMeasure. 1..1** To: **AbstractMeasure**	

Association	Notes
From: **LinearAccelerationMeasure. 1..1** To: **AbstractMeasure**	
From: **PressurePerTimeMeasure.** To: **AbstractMeasure**	
From: **EnergyPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **LogarithmicPowerRatioPerLengthMeasure.** To: **AbstractMeasure**	
From: **ReciprocalVolumeMeasureExt.** To: **AbstractMeasure**	
From: **MassLengthMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFluxDensityMeasure. 1..1** To: **AbstractMeasure**	
From: **VolumePerTimePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **DigitalStorageMeasureExt.** To: **AbstractMeasure**	
From: **TimePerTimeMeasure.** To: **AbstractMeasure**	
From: **EnergyPerVolumeMeasure.** To: **AbstractMeasure**	
From: **MassPerAreaMeasure.** To: **AbstractMeasure**	
From: **APIGravityMeasureExt.** To: **AbstractMeasure**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureMeasureExt.** To: **AbstractMeasure**	
From: **QuantityOfLightMeasureExt.** To: **AbstractMeasure**	
From: **MassPerTimeMeasure.** To: **AbstractMeasure**	
From: **PermeabilityLengthMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerVolumeMeasure.** To: **AbstractMeasure**	
From: **IsothermalCompressibilityMeasure.** To: **AbstractMeasure**	
From: **ReciprocalTimeMeasureExt.** To: **AbstractMeasure**	
From: **DynamicViscosityMeasureExt.** To: **AbstractMeasure**	
From: **MagneticDipoleMomentMeasure.** To: **AbstractMeasure**	
From: **ReluctanceMeasure.** To: **AbstractMeasure**	
From: **AreaPerCountMeasure.** To: **AbstractMeasure**	
From: **NormalizedPowerMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **SolidAngleMeasure.** To: **AbstractMeasure**	
From: **ElectricCurrentDensityMeasureExt.** To: **AbstractMeasure**	
From: **SecondMomentOfAreaMeasure.** To: **AbstractMeasure**	
From: **LuminousIntensityMeasure.** To: **AbstractMeasure**	
From: **LogarithmicPowerRatioPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerPressureMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **PotentialDifferencePerPowerDropMeasureExt.** To: **AbstractMeasure**	
From: **ThermalDiffusivityMeasureExt.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerAmountOfSubstanceMeasure.** To: **AbstractMeasure**	
From: **AreaMeasureExt.** To: **AbstractMeasure**	
From: **ElectricFieldStrengthMeasure.** To: **AbstractMeasure**	
From: **LengthPerPressureMeasure.** To: **AbstractMeasure**	
From: **ElectricResistanceMeasure.** To: **AbstractMeasure**	
From: **ElectricPotentialDifferenceMeasure. 1..1** To: **AbstractMeasure**	
From: **PvtModelParameter.** To: **AbstractMeasure**	
From: **ElectricCurrentDensityMeasure.** To: **AbstractMeasure**	
From: **CationExchangeCapacityMeasureExt.** To: **AbstractMeasure**	
From: **EnergyPerLengthMeasure.** To: **AbstractMeasure**	
From: **MomentOfForceMeasureExt.** To: **AbstractMeasure**	
From: **LengthPerTemperatureMeasure.** To: **AbstractMeasure**	
From: **VolumePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **PlaneAngleMeasureExt.** To: **AbstractMeasure**	
From: **RadiantIntensityMeasureExt.** To: **AbstractMeasure**	
From: **ElectricConductanceMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From: **AnglePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **SignalingEventPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **ElectricPotentialDifferenceMeasureExt.** To: **AbstractMeasure**	
From: **AnglePerLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **SpecificHeatCapacityMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **PowerMeasureExt.** To: **AbstractMeasure**	
From: **PressurePerTimeMeasureExt.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerTimePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **MassPerTimePerAreaMeasure.** To: **AbstractMeasure**	
From: **VerticalCoordinateMeasureExt.** To: **AbstractMeasure**	
From: **LengthPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFluxDensityPerLengthMeasure.** To: **AbstractMeasure**	
From: **ThermalConductanceMeasure.** To: **AbstractMeasure**	
From: **FrequencyIntervalMeasure.** To: **AbstractMeasure**	
From: **MagneticPermeabilityMeasureExt.** To: **AbstractMeasure**	
From: **VolumetricHeatTransferCoefficientMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimeLengthMeasureExt.** To: **AbstractMeasure**	
From: **LengthPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **FrequencyMeasure.** To: **AbstractMeasure**	
From: **EnergyPerAreaMeasure.** To: **AbstractMeasure**	
From: **MolarHeatCapacityMeasureExt.** To: **AbstractMeasure**	
From: **MassPerTimePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerTimeMeasure.** To: **AbstractMeasure**	
From: **ReferencePressure.** To: **AbstractMeasure**	

Association	Notes
From: **VolumeFlowRatePerVolumeFlowRateMeasure.** To: **AbstractMeasure**	
From: **AngularVelocityMeasureExt.** To: **AbstractMeasure**	
From: **EnergyPerMassMeasure.** To: **AbstractMeasure**	
From: **MassPerAreaMeasureExt.** To: **AbstractMeasure**	
From: **PermittivityMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerMassMeasure. 1..1** To: **AbstractMeasure**	
From: **MassPerVolumePerPressureMeasure.** To: **AbstractMeasure**	
From: **AreaPerAmountOfSubstanceMeasure.** To: **AbstractMeasure**	
From: **VolumePerRotationMeasureExt.** To: **AbstractMeasure**	
From: **ElectricChargePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **ElectricChargePerMassMeasureExt.** To: **AbstractMeasure**	
From: **PressurePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **ThermodynamicTemperatureMeasure. 1..1** To: **AbstractMeasure**	
From: **MassPerVolumeMeasure. 1..1** To: **AbstractMeasure**	
From: **PermeabilityLengthMeasureExt.** To: **AbstractMeasure**	
From: **ElectricConductivityMeasure.** To: **AbstractMeasure**	
From: **MassMeasure. 1..1** To: **AbstractMeasure**	
From: **MolecularWeightMeasureExt.** To: **AbstractMeasure**	
From: **ElectricCurrentMeasureExt.** To: **AbstractMeasure**	
From: **LuminanceMeasureExt.** To: **AbstractMeasure**	
From: **LuminousFluxMeasureExt.** To: **AbstractMeasure**	
From: **RadianceMeasureExt.** To: **AbstractMeasure**	
From: **Cost.** To: **AbstractMeasure**	
From: **ReciprocalTimeMeasure.** To: **AbstractMeasure**	
From: **DataTransferSpeedMeasureExt.** To: **AbstractMeasure**	
From: **LogarithmicPowerRatioMeasureExt.** To: **AbstractMeasure**	
From: **AbsorbedDoseMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **PermeabilityRockMeasureExt.** To: **AbstractMeasure**	
From: **MassPerVolumePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **AbsorbedDoseMeasureExt.** To: **AbstractMeasure**	
From: **MomentumMeasureExt.** To: **AbstractMeasure**	
From: **MagneticFieldStrengthMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimeMeasure. 1..1** To: **AbstractMeasure**	
From: **ReciprocalAreaMeasureExt.** To: **AbstractMeasure**	
From: **PlaneAngleMeasure. 1..1** To: **AbstractMeasure**	
From: **RadiantIntensityMeasure.** To: **AbstractMeasure**	
From: **VolumetricHeatTransferCoefficientMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalVolumeMeasure.** To: **AbstractMeasure**	
From: **ElectricResistancePerLengthMeasure.** To: **AbstractMeasure**	
From: **TimeMeasure. 1..1** To: **AbstractMeasure**	
From: **TemperatureIntervalPerPressureMeasure.** To: **AbstractMeasure**	
From: **MomentOfInertiaMeasureExt.** To: **AbstractMeasure**	
From: **MobilityMeasureExt.** To: **AbstractMeasure**	
From: **ElectricChargeMeasureExt.** To: **AbstractMeasure**	
From: **AngularAccelerationMeasureExt.** To: **AbstractMeasure**	
From: **MassPerLengthMeasure. 1..1** To: **AbstractMeasure**	
From: **PowerMeasure. 1..1** To: **AbstractMeasure**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureMeasure.** To: **AbstractMeasure**	
From: **LengthMeasure. 1..1** To: **AbstractMeasure**	
From: **ThermalInsulanceMeasure.** To: **AbstractMeasure**	
From: **ElectricChargeMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimePerAreaMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **ElectricCurrentMeasure. 1..1** To: **AbstractMeasure**	
From: **ThermalConductanceMeasureExt.** To: **AbstractMeasure**	
From: **AmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalElectricPotentialDifferenceMeasureExt.** To: **AbstractMeasure**	
From: **MassPerMassMeasureExt.** To: **AbstractMeasure**	
From: **VolumeMeasure. 1..1** To: **AbstractMeasure**	
From: **ActivityOfRadioactivityMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerVolumeMeasure.** To: **AbstractMeasure**	
From: **PotentialDifferencePerPowerDropMeasure.** To: **AbstractMeasure**	
From: **MagneticFluxMeasureExt.** To: **AbstractMeasure**	
From: **DiffusiveTimeOfFlightMeasureExt.** To: **AbstractMeasure**	
From: **PressureSquaredMeasure.** To: **AbstractMeasure**	
From: **PowerPerPowerMeasure. 1..1** To: **AbstractMeasure**	
From: **EnergyPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **ThermalResistanceMeasureExt.** To: **AbstractMeasure**	
From: **SignalingEventPerTimeMeasure.** To: **AbstractMeasure**	
From: **MagneticVectorPotentialMeasureExt.** To: **AbstractMeasure**	
From: **PermeabilityRockMeasure. 1..1** To: **AbstractMeasure**	
From: **MassPerMassMeasure. 1..1** To: **AbstractMeasure**	
From: **ReciprocalAreaMeasure.** To: **AbstractMeasure**	
From: **PressureSquaredMeasureExt.** To: **AbstractMeasure**	
From: **MassLengthMeasure.** To: **AbstractMeasure**	
From: **DipoleMomentMeasureExt.** To: **AbstractMeasure**	
From: **TimePerMassMeasure.** To: **AbstractMeasure**	
From: **DynamicViscosityMeasure. 1..1** To: **AbstractMeasure**	
From: **APINeutronMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **MolarHeatCapacityMeasure.** To: **AbstractMeasure**	
From: **AngularVelocityMeasure. 1..1** To: **AbstractMeasure**	
From: **CationExchangeCapacityMeasure.** To: **AbstractMeasure**	
From: **MagneticPermeabilityMeasure.** To: **AbstractMeasure**	
From: **VolumePerTimeLengthMeasure.** To: **AbstractMeasure**	
From: **MolecularWeightMeasure.** To: **AbstractMeasure**	
From: **EndpointQuantity.** To: **AbstractMeasure**	
From: **LengthPerTemperatureMeasureExt.** To: **AbstractMeasure**	
From: **MassPerTimePerAreaMeasureExt.** To: **AbstractMeasure**	
From: **MolarEnergyMeasureExt.** To: **AbstractMeasure**	
From: **ThermalConductivityMeasureExt.** To: **AbstractMeasure**	
From: **MeasuredDepthCoord.** To: **AbstractMeasure**	
From: **EnergyLengthPerTimeAreaTemperatureMeasure.** To: **AbstractMeasure**	
From: **PressurePerFlowrateSquaredMeasure.** To: **AbstractMeasure**	
From: **PressurePerPressureMeasure.** To: **AbstractMeasure**	
From: **VerticalCoordinateMeasure.** To: **AbstractMeasure**	
From: **LinearAccelerationMeasureExt.** To: **AbstractMeasure**	
From: **LightExposureMeasureExt.** To: **AbstractMeasure**	
From: **LengthOrTimeMeasureExt.** To: **AbstractMeasure**	
From: **MassPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **PressureTimePerVolumeMeasure.** To: **AbstractMeasure**	
From: **ThermalConductivityMeasure. 1..1** To: **AbstractMeasure**	
From: **PressureMeasure. 1..1** To: **AbstractMeasure**	
From: **LengthPerPressureMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalElectricPotentialDifferenceMeasure.** To: **AbstractMeasure**	
From: **VolumePerRotationMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **EnergyLengthPerTimeAreaTemperatureMeasureExt.** To: **AbstractMeasure**	
From: **ForceAreaMeasure.** To: **AbstractMeasure**	
From: **DigitalStorageMeasure.** To: **AbstractMeasure**	
From: **MolarEnergyMeasure.** To: **AbstractMeasure**	
From: **ThermodynamicTemperatureMeasureExt.** To: **AbstractMeasure**	
From: **TemperatureIntervalPerLengthMeasureExt.** To: **AbstractMeasure**	
From: **ForcePerForceMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerTimeMeasure.** To: **AbstractMeasure**	
From: **AreaPerVolumeMeasure.** To: **AbstractMeasure**	
From: **LinearThermalExpansionMeasureExt.** To: **AbstractMeasure**	
From: **PressureTimePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **CapacitanceMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerPressureLengthMeasureExt.** To: **AbstractMeasure**	
From: **HeatTransferCoefficientMeasureExt.** To: **AbstractMeasure**	
From: **ElectromagneticMomentMeasure.** To: **AbstractMeasure**	
From: **EnergyPerMassMeasureExt.** To: **AbstractMeasure**	
From: **HeatCapacityMeasureExt.** To: **AbstractMeasure**	
From: **ReciprocalMassTimeMeasure.** To: **AbstractMeasure**	
From: **CapacitanceMeasure.** To: **AbstractMeasure**	
From: **LengthPerTimeMeasure. 1..1** To: **AbstractMeasure**	
From: **FrequencyMeasureExt.** To: **AbstractMeasure**	
From: **LengthPerMassMeasure.** To: **AbstractMeasure**	
From: **HeatFlowRateMeasureExt.** To: **AbstractMeasure**	
From: **LuminanceMeasure.** To: **AbstractMeasure**	
From: **ElectricConductanceMeasure.** To: **AbstractMeasure**	

Association	Notes
From: **AreaPerAreaMeasureExt.** To: **AbstractMeasure**	
From: **DoseEquivalentMeasure.** To: **AbstractMeasure**	
From: **AmountOfSubstancePerTimePerAreaMeasure.** To: **AbstractMeasure**	
From: **LuminousFluxMeasure.** To: **AbstractMeasure**	
From: **TemperatureIntervalPerLengthMeasure.** To: **AbstractMeasure**	
From: **EnergyPerMassPerTimeMeasureExt.** To: **AbstractMeasure**	
From: **FrequencyIntervalMeasureExt.** To: **AbstractMeasure**	
From: **TemperatureIntervalPerPressureMeasureExt.** To: **AbstractMeasure**	
From: **ElectricResistanceMeasureExt.** To: **AbstractMeasure**	
From: **ElectricResistancePerLengthMeasureExt.** To: **AbstractMeasure**	
From: **AreaPerMassMeasureExt.** To: **AbstractMeasure**	
From: **LinearThermalExpansionMeasure.** To: **AbstractMeasure**	
From: **MassPerVolumePerPressureMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimeMeasureExt.** To: **AbstractMeasure**	
From: **TimeMeasureExt.** To: **AbstractMeasure**	
From: **VolumeFlowRatePerVolumeFlowRateMeasureExt.** To: **AbstractMeasure**	
From: **DiffusiveTimeOfFlightMeasure.** To: **AbstractMeasure**	
From: **LogarithmicPowerRatioMeasure.** To: **AbstractMeasure**	
From: **IsothermalCompressibilityMeasureExt.** To: **AbstractMeasure**	
From: **PressurePerPressureMeasureExt.** To: **AbstractMeasure**	
From: **VolumePerTimePerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **MassPerVolumeMeasureExt.** To: **AbstractMeasure**	
From: **ForcePerForceMeasure.** To: **AbstractMeasure**	
From: **ForceLengthPerLengthMeasureExt.** To: **AbstractMeasure**	

Association	Notes
From**: TimePerTimeMeasureExt.** To: **AbstractMeasure**	
From**: MassPerVolumePerLengthMeasure.** To: **AbstractMeasure**	
From**: ReciprocalForceMeasure.** To: **AbstractMeasure**	
From**: ForceMeasureExt.** To: **AbstractMeasure**	
From**: AttenuationPerFrequencyIntervalMeasureExt.** To: **AbstractMeasure**	
From**: APIGammaRayMeasureExt.** To: **AbstractMeasure**	
From**: NormalizedPowerMeasure.** To: **AbstractMeasure**	
From**: SpecificHeatCapacityMeasure. 1..1** To: **AbstractMeasure**	
From**: ReluctanceMeasureExt.** To: **AbstractMeasure**	

6.8 AbstractNumericArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/3/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association		Notes
	From**: AbstractNumericArray.** To: **AbstractValueArray**	
1	From**: DasFbeData.**FbeDataArray To: **AbstractNumericArray**	Generic representation of an array of numeric values. Each derived element provides specialized implementation to allow specific optimization of the representation.
	From**: AbstractFloatingPointArray.** To: **AbstractNumericArray**	
	From**: AbstractIntegerArray.** To: **AbstractNumericArray**	
1	From**: DasSpectraData.**SpectraDataArray To: **AbstractNumericArray**	Generic representation of an array of numeric values. Each derived element provides specialized implementation to allow specific optimization of the representation.
1	From**: DasRawData.**RawDataArray To: **AbstractNumericArray**	Generic representation of an array of numeric values. Each derived element provides specialized implementation to allow specific optimization of the representation.

6.9 AbstractPressureInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: AbstractPressureInterval.** To: **AbstractInterval**	
From**: GaugePressureInterval.** To: **AbstractPressureInterval**	
From**: RelativePressureInterval.** To: **AbstractPressureInterval**	
From**: AbsolutePressureInterval.** To: **AbstractPressureInterval**	

6.10 AbstractString

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 5/7/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes: *The intended abstract supertype of all strings. This abstract type allows the control over whitespace for all strings to be defined at a high level. This type should not be used directly except to derive another type.*

Associations

Association	Notes
From: **UomEnum.** To: **AbstractString**	
From: **EnumExtensionPattern.** To: **AbstractString**	
From: **TimeSeriesStringSample.** To: **AbstractString**	
From: **String256.** To: **AbstractString**	
From: **UuidString.** To: **AbstractString**	
From: **String2000.** To: **AbstractString**	
From: **String64.** To: **AbstractString**	
From: **KeywordValueStruct.** To: **AbstractString**	
From: **FluidCharacterizationTableRow.** To: **AbstractString**	

6.11 AbstractStringArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Statistics	StringArrayStatistics	

Associations

Association	Notes
From: **AbstractStringArray.** To: **StringArrayStatistics**	
From: **AbstractStringArray.** To: **AbstractValueArray**	
From: **StringConstantArray.** To: **AbstractStringArray**	
From: **StringExternalArray.** To: **AbstractStringArray**	
From: **StringXmlArray.** To: **AbstractStringArray**	

6.12 AbstractTvdInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/15/2016 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Trajectory	DataObjectReference	
TvdMax	double	The maximum true vertical depth value.
TvdMin	double	The minimum true vertical depth value.
Uom	LengthUomExt	

Associations

Association	Notes
From: **AbstractTvdInterval.** To: **AbstractInterval**	
From: **ReferencePointTvdInterval.** To: **AbstractTvdInterval**	
From: **DatumTvdInterval.** To: **AbstractTvdInterval**	

6.13 AbstractValueArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Approved *Author:* deny
Notes: *Generic representation of an array of numeric, Boolean, and string values. Each derived element provides specialized implementation for specific content types or for optimization of the representation.*

Associations

Association	Notes
From**: JaggedArray.** To: **AbstractValueArray**	
From**: AbstractNumericArray.** To: **AbstractValueArray**	
From**: AbstractBooleanArray.** To: **AbstractValueArray**	
From**: Column.**Values To: **AbstractValueArray**	All values of the column. Ordering matters since it will be the same in all columns allowing to map a column value to another one.
From**: AbstractStringArray.** To: **AbstractValueArray**	
From**: CompoundExternalArray.** To: **AbstractValueArray**	

6.14 AbstractVerticalDepth

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*9/22/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *A vertical (gravity-based) depth coordinate within the context of a well. Positive moving downward from the reference datum. All coordinates with the same datum (and same UOM) can be considered to be in the same coordinate reference system (CRS) and are thus directly comparable.*

Attributes

Name	Type	Notes
Trajectory	DataObjectReference	
VerticalDepth	LengthMeasureExt	

Associations

Association	Notes
From: **ReferencePointVerticalDepth.** To: **AbstractVerticalDepth**	
From: **DatumVerticalDepth.** To: **AbstractVerticalDepth**	

6.15 AuthorityQualifiedName

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/3/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
authority	String64	
code	String64	

Associations

Association	Notes
From**: AuthorityQualifiedName.** To: **String64**	

6.16 BooleanArrayFromIndexArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: *An array of Boolean values defined by specifying explicitly which indices in the array are either true or false. This class is used to represent very sparse true or false data.*

Attributes

Name	Type	Notes
Count	PositiveLong	Total number of Boolean elements in the array. This number is different from the number of indices used to represent the array.
CountPerValue	long	
IndexIsTrue	boolean	Indicates whether the specified elements are true or false.
Indices	AbstractIntegerArray	Array of integer indices. BUSINESS RULE: Must be non-negative.

Associations

Association	Notes
From**: BooleanArrayFromIndexArray.** To: **AbstractBooleanArray**	

6.17 BooleanArrayStatistics

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/27/2021 *Last modified:*10/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ModePercentage	double	
ValuesMode	boolean	

Associations

Association	Notes
From**: AbstractBooleanArray.** To: **BooleanArrayStatistics**	

6.18 BooleanConstantArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: *Represents an array of Boolean values where all values are identical. This an optimization for which an array of explicit Boolean values is not required.*

Attributes

Name	Type	Notes
Count	PositiveLong	Size of the array.
Value	boolean	Value inside all the elements of the array.

Associations

Association	Notes
From**: BooleanConstantArray.** To: **AbstractBooleanArray**	

6.19 BooleanExternalArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*8/19/2021 *Status:* Approved *Author:* deny
Notes: Array of Boolean values provided explicitly by an HDF5 dataset.

This text needs to be altered to say that nulls are not allowed in the underlying implementation

Attributes

Name	Type	Notes
CountPerValue	long	
Values	ExternalDataArray	Reference to an HDF5 array of values.

Associations

Association	Notes
From: **BooleanExternalArray.** To: **AbstractBooleanArray**	

6.20 BooleanXmlArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/1/2021 *Last modified:*11/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
CountPerValue	long	
Values	BooleanXmlArrayList	

Associations

Association	Notes
From: **BooleanXmlArray.** To: **AbstractBooleanArray**	
From: **BooleanXmlArray.** To: **BooleanXmlArrayList**	

6.21 BooleanXmlArrayList

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 11/1/2021 *Last modified:*11/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: BooleanXmlArray.** To: **BooleanXmlArrayList**	

6.22 Cost

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *The price of an item, with a currency indication.*

Attributes

Name	Type	Notes
currency	String64	Currency used for this Cost. Use of ISO 4217 alphabetic codes for transfers would be a best practice.

Associations

Association		Notes
	From**: Cost.** To: **AbstractMeasure**	
0..1	From**: BitRecord.**Cost To: **Cost**	Bit cost in local currency.
0..1	From**: DrillReportStatusInfo.**CostDay To: **Cost**	Daily Cost.
0..1	From**: DrillReportStatusInfo.**CostDayMud To: **Cost**	Daily Mud Cost.

6.23 DateTimeInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/12/2019 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
EndTime	TimeStamp	
StartTime	TimeStamp	

Associations

Association	Notes
From**: DateTimeInterval.** To: **AbstractInterval**	

6.24 DatumElevation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Datum	VerticalCrs	The datum the elevation is referenced to.

Associations

Association	Notes
From**: DatumElevation.** To: **AbstractElevation**	

6.25 DatumTvdInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Datum	VerticalCrs	The datum the TVD interval is referenced to. Required when there is no default TVD datum associated with the data object this is used in.

Associations

Association	Notes
From: **DatumTvdInterval.** To: **AbstractTvdInterval**	

6.26 DatumVerticalDepth

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Datum	VerticalCrs	The datum the vertical depth is referenced to. Required when there is no default TVD datum associated with the data object this is used in.

Associations

Association	Notes
From: **DatumVerticalDepth.** To: **AbstractVerticalDepth**	

6.27 ElapsedTimeInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
EndElapsedTime	TimeMeasure	
StartElapsedTime	TimeMeasure	

Associations

Association	Notes
From**: ElapsedTimeInterval.** To: **AbstractInterval**	

6.28 EnumExtensionPattern

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnumExtensionPattern.** To: **AbstractString**	
From: **ReciprocalElectricPotentialDifferenceUomExt.** To: **EnumExtensionPattern**	
From: **APINeutronUomExt.** To: **EnumExtensionPattern**	
From: **ElectricalResistivityUomExt.** To: **EnumExtensionPattern**	
From: **ThermodynamicTemperatureUomExt.** To: **EnumExtensionPattern**	
From: **Shape3dExt.** To: **EnumExtensionPattern**	
From: **PvtModelParameterKindExt.** To: **EnumExtensionPattern**	
From: **SequenceStratigraphySurfaceKindExt.** To: **EnumExtensionPattern**	
From: **ReciprocalPressureUomExt.** To: **EnumExtensionPattern**	
From: **PressureSquaredPerForceTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **MagneticFieldStrengthUomExt.** To: **EnumExtensionPattern**	
From: **UnitOfMeasureExt.** To: **EnumExtensionPattern**	
From: **CulturalFeatureKindExt.** To: **EnumExtensionPattern**	
From: **VolumePerMassUomExt.** To: **EnumExtensionPattern**	
From: **MassPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **FacilityLifecycleStateExt.** To: **EnumExtensionPattern**	
From: **TubularComponentTypeExt.** To: **EnumExtensionPattern**	
From: **TrajStationTypeExt.** To: **EnumExtensionPattern**	
From: **OutputFluidPropertyExt.** To: **EnumExtensionPattern**	
From: **MagneticFluxUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **HeatTransferCoefficientUomExt.** To: **EnumExtensionPattern**	
From: **ForcePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MassPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ElectricChargePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **HeatCapacityUomExt.** To: **EnumExtensionPattern**	
From: **LuminousIntensityUomExt.** To: **EnumExtensionPattern**	
From: **KinematicViscosityUomExt.** To: **EnumExtensionPattern**	
From: **TubularAssemblyExt.** To: **EnumExtensionPattern**	
From: **EstimationMethodExt.** To: **EnumExtensionPattern**	
From: **TargetScopeExt.** To: **EnumExtensionPattern**	
From: **VolumeReferenceKindExt.** To: **EnumExtensionPattern**	
From: **AnglePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalTimeUomExt.** To: **EnumExtensionPattern**	
From: **LuminanceUomExt.** To: **EnumExtensionPattern**	
From: **PlaneAngleUomExt.** To: **EnumExtensionPattern**	
From: **DiffusiveTimeOfFlightUomExt.** To: **EnumExtensionPattern**	
From: **ProductFluidKindExt.** To: **EnumExtensionPattern**	
From: **TypeSurveyToolExt.** To: **EnumExtensionPattern**	
From: **ElectricResistancePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **ThermalConductivityUomExt.** To: **EnumExtensionPattern**	
From: **ReportingFacilityExt.** To: **EnumExtensionPattern**	
From: **InductanceUomExt.** To: **EnumExtensionPattern**	
From: **StreamlineFluxExt.** To: **EnumExtensionPattern**	
From: **FrequencyUomExt.** To: **EnumExtensionPattern**	
From: **PureComponentKindExt.** To: **EnumExtensionPattern**	
From: **ElectricFieldStrengthUomExt.** To: **EnumExtensionPattern**	
From: **WellboreMarkerKindExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **PPFGUncertaintyClassExt.** To: **EnumExtensionPattern**	
From: **AreaPerAmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	
From: **LuminousEfficacyUomExt.** To: **EnumExtensionPattern**	
From: **PressureTimePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MagneticDipoleMomentUomExt.** To: **EnumExtensionPattern**	
From: **FluidSampleKindExt.** To: **EnumExtensionPattern**	
From: **SecondMomentOfAreaUomExt.** To: **EnumExtensionPattern**	
From: **APIGravityUomExt.** To: **EnumExtensionPattern**	
From: **ToolSubKindExt.** To: **EnumExtensionPattern**	
From: **EnergyPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MassPerTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **MobilityUomExt.** To: **EnumExtensionPattern**	
From: **PressurePerFlowrateUomExt.** To: **EnumExtensionPattern**	
From: **MagneticFluxDensityPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalAreaUomExt.** To: **EnumExtensionPattern**	
From: **MolecularWeightUomExt.** To: **EnumExtensionPattern**	
From: **ElectromagneticMomentUomExt.** To: **EnumExtensionPattern**	
From: **AngularAccelerationUomExt.** To: **EnumExtensionPattern**	
From: **HeatFlowRateUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerPressureLengthUomExt.** To: **EnumExtensionPattern**	
From: **DasCalibrationTypeExt.** To: **EnumExtensionPattern**	
From: **StratigraphyKindQualifierExt.** To: **EnumExtensionPattern**	
From: **PlusComponentKindExt.** To: **EnumExtensionPattern**	
From: **LinearAccelerationUomExt.** To: **EnumExtensionPattern**	
From: **PPFGFamilyExt.** To: **EnumExtensionPattern**	
From: **PressurePerVolumeUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **CollectionKindExt.** To: **EnumExtensionPattern**	
From: **ViewerKindExt.** To: **EnumExtensionPattern**	
From: **ElectricPotentialDifferenceUomExt.** To: **EnumExtensionPattern**	
From: **FrequencyIntervalUomExt.** To: **EnumExtensionPattern**	
From: **DynamicViscosityUomExt.** To: **EnumExtensionPattern**	
From: **TimeUomExt.** To: **EnumExtensionPattern**	
From: **SignalingEventPerTimeUomExt.** To: **EnumExtensionPattern**	
From: **VolumeUomExt.** To: **EnumExtensionPattern**	
From: **MassPerTimeUomExt.** To: **EnumExtensionPattern**	
From: **AttenuationPerFrequencyIntervalUomExt.** To: **EnumExtensionPattern**	
From: **PotentialDifferencePerPowerDropUomExt.** To: **EnumExtensionPattern**	
From: **DispositionKindExt.** To: **EnumExtensionPattern**	
From: **EnergyLengthPerAreaUomExt.** To: **EnumExtensionPattern**	
From: **MolarHeatCapacityUomExt.** To: **EnumExtensionPattern**	
From: **PowerPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **LogarithmicPowerRatioUomExt.** To: **EnumExtensionPattern**	
From: **AngularVelocityUomExt.** To: **EnumExtensionPattern**	
From: **CationExchangeCapacityUomExt.** To: **EnumExtensionPattern**	
From: **QuantityClassKindExt.** To: **EnumExtensionPattern**	
From: **ReportingDurationKindExt.** To: **EnumExtensionPattern**	
From: **ForceLengthPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **ThermalResistanceUomExt.** To: **EnumExtensionPattern**	
From: **AnglePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **NodeSymbolExt.** To: **EnumExtensionPattern**	
From: **TimePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MagneticPermeabilityUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **ExistenceKindExt.** To: **EnumExtensionPattern**	
From: **NormalizedPowerUomExt.** To: **EnumExtensionPattern**	
From: **QuantityMethodExt.** To: **EnumExtensionPattern**	
From: **EdgePatternExt.** To: **EnumExtensionPattern**	
From: **ForceUomExt.** To: **EnumExtensionPattern**	
From: **PseudoComponentKindExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalLengthUomExt.** To: **EnumExtensionPattern**	
From: **LightExposureUomExt.** To: **EnumExtensionPattern**	
From: **RadiantIntensityUomExt.** To: **EnumExtensionPattern**	
From: **PowerUomExt.** To: **EnumExtensionPattern**	
From: **MomentOfForceUomExt.** To: **EnumExtensionPattern**	
From: **ElectricConductivityUomExt.** To: **EnumExtensionPattern**	
From: **AreaUomExt.** To: **EnumExtensionPattern**	
From: **StratigraphyKindExt.** To: **EnumExtensionPattern**	
From: **APIGammaRayUomExt.** To: **EnumExtensionPattern**	
From: **SulfurComponentKindExt.** To: **EnumExtensionPattern**	
From: **ElectricChargeUomExt.** To: **EnumExtensionPattern**	
From: **DataConditioningExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	
From: **MassUomExt.** To: **EnumExtensionPattern**	
From: **PermeabilityRockUomExt.** To: **EnumExtensionPattern**	
From: **OrganicAcidKindExt.** To: **EnumExtensionPattern**	
From: **MomentOfInertiaUomExt.** To: **EnumExtensionPattern**	
From: **TrajStnCalcAlgorithmExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **ServiceFluidKindExt.** To: **EnumExtensionPattern**	
From: **ForcePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **EnergyUomExt.** To: **EnumExtensionPattern**	
From: **LithologyQualifierKindExt.** To: **EnumExtensionPattern**	
From: **FacilityKindExt.** To: **EnumExtensionPattern**	
From: **WellborePointOfInterestExt.** To: **EnumExtensionPattern**	
From: **ElectricCurrentUomExt.** To: **EnumExtensionPattern**	
From: **MolarEnergyUomExt.** To: **EnumExtensionPattern**	
From: **OperatingConditionExt.** To: **EnumExtensionPattern**	
From: **LengthPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ElectricCurrentDensityUomExt.** To: **EnumExtensionPattern**	
From: **RadianceUomExt.** To: **EnumExtensionPattern**	
From: **EquipmentTypeExt.** To: **EnumExtensionPattern**	
From: **SpecificHeatCapacityUomExt.** To: **EnumExtensionPattern**	
From: **PPFGMainFamilyExt.** To: **EnumExtensionPattern**	
From: **LengthPerTimeUomExt.** To: **EnumExtensionPattern**	
From: **PressureSquaredUomExt.** To: **EnumExtensionPattern**	
From: **AnionKindExt.** To: **EnumExtensionPattern**	
From: **DepositionalFaciesKindExt.** To: **EnumExtensionPattern**	
From: **PPFGFamilyMnemonicExt.** To: **EnumExtensionPattern**	
From: **QuantityOfLightUomExt.** To: **EnumExtensionPattern**	
From: **ThermalConductanceUomExt.** To: **EnumExtensionPattern**	
From: **LoggingToolClassExt.** To: **EnumExtensionPattern**	
From: **VolumePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **CorrectionConsideredExt.** To: **EnumExtensionPattern**	
From: **TimePerMassUomExt.** To: **EnumExtensionPattern**	
From: **VolumetricThermalExpansionUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **MagneticFluxDensityUomExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerPressureUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **IsothermalCompressibilityUomExt.** To: **EnumExtensionPattern**	
From: **MudSubClassExt.** To: **EnumExtensionPattern**	
From: **MatrixCementKindExt.** To: **EnumExtensionPattern**	
From: **MassPerVolumePerTemperatureUomExt.** To: **EnumExtensionPattern**	
From: **LengthPerTemperatureUomExt.** To: **EnumExtensionPattern**	
From: **AreaPerTimeUomExt.** To: **EnumExtensionPattern**	
From: **MassPerVolumePerPressureUomExt.** To: **EnumExtensionPattern**	
From: **ActivityOfRadioactivityPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerPressureUomExt.** To: **EnumExtensionPattern**	
From: **EnergyPerMassUomExt.** To: **EnumExtensionPattern**	
From: **ThermalInsulanceUomExt.** To: **EnumExtensionPattern**	
From: **MassLengthUomExt.** To: **EnumExtensionPattern**	
From: **ThermalDiffusivityUomExt.** To: **EnumExtensionPattern**	
From: **MassPerMassUomExt.** To: **EnumExtensionPattern**	
From: **DipoleMomentUomExt.** To: **EnumExtensionPattern**	
From: **LineRoleExt.** To: **EnumExtensionPattern**	
From: **ThrowKindExt.** To: **EnumExtensionPattern**	
From: **TimePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **MarkerQualifierExt.** To: **EnumExtensionPattern**	
From: **PressureUomExt.** To: **EnumExtensionPattern**	
From: **AreaPerAreaUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **TemperatureIntervalUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalMassTimeUomExt.** To: **EnumExtensionPattern**	
From: **PPFGModeledLithologyExt.** To: **EnumExtensionPattern**	
From: **DoseEquivalentUomExt.** To: **EnumExtensionPattern**	
From: **AreaPerCountUomExt.** To: **EnumExtensionPattern**	
From: **MudClassExt.** To: **EnumExtensionPattern**	
From: **VolumePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **LengthPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **CationKindExt.** To: **EnumExtensionPattern**	
From: **LogarithmicPowerRatioPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **MassPerVolumePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ElectricResistanceUomExt.** To: **EnumExtensionPattern**	
From: **EnergyLengthPerTimeAreaTemperatureUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimeLengthUomExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MolarVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MagneticVectorPotentialUomExt.** To: **EnumExtensionPattern**	
From: **FacetExt.** To: **EnumExtensionPattern**	
From: **ReferencePointKindExt.** To: **EnumExtensionPattern**	
From: **PPFGTransformModelTypeExt.** To: **EnumExtensionPattern**	
From: **ReluctanceUomExt.** To: **EnumExtensionPattern**	
From: **TemperatureIntervalPerTimeUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **DimensionlessUomExt.** To: **EnumExtensionPattern**	
From: **ElectricConductanceUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **PermeabilityLengthUomExt.** To: **EnumExtensionPattern**	
From: **LengthPerMassUomExt.** To: **EnumExtensionPattern**	
From: **ReferenceConditionExt.** To: **EnumExtensionPattern**	
From: **MassPerEnergyUomExt.** To: **EnumExtensionPattern**	
From: **AbsorbedDoseUomExt.** To: **EnumExtensionPattern**	
From: **LinearThermalExpansionUomExt.** To: **EnumExtensionPattern**	
From: **ElectricChargePerMassUomExt.** To: **EnumExtensionPattern**	
From: **LengthPerPressureUomExt.** To: **EnumExtensionPattern**	
From: **VerticalCoordinateUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerRotationUomExt.** To: **EnumExtensionPattern**	
From: **TemperatureIntervalPerPressureUomExt.** To: **EnumExtensionPattern**	
From: **DasCalibrationInputPointKindExt.** To: **EnumExtensionPattern**	
From: **CapacitanceUomExt.** To: **EnumExtensionPattern**	
From: **LithologyKindExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerTimeUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalForceUomExt.** To: **EnumExtensionPattern**	
From: **TargetCategoryExt.** To: **EnumExtensionPattern**	
From: **OperatingEnvironmentExt.** To: **EnumExtensionPattern**	
From: **PressurePerFlowrateSquaredUomExt.** To: **EnumExtensionPattern**	
From: **ElectricChargePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerAmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerTimeUomExt.** To: **EnumExtensionPattern**	
From: **PowerPerPowerUomExt.** To: **EnumExtensionPattern**	
From: **PPFGDataProcessingExt.** To: **EnumExtensionPattern**	
From: **PPFGTectonicSettingExt.** To: **EnumExtensionPattern**	
From: **LuminousFluxUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From: **AliasIdentifierKindExt.** To: **EnumExtensionPattern**	
From: **DigitalStorageUomExt.** To: **EnumExtensionPattern**	
From: **MassPerTimePerLengthUomExt.** To: **EnumExtensionPattern**	
From: **IlluminanceUomExt.** To: **EnumExtensionPattern**	
From: **PressurePerTimeUomExt.** To: **EnumExtensionPattern**	
From: **AreaPerMassUomExt.** To: **EnumExtensionPattern**	
From: **TimePerTimeUomExt.** To: **EnumExtensionPattern**	
From: **ForceAreaUomExt.** To: **EnumExtensionPattern**	
From: **OrganizationKindExt.** To: **EnumExtensionPattern**	
From: **PressurePerPressureUomExt.** To: **EnumExtensionPattern**	
From: **LengthUomExt.** To: **EnumExtensionPattern**	
From: **VolumetricHeatTransferCoefficientUomExt.** To: **EnumExtensionPattern**	
From: **EnergyPerAreaUomExt.** To: **EnumExtensionPattern**	
From: **PowerPerAreaUomExt.** To: **EnumExtensionPattern**	
From: **PPFGDataDerivationExt.** To: **EnumExtensionPattern**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimeUomExt.** To: **EnumExtensionPattern**	
From: **SolidAngleUomExt.** To: **EnumExtensionPattern**	
From: **EnergyPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **ForcePerForceUomExt.** To: **EnumExtensionPattern**	
From: **MomentumUomExt.** To: **EnumExtensionPattern**	
From: **MassPerAreaUomExt.** To: **EnumExtensionPattern**	
From: **VolumeFlowRatePerVolumeFlowRateUomExt.** To: **EnumExtensionPattern**	
From: **TemperatureIntervalPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **DataTransferSpeedUomExt.** To: **EnumExtensionPattern**	

Association	Notes
From**: AreaPerVolumeUomExt.** To: **EnumExtensionPattern**	
From**: ActivityOfRadioactivityUomExt.** To: **EnumExtensionPattern**	
From**: BrineClassExt.** To: **EnumExtensionPattern**	
From**: ReciprocalMassUomExt.** To: **EnumExtensionPattern**	
From**: WellInterestExt.** To: **EnumExtensionPattern**	
From**: DepositionalEnvironmentKindExt.** To: **EnumExtensionPattern**	
From**: DiffusionCoefficientUomExt.** To: **EnumExtensionPattern**	
From**: PermittivityUomExt.** To: **EnumExtensionPattern**	
From**: LengthAndTimeUomExt.** To: **EnumExtensionPattern**	
From**: EnergyPerMassPerTimeUomExt.** To: **EnumExtensionPattern**	

6.29 FloatingPointArrayStatistics

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/27/2021 *Last modified:*10/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaximumValue	double	
MinimumValue	double	
ModePercentage	double	
ValidValueCount	long	
ValuesMean	double	
ValuesMedian	double	
ValuesMode	double	
ValuesStandardDeviation	double	

Associations

Association	Notes
From: **AbstractFloatingPointArray.** To: **FloatingPointArrayStatistics**	

6.30 FloatingPointConstantArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: *Represents an array of double values where all values are identical. This an optimization for which an array of explicit double values is not required.*

Attributes

Name	Type	Notes
Count	PositiveLong	Size of the array.
Value	double	Values inside all the elements of the array.

Associations

Association	Notes
From**: FloatingPointConstantArray.** To: **AbstractFloatingPointArray**	
From**: FloatingPointLatticeArray.**Offset **1..*** To: **FloatingPointConstantArray**	An offset value indicates the double difference between two consecutive double values of the lattice double values against one particular dimension. For example, in case of a 1D lattice, the offset value corresponds to the double difference between the value at index 1 and the value at index 0. It also corresponds to the double difference between the value at index2 and the value at index 1, etc. There is one offset value per dimension of the lattice double values. The first offset value corresponds to the first dimension of the lattice double value, the second offset value corresponds to the second dimension of the lattice double value, etc. The offset count defines the count of double difference between two consecutive double values. It is n-1 where n is the number of values in the dimension of the double lattice array.

6.31 FloatingPointExternalArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: An array of double values provided explicitly by an HDF5 dataset.
By convention, the null value is NaN.

Attributes

Name	Type	Notes
ArrayFloatingPointType	FloatingPointType	
CountPerValue	long	
Values	ExternalDataArray	Reference to an HDF5 array of doubles.

Associations

Association	Notes
From: **FloatingPointExternalArray.** To: **AbstractFloatingPointArray**	
From: **FloatingPointExternalArray.** To: **FloatingPointType**	

6.32 FloatingPointLatticeArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* philippe
Notes: Represents an array of doubles based on an origin and a multi-dimensional offset. The offset is based on a linearization of a multi-dimensional offset.

If count(i) is the number of elements in the dimension i and offset(i) is the offset in the dimension i, then:
globalOffsetInNDimension = startValue+ ni*offset(n) + n_1i*count(n)*offset(n-1) + ... + 0i*count(n)*count(n-1)*....count(1)*offset(0)

Attributes

Name	Type	Notes
StartValue	double	Value representing the global start for the lattice.

Associations

Association	Notes
From: **FloatingPointLatticeArray.**Offset **1..*** To: **FloatingPointConstantArray**	An offset value indicates the double difference between two consecutive double values of the lattice double values against one particular dimension. For example, in case of a 1D lattice, the offset value corresponds to the double difference between the value at index 1 and the value at index 0. It also corresponds to the double difference between the value at index2 and the value at index 1, etc. There is one offset value per dimension of the lattice double values. The first offset value corresponds to the first dimension of the lattice double value, the second offset value corresponds to the second dimension of the lattice double value, etc. The offset count defines the count of double difference between two consecutive double values. It is n-1 where n is the number of values in the dimension of the double lattice array.
From: **FloatingPointLatticeArray.** To: **AbstractFloatingPointArray**	

6.33 FloatingPointType

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/7/2021 *Last modified:*7/7/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
arrayOfFloat32LE		
arrayOfDouble64LE		
arrayOfFloat32BE		
arrayOfDouble64BE		

Associations

Association	Notes
From**: FloatingPointType.** To: **TypeEnum**	
From**: FloatingPointExternalArray.** To: **FloatingPointType**	

6.34 FloatingPointXmlArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/27/2021 *Last modified:*8/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
CountPerValue	long	
Values	FloatingPointXmlArrayList	

Associations

Association	Notes
From: **FloatingPointXmlArray.** To: **FloatingPointXmlArrayList**	
From: **FloatingPointXmlArray.** To: **AbstractFloatingPointArray**	

6.35 FloatingPointXmlArrayList

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 8/22/2021 *Last modified:*8/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: FloatingPointXmlArray.** To: **FloatingPointXmlArrayList**	

6.36 GaugePressureInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaxPressure	GaugePressure	
MinPressure	GaugePressure	

Associations

Association	Notes
From**: GaugePressureInterval.** To: **AbstractPressureInterval**	

6.37 GenericMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*11/11/2016 *Status:* Proposed *Author:* William McKenzie
Notes: A generic measure type.
This should not be used except in situations where the underlying class of data is captured elsewhere. For example, for a log curve.

Attributes

Name	Type	Notes
uom	UomEnum	

Associations

Association	Notes
From: **GenericMeasure.** To: **AbstractMeasure**	

6.38 IntegerArrayFromBooleanMaskArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: *One-dimensional array of integer values obtained from the true elements of the Boolean mask.*

Attributes

Name	Type	Notes
CountPerValue	long	
Mask	AbstractBooleanArray	Boolean mask. A true element indicates that the index is included on the list of integer values.

Associations

Association	Notes
From: **IntegerArrayFromBooleanMaskArray.** To: **AbstractIntegerArray**	

6.39 IntegerArrayStatistics

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/27/2021 *Last modified:*10/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaximumValue	long	
MinimumValue	long	
ModePercentage	double	
ValidValueCount	long	
ValuesMedian	long	
ValuesMode	long	

Associations

Association	Notes
From: **AbstractIntegerArray.** To: **IntegerArrayStatistics**	

6.40 IntegerConstantArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: *Represents an array of integer values where all values are identical. This an optimization for which an array of explicit integer values is not required.*

Attributes

Name	Type	Notes
Count	PositiveLong	Size of the array.
Value	long	Values inside all the elements of the array.

Associations

Association	Notes
From**: IntegerConstantArray.** To: **AbstractIntegerArray**	
From**: IntegerLatticeArray.**Offset **1..*** To: **IntegerConstantArray**	An offset value indicates the integer difference between two consecutive integer values of the lattice integer values against one particular dimension. For example, in case of a 1D lattice, the offset value corresponds to the integer difference between the value at index 1 and the value at index 0. It also corresponds to the integer difference between the value at index2 and the value at index 1, etc. There is one offset value per dimension of the lattice integer values. The first offset value corresponds to the first dimension of the lattice integer value, the second offset value corresponds to the second dimension of the lattice integer value, etc. The offset count defines the count of integer difference between two consecutive integer values. It is n-1 where n is the number of values in the dimension of the integer lattice array.

6.41 IntegerExternalArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny
Notes: Array of integer values provided explicitly by an HDF5 dataset. The null value must be explicitly provided in the NullValue attribute of this class.

Attributes

Name	Type	Notes
ArrayIntegerType	IntegerType	
CountPerValue	long	
NullValue	long	
Values	ExternalDataArray	Reference to an HDF5 array of integers or doubles.

Associations

Association	Notes
From**: IntegerExternalArray.** To: **IntegerType**	
From**: IntegerExternalArray.** To: **AbstractIntegerArray**	
1 From**: DasTimeArray.**TimeArray To: **IntegerExternalArray**	Array of integer values provided explicitly by an HDF5 dataset. The null value must be explicitly provided in the NullValue attribute of this class.

6.42 IntegerLatticeArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*11/1/2016 *Status:* Approved *Author:* philippe
Notes: Represents an array of integers based on an origin and a multi-dimensional offset. The offset is based on a linearization of a multi-dimensional offset.

If count(i) is the number of elements in the dimension i and offset(i) is the offset in the dimension i, then:
globalOffsetInNDimension = startValue+ ni*offset(n) + n_1i*count(n)*offset(n-1) + ... + 0i*count(n)*count(n-1)*....count(1)*offset(0)

Attributes

Name	Type	Notes
StartValue	long	Value representing the global start for the lattice: i.e., iStart + jStart*ni + kStart*ni*nj

Associations

Association	Notes
From: **IntegerLatticeArray.**Offset **1..*** To: **IntegerConstantArray**	An offset value indicates the integer difference between two consecutive integer values of the lattice integer values against one particular dimension. For example, in case of a 1D lattice, the offset value corresponds to the integer difference between the value at index 1 and the value at index 0. It also corresponds to the integer difference between the value at index2 and the value at index 1, etc. There is one offset value per dimension of the lattice integer values. The first offset value corresponds to the first dimension of the lattice integer value, the second offset value corresponds to the second dimension of the lattice integer value, etc. The offset count defines the count of integer difference between two consecutive integer values. It is n-1 where n is the number of values in the dimension of the integer lattice array.
From: **IntegerLatticeArray.** To: **AbstractIntegerArray**	

6.43 IntegerType

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/7/2021 *Last modified:*7/7/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
arrayOfInt8		
arrayOfUInt8		
arrayOfInt16LE		
arrayOfInt32LE		
arrayOfInt64LE		
arrayOfUInt16LE		
arrayOfUInt32LE		
arrayOfUInt64LE		
arrayOfInt16BE		
arrayOfInt32BE		
arrayOfInt64BE		
arrayOfUInt16BE		
arrayOfUInt32BE		
arrayOfUInt64BE		

Associations

Association	Notes
From: **IntegerType.** To: **TypeEnum**	
From: **IntegerExternalArray.** To: **IntegerType**	

6.44 IntegerXmlArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/1/2021 *Last modified:*11/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
CountPerValue	long	
NullValue	long	
Values	IntegerXmlArrayList	

Associations

Association	Notes
From: **IntegerXmlArray.** To: **AbstractIntegerArray**	
From: **IntegerXmlArray.** To: **IntegerXmlArrayList**	

6.45 IntegerXmlArrayList

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 11/1/2021 *Last modified:*11/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: IntegerXmlArray.** To: **IntegerXmlArrayList**	

6.46 JaggedArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/29/2012 *Last modified:*11/1/2016 *Status:* Approved *Author:* deny

Notes: Data storage object for an array of variable length 1D sub-arrays. The jagged array object consists of these two arrays:

- An aggregation of all the variable length sub-arrays into a single 1D array.
- The offsets into the single 1D array, given by the sum of all the sub-array lengths up to and including the current sub-array.

Often referred to as a "list-of-lists" or "array-of-arrays" construction.

For example to store the following three arrays as a jagged array:
(a b c)
(d e f g)
(h)
Elements = (a b c d e f g h)
Cumulative Length = (3 7 8)

Attributes

Name	Type	Notes
CumulativeLength	AbstractIntegerArray	1D array of cumulative lengths to the end of the current sub-array. Each cumulative length is also equal to the index of the first element of the next sub-array, i.e., the index in the elements array for which the next variable length sub-array begins.
Elements	AbstractValueArray	1D array of elements containing the aggregation of individual array data.

Associations

Association	Notes
From: **JaggedArray.** To: **AbstractValueArray**	

6.47 MdInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 2/15/2016 *Last modified:*11/2/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Datum	AbstractReferencePoint	The datum the MD interval is referenced to. Required when there is no default MD datum associated with the data object this is used in.
MdMax	double	
MdMin	double	
Uom	LengthUomExt	

Associations

Association	Notes
From**: MdInterval.** To: **AbstractInterval**	

6.48 MeasuredDepth

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*9/22/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *A measured depth coordinate in a wellbore. Positive moving from the reference datum toward the bottomhole. All coordinates with the same datum (and same UOM) can be considered to be in the same coordinate reference system (CRS) and are thus directly comparable.*

Attributes

Name	Type	Notes
Datum	AbstractReferencePoint	The datum the measured depth is referenced to. Required when there is no default MD datum associated with the data object this is used in.
MeasuredDepth	LengthMeasureExt	

6.49 NonNegativeLong

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 2/12/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: CrewCount.** To: **NonNegativeLong**	

6.50 PositiveDouble

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 8/10/2018 *Last modified:*8/10/2018 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

6.51 PositiveLong

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 2/12/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: SafetyCount.** To: **PositiveLong**	

6.52 QualifiedType

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 11/12/2021 *Last modified:*11/12/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: QualifiedType.** To: **String256**	

6.53 ReferencePointElevation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ReferencePoint	AbstractReferencePoint	

Associations

Association	Notes
From**: ReferencePointElevation.** To: **AbstractElevation**	

6.54 ReferencePointTvdInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ReferencePoint	AbstractReferencePoint	

Associations

Association	Notes
From**: ReferencePointTvdInterval.** To: **AbstractTvdInterval**	

6.55 ReferencePointVerticalDepth

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/22/2021 *Last modified:*9/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ReferencePoint	AbstractReferencePoint	

Associations

Association	Notes
From**: ReferencePointVerticalDepth.** To: **AbstractVerticalDepth**	

6.56 RelativePressureInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaxPressure	RelativePressure	
MinPressure	RelativePressure	

Associations

Association	Notes
From**: RelativePressureInterval.** To: **AbstractPressureInterval**	

6.57 ScalarInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaxValue	GenericMeasure	
MinValue	GenericMeasure	

Associations

Association	Notes
From: **ScalarInterval.** To: **AbstractInterval**	

6.58 String2000

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 3/2/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: String2000.** To: **AbstractString**	
From**: TimestampedCommentString.** To: **String2000**	
From**: StringMeasure.** To: **String2000**	

6.59 String256

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 8/6/2018 *Last modified:*8/6/2018 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: String256.** To: **AbstractString**	
From**: QualifiedType.** To: **String256**	

6.60 String64

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 3/2/2015 *Last modified:*11/2/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **String64.** To: **AbstractString**	
From: **NameStruct.** To: **String64**	
From: **TypeEnum.** To: **String64**	
From: **LithostratigraphicUnit.** To: **String64**	
From: **PublicLandSurveySystemQuarterSection.** To: **String64**	
From: **TimeZone.** To: **String64**	
From: **SectionNumber.** To: **String64**	
From: **PublicLandSurveySystemQuarterTownship.** To: **String64**	
From: **EmailQualifierStruct.** To: **String64**	
From: **CalendarMonth.** To: **String64**	
From: **GeochronologicalUnit.** To: **String64**	
From: **EventType.** To: **String64**	
From: **AuthorityQualifiedName.** To: **String64**	

6.61 StringArrayStatistics

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/27/2021 *Last modified:*10/27/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
ModePercentage	double	
ValuesMode	string	

Associations

Association	Notes
From**: AbstractStringArray.** To: **StringArrayStatistics**	

6.62 StringConstantArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/27/2021 *Status:* Approved *Author:* deny
Notes: *Represents an array of Boolean values where all values are identical. This an optimization for which an array of explicit Boolean values is not required.*

Attributes

Name	Type	Notes
Count	PositiveLong	Size of the array.
Value	String2000	Value inside all the elements of the array.

Associations

Association	Notes
From: **StringConstantArray.** To: **AbstractStringArray**	

6.63 StringExternalArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/13/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* deny
Notes: *Used to store explicit string values, i.e., values that are not double, boolean or integers. The datatype of the values will be identified by means of the HDF5 API.*

Attributes

Name	Type	Notes
CountPerValue	long	
Values	ExternalDataArray	Reference to HDF5 array of integer or double

Associations

Association	Notes
From: **StringExternalArray.** To: **AbstractStringArray**	

6.64 StringMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/2/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	UnitOfMeasureExt	

Associations

Association	Notes
From**: StringMeasure.** To: **String2000**	

6.65 StringXmlArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/22/2021 *Last modified:*8/22/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
CountPerValue	long	
Values	string	

Associations

Association	Notes
From: **StringXmlArray.** To: **AbstractStringArray**	

6.66 TemperatureInterval

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2021 *Last modified:*11/11/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
MaxTemperature	ThermodynamicTemperatureMeasureExt	
MinTemperature	ThermodynamicTemperatureMeasureExt	

Associations

Association	Notes
From**: TemperatureInterval.** To: **AbstractInterval**	

6.67 TimeStamp

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 3/5/2015 *Last modified:*8/6/2018 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: EndpointDateTime.** To: **TimeStamp**	

6.68 TimeZone

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 4/13/2015 *Last modified:*12/6/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *A time zone conforming to the XSD:dateTime specification.*

Associations

Association	Notes
From**: TimeZone.** To: **String64**	

6.69 TypeEnum

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 5/7/2014 *Last modified:*12/6/2016 *Status:* Proposed *Author:* wsmckenz
Notes: *The intended abstract supertype of all enumerated "types". This abstract type allows the maximum length of a type enumeration to be centrally defined. This type should not be used directly except to derive another type. It should also be used for uncontrolled strings which are candidates to become enumerations at a future date.*

Associations

Association	Notes
From: **TypeEnum.** To: **String64**	
From: **DasCalibrationColumn.** To: **TypeEnum**	
From: **InterpolationMethod.** To: **TypeEnum**	
From: **QuantityClassKind.** To: **TypeEnum**	
From: **FlowSubQualifier.** To: **TypeEnum**	
From: **CulturalFeatureKind.** To: **TypeEnum**	
From: **AxisDirectionKind.** To: **TypeEnum**	
From: **FluidContaminant.** To: **TypeEnum**	
From: **PPFGTectonicSetting.** To: **TypeEnum**	
From: **CollectionKind.** To: **TypeEnum**	
From: **ErrorKind.** To: **TypeEnum**	
From: **OperationKind.** To: **TypeEnum**	
From: **TransferKind.** To: **TypeEnum**	
From: **AccelerometerAxisCombination.** To: **TypeEnum**	
From: **SulfurComponentKind.** To: **TypeEnum**	
From: **SafetyType.** To: **TypeEnum**	
From: **FluidAnalysisStepCondition.** To: **TypeEnum**	
From: **LithologyKind.** To: **TypeEnum**	
From: **SaturationPointKind.** To: **TypeEnum**	
From: **ChannelState.** To: **TypeEnum**	
From: **MudSubClass.** To: **TypeEnum**	
From: **EventClassType.** To: **TypeEnum**	
From: **TubingConnectionTypes.** To: **TypeEnum**	
From: **WellDirection.** To: **TypeEnum**	
From: **DataIndexKind.** To: **TypeEnum**	
From: **BoxPinConfig.** To: **TypeEnum**	
From: **FacilityParameter.** To: **TypeEnum**	
From: **ThermodynamicPhase.** To: **TypeEnum**	
From: **MaterialType.** To: **TypeEnum**	
From: **LithologyQualifierKind.** To: **TypeEnum**	
From: **PPFGUncertaintyClass.** To: **TypeEnum**	
From: **OperatingEnvironment.** To: **TypeEnum**	
From: **BalanceEventKind.** To: **TypeEnum**	
From: **ReportVersionStatus.** To: **TypeEnum**	
From: **DasDimensions.** To: **TypeEnum**	
From: **TypeSurveyTool.** To: **TypeEnum**	
From: **BearingType.** To: **TypeEnum**	

Association	Notes
From: **ShowFluid.** To: **TypeEnum**	
From: **DasCalibrationInputPointKind.** To: **TypeEnum**	
From: **ProppantAgentKind.** To: **TypeEnum**	
From: **FacilityLifecycleState.** To: **TypeEnum**	
From: **WellOperationMethod.** To: **TypeEnum**	
From: **CrewType.** To: **TypeEnum**	
From: **PrincipalMeridian.** To: **TypeEnum**	
From: **JarAction.** To: **TypeEnum**	
From: **ShowFluorescence.** To: **TypeEnum**	
From: **RiskSubCategory.** To: **TypeEnum**	
From: **NorthOrSouth.** To: **TypeEnum**	
From: **HoleOpenerType.** To: **TypeEnum**	
From: **PPFGDataDerivation.** To: **TypeEnum**	
From: **StimFetTestAnalysisMethod.** To: **TypeEnum**	
From: **OtherConnectionTypes.** To: **TypeEnum**	
From: **MudClass.** To: **TypeEnum**	
From: **ViewerKind.** To: **TypeEnum**	
From: **ToolSubKind.** To: **TypeEnum**	
From: **SupportCraftType.** To: **TypeEnum**	
From: **OutputFluidProperty.** To: **TypeEnum**	
From: **EastOrWest.** To: **TypeEnum**	
From: **SampleQuality.** To: **TypeEnum**	
From: **ScaleType.** To: **TypeEnum**	
From: **LoggingToolClass.** To: **TypeEnum**	
From: **PPFGDataProcessing.** To: **TypeEnum**	
From: **JarType.** To: **TypeEnum**	
From: **ServiceFluidKind.** To: **TypeEnum**	
From: **StratigraphyKindQualifier.** To: **TypeEnum**	
From: **ConnectionFormType.** To: **TypeEnum**	
From: **OTDRDirection.** To: **TypeEnum**	
From: **NameTagNumberingScheme.** To: **TypeEnum**	
From: **PPFGMainFamily.** To: **TypeEnum**	
From: **StimAdditiveKind.** To: **TypeEnum**	
From: **PumpOpType.** To: **TypeEnum**	
From: **BitReasonPulled.** To: **TypeEnum**	
From: **ReportingProduct.** To: **TypeEnum**	
From: **StimJobDiversionMethod.** To: **TypeEnum**	
From: **StateDetailActivity.** To: **TypeEnum**	
From: **AliasIdentifierKind.** To: **TypeEnum**	
From: **FiberConnectorKind.** To: **TypeEnum**	
From: **StimMaterialKind.** To: **TypeEnum**	
From: **BopType.** To: **TypeEnum**	
From: **IntegerType.** To: **TypeEnum**	
From: **MixingRule.** To: **TypeEnum**	
From: **VolumeReferenceKind.** To: **TypeEnum**	
From: **ShowSpeed.** To: **TypeEnum**	
From: **BusinessUnitKind.** To: **TypeEnum**	
From: **RiskType.** To: **TypeEnum**	

Association	Notes
From: **WellFluid.** To: **TypeEnum**	
From: **ControlLineSize.** To: **TypeEnum**	
From: **WellFluid.** To: **TypeEnum**	
From: **MimeType.** To: **TypeEnum**	
From: **TimeSeriesKeyword.** To: **TypeEnum**	
From: **ChannelDerivation.** To: **TypeEnum**	
From: **WellboreShape.** To: **TypeEnum**	
From: **ReferencePointKind.** To: **TypeEnum**	
From: **PPFGFamily.** To: **TypeEnum**	
From: **FacetKind.** To: **TypeEnum**	
From: **CalculationMethod.** To: **TypeEnum**	
From: **SaturationKind.** To: **TypeEnum**	
From: **WellboreFluidLocation.** To: **TypeEnum**	
From: **HoleLoggingStatus.** To: **TypeEnum**	
From: **BhaStatus.** To: **TypeEnum**	
From: **PermanentCableInstallationKind.** To: **TypeEnum**	
From: **CalibrationPointRole.** To: **TypeEnum**	
From: **StimFluidSubtype.** To: **TypeEnum**	
From: **PPFGFamilyMnemonic.** To: **TypeEnum**	
From: **ScrType.** To: **TypeEnum**	
From: **DerrickType.** To: **TypeEnum**	
From: **LogSectionType.** To: **TypeEnum**	
From: **MeasureClass.** To: **TypeEnum**	
From: **LogTrackType.** To: **TypeEnum**	
From: **InterpretationProcessingType.** To: **TypeEnum**	
From: **GyroMode.** To: **TypeEnum**	
From: **FloatingPointType.** To: **TypeEnum**	
From: **FiberSpliceKind.** To: **TypeEnum**	
From: **CompressibilityKind.** To: **TypeEnum**	
From: **EstimationMethod.** To: **TypeEnum**	
From: **TrajStationType.** To: **TypeEnum**	
From: **PseudoComponentKind.** To: **TypeEnum**	
From: **FlowQualifier.** To: **TypeEnum**	
From: **BladeShapeType.** To: **TypeEnum**	
From: **CableKind.** To: **TypeEnum**	
From: **ReadingKind.** To: **TypeEnum**	
From: **LithostratigraphicRank.** To: **TypeEnum**	
From: **ReservoirFluidKind.** To: **TypeEnum**	
From: **BitDullCode.** To: **TypeEnum**	
From: **RiskAffectedPersonnel.** To: **TypeEnum**	
From: **ReportingEntityKind.** To: **TypeEnum**	
From: **ReferencePressureKind.** To: **TypeEnum**	
From: **AddressQualifier.** To: **TypeEnum**	
From: **DriveType.** To: **TypeEnum**	
From: **MatrixCementKind.** To: **TypeEnum**	
From: **ShowLevel.** To: **TypeEnum**	
From: **OperatingCondition.** To: **TypeEnum**	
From: **LithologySource.** To: **TypeEnum**	

Association	Notes
From: **AddressKindEnum.** To: **TypeEnum**	
From: **WellboreMarkerKind.** To: **TypeEnum**	
From: **WellStatus.** To: **TypeEnum**	
From: **OTDRReason.** To: **TypeEnum**	
From: **PPFGModeledLithology.** To: **TypeEnum**	
From: **GeochronologicalRank.** To: **TypeEnum**	
From: **WellboreType.** To: **TypeEnum**	
From: **SampleAction.** To: **TypeEnum**	
From: **CompletionStatus.** To: **TypeEnum**	
From: **GyroAxisCombination.** To: **TypeEnum**	
From: **IndexableElement.** To: **TypeEnum**	
From: **ShowRating.** To: **TypeEnum**	
From: **InterventionConveyanceKind.** To: **TypeEnum**	
From: **ReferenceCondition.** To: **TypeEnum**	
From: **PhasePresent.** To: **TypeEnum**	
From: **WellPurpose.** To: **TypeEnum**	
From: **ChannelDataKind.** To: **TypeEnum**	
From: **ProductFluidKind.** To: **TypeEnum**	
From: **TargetCategory.** To: **TypeEnum**	
From: **ReportingFacility.** To: **TypeEnum**	
From: **InnerBarrelType.** To: **TypeEnum**	
From: **WellborePointOfInterest.** To: **TypeEnum**	
From: **FluidComponentBasis.** To: **TypeEnum**	
From: **OSDULineageRelationshipKind.** To: **TypeEnum**	
From: **RigType.** To: **TypeEnum**	
From: **PresTestType.** To: **TypeEnum**	
From: **ControlLineMaterial.** To: **TypeEnum**	
From: **FacilityKind.** To: **TypeEnum**	
From: **TargetSectionScope.** To: **TypeEnum**	
From: **LineStyle.** To: **TypeEnum**	
From: **ReasonLost.** To: **TypeEnum**	
From: **ExistenceKind.** To: **TypeEnum**	
From: **BalanceFlowPart.** To: **TypeEnum**	
From: **WellTestType.** To: **TypeEnum**	
From: **StimFluidKind.** To: **TypeEnum**	
From: **LoggingMethod.** To: **TypeEnum**	
From: **PvtModelParameterKind.** To: **TypeEnum**	
From: **ActiveStatusKind.** To: **TypeEnum**	
From: **ReportingDurationKind.** To: **TypeEnum**	
From: **NameTagLocation.** To: **TypeEnum**	
From: **DrawWorksType.** To: **TypeEnum**	
From: **ValueStatus.** To: **TypeEnum**	
From: **CorrectionConsidered.** To: **TypeEnum**	
From: **OpsReportVersion.** To: **TypeEnum**	
From: **EndpointQualifier.** To: **TypeEnum**	
From: **TrajStationStatus.** To: **TypeEnum**	
From: **NameTagTechnology.** To: **TypeEnum**	

Association	Notes
From: **ToolKind.** To: **TypeEnum**	
From: **TargetScope.** To: **TypeEnum**	
From: **WellControlIncidentType.** To: **TypeEnum**	
From: **ProductFlowPortType.** To: **TypeEnum**	
From: **DeferredKind.** To: **TypeEnum**	
From: **BitType.** To: **TypeEnum**	
From: **DeflectionMethod.** To: **TypeEnum**	
From: **RiskCategory.** To: **TypeEnum**	
From: **IndexDirection.** To: **TypeEnum**	
From: **TrajStnCalcAlgorithm.** To: **TypeEnum**	
From: **DrillActivityCode.** To: **TypeEnum**	
From: **Facet.** To: **TypeEnum**	
From: **PassDirection.** To: **TypeEnum**	
From: **VolumeReferenceKind.** To: **TypeEnum**	
From: **MisalignmentMode.** To: **TypeEnum**	
From: **BladeType.** To: **TypeEnum**	
From: **ConnectionPosition.** To: **TypeEnum**	
From: **VerticalDirection.** To: **TypeEnum**	
From: **ControlLineEncapsulationKind.** To: **TypeEnum**	
From: **OpticalPathConfiguration.** To: **TypeEnum**	
From: **DisplaySpace.** To: **TypeEnum**	
From: **PureComponentKind.** To: **TypeEnum**	
From: **FiberMode.** To: **TypeEnum**	
From: **InterpolationDomain.** To: **TypeEnum**	
From: **ReservoirLifeCycleState.** To: **TypeEnum**	
From: **SurfEquipType.** To: **TypeEnum**	
From: **DispositionKind.** To: **TypeEnum**	
From: **FiberEndKind.** To: **TypeEnum**	
From: **PPFGTransformModelType.** To: **TypeEnum**	
From: **OrganizationKind.** To: **TypeEnum**	
From: **ReportingFlow.** To: **TypeEnum**	
From: **TerminationKind.** To: **TypeEnum**	
From: **PlusComponentKind.** To: **TypeEnum**	
From: **EdgePattern.** To: **TypeEnum**	
From: **HoleCasingType.** To: **TypeEnum**	
From: **ActivityParameterKind.** To: **TypeEnum**	
From: **PathDefectKind.** To: **TypeEnum**	
From: **GasPeakType.** To: **TypeEnum**	
From: **FluidSampleKind.** To: **TypeEnum**	
From: **BackupScaleType.** To: **TypeEnum**	
From: **AxisOrder2d.** To: **TypeEnum**	
From: **FileNameType.** To: **TypeEnum**	
From: **DrillActivityClassType.** To: **TypeEnum**	
From: **MessageDigestType.** To: **TypeEnum**	
From: **RodConnectionTypes.** To: **TypeEnum**	
From: **EndpointQualifierInterval.** To: **TypeEnum**	
From: **PIDXCommodityCode.** To: **TypeEnum**	
From: **WellInterest.** To: **TypeEnum**	

Association	Notes
From: **BalanceDestinationType.** To: **TypeEnum**	
From: **TraceProcessingType.** To: **TypeEnum**	
From: **PitType.** To: **TypeEnum**	
From: **PumpType.** To: **TypeEnum**	
From: **CasingConnectionTypes.** To: **TypeEnum**	
From: **ItemState.** To: **TypeEnum**	
From: **WellDirection.** To: **TypeEnum**	
From: **NozzleType.** To: **TypeEnum**	
From: **PhoneType.** To: **TypeEnum**	
From: **WellKillingProcedureType.** To: **TypeEnum**	
From: **ControlLineEncapsulationSize.** To: **TypeEnum**	
From: **ErrorPropagationMode.** To: **TypeEnum**	
From: **QuantityMethod.** To: **TypeEnum**	
From: **NorthReferenceKind.** To: **TypeEnum**	
From: **AuthorizationStatus.** To: **TypeEnum**	
From: **MeasurementType.** To: **TypeEnum**	
From: **BrineClass.** To: **TypeEnum**	
From: **LogRectangleType.** To: **TypeEnum**	
From: **TubularAssembly.** To: **TypeEnum**	

6.70 UomEnum

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 5/7/2014 *Last modified:*8/24/2021 *Status:* Proposed *Author:* wsmckenz
Notes: The intended supertype of all "units of measure".
This abstract type allows the maximum length of a UOM enumeration to be centrally defined.
This type is abstract in the sense that it should not be used directly except to derive another type.

Associations

Association	Notes
From: **UomEnum.** To: **AbstractString**	
From: **IsothermalCompressibilityUom.** To: **UomEnum**	
From: **MobilityUom.** To: **UomEnum**	
From: **MassPerTimePerLengthUom.** To: **UomEnum**	
From: **MassPerMassUom.** To: **UomEnum**	
From: **AngularVelocityUom.** To: **UomEnum**	
From: **AmountOfSubstancePerAmountOfSubstanceUom.** To: **UomEnum**	
From: **LengthUom.** To: **UomEnum**	
From: **ElectricPotentialDifferenceUom.** To: **UomEnum**	
From: **MassPerEnergyUom.** To: **UomEnum**	
From: **VolumePerVolumeUom.** To: **UomEnum**	
From: **ElectricCurrentDensityUom.** To: **UomEnum**	
From: **ReciprocalMassUom.** To: **UomEnum**	
From: **PressurePerTimeUom.** To: **UomEnum**	
From: **CationExchangeCapacityUom.** To: **UomEnum**	
From: **CapacitanceUom.** To: **UomEnum**	
From: **MomentumUom.** To: **UomEnum**	
From: **LuminousEfficacyUom.** To: **UomEnum**	
From: **ElectricChargeUom.** To: **UomEnum**	
From: **MassPerAreaUom.** To: **UomEnum**	
From: **InductanceUom.** To: **UomEnum**	
From: **AreaUom.** To: **UomEnum**	
From: **MomentOfInertiaUom.** To: **UomEnum**	
From: **ElectricChargePerMassUom.** To: **UomEnum**	
From: **RadianceUom.** To: **UomEnum**	
From: **MolarEnergyUom.** To: **UomEnum**	
From: **FrequencyIntervalUom.** To: **UomEnum**	
From: **EnergyLengthPerAreaUom.** To: **UomEnum**	
From: **HeatFlowRateUom.** To: **UomEnum**	
From: **LegacyPressurePerVolumeUom.** To: **UomEnum**	

Association	Notes
From: **ElectricResistanceUom.** To: **UomEnum**	
From: **AnglePerLengthUom.** To: **UomEnum**	
From: **MagneticFluxDensityPerLengthUom.** To: **UomEnum**	
From: **ForceLengthPerLengthUom.** To: **UomEnum**	
From: **TimeUom.** To: **UomEnum**	
From: **TimePerVolumeUom.** To: **UomEnum**	
From: **MassLengthUom.** To: **UomEnum**	
From: **MagneticFluxUom.** To: **UomEnum**	
From: **MassPerLengthUom.** To: **UomEnum**	
From: **AmountOfSubstancePerAreaUom.** To: **UomEnum**	
From: **LogarithmicPowerRatioUom.** To: **UomEnum**	
From: **VolumePerTimePerPressureLengthUom.** To: **UomEnum**	
From: **MolarVolumeUom.** To: **UomEnum**	
From: **VolumeUom.** To: **UomEnum**	
From: **ForceAreaUom.** To: **UomEnum**	
From: **PressurePerFlowrateSquaredUom.** To: **UomEnum**	
From: **TemperatureIntervalPerPressureUom.** To: **UomEnum**	
From: **VolumePerTimePerLengthUom.** To: **UomEnum**	
From: **APINeutronUom.** To: **UomEnum**	
From: **AmountOfSubstancePerVolumeUom.** To: **UomEnum**	
From: **VolumePerLengthUom.** To: **UomEnum**	
From: **PowerPerAreaUom.** To: **UomEnum**	
From: **DynamicViscosityUom.** To: **UomEnum**	
From: **AttenuationPerFrequencyIntervalUom.** To: **UomEnum**	
From: **TimePerLengthUom.** To: **UomEnum**	
From: **VolumePerMassUom.** To: **UomEnum**	
From: **PermeabilityLengthUom.** To: **UomEnum**	
From: **KinematicViscosityUom.** To: **UomEnum**	
From: **FrequencyUom.** To: **UomEnum**	
From: **LegacyUnitOfMeasure.** To: **UomEnum**	
From: **ThermalInsulanceUom.** To: **UomEnum**	
From: **SolidAngleUom.** To: **UomEnum**	
From: **DiffusiveTimeOfFlightUom.** To: **UomEnum**	
From: **MagneticFieldStrengthUom.** To: **UomEnum**	
From: **LengthPerVolumeUom.** To: **UomEnum**	
From: **AbsorbedDoseUom.** To: **UomEnum**	
From: **ElectricCurrentUom.** To: **UomEnum**	

Association	Notes
From: **ReciprocalMassTimeUom.** To: **UomEnum**	
From: **ReciprocalForceUom.** To: **UomEnum**	
From: **EnergyUom.** To: **UomEnum**	
From: **VolumePerTimePerPressureUom.** To: **UomEnum**	
From: **HeatTransferCoefficientUom.** To: **UomEnum**	
From: **PressureSquaredPerForceTimePerAreaUom.** To: **UomEnum**	
From: **MagneticPermeabilityUom.** To: **UomEnum**	
From: **ActivityOfRadioactivityUom.** To: **UomEnum**	
From: **VolumePerAreaUom.** To: **UomEnum**	
From: **ForcePerVolumeUom.** To: **UomEnum**	
From: **LuminousFluxUom.** To: **UomEnum**	
From: **VolumePerTimeLengthUom.** To: **UomEnum**	
From: **ElectricalResistivityUom.** To: **UomEnum**	
From: **EnergyPerLengthUom.** To: **UomEnum**	
From: **EnergyLengthPerTimeAreaTemperatureUom.** To: **UomEnum**	
From: **VerticalCoordinateUom.** To: **UomEnum**	
From: **ElectricChargePerAreaUom.** To: **UomEnum**	
From: **ReciprocalLengthUom.** To: **UomEnum**	
From: **AreaPerAmountOfSubstanceUom.** To: **UomEnum**	
From: **VolumePerTimePerVolumeUom.** To: **UomEnum**	
From: **MassPerVolumePerLengthUom.** To: **UomEnum**	
From: **TimePerMassUom.** To: **UomEnum**	
From: **LuminousIntensityUom.** To: **UomEnum**	
From: **ElectricResistancePerLengthUom.** To: **UomEnum**	
From: **AreaPerMassUom.** To: **UomEnum**	
From: **DigitalStorageUom.** To: **UomEnum**	
From: **DataTransferSpeedUom.** To: **UomEnum**	
From: **RadiantIntensityUom.** To: **UomEnum**	
From: **PressurePerVolumeUom.** To: **UomEnum**	
From: **LegacyPressureUom.** To: **UomEnum**	
From: **MolecularWeightUom.** To: **UomEnum**	
From: **MassPerVolumeUom.** To: **UomEnum**	
From: **PlaneAngleUom.** To: **UomEnum**	
From: **MomentOfForceUom.** To: **UomEnum**	

Association	Notes
From: **ReciprocalPressureUom.** To: **UomEnum**	
From: **LogarithmicPowerRatioPerLengthUom.** To: **UomEnum**	
From: **LengthPerTemperatureUom.** To: **UomEnum**	
From: **DipoleMomentUom.** To: **UomEnum**	
From: **SignalingEventPerTimeUom.** To: **UomEnum**	
From: **SecondMomentOfAreaUom.** To: **UomEnum**	
From: **DiffusionCoefficientUom.** To: **UomEnum**	
From: **LengthPerLengthUom.** To: **UomEnum**	
From: **TimePerTimeUom.** To: **UomEnum**	
From: **EnergyPerMassUom.** To: **UomEnum**	
From: **ElectromagneticMomentUom.** To: **UomEnum**	
From: **VolumePerPressureUom.** To: **UomEnum**	
From: **PowerPerVolumeUom.** To: **UomEnum**	
From: **AreaPerCountUom.** To: **UomEnum**	
From: **ActivityOfRadioactivityPerVolumeUom.** To: **UomEnum**	
From: **ThermalResistanceUom.** To: **UomEnum**	
From: **LegacyMassPerVolumeUom.** To: **UomEnum**	
From: **VolumePerTimePerTimeUom.** To: **UomEnum**	
From: **AngularAccelerationUom.** To: **UomEnum**	
From: **PressurePerPressureUom.** To: **UomEnum**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUom.** To: **UomEnum**	
From: **VolumetricHeatTransferCoefficientUom.** To: **UomEnum**	
From: **HeatCapacityUom.** To: **UomEnum**	
From: **EnergyPerMassPerTimeUom.** To: **UomEnum**	
From: **MagneticDipoleMomentUom.** To: **UomEnum**	
From: **ThermalConductivityUom.** To: **UomEnum**	
From: **MassUom.** To: **UomEnum**	
From: **AmountOfSubstancePerTimeUom.** To: **UomEnum**	
From: **ReciprocalTimeUom.** To: **UomEnum**	
From: **ElectricFieldStrengthUom.** To: **UomEnum**	
From: **VolumePerTimeUom.** To: **UomEnum**	

Association	Notes
From: **ThermalConductanceUom.** To: **UomEnum**	
From: **EnergyPerVolumeUom.** To: **UomEnum**	
From: **LegacyVolumePerAreaUom.** To: **UomEnum**	
From: **APIGammaRayUom.** To: **UomEnum**	
From: **UnitOfMeasure.** To: **UomEnum**	
From: **LengthPerTimeUom.** To: **UomEnum**	
From: **PowerUom.** To: **UomEnum**	
From: **LegacyVolumeUom.** To: **UomEnum**	
From: **MassPerTimeUom.** To: **UomEnum**	
From: **AreaPerVolumeUom.** To: **UomEnum**	
From: **VolumetricThermalExpansionUom.** To: **UomEnum**	
From: **ThermalDiffusivityUom.** To: **UomEnum**	
From: **AmountOfSubstancePerTimePerAreaUom.** To: **UomEnum**	
From: **MagneticVectorPotentialUom.** To: **UomEnum**	
From: **TemperatureIntervalUom.** To: **UomEnum**	
From: **VolumeFlowRatePerVolumeFlowRateUom.** To: **UomEnum**	
From: **MassPerVolumePerPressureUom.** To: **UomEnum**	
From: **LengthPerMassUom.** To: **UomEnum**	
From: **ForcePerForceUom.** To: **UomEnum**	
From: **MassPerTimePerAreaUom.** To: **UomEnum**	
From: **MassPerVolumePerTemperatureUom.** To: **UomEnum**	
From: **ElectricChargePerVolumeUom.** To: **UomEnum**	
From: **AreaPerTimeUom.** To: **UomEnum**	
From: **LinearThermalExpansionUom.** To: **UomEnum**	
From: **MolarHeatCapacityUom.** To: **UomEnum**	
From: **MagneticFluxDensityUom.** To: **UomEnum**	
From: **AreaPerAreaUom.** To: **UomEnum**	
From: **PowerPerPowerUom.** To: **UomEnum**	
From: **PermeabilityRockUom.** To: **UomEnum**	
From: **VolumePerTimePerAreaUom.** To: **UomEnum**	
From: **ForcePerLengthUom.** To: **UomEnum**	
From: **LightExposureUom.** To: **UomEnum**	
From: **ReciprocalVolumeUom.** To: **UomEnum**	
From: **LegacyVolumePerVolumeUom.** To: **UomEnum**	

Association	Notes
From: **LinearAccelerationUom.** To: **UomEnum**	
From: **VolumePerRotationUom.** To: **UomEnum**	
From: **ForceUom.** To: **UomEnum**	
From: **ElectricConductanceUom.** To: **UomEnum**	
From: **DimensionlessUom.** To: **UomEnum**	
From: **NormalizedPowerUom.** To: **UomEnum**	
From: **AmountOfSubstanceUom.** To: **UomEnum**	
From: **ThermodynamicTemperatureUom.** To: **UomEnum**	
From: **EnergyPerAreaUom.** To: **UomEnum**	
From: **IlluminanceUom.** To: **UomEnum**	
From: **QuantityOfLightUom.** To: **UomEnum**	
From: **LengthPerPressureUom.** To: **UomEnum**	
From: **TemperatureIntervalPerLengthUom.** To: **UomEnum**	
From: **TemperatureIntervalPerTimeUom.** To: **UomEnum**	
From: **PermittivityUom.** To: **UomEnum**	
From: **ReciprocalAreaUom.** To: **UomEnum**	
From: **ElectricConductivityUom.** To: **UomEnum**	
From: **PotentialDifferencePerPowerDropUom.** To: **UomEnum**	
From: **LuminanceUom.** To: **UomEnum**	
From: **PressureUom.** To: **UomEnum**	
From: **APIGravityUom.** To: **UomEnum**	
From: **ReciprocalElectricPotentialDifferenceUom.** To: **UomEnum**	
From: **PressurePerFlowrateUom.** To: **UomEnum**	
From: **DoseEquivalentUom.** To: **UomEnum**	
From: **LegacyVolumePerTimeUom.** To: **UomEnum**	
From: **SpecificHeatCapacityUom.** To: **UomEnum**	
From: **ReluctanceUom.** To: **UomEnum**	
From: **AnglePerVolumeUom.** To: **UomEnum**	
From: **PressureTimePerVolumeUom.** To: **UomEnum**	
From: **PressureSquaredUom.** To: **UomEnum**	

6.71 UuidString

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 5/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Associations

Association	Notes
From**: UuidString.** To: **AbstractString**	

7 BusinessAssociate

Package: xsd_schemas

Notes: The BusinessAssociate package is the schema for capturing the name, kind and related contact information for any organization required. As an EnergyML data object, any other data object can reference it using a data object reference.

This data object was added for compatibility with OSDU. As an Energistics data object, it can be referenced (using a data object reference (DataObjectReference) by any other Energistics data object.

7.1 AddressKindEnum

Type: Enumeration Stereotype:
Detail: Created: 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *Specifies the kinds of company addresses.*

Attributes

Name	Type	Notes
both	TypeEnum	
mailing	TypeEnum	
physical	TypeEnum	physical

Associations

Association	Notes
From**: AddressKindEnum.** To: **TypeEnum**	
From**: GeneralAddress.** To: **AddressKindEnum**	

7.2 AddressQualifier

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *Specifies qualifiers that can be used for addresses or phone numbers.*

Attributes

Name	Type	Notes
permanent		permanent
personal		personal
work		

Associations

Association	Notes
From**: AddressQualifier.** To: **TypeEnum**	
From**: EmailQualifierStruct.** To: **AddressQualifier**	

7.3 BusinessAssociate

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.*

Attributes

Name	Type	Notes
Address	GeneralAddress	The business address.
AssociatedWith	String64	A pointer to another business associate that this business associate is associated with. The most common situation is that of an employee being associated with a company. But it may also be, for example, a work group associated with a university.
AuthorityCode	String64	The code used when this business associate is used as an authority attribute or extensible enumeration authority within Energistics standards.
Contact	String64	A pointer to a business associate (generally a person) who serves as a contact for this business associate.
EffectiveDateTime	TimeStamp	The date and time when the business associate became effective (e.g., the date it was founded).
Email	EmailQualifierStruct	The email address may be home, office, or permanent. More than one may be given.
IsInternal	boolean	Indicates if the business associate is internal to the enterprise.
Name	String256	Name of the business associate.
OrganizationKind	OrganizationKindExt	The kind of organizational structure the business associate fits into. Typical values include: Operating Unit, Operating sub Unit, A Business, A Department, Government Agency, etc.
PersonnelCount	nonNegativeInteger	The count of personnel in a group.
PhoneNumber	PhoneNumberStruct	Various types of phone numbers may be given. They may be office or home, they may be a number for a cell phone, or for a fax, etc. Attributes of PhoneNumber declare the type of phone number that is being given.
Purpose	String2000	The reason the business associate was formed.

Role	NameStruct	The role of the business associate within the context. For example, "driller" or "operator", "lead agency - CEQA compliance" "regulatory contact", "safety contact". A business associate generally has one role but the role may be called different things in different naming systems.
TerminationDateTime	TimeStamp	The data and time when the business associate ceased to be effective (e.g., the date when it was acquired by another company).

Associations

Association			Notes
	From**: BusinessAssociate.**	To: **EmailQualifierStruct**	
	From**: BusinessAssociate.**	To: **AbstractObject**	
	From**: BusinessAssociate.**	To: **PhoneNumberStruct**	
	From**: BusinessAssociate.**	To: **OrganizationKindExt**	
	From**: BusinessAssociate.**	To: **NameStruct**	
	From**: BusinessAssociate.**	To: **GeneralAddress**	
0..1	From**: BusinessAssociate.**PersonName	To: **PersonName**	The components of a person's name.
0..1	From**: FacilityIdentifier.**Operator	To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: Report.**Operator	To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: ProductionOperation.**Operator	To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.

Association		Notes
0..1	From**: AbstractDtsEquipment.**Supplier To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: Report.**Approver To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: Report.**IssuedBy To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: ProductionOperation.**IssuedBy To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: ProductionOperation.**Approver To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: OTDRAcquisition.**MeasurementContact To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.

Association		Notes
0..1	From**: AbstractSimpleProductVolume.**Operator To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: Instrument.**InstrumentVendor To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.
0..1	From**: FiberOpticalPath.**InstallingVendor To: **BusinessAssociate**	Describes any company, person, group, consultant, etc., which is associated within a context (e.g., a well). The information contained in this module is: (1) contact information, such as address, phone numbers, email, (2) alternate name, or aliases, and (3) associations, such as the business associate that this one is associated with, or a contact who is associated with this business associate.

7.4 EmailQualifierStruct

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *An email address with an attribute, used to "qualify" an email as personal, work, or permanent.*

Attributes

Name	Type	Notes
qualifier	AddressQualifier	Enum attribute, used to "qualify" an email as personal, work, or permanent.

Associations

Association	Notes
From: **EmailQualifierStruct.** To: **AddressQualifier**	
From: **EmailQualifierStruct.** To: **String64**	
From: **BusinessAssociate.** To: **EmailQualifierStruct**	

7.5 GeneralAddress

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *An general address structure. This form is appropriate for most countries.*

Attributes

Name	Type	Notes
City	String64	The city for the business associate's address.
Country	String64	The country may be included. Although this is optional, it is probably required for most uses.
County	String64	The county, if applicable or necessary.
kind	AddressKindEnum	The type of address: mailing, physical, or both. See AddressKindEnum.
Name	String64	The name line of an address. If missing, use the name of the business associate.
PostalCode	String64	A postal code, if appropriate for the country. In the USA, this would be the five or nine digit zip code.
Province	String64	Province.
State	String64	State.
Street	String64	A generic term for the middle lines of an address. They may be a street address, PO box, suite number, or any lines that come between the "name" and "city" lines. This may be repeated for up to four, ordered lines.
uid	String64	A unique identifier for this data element. It is not globally unique (not a uuid) and only need be unique within the context of the parent top-level object.

Associations

Association	Notes
From**: GeneralAddress.** To: **AddressKindEnum**	
From**: BusinessAssociate.** To: **GeneralAddress**	

7.6 NameStruct

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *The name of something within a naming system.*

Attributes

Name	Type	Notes
authority	String64	The authority for the naming system, e.g., a company.

Associations

Association		Notes
	From**: NameStruct.** To: **String64**	
0..*	From**: ProductFlowUnit.**FacilityAlias To: **NameStruct**	The name of something within a naming system.
	From**: BusinessAssociate.** To: **NameStruct**	

7.7 OrganizationKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Kind of organization.*

Attributes

Name	Type	Notes
academic institution		
government agency		
industry organization		
non-governmental organization		
organization unit		

Associations

Association	Notes
From**: OrganizationKind.** To: **TypeEnum**	
From**: OrganizationKindExt.** To: **OrganizationKind**	

7.8 OrganizationKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: OrganizationKindExt.** To: **OrganizationKind**	
From**: OrganizationKindExt.** To: **EnumExtensionPattern**	
From**: BusinessAssociate.** To: **OrganizationKindExt**	

7.9 PersonName

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *The components of a person's name.*

Attributes

Name	Type	Notes
First	String64	The person's first name, sometimes called their "given name".
Last	String64	The person's last or family name.
Middle	String64	The person's middle name or initial.
Prefix	String64	A name prefix. Such as, Dr, Ms, Miss, Mr, etc.
Suffix	String64	A name suffix such as Esq, Phd, etc.

Associations

Association	Notes
From**: BusinessAssociate.**PersonName **0..1** To: **PersonName**	The components of a person's name.

7.10 PhoneNumberStruct

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *A phone number with two attributes, used to "type" and "qualify" a phone number. The type would carry information such as fax, modem, voice, and the qualifier would carry information such as home or office.*

Attributes

Name	Type	Notes
extension	String64	The phone number extension.
qualifier	AddressQualifier	Indicates whether the number is personal, business or both.
type	PhoneType	The kind of phone such as voice or fax.

Associations

Association	Notes
From: **PhoneNumberStruct.** To: **PhoneType**	
From: **BusinessAssociate.** To: **PhoneNumberStruct**	

7.11 PhoneType

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/13/2014 *Last modified:*8/26/2021 *Status:* Proposed *Author:* Mark Mao
Notes: *Specifies the types phone number (e.g., fax, mobile, etc.)*

Attributes

Name	Type	Notes
fax		
mobile		
pager		
unknown		
voice		
voice/fax		
voicemail		

Associations

Association	Notes
From**: PhoneType.** To: **TypeEnum**	
From**: PhoneNumberStruct.** To: **PhoneType**	

8 Collection

Package: xsd_schemas

Notes: Collection contains the schemas to create a data object collection (DataobjectCollection), which is a grouping of other EnergyML data objects, which (because it's a data object) can be persisted.

8.1 CollectionKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 10/9/2020 *Last modified:*10/6/2021 *Status:* Proposed *Author:* Philippe Verney
Notes: *The list of enumerated values for a collection.*

Attributes

Name	Type	Notes
folder		
project		
realization		
scenario		
study		

Associations

Association	Notes
From**: CollectionKind.** To: **TypeEnum**	
From**: CollectionKindExt.** To: **CollectionKind**	

8.2 CollectionKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 10/9/2020 *Last modified:*11/29/2021 *Status:* Proposed *Author:* Philippe Verney
Notes: An Energistics modeling pattern that allows an implementation to extend the defined list of enumerations.
A writer can use this field to write a string (enumeration) that is not part of the official enumeration.
A reader must accept this text but is not required to understand or process it.

Associations

Association	Notes
From: **CollectionKindExt.** To: **EnumExtensionPattern**	
From: **CollectionKindExt.** To: **CollectionKind**	
From: **DataobjectCollection.** To: **CollectionKindExt**	

8.3 CollectionsToDataobjectsAssociationSet

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/9/2020 *Last modified:*12/12/2021 *Status:* Proposed *Author:* Philippe Verney
Notes: Allows data objects to be associated in one or more collections.
BUSINESS RULE : If two or more of the same data object collections are used in one CollectionsToDataobjectsAssociationSet, only one of those data object collections should be taken into account and the other ones must be ignored.

Associations

Association	Notes
From: **CollectionsToDataobjectsAssociationSet.** To: **AbstractObject**	
From: **CollectionsToDataobjectsAssociationSet.**SingleCollectionAssociation **1..*** To: **SingleCollectionAssociation**	

8.4 DataobjectCollection

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/9/2020 *Last modified:*10/6/2021 *Status:* Proposed *Author:* Philippe Verney
Notes: Allows multiple data objects to be grouped together into a collection.
The relationships (between the data objects and the collection) are specified and managed using the SingleCollectionAssociation.

Attributes

Name	Type	Notes
HomogeneousDatatype	boolean	Boolean flag. If true all data objects in the collection are of the same Energistics data type (EXAMPLE: All wellbores or all horizons).
Kind	CollectionKindExt	Indicates the semantic of the collection. It is an extensible enumeration. So it may be one of the enumerations listed in CollectionKind or an implemenation may specify its own kind using CollectionKindExt.

Associations

Association	Notes
From: **DataobjectCollection.** To: **AbstractObject**	
From: **DataobjectCollection.** To: **CollectionKindExt**	
From: **EarthModelInterpretation.**WellboreInterpretationSet **0..*** To: **DataobjectCollection**	A container to group together a set of WellboreInterpretations. This container can be associated with an EarthModelInterpretation. This link of the wellbore interpretation set to the earth model interpretation helps the reader know which wellbore interpretations are used to realize an earth model interpretation the DataobjectCollection must only contain WellboreInterpretation i.e. its homogeneousdatatype attribute must be resqml22.WellboreInterpretation
From: **SingleCollectionAssociation.**Collection To: **DataobjectCollection**	
From: **BoundaryFeatureInterpretationPlusItsRank.**FeatureInterpretationSet **0..1** To: **DataobjectCollection**	

8.5 SingleCollectionAssociation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/9/2020 *Last modified:*10/6/2021 *Status:* Proposed *Author:* Philippe Verney
Notes: Indicates the data objects that are associated to a single collection.
BUSINESS RULE: The same collection CANNOT be used in multiple SingleCollectionAssociations of the same CollectionsToDataobjectsAssociations.
BUSINESS RULE : If two or more of the same data objects are used in one SingleCollectionAssociation, only one data object should be taken into account and the other ones must be ignored.

Attributes

Name	Type	Notes
HomogeneousDatatype	boolean	Boolean flag. If true all data objects in the collection are of the same Energistics data type (EXAMPLE: All wellbores or all horizons).

Associations

Association	Notes
From**: SingleCollectionAssociation.**Collection To: **DataobjectCollection**	
From**: SingleCollectionAssociation.**Dataobject **1..*** To: **AbstractObject**	
From**: CollectionsToDataobjectsAssociationSet.**SingleCollectionAssociation **1..*** To: **SingleCollectionAssociation**	

9 ColumnBasedTable

Package: xsd_schemas

Notes: This package contains the schemas to define a column-based table. A column-based table allows the exchange of tables, where the values are arranged against columns that are defined by PropertyKind, UOM and Facet.

EXAMPLES: KrPc table and facies tables.

9.1 Column

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/6/2021 *Last modified:*10/6/2021 *Status:* Proposed *Author:* philippe
Notes: *Defines one column in a column-based table.*

Attributes

Name	Type	Notes
Description	String2000	A free text description for this column.
Title	String64	The title of the column. It is optional because the property kind already provides information about the content in a column.
Uom	UnitOfMeasureExt	If present, this value overrides the default UOM of the associated property kind.
ValueCountPerRow	PositiveLong	The count of values in each row of this column. If this value is greater than 1, then the fastest dimension of the column Values array must be this value. EXAMPLE: If this value is 3 for a column of 10 rows, then the corresponding array would be [10, 3] (C array notation where 3 is fastest and 10 slowest).

Associations

Association		Notes
0..*	From**: Column.**Aliases To: **ObjectAlias**	Aliases which are used for this column (title).
	From**: Column.**PropertyKind To: **PropertyKind**	The mandatory property kind which identifies the meaning of the values of the column.
	From**: Column.**Values To: **AbstractValueArray**	All values of the column. Ordering matters since it will be the same in all columns allowing to map a column value to another one.
0..*	From**: Column.**Facet To: **PropertyKindFacet**	
1..*	From**: ColumnBasedTable.**Column To: **Column**	
1..*	From**: NestedColumnBasedTable.**Column To: **Column**	
0..*	From**: NestedColumnBasedTable.**KeyColumn To: **Column**	
0..*	From**: ColumnBasedTable.**KeyColumn To: **Column**	Defines a key column which make the table a lookup table.

9.2 ColumnBasedTable

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/6/2021 *Last modified:*10/6/2021 *Status:* Proposed *Author:* philippe
Notes: A column-based table allows the exchange of tables, where the values are arranged against columns that are defined by PropertyKind, UOM and Facet.
EXAMPLES: KrPc table and facies tables.

Associations

Association	Notes
From**: ColumnBasedTable.** To: **AbstractObject**	
1..* From**: ColumnBasedTable.**Column To: **Column**	
0..* From**: ColumnBasedTable.**KeyColumn To: **Column**	Defines a key column which make the table a lookup table.
0..1 From**: DiscreteProperty.**CategoryLookup To: **ColumnBasedTable**	

9.3 NestedColumnBasedTable

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/6/2021 *Last modified:*10/6/2021 *Status:* Proposed *Author:* philippe
Notes: Allows a table to be contained in an abstract object (AbstractObject) without carrying all of the information of an abstract object (such as UUID, schema version, object version, aliases, extensions, etc.)
Also, it is not a data object, meaning it is not discoverable by itself in an ETP context.

Attributes

Name	Type	Notes
Description	String2000	
Title	String256	

Associations

Association		Notes
1..*	From**: NestedColumnBasedTable.**Column To: **Column**	
0..*	From**: NestedColumnBasedTable.**KeyColumn To: **Column**	

10 CommonEnumerations

Package: xsd_schemas

Notes: Enumerations shared across all Energistics ML standards.

10.1 DataIndexKind

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/15/2015 *Last modified:*11/19/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies the kind of value used to index data.*

Attributes

Name	Type	Notes
measured depth		Measured depth.
true vertical depth		True vertical depth.
pass indexed depth		An index value that includes pass, direction, and depth values This can only refer to measured depths.
date time		Date with time.
elapsed time		Time that has elapsed
temperature		Temperature.
pressure		Pressure.
scalar		Scalar.

Associations

Association	Notes
From**: DataIndexKind.** To: **TypeEnum**	
From**: ChannelIndex.** To: **DataIndexKind**	

10.2 GeochronologicalRank

Type: Enumeration *Stereotype:*
Detail: *Created:* 2/8/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Qualifier for the geological time denoted by the GeochronologicalUnit: eon, era, epoch, etc.*

Attributes

Name	Type	Notes
eon		
era		
period		
epoch		
age		
chron		

Associations

Association	Notes
From: **GeochronologicalRank.** To: **TypeEnum**	
From: **GeochronologicalUnit.** To: **GeochronologicalRank**	

10.3 IndexableElement

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/21/2012 *Last modified:*8/23/2021 *Status:* Approved *Author:* philippe
Notes: Indexable elements for the different representations. The indexing of each element depends upon the specific representation.
To order and reference the elements of a representation, RESQML makes extensive use of the concept of indexing. Both one-dimensional and multi-dimensional arrays of elements are used. So that all elements may be referenced in a consistent and uniform fashion, each multi-dimensional index must have a well-defined 1D index.

Attributes below identify the IndexableElements, though not all elements apply to all types of representations.

Indexable elements are used to:

- attach geometry and properties to a representation.
- identify portions of a representation when expressing a representation identity.
- construct a sub-representation from an existing representation.

For the table of indexable elements and the representations to which they apply, see the *RESQML Technical Usage Guide*.

Attributes

Name	Type	Notes
cells	External Reference	
intervals from datum		
column edges	External Reference	
columns	External Reference	
contacts	External Reference	
coordinate lines	External Reference	
edges	External Reference	
edges per column	External Reference	
enumerated elements	External Reference	
faces	External Reference	
faces per cell	External Reference	
interval edges	External Reference	Count = NKL (column-layer grids, only)
intervals	External Reference	
I0	External Reference	Count = NI (IJK grids, only)
I0 edges	External Reference	Count = NIL (IJK grids, only)
J0	External Reference	Count = NJ (IJK grids, only)
J0 edges	External Reference	Count = NJL (IJK grids, only)
layers	External Reference	Count = NK (column-layer grids, only)
lines		Streamlines
nodes	External Reference	

nodes per cell	External Reference	
nodes per edge	External Reference	
nodes per face	External Reference	
patches	External Reference	
pillars	External Reference	
regions	External Reference	
representation	External Reference	
subnodes	External Reference	
triangles	External Reference	

Associations

Association	Notes
From**: IndexableElement.** To: **TypeEnum**	
From**: AbstractProperty.** To: **IndexableElement**	
From**: Attachment.** To: **IndexableElement**	

10.4 IndexDirection

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 6/30/2015 *Last modified:*11/10/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies the direction of the index, whether decreasing, increasing or unordered. For secondary indexes, the direction depends on the direction of the primary index. Unordered is only for secondary indexes.*

Attributes

Name	Type	Notes
decreasing		For primary indexes, the index value of consecutive data points are strictly decreasing. For secondary indexes, the index value of consecutive data points are monotonically decreasing.
increasing		For primary indexes, the index value of consecutive data points are strictly increasing. For secondary indexes, the index value of consecutive data points are monotonically increasing.
unordered		Not valid for primary indexes. For secondary indexes, consecutive index values are not guaranteed to be increasing or decreasing.

Associations

Association	Notes
From: **IndexDirection.** To: **TypeEnum**	
From: **ChannelIndex.** To: **IndexDirection**	

10.5 LegacyUnitOfMeasure

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/13/2017 *Last modified:*7/13/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
1000scf/d		
1000scf/mo		
1000scf/stb		
1000scm		
1000scm/d		
1000scm/mo		
1000stb		
1000stb/d		
1000stb/mo		
1E6scf		
1E6scf/d		
1E6scf/mo		
1E6scf/stb		
1E6scm		
1E6scm/d		
1E6scm/mo		
1E6stb		
1E6stb/acre		
1E6stb/acre.ft		
1E6stb/d		
1E6stb/mo		
1E9scf		
acre.ft/1E6stb		
bbl/1000scf		
bbl/1E6scf		
bbl/scf		
bbl/stb		
ft3/scf		
ft3/stb		
galUS/1000scf		
kg/scm		
kscf		

lbm/1000scf		
lbm/1E6scf		
m3/scm		
ml/scm		
Pa/scm		
psi/1000scf		
psi/1E6scf		
psia		
psig		
scf		
scf/bbl		
scf/d		
scf/ft2		
scf/ft3		
scf/scf		
scf/stb		
scm		
scm/d		
scm/h		
scm/m2		
scm/m3		
scm/mo		
scm/s		
scm/scm		
scm/stb		
stb		
stb/1000scf		
stb/1000scm		
stb/1E6scf		
stb/1E6scm		
stb/acre		
stb/bbl		
stb/d		
stb/mo		
stb/scm		
stb/stb		

Associations

Association	Notes
From**: LegacyUnitOfMeasure.** To: **UomEnum**	

Association	Notes
From**: UnitOfMeasureExt.** To: **LegacyUnitOfMeasure**	

10.6 LithologyKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/3/2016 *Last modified:*11/9/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A description of minerals or accessories that constitute a fractional part of a lithology description*

Attributes

Name	Type	Notes
alkali feldspar rhyolite		
alkali olivine basalt		
amphibolite		
andesite		
anhydrite		
anorthositic rock		
anthracite		
aplite		
arenite		
argillaceous		
arkose		
basalt		
basanite		
bauxite		
bituminous coal		
blueschist metamorphic rock		
boninite		
breccia		
carbonate ooze		
carbonatite		
chalk		
chert		
clay		
claystone		
coal		
conglomerate		
dacite		
diabase		
diamictite		
diorite		
dioritoid		

doleritic rock		
dolomite		
dolomitic		
eclogite		
exotic alkaline rock		
feldspar		
feldspathic arenite		
fine grained igneous rock		
foid dioritoid		
foid gabbroid		
foid syenitoid		
foidite		
foiditoid		
foidolite		
foliated metamorphic rock		
fragmental igneous rock		
gabbro		
gabbroic rock		
gabbroid		
glauconite		
gneiss		
granite		
granodiorite		
granofels		
granulite		
gravel		
greenstone		
gumbo		
gypsum		
halite		
hornfels		
igneous rock		
impact generated material		
impure dolomite		
impure limestone		
intrusive rock (plutonic)		
iron rich sedimentary rock		
kalsilitic and melilitic rocks		
komatiitic rock		
latitic rock		

lignite		
lime boundstone		
lime framestone		
lime grainstone		
lime mudstone		
lime packstone		
lime wackestone		
limestone		
marble		
marl		
metamorphic rock		
mica schist		
migmatite		
monzogabbro		
mud		
mudstone		
mylonitic rock		
no description		
no sample		
ooze		
ophiolite		
organic bearing mudstone		
peat		
pegmatite		
peridotite		
phaneritic igneous rock		
phonolite		
phonolitoid		
phosphate		
phosphate rock		
phyllite		
porphyry		
potassium and magnesium salts		
pyroclastic breccia		
pyroclastic rock		
pyroxenite		
quartz arenite		
quartzite		
rhyolite		
rock salt		

sand		
sandstone		
sandy		
sapropel		
schist		
serpentinite		
shale		
siliceous ooze		
silt		
siltstone		
skarn		
slate		
spilite		
syenite		
syenitoid		
sylvite		
tephrite		
tephritoid		
tholeiitic basalt		
tonalite		
trachyte		
trachytic rock		
trachytoid		
travertine		
tuff		
tuffite		
ultrabasic		
undifferentiated		
unknown		
wacke		

Associations

Association	Notes
From**: LithologyKind.** To: **TypeEnum**	
From**: LithologyKindExt.** To: **LithologyKind**	

10.7 LithologyKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/3/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: LithologyKindExt.** To: **LithologyKind**	
From**: LithologyKindExt.** To: **EnumExtensionPattern**	
From**: CuttingsIntervalLithology.** To: **LithologyKindExt**	
From**: InterpretedIntervalLithology.** To: **LithologyKindExt**	

10.8 LithologyQualifierKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/3/2016 *Last modified:*11/9/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
alkali feldspar rhyolite		
alkali olivine basalt		
amphibolite		
amphibolitic		
andesite		
andesitic		
anhydrite		
anhydritic		
ankerite		
ankeritic		
anorthositic rock		
anthracite		
anthracitic		
aplite		
aplitic		
arenite		
arenitic		
argillaceous		
arkose		
arkosic		
barite		
baritic		
basalt		
basaltic		
basanite		
basanitic		
bauxite		
bauxitic		
belemnites		
belemnitic		
bioturbated		
bioturbation		

bitumen		
bituminous		
bituminous coal		
blueschist metamorphic rock		
boninite		
breccia		
brecciated		
bryozoan		
bryozoans		
burrowed		
burrows		
calcareous		
calcite		
calcite concretion		
calcitic		
carbonaceous		
carbonate ooze		
carbonatite		
carbonatitic		
chalk		
chalky		
chamosite		
chamositic		
chert		
cherty		
chlorite		
chloritic		
clay		
claystone		
coal		
concretionary		
concretions		
conglomerate		
conglomeratic		
coral fragments		
coralline		
crinoidal		
crinoids		
dacite		
dacitic		

diabase		
diabasic		
diamictite		
diamictitic		
diatomaceous		
diatoms		
diorite		
dioritic		
dioritoid		
dioritoidic		
doleritic rock		
dolomite		
dolomite concretion		
dolomite stringer		
dolomitic		
eclogite		
eclogitic		
exotic alkaline rock		
feldspar		
feldsparic		
feldspathic		
feldspathic arenite		
ferruginous		
fine grained igneous rock		
foid dioritoid		
foid gabbroid		
foid syenitoid		
foidite		
foiditic		
foiditoid		
foidolite		
foidolitic		
foliated metamorphic rock		
foraminifera		
foraminiferous		
forams		
fossil fragments		
fossiliferous		
fossils undifferentiated		
fragmental igneous rock		

gabbro		
gabbroic		
gabbroic rock		
gabbroid		
gabbroidic		
gilsonite		
gilsonitic		
glauconite		
glauconitic		
gneiss		
gneissic		
granite		
granitic		
granodiorite		
granodioritic		
granofels		
granulite		
granulitic		
gravel		
gravelly		
greenstone		
gumbo		
gypsiferous		
gypsum		
halite		
halitic		
hornfels		
hornfelsic		
igneous		
igneous rock		
illite		
illitic		
impact generated material		
impure dolomite		
impure limestone		
intrusive rock (plutonic)		
iron rich sedimentary rock		
kalsilitic and melilitic rocks		
kaolinite		
kaolinitic		

komatiitic rock		
latitic rock		
lignite		
lignitic		
lime boundstone		
lime framestone		
lime grainstone		
lime mudstone		
lime packstone		
lime wackestone		
limestone		
limestone stringer		
lithic		
lithic fragments		
marble		
marcasite		
marcasitic		
marl		
marly		
metamorphic rock		
mica		
mica schist		
micaceous		
microfossiliferous		
microfossils		
migmatite		
migmatitic		
monzogabbro		
monzogabbroic		
mud		
muddy		
mudstone		
mylonitic rock		
no sample		
oncolite		
oncoliths		
oncolitic		
ooids		
ooliths		
oolitic		

ooze		
ophiolite		
ophiolitic		
organic bearing mudstone		
ostracodal		
ostracods		
peat		
peaty		
pebble		
pebbly		
pegmatite		
pegmatitic		
pelletal		
pellets		
peloidal		
peloids		
peridotite		
peridotitic		
phaneritic igneous rock		
phonolite		
phonolitic		
phonolitoid		
phosphate		
phosphate rock		
phosphatic		
phyllite		
phyllitic		
pisolite		
pisoliths		
pisolitic		
plant remains		
porphyritic		
porphyry		
potassium and magnesium salts		
pyrite		
pyritic		
pyroclastic breccia		
pyroclastic rock		
pyroxenite		
pyroxenitic		

quartiferous		
quartz		
quartz arenite		
quartzite		
quartzitic		
radiolaria		
radiolarian		
rhyolite		
rhyolitic		
rock salt		
rootlets		
salty		
sand		
sandstone		
sandy		
sapropel		
sapropelic		
schist		
schisty		
sepentinitic		
serpentinite		
shale		
shaly		
shell fragments		
shelly		
siderite		
siderite concretion		
sideritic		
siliceous ooze		
silt		
siltstone		
silty		
skarn		
skarny		
slate		
slaty		
smectite		
smectitic		
spicular		
spicules		

spilite		
spilitic		
stylolites		
stylolitic		
syenite		
syenitic		
syenitoid		
sylvite		
sylvitic		
tarry		
tephrite		
tephritic		
tephritoid		
tholeiitic basalt		
tonalite		
tonalitic		
trachyte		
trachytic		
trachytic rock		
trachytoid		
travertine		
tuff		
tuffaceous		
tuffite		
tuffitic		
ultrabasic		
undifferentiated		
unknown		
wacke		

Associations

Association	Notes
From**: LithologyQualifierKind.** To: **TypeEnum**	
From**: LithologyQualifierKindExt.** To: **LithologyQualifierKind**	

10.9 LithologyQualifierKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/9/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: LithologyQualifierKindExt.** To: **EnumExtensionPattern**	
From**: LithologyQualifierKindExt.** To: **LithologyQualifierKind**	
From**: LithologyQualifier.** To: **LithologyQualifierKindExt**	

10.10 LithostratigraphicRank

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 2/8/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies the unit of lithostratigraphy.*

Attributes

Name	Type	Notes
group		A succession of two or more contiguous or associated formations with significant and diagnostic lithologic properties in common. Formations need not be aggregated into groups unless doing so provides a useful means of simplifying stratigraphic classification in certain regions or certain intervals. Thickness of a stratigraphic succession is not a valid reason for defining a unit as a group rather than a formation. The component formations of a group need not be everywhere the same.
formation		The primary formal unit of lithostratigraphic classification. Formations are the only formal lithostratigraphic units into which the stratigraphic column everywhere should be divided completely on the basis of lithology. The contrast in lithology between formations required to justify their establishment varies with the complexity of the geology of a region and the detail needed for geologic mapping and to work out its geologic history. No formation is considered justifiable and useful that cannot be delineated at the scale of geologic mapping practiced in the region. The thickness of formations may range from less than a meter to several thousand meters.

member		The formal lithostratigraphic unit next in rank below a formation. It possesses lithologic properties distinguishing it from adjacent parts of the formation. No fixed standard is required for the extent and thickness of a member. A formation need not be divided into members unless a useful purpose is thus served. Some formations may be completely divided into members; others may have only certain parts designated as members. A member may extend from one formation to another.
bed		The smallest formal unit in the hierarchy of sedimentary lithostratigraphic units, e.g. a single stratum lithologically distinguishable from other layers above and below. Customarily only distinctive beds (key beds, marker beds) particularly useful for stratigraphic purposes are given proper names and considered formal lithostratigraphic units.

Associations

Association	Notes
From: **LithostratigraphicRank.** To: **TypeEnum**	
From: **LithostratigraphicUnit.** To: **LithostratigraphicRank**	

10.11 MatrixCementKind

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 2/8/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *Lithology matrix/cement description. The list of standard values is contained in the WITSML enumValues.xml file.*

Attributes

Name	Type	Notes
ankerite		
calcite		
chlorite		
dolomite		
illite		
kaolinite		
quartz		
siderite		
smectite		

Associations

Association	Notes
From**: MatrixCementKind.** To: **TypeEnum**	
From**: MatrixCementKindExt.** To: **MatrixCementKind**	
From**: CuttingsIntervalLithology.** To: **MatrixCementKind**	

10.12 MatrixCementKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 8/30/2021 *Last modified:*8/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: MatrixCementKindExt.** To: **MatrixCementKind**	
From**: MatrixCementKindExt.** To: **EnumExtensionPattern**	

10.13 MeasureClass

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/13/2015 *Last modified:*12/8/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *Measure class values. The list of standard values is contained in the WITSML enumValues.xml file.*

Attributes

Name	Type	Notes
absorbed dose		
activity of radioactivity		
activity of radioactivity per volume		
amount of substance		
amount of substance per amount of substance		
amount of substance per area		
amount of substance per time		
amount of substance per time per area		
amount of substance per volume		
angle per length		
angle per volume		
angular acceleration		
angular velocity		
api gamma ray		
api gravity		
api neutron		
area		
area per amount of substance		
area per area		
area per count		
area per mass		
area per time		
area per volume		
attenuation per frequency interval		
capacitance		
cation exchange capacity		
data transfer speed		
diffusion coefficient		
diffusive time of flight		
digital storage		
dimensionless		

dipole moment		
dose equivalent		
dynamic viscosity		
electric charge		
electric charge per area		
electric charge per mass		
electric charge per volume		
electric conductance		
electric conductivity		
electric current		
electric current density		
electric field strength		
electric potential difference		
electric resistance		
electric resistance per length		
electrical resistivity		
electromagnetic moment		
energy		
energy length per area		
energy length per time area temperature		
energy per area		
energy per length		
energy per mass		
energy per mass per time		
energy per volume		
force		
force area		
force length per length		
force per force		
force per length		
force per volume		
frequency		
frequency interval		
heat capacity		
heat flow rate		
heat transfer coefficient		
illuminance		
inductance		
isothermal compressibility		
kinematic viscosity		

length		
length per length		
length per mass		
length per pressure		
length per temperature		
length per time		
length per volume		
light exposure		
linear acceleration		
linear thermal expansion		
logarithmic power ratio		
logarithmic power ratio per length		
luminance		
luminous efficacy		
luminous flux		
luminous intensity		
magnetic dipole moment		
magnetic field strength		
magnetic flux		
magnetic flux density		
magnetic flux density per length		
magnetic permeability		
magnetic vector potential		
mass		
mass length		
mass per area		
mass per energy		
mass per length		
mass per mass		
mass per time		
mass per time per area		
mass per time per length		
mass per volume		
mass per volume per length		
mass per volume per pressure		
mass per volume per temperature		
mobility		
molar energy		
molar heat capacity		
molar volume		

molecular weight		
moment of force		
moment of inertia		
momentum		
normalized power		
permeability length		
permeability rock		
permittivity		
plane angle		
potential difference per power drop		
power		
power per area		
power per power		
power per volume		
pressure		
pressure per flowrate		
pressure per flowrate squared		
pressure per pressure		
pressure per time		
pressure per volume		
pressure squared		
pressure squared per force time per area		
pressure time per volume		
quantity of light		
radiance		
radiant intensity		
reciprocal area		
reciprocal electric potential difference		
reciprocal force		
reciprocal length		
reciprocal mass		
reciprocal mass time		
reciprocal pressure		
reciprocal time		
reciprocal volume		
reluctance		
second moment of area		
signaling event per time		
solid angle		
specific heat capacity		

temperature interval		
temperature interval per length		
temperature interval per pressure		
temperature interval per time		
thermal conductance		
thermal conductivity		
thermal diffusivity		
thermal insulance		
thermal resistance		
thermodynamic temperature		
thermodynamic temperature per thermodynamic temperature		
time		
time per length		
time per mass		
time per time		
time per volume		
vertical coordinate		
volume		
volume flow rate per volume flow rate		
volume per area		
volume per length		
volume per mass		
volume per pressure		
volume per rotation		
volume per time		
volume per time length		
volume per time per area		
volume per time per length		
volume per time per pressure		
volume per time per pressure length		
volume per time per time		
volume per time per volume		
volume per volume		
volumetric heat transfer coefficient		
volumetric thermal expansion		
unitless		

Associations

Association	Notes
From**: MeasureClass.** To: **TypeEnum**	

10.14 NorthReferenceKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/8/2018 *Last modified:*9/3/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: The kinds of north references likely to be encountered in oil & gas data. A north reference is a clear definition of what is meant by the word "north" (and by extension all of the compass points). Some of this wording is from the NGS Geodetic Glossary.

true north - the common name of what is formally called geodetic north. This is along the rotational axis of the earth, and cannot be easily measured in the field. The rigorous definition of geodetic north is "the positive direction of that line parallel to the Earth's axis of rotation and perpendicularly to the left of an observer facing in the direction of the Earth's rotation." True north is normally computed from an imperfect measurement of north.

astronomic north - An estimate of true north derived from astronomic observations. This differs from true north slightly because astronomic instruments rely on gravity to define "up" (the vertical) while the earth's gravity field is seldom perfectly vertical. A "Laplace correction" is applied to the astronomic north to get geodetic north. Astronomic north is seldom used in oil & gas operations.

magnetic north - The direction of the Earth's magnetic north pole. A "declination" correction is applied to calculate true north from magnetic north. Since the Earth's magnetic north pole is constantly in motion, the date and time an observation is made are critically important to be able to find the correct declination value to be used.

compass north - A raw reading of the north-seeking end of a needle or other magnetic component of a compass. This differs from magnetic north because of the influence of iron and other magnetic materials which disturb the Earth's magnetic field close to the compass instrument. There may be a correction applied to compass north to realize a magnetic north reading. This kind of north is encountered in older oil & gas data.

grid north - The direction of the north lines on a map projection. In most projections there is only one north line which points to true geodetic north, the central meridian in a UTM projection, for example. At any point on a grid there can be a "convergence angle" defined which relates the grid north to true geodetic north. Grid north is not measured in the field; it must be calculated.

plant north - A direction in a local engineering coordinate reference system which is normally oriented more or less north. This is used in industrial facilities (like gas plants or offshore platforms) and for smaller areas like drilling pads. Distances and directions in this local system are easier to handle without need for a professional land surveyor because the need for accuracy is less and the distances involved are limited. In this case a surveyor might determine the location of a corner of the facility and the angle between true north and the apparent north of the facility.

Attributes

Name	Type	Notes
astronomic north		
compass north		
grid north		
magnetic north		

plant north		
true north		

Associations

Association	Notes
From**: NorthReferenceKind.** To: **TypeEnum**	
From**: LocalEngineering2dCrs.** To: **NorthReferenceKind**	
From**: Target.** To: **NorthReferenceKind**	

10.15 QuantityClassKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/24/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
absorbed dose		
activity of radioactivity		
activity of radioactivity per volume		
amount of substance		
amount of substance per amount of substance		
amount of substance per area		
amount of substance per time		
amount of substance per time per area		
amount of substance per volume		
angle per length		
angle per volume		
angular acceleration		
angular velocity		
api gamma ray		
api gravity		
api neutron		
area		
area per amount of substance		
area per area		
area per count		
area per mass		
area per time		
area per volume		
attenuation per frequency interval		
capacitance		
cation exchange capacity		
data transfer speed		
diffusion coefficient		
diffusive time of flight		
digital storage		
dimensionless		

dipole moment		
dose equivalent		
dynamic viscosity		
electric charge		
electric charge per area		
electric charge per mass		
electric charge per volume		
electric conductance		
electric conductivity		
electric current		
electric current density		
electric field strength		
electric potential difference		
electric resistance		
electric resistance per length		
electrical resistivity		
electromagnetic moment		
energy		
energy length per area		
energy length per time area temperature		
energy per area		
energy per length		
energy per mass		
energy per mass per time		
energy per volume		
force		
force area		
force length per length		
force per force		
force per length		
force per volume		
frequency		
frequency interval		
heat capacity		
heat flow rate		
heat transfer coefficient		
illuminance		
inductance		
isothermal compressibility		
kinematic viscosity		

length		
length per length		
length per mass		
length per pressure		
length per temperature		
length per time		
length per volume		
light exposure		
linear acceleration		
linear thermal expansion		
logarithmic power ratio		
logarithmic power ratio per length		
luminance		
luminous efficacy		
luminous flux		
luminous intensity		
magnetic dipole moment		
magnetic field strength		
magnetic flux		
magnetic flux density		
magnetic flux density per length		
magnetic permeability		
magnetic vector potential		
mass		
mass length		
mass per area		
mass per energy		
mass per length		
mass per mass		
mass per time		
mass per time per area		
mass per time per length		
mass per volume		
mass per volume per length		
mass per volume per pressure		
mass per volume per temperature		
mobility		
molar energy		
molar heat capacity		
molar volume		

molecular weight		
moment of force		
moment of inertia		
momentum		
normalized power		
pressure per flowrate		
pressure per flowrate squared		
permeability length		
permeability rock		
permittivity		
plane angle		
potential difference per power drop		
power		
power per area		
power per power		
power per volume		
pressure		
pressure per pressure		
pressure per time		
pressure per volume		
pressure squared		
pressure squared per force time per area		
pressure time per volume		
quantity of light		
radiance		
radiant intensity		
reciprocal area		
reciprocal electric potential difference		
reciprocal force		
reciprocal length		
reciprocal mass		
reciprocal mass time		
reciprocal pressure		
reciprocal time		
reciprocal volume		
reluctance		
second moment of area		
signaling event per time		
solid angle		
specific heat capacity		

temperature interval		
temperature interval per length		
temperature interval per pressure		
temperature interval per time		
thermal conductance		
thermal conductivity		
thermal diffusivity		
thermal insulance		
thermal resistance		
thermodynamic temperature		
thermodynamic temperature per thermodynamic temperature		
time		
time per length		
time per mass		
time per time		
time per volume		
vertical coordinate		
volume		
volume flow rate per volume flow rate		
volume per area		
volume per length		
volume per mass		
volume per pressure		
volume per rotation		
volume per time		
volume per time length		
volume per time per area		
volume per time per length		
volume per time per pressure		
volume per time per pressure length		
volume per time per time		
volume per time per volume		
volume per volume		
volumetric heat transfer coefficient		
volumetric thermal expansion		

unitless		A unitless quantity is a quantity which has no unit of measure symbol, but could be a real physical measurement. Examples would be a count, pH, wire gauge (AWG and BWG) and shoe size. This is different from a dimensionless quantity which represents a ratio whose units of measure have cancelled each other. DImensionless quantities can have units of measure (like ppm or %) or may not have a displayable unit of measure symbol (in which case the units symbol Euc is used in a data transfer). Units derived from a unitless number simply ignore the unitless part. For example, the unit for counts per hour is just inverse hours (1/hr).
not a measure		The "not a measure" quantity class represents data values which are not measures at all. This would include strings, ordinal numbers, index values and other things for which the concept of units of measure is irrelevant.

Associations

Association	Notes
From: **QuantityClassKind.** To: **TypeEnum**	
From: **QuantityClassKindExt.** To: **QuantityClassKind**	

10.16 QuantityClassKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 12/12/2016 *Last modified:*12/12/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: QuantityClassKindExt.** To: **EnumExtensionPattern**	
From**: QuantityClassKindExt.** To: **QuantityClassKind**	

10.17 ReferenceCondition

Type: Enumeration Stereotype:
Detail: Created: 6/13/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *Combinations of standard temperature and pressure including "ambient". The list of standard values is contained in the enumValuesProdml.xml file.*

Attributes

Name	Type	Notes
0 degC 1 atm		0 degC and 1 standard atmosphere
0 degC 1 bar		
15 degC 1 atm		15 degC and 1 standard atmosphere
15 degC 1 bar		
20 degC 1 atm		
20 degC 1 bar		
25 degC 1 bar		
60 degF 1 atm		60 degF and 1 standard atmosphere
60 degF 30 in Hg		
ambient		

Associations

Association	Notes
From: **ReferenceCondition.** To: **TypeEnum**	
From: **ReferenceConditionExt.** To: **ReferenceCondition**	

10.18 ReferenceConditionExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/8/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: ReferenceConditionExt.** To: **ReferenceCondition**	
From**: ReferenceConditionExt.** To: **EnumExtensionPattern**	

10.19 UnitOfMeasure

Type: Enumeration *Stereotype:*
Detail: *Created:* 5/15/2014 *Last modified:*12/8/2016 *Status:* Approved *Author:* jay hollingsworth
Notes: *This is a list of the valid units of measure across all the measure classes. Its intended use is to ensure that a valid unit of measure string is used in cases where the measure class is not known in advance or is otherwise not explicitly modeled in the XML schema.*

Attributes

Name	Type	Notes
%		
%[area]		
%[mass]		
%[molar]		
%[vol]		
(bbl/d)/(bbl/d)		
(m3/d)/(m3/d)		
(m3/s)/(m3/s)		
0.001 bbl/ft3		
0.001 bbl/m3		
0.001 d/ft3		
0.001 gal[UK]/bbl		
0.001 gal[UK]/gal[UK]		
0.001 gal[US]/bbl		
0.001 gal[US]/ft3		
0.001 gal[US]/gal[US]		
0.001 h/ft		
0.001 kPa2/cP		
0.001 lbm/bbl		
0.001 lbm/gal[UK]		
0.001 lbm/gal[US]		
0.001 psi/ft		
0.001 pt[UK]/bbl		
0.001 seca		
0.01 bbl/bbl		
0.01 dega/ft		
0.01 degF/ft		
0.01 dm3/km		
0.01 ft/ft		
0.01 grain/ft3		

0.01 L/kg		
0.01 L/km		
0.01 lbf/ft		
0.01 lbf/ft2		
0.01 lbm/ft2		
0.01 psi/ft		
0.1 ft		
0.1 ft[US]		
0.1 gal[US]/bbl		
0.1 in		
0.1 L/bbl		
0.1 lbm/bbl		
0.1 pt[US]/bbl		
0.1 yd		
1/(kg.s)		
1/16 in		
1/2 ft		
1/2 ms		
1/30 cm3/min		
1/30 dega/ft		
1/30 dega/m		
1/30 lbf/m		
1/30 m/m		
1/30 N/m		
1/32 in		
1/64 in		
1/a		
1/angstrom		
1/bar		
1/bbl		
1/cm		
1/d		
1/degC		
1/degF		
1/degR		
1/ft		
1/ft2		
1/ft3		
1/g		
1/gal[UK]		

1/gal[US]		
1/H		
1/h		
1/in		
1/K		
1/kg		
1/km2		
1/kPa		
1/L		
1/lbf		
1/lbm		
1/m		
1/m2		
1/m3		
1/mi		
1/mi2		
1/min		
1/mm		
1/ms		
1/N		
1/nm		
1/Pa		
1/pPa		
1/psi		
1/s		
1/upsi		
1/us		
1/uV		
1/V		
1/wk		
1/yd		
10 ft		
10 in		
10 km		
10 kN		
10 Mg/m3		
100 ft		
100 ka[t]		
100 km		
1000 bbl		

1000 bbl.ft/d		
1000 bbl/d		
1000 ft		
1000 ft/h		
1000 ft/s		
1000 ft3		
1000 ft3/(d.ft)		
1000 ft3/(psi.d)		
1000 ft3/bbl		
1000 ft3/d		
1000 gal[UK]		
1000 gal[US]		
1000 lbf.ft		
1000 m3		
1000 m3/(d.m)		
1000 m3/(h.m)		
1000 m3/d		
1000 m3/h		
1000 m3/m3		
1000 m4/d		
1E12 ft3		
1E6 (ft3/d)/(bbl/d)		
1E-6 acre.ft/bbl		
1E6 bbl		
1E6 bbl/(acre.ft)		
1E6 bbl/acre		
1E6 bbl/d		
1E-6 bbl/ft3		
1E-6 bbl/m3		
1E6 Btu[IT]		
1E6 Btu[IT]/h		
1E6 ft3		
1E6 ft3/(acre.ft)		
1E6 ft3/bbl		
1E6 ft3/d		
1E-6 gal[US]		
1E6 lbm/a		
1E6 m3		
1E-6 m3/(m3.degC)		
1E-6 m3/(m3.degF)		

1E6 m3/d		
1E-9 1/ft		
1E9 bbl		
1E9 ft3		
30 ft		
30 m		
A		
a		
A.h		
A.m2		
A.s		
A.s/kg		
A.s/m3		
A/cm2		
A/ft2		
A/m		
A/m2		
A/mm		
A/mm2		
a[t]		
acre		
acre.ft		
ag		
aJ		
angstrom		
at		
atm		
atm/ft		
atm/h		
atm/hm		
atm/m		
B		
b		
B.W		
b/cm3		
B/m		
B/O		
bar		
bar/(1000m3/day)		
bar/(1000m3/day)2		

bar/(m3/day)		
bar/(m3/day)2		
bar/h		
bar/km		
bar/m		
bar2		
bar2/cP		
bbl		
bbl/(acre.ft)		
bbl/(d.acre.ft)		
bbl/(d.ft)		
bbl/(ft.psi.d)		
bbl/(kPa.d)		
bbl/(psi.d)		
bbl/acre		
bbl/bbl		
bbl/d		
bbl/d2		
bbl/ft		
bbl/ft3		
bbl/h		
bbl/h2		
bbl/in		
bbl/m3		
bbl/mi		
bbl/min		
bbl/psi		
bbl/ton[UK]		
bbl/ton[US]		
Bd		
bit		
bit/s		
Bq		
Bq/kg		
Bq/m3		
Btu[IT]		
Btu[IT].in/(h.ft2.degF)		
Btu[IT]/(h.ft.degF)		
Btu[IT]/(h.ft2)		
Btu[IT]/(h.ft2.degF)		

Btu[IT]/(h.ft2.degR)		
Btu[IT]/(h.ft3)		
Btu[IT]/(h.ft3.degF)		
Btu[IT]/(h.m2.degC)		
Btu[IT]/(hp.h)		
Btu[IT]/(lbm.degF)		
Btu[IT]/(lbm.degR)		
Btu[IT]/(lbmol.degF)		
Btu[IT]/(s.ft2)		
Btu[IT]/(s.ft2.degF)		
Btu[IT]/(s.ft3)		
Btu[IT]/(s.ft3.degF)		
Btu[IT]/bbl		
Btu[IT]/ft3		
Btu[IT]/gal[UK]		
Btu[IT]/gal[US]		
Btu[IT]/h		
Btu[IT]/lbm		
Btu[IT]/lbmol		
Btu[IT]/min		
Btu[IT]/s		
Btu[th]		
Btu[UK]		
byte		
byte/s		
C		
C.m		
C/cm2		
C/cm3		
C/g		
C/kg		
C/m2		
C/m3		
C/mm2		
C/mm3		
ca		
cA		
cal[IT]		
cal[th]		
cal[th]/(g.K)		

cal[th]/(h.cm.degC)		
cal[th]/(h.cm2)		
cal[th]/(h.cm2.degC)		
cal[th]/(h.cm3)		
cal[th]/(mol.degC)		
cal[th]/(s.cm.degC)		
cal[th]/(s.cm2.degC)		
cal[th]/(s.cm3)		
cal[th]/cm3		
cal[th]/g		
cal[th]/h		
cal[th]/kg		
cal[th]/lbm		
cal[th]/mL		
cal[th]/mm3		
cC		
ccal[th]		
ccgr		
cd		
cd/m2		
cEuc		
ceV		
cF		
cg		
cgauss		
cgr		
cGy		
cH		
chain		
chain[BnA]		
chain[BnB]		
chain[Cla]		
chain[Ind37]		
chain[Se]		
chain[SeT]		
chain[US]		
cHz		
Ci		
cJ		
cm		

cm/a		
cm/s		
cm/s2		
cm2		
cm2/g		
cm2/s		
cm3		
cm3/cm3		
cm3/g		
cm3/h		
cm3/L		
cm3/m3		
cm3/min		
cm3/s		
cm4		
cmH2O[4degC]		
cN		
cohm		
cP		
cPa		
crd		
cS		
cs		
cSt		
cT		
ct		
cu		
cV		
cW		
cWb		
cwt[UK]		
cwt[US]		
d		
D		
D.ft		
D.m		
D/(Pa.s)		
d/bbl		
D/cP		
d/ft3		

d/m3		
D[API]		
dA		
dam		
daN		
daN.m		
dAPI		
dB		
dB.mW		
dB.MW		
dB.W		
dB/ft		
dB/km		
dB/m		
dB/O		
dC		
dcal[th]		
dega		
dega/ft		
dega/h		
dega/m		
dega/min		
dega/s		
degC		
degC.m2.h/kcal[th]		
degC/ft		
degC/h		
degC/hm		
degC/km		
degC/kPa		
degC/m		
degC/min		
degC/s		
degF		
degF.ft2.h/Btu[IT]		
degF/ft		
degF/h		
degF/m		
degF/min		
degF/psi		

degF/s		
degR		
dEuc		
deV		
dF		
dgauss		
dGy		
dH		
dHz		
dJ		
dm		
dm/s		
dm3		
dm3/(kW.h)		
dm3/kg		
dm3/kmol		
dm3/m		
dm3/m3		
dm3/MJ		
dm3/s		
dm3/s2		
dm3/t		
dN		
dN.m		
dohm		
dP		
dPa		
drd		
dS		
ds		
dT		
dV		
dW		
dWb		
dyne		
dyne.cm2		
dyne.s/cm2		
dyne/cm		
dyne/cm2		
EA		

Ea[t]		
EC		
Ecal[th]		
EEuc		
EeV		
EF		
Eg		
Egauss		
EGy		
EH		
EHz		
EJ		
EJ/a		
Em		
EN		
Eohm		
EP		
EPa		
Erd		
erg		
erg/a		
erg/cm2		
erg/cm3		
erg/g		
erg/kg		
erg/m3		
ES		
ET		
Euc		
eV		
EW		
EWb		
F		
F/m		
fa		
fA		
fathom		
fC		
fcal[th]		
fEuc		

feV		
fF		
fg		
fgauss		
fGy		
fH		
fHz		
fJ		
floz[UK]		
floz[US]		
fm		
fN		
fohm		
footcandle		
footcandle.s		
fP		
fPa		
frd		
fS		
ft		
fT		
ft/bbl		
ft/d		
ft/degF		
ft/ft		
ft/ft3		
ft/gal[US]		
ft/h		
ft/in		
ft/lbm		
ft/m		
ft/mi		
ft/min		
ft/ms		
ft/psi		
ft/s		
ft/s2		
ft/us		
ft[BnA]		
ft[BnB]		

ft[Br36]		
ft[Br65]		
ft[Cla]		
ft[GC]		
ft[Ind]		
ft[Ind37]		
ft[Ind62]		
ft[Ind75]		
ft[Se]		
ft[SeT]		
ft[US]		
ft2		
ft2/h		
ft2/in3		
ft2/lbm		
ft2/s		
ft3		
ft3/(d.ft)		
ft3/(ft.psi.d)		
ft3/(min.ft2)		
ft3/(s.ft2)		
ft3/bbl		
ft3/d		
ft3/d2		
ft3/ft		
ft3/ft2		
ft3/ft3		
ft3/h		
ft3/h2		
ft3/kg		
ft3/lbm		
ft3/lbmol		
ft3/min		
ft3/min2		
ft3/rad		
ft3/s		
ft3/s2		
ft3/sack[94lbm]		
fur[US]		
fV		

fW		
fWb		
g		
g.ft/(cm3.s)		
g.m/(cm3.s)		
g/cm3		
g/cm4		
g/dm3		
g/gal[UK]		
g/gal[US]		
g/kg		
g/L		
g/m3		
g/mol		
g/s		
g/t		
GA		
Ga[t]		
Gal		
gal[UK]		
gal[UK]/(h.ft)		
gal[UK]/(h.ft2)		
gal[UK]/(h.in)		
gal[UK]/(h.in2)		
gal[UK]/(min.ft)		
gal[UK]/(min.ft2)		
gal[UK]/d		
gal[UK]/ft3		
gal[UK]/h		
gal[UK]/h2		
gal[UK]/lbm		
gal[UK]/mi		
gal[UK]/min		
gal[UK]/min2		
gal[US]		
gal[US]/(h.ft)		
gal[US]/(h.ft2)		
gal[US]/(h.in)		
gal[US]/(h.in2)		
gal[US]/(min.ft)		

gal[US]/(min.ft2)		
gal[US]/bbl		
gal[US]/d		
gal[US]/ft		
gal[US]/ft3		
gal[US]/h		
gal[US]/h2		
gal[US]/lbm		
gal[US]/mi		
gal[US]/min		
gal[US]/min2		
gal[US]/sack[94lbm]		
gal[US]/ton[UK]		
gal[US]/ton[US]		
gAPI		
gauss		
gauss/cm		
GBq		
GC		
Gcal[th]		
GEuc		
GeV		
gf		
GF		
Gg		
Ggauss		
GGy		
GH		
GHz		
GJ		
Gm		
GN		
gn		
Gohm		
gon		
GP		
GPa		
GPa/cm		
GPa2		
grain		

grain/ft3		
grain/gal[US]		
Grd		
GS		
GT		
GV		
GW		
GW.h		
GWb		
Gy		
H		
h		
h/ft3		
h/km		
H/m		
h/m3		
ha		
ha.m		
hbar		
hg		
hL		
hm		
hN		
hp		
hp.h		
hp.h/bbl		
hp.h/lbm		
hp/ft3		
hp/in2		
hp[elec]		
hp[hyd]		
hp[hyd]/in2		
hp[metric]		
hp[metric].h		
hs		
Hz		
in		
in/(in.degF)		
in/a		
in/min		

in/s		
in/s2		
in[US]		
in2		
in2/ft2		
in2/in2		
in2/s		
in3		
in3/ft		
in4		
inH2O[39degF]		
inH2O[60degF]		
inHg[32degF]		
inHg[60degF]		
J		
J.m/(s.m2.K)		
J.m/m2		
J/(g.K)		
J/(kg.K)		
J/(mol.K)		
J/(s.m2.degC)		
J/cm2		
J/dm3		
J/g		
J/K		
J/kg		
J/m		
J/m2		
J/m3		
J/mol		
J/s		
K		
K.m2/kW		
K.m2/W		
K/km		
K/m		
K/Pa		
K/s		
K/W		
kA		

ka[t]		
kC		
kcal[th]		
kcal[th].m/cm2		
kcal[th]/(h.m.degC)		
kcal[th]/(h.m2.degC)		
kcal[th]/(kg.degC)		
kcal[th]/cm3		
kcal[th]/g		
kcal[th]/h		
kcal[th]/kg		
kcal[th]/m3		
kcal[th]/mol		
kcd		
kdyne		
kEuc		
keV		
kF		
kg		
kg.m		
kg.m/cm2		
kg.m/s		
kg.m2		
kg/(kW.h)		
kg/(m.s)		
kg/(m2.s)		
kg/d		
kg/dm3		
kg/dm4		
kg/h		
kg/J		
kg/kg		
kg/L		
kg/m		
kg/m2		
kg/m3		
kg/m4		
kg/min		
kg/MJ		
kg/mol		

kg/s		
kg/sack[94lbm]		
kg/t		
kgauss		
kgf		
kgf.m		
kgf.m/cm2		
kgf.m/m		
kgf.m2		
kgf.s/m2		
kgf/cm		
kgf/cm2		
kgf/kgf		
kgf/m2		
kgf/mm2		
kGy		
kH		
kHz		
Kibyte		
kJ		
kJ.m/(h.m2.K)		
kJ/(h.m2.K)		
kJ/(kg.K)		
kJ/(kmol.K)		
kJ/dm3		
kJ/kg		
kJ/kmol		
kJ/m3		
klbf		
klbm		
klbm/in		
klx		
km		
km/cm		
km/dm3		
km/h		
km/L		
km/s		
km2		
km3		

kmol		
kmol/h		
kmol/m3		
kmol/s		
kN		
kN.m		
kN.m2		
kN/m		
kN/m2		
knot		
kohm		
kohm.m		
kP		
kPa		
kPa.s/m		
kPa/h		
kPa/hm		
kPa/m		
kPa/min		
kPa2		
kPa2/cP		
kpsi		
kpsi2		
krad		
krd		
kS		
kS/m		
kT		
kV		
kW		
kW.h		
kW.h/(kg.degC)		
kW.h/dm3		
kW.h/kg		
kW.h/m3		
kW/(m2.K)		
kW/(m3.K)		
kW/cm2		
kW/m2		
kW/m3		

kWb		
L		
L/(bar.min)		
L/h		
L/kg		
L/kmol		
L/m		
L/m3		
L/min		
L/mol		
L/s		
L/s2		
L/t		
L/ton[UK]		
lbf		
lbf.ft		
lbf.ft/bbl		
lbf.ft/gal[US]		
lbf.ft/in		
lbf.ft/in2		
lbf.ft/lbm		
lbf.ft/min		
lbf.ft/s		
lbf.in		
lbf.in/in		
lbf.in2		
lbf.s/ft2		
lbf.s/in2		
lbf/ft		
lbf/ft2		
lbf/ft3		
lbf/gal[US]		
lbf/in		
lbf/lbf		
lbm		
lbm.ft		
lbm.ft/s		
lbm.ft2		
lbm.ft2/s2		
lbm/(ft.h)		

lbm/(ft.s)		
lbm/(ft2.h)		
lbm/(ft2.s)		
lbm/(gal[UK].ft)		
lbm/(gal[US].ft)		
lbm/(hp.h)		
lbm/bbl		
lbm/d		
lbm/ft		
lbm/ft2		
lbm/ft3		
lbm/ft4		
lbm/gal[UK]		
lbm/gal[US]		
lbm/h		
lbm/in3		
lbm/lbmol		
lbm/min		
lbm/s		
lbmol		
lbmol/(h.ft2)		
lbmol/(s.ft2)		
lbmol/ft3		
lbmol/gal[UK]		
lbmol/gal[US]		
lbmol/h		
lbmol/s		
link		
link[BnA]		
link[BnB]		
link[Cla]		
link[Se]		
link[SeT]		
link[US]		
lm		
lm.s		
lm/m2		
lm/W		
lx		
lx.s		

m		
m/(m.K)		
m/cm		
m/d		
m/h		
m/K		
m/kg		
m/km		
m/kPa		
m/m		
m/m3		
m/min		
m/ms		
m/Pa		
m/s		
m/s2		
m[Ger]		
m2		
m2/(kPa.d)		
m2/(Pa.s)		
m2/cm3		
m2/d		
m2/g		
m2/h		
m2/kg		
m2/m2		
m2/m3		
m2/mol		
m2/s		
m3		
m3/(bar.d)		
m3/(bar.h)		
m3/(bar.min)		
m3/(d.m)		
m3/(h.m)		
m3/(ha.m)		
m3/(kPa.d)		
m3/(kPa.h)		
m3/(kW.h)		
m3/(m3.K)		

m3/(Pa.s)		
m3/(psi.d)		
m3/(s.ft)		
m3/(s.m)		
m3/(s.m2)		
m3/(s.m3)		
m3/bbl		
m3/d		
m3/d2		
m3/g		
m3/h		
m3/J		
m3/kg		
m3/km		
m3/kmol		
m3/kPa		
m3/m		
m3/m2		
m3/m3		
m3/min		
m3/mol		
m3/Pa		
m3/rad		
m3/rev		
m3/s		
m3/s2		
m3/t		
m3/ton[UK]		
m3/ton[US]		
m4		
m4/s		
MA		
mA		
mA/cm2		
mA/ft2		
Ma[t]		
mbar		
MBq		
MC		
mC		

mC/m2		
Mcal[th]		
mcal[th]		
mCi		
mD		
mD.ft		
mD.ft2/(lbf.s)		
mD.in2/(lbf.s)		
mD.m		
mD/(Pa.s)		
mD/cP		
mEuc		
MEuc		
MeV		
meV		
MF		
mF		
mg		
Mg		
Mg/a		
Mg/d		
mg/dm3		
mg/g		
mg/gal[US]		
Mg/h		
Mg/in		
mg/J		
mg/kg		
mg/L		
Mg/m2		
mg/m3		
Mg/m3		
Mg/min		
mGal		
mgauss		
Mgauss		
Mgf		
mgn		
MGy		
mGy		

MH		
mH		
MHz		
mHz		
mi		
mi/gal[UK]		
mi/gal[US]		
mi/h		
mi/in		
mi[naut]		
mi[nautUK]		
mi[US]		
mi[US]2		
mi2		
mi3		
Mibyte		
mil		
mil/a		
mila		
min		
min/ft		
min/m		
mina		
MJ		
mJ		
MJ/a		
mJ/cm2		
MJ/kg		
MJ/kmol		
MJ/m		
mJ/m2		
MJ/m3		
mL		
mL/gal[UK]		
mL/gal[US]		
mL/mL		
mm		
Mm		
mm/(mm.K)		
mm/a		

mm/s		
mm2		
mm2/mm2		
mm2/s		
mm3		
mm3/J		
mmHg[0degC]		
mmol		
MN		
mN		
mN.m2		
mN/km		
mN/m		
Mohm		
mohm		
mol		
mol.m2/(mol.s)		
mol/(s.m2)		
mol/m2		
mol/m3		
mol/mol		
mol/s		
MP		
mP		
MPa		
mPa		
mPa.s		
MPa.s/m		
MPa/h		
MPa/m		
Mpsi		
mrad		
Mrad		
Mrd		
mrd		
mrem		
mrem/h		
ms		
MS		
mS		

ms/cm		
mS/cm		
ms/ft		
ms/in		
mS/m		
ms/m		
ms/s		
mSv		
mSv/h		
mT		
mT/dm		
mV		
MV		
mV/ft		
mV/m		
mW		
MW		
MW.h		
MW.h/kg		
MW.h/m3		
mW/m2		
mWb		
MWb		
N		
N.m		
N.m/m		
N.m2		
N.s/m2		
N/m		
N/m2		
N/m3		
N/mm2		
N/N		
nA		
na		
nAPI		
nC		
ncal[th]		
nCi		
nEuc		

neV		
nF		
ng		
ng/g		
ng/l		
ng/m3		
ng/mg		
ng/ml		
ngauss		
nGy		
nH		
nHz		
nJ		
nm		
nm/s		
nN		
nohm		
nohm.mil2/ft		
nohm.mm2/m		
nP		
nPa		
nrd		
nS		
ns		
ns/ft		
ns/m		
nT		
nV		
nW		
nWb		
O		
Oe		
ohm		
ohm.cm		
ohm.m		
ohm.m2/m		
ohm/m		
ozf		
ozm		
ozm[troy]		

P		
pA		
Pa		
Pa.s		
Pa.s.m3/kg		
Pa.s/m3		
Pa.s2/m3		
Pa/(1000m3/day)		
Pa/(1000m3/day)2		
Pa/(m3/day)		
Pa/(m3/day)2		
Pa/h		
Pa/m		
Pa/m3		
Pa/s		
Pa2		
Pa2/(Pa.s)		
pC		
pcal[th]		
pCi		
pCi/g		
pdl		
pdl.cm2		
pdl.ft		
pdl/cm		
pEuc		
peV		
pF		
pg		
pgauss		
pGy		
pHz		
pJ		
pm		
pN		
pohm		
pP		
pPa		
ppk		
ppm		

ppm[mass]		
ppm[vol]		
ppm[vol]/degC		
ppm[vol]/degF		
prd		
pS		
ps		
psi		
psi.d/bbl		
psi.s		
psi/(1000000ft3/day)		
psi/(1000000ft3/day)2		
psi/(1000ft3/day)		
psi/(1000ft3/day)2		
psi/(bbl/day)		
psi/(bbl/day)2		
psi/ft		
psi/h		
psi/m		
psi/min		
psi2		
psi2.d/(cP.ft3)		
psi2/cP		
pT		
pt[UK]		
pt[UK]/(hp.h)		
pt[US]		
pV		
pW		
pWb		
qt[UK]		
qt[US]		
quad		
quad/a		
rad		
rad/ft		
rad/ft3		
rad/m		
rad/m3		
rad/s		

rad/s2		
rd		
rem		
rem/h		
rev		
rev/ft		
rev/m		
rev/s		
rod[US]		
rpm		
rpm/s		
S		
s		
s/cm		
s/ft		
s/ft3		
s/in		
s/kg		
s/L		
S/m		
s/m		
s/m3		
s/qt[UK]		
s/qt[US]		
s/s		
sack[94lbm]		
seca		
section		
sr		
St		
Sv		
Sv/h		
Sv/s		
t		
T		
t/a		
t/d		
t/h		
T/m		
t/m3		

t/min		
TA		
Ta[t]		
TBq		
TC		
Tcal[th]		
TD[API]		
TD[API].m		
TD[API]/(Pa.s)		
TEuc		
TeV		
TF		
Tg		
Tgauss		
TGy		
TH		
therm[EC]		
therm[UK]		
therm[US]		
THz		
TJ		
TJ/a		
Tm		
TN		
Tohm		
ton[UK]		
ton[UK]/a		
ton[UK]/d		
ton[UK]/h		
ton[UK]/min		
ton[US]		
ton[US]/a		
ton[US]/d		
ton[US]/ft2		
ton[US]/h		
ton[US]/min		
tonf[UK]		
tonf[UK].ft2		
tonf[UK]/ft		
tonf[UK]/ft2		

tonf[US]		
tonf[US].ft		
tonf[US].ft2		
tonf[US].mi		
tonf[US].mi/bbl		
tonf[US].mi/ft		
tonf[US]/ft		
tonf[US]/ft2		
tonf[US]/in2		
tonRefrig		
torr		
TP		
TPa		
Trd		
TS		
TT		
TV		
TW		
TW.h		
TWb		
uA		
uA/cm2		
uA/in2		
ubar		
uC		
ucal[th]		
ucal[th]/(s.cm2)		
ucal[th]/s		
uCi		
uEuc		
ueV		
uF		
uF/m		
ug		
ug/cm3		
ug/g		
ug/mg		
ugauss		
uGy		
uH		

uH/m		
uHz		
uJ		
um		
um/s		
um2		
um2.m		
umHg[0degC]		
umol		
uN		
unitless		
uohm		
uohm/ft		
uohm/m		
uP		
uPa		
upsi		
urad		
urd		
us		
uS		
us/ft		
us/in		
us/m		
uT		
uV		
uV/ft		
uV/m		
uW		
uW/m3		
uWb		
V		
V/B		
V/dB		
V/m		
W		
W.m2.K/(J.K)		
W/(m.K)		
W/(m2.K)		
W/(m2.sr)		

W/(m3.K)		
W/cm2		
W/K		
W/kW		
W/m2		
W/m3		
W/mm2		
W/sr		
W/W		
Wb		
Wb.m		
Wb/m		
Wb/mm		
wk		
yd		
yd[BnA]		
yd[BnB]		
yd[Cla]		
yd[Ind]		
yd[Ind37]		
yd[Ind62]		
yd[Ind75]		
yd[Se]		
yd[SeT]		
yd[US]		
yd2		
yd3		

Associations

Association	Notes
From**: UnitOfMeasure.** To: **UomEnum**	
From**: UnitOfMeasureExt.** To: **UnitOfMeasure**	

10.20 UnitOfMeasureExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*12/8/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes: A variant of UnitOfMeasure which has been extended to allow any user-defined unit of measure which follows an authority:unit pattern; the colon is mandatory.

This class is implemented in XML as a union between the list of valid units per the prevailing Energistics Units of Measure Specification and an XML pattern which mandates the central colon.

Associations

Association	Notes
From: **UnitOfMeasureExt.** To: **EnumExtensionPattern**	
From: **UnitOfMeasureExt.** To: **LegacyUnitOfMeasure**	
From: **UnitOfMeasureExt.** To: **UnitOfMeasure**	

10.21 WellStatus

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/13/2015 *Last modified:*12/8/2016 *Status:* Proposed *Author:* William McKenzie
Notes: *These values represent the status of a well or wellbore.*

Attributes

Name	Type	Notes
abandoned		The status of a facility in which drilling, completion, and production operations have been permanently terminated.
active		For a well to be active, at least one of its wellbores must be active. For a wellbore to be active, at least one of its completions must be actively producing or injecting fluids.
active -- injecting		Fluids are actively being injected into the facility.
active -- producing		Fluids are actively being produced from the facility.
completed		The completion has been installed, but the facility is not yet active. This status is appropriate only before the initial producing or injecting activity.
drilling		The status of a well or wellbore in which drilling operations have begun, but are not yet completed. The status ends when another status becomes appropriate.
partially plugged		The wellbore has been plugged from the bottom, but only partially to the point where it intersects another wellbore.
permitted		The facility has received regulatory approvel, but drilling has not yet commenced. For a well, it has been spudded. For a subsequent wellbore, the whipstock or similar device has not yet been set.

plugged and abandoned		An abandoned well (or wellbore) whose wellbores have been plugged in such a manner as to prevent the migration of oil, gas, salt water, or other substance from one stratum to another. Generally the criteria for this status is controlled by regulatory authorities.
proposed		The status of a well or wellbore from conception to either regulatory approval or commencement of drilling.
sold		The facility has been sold, so it is no longer appropriate to keep a close internal status value. Status values may be added at later times without changing the sold status.
suspended		Production or injection has been temporarily suspended in a manner that will allow immediate resumption of activities.
temporarily abandoned		Production or injection has been temporarily suspended in a manner that will not allow immediate resumption of activities.
testing		The facility operations are suspended while tests are being conducted to determine formation and/or reservoir properties. For example, a drillstem test. This status also includes extended testing.
tight		Information about the status of the well is confidential. This is more explicit than unknown, since it gives the reason that the status value is unknown.
working over		Maintenance or data acquisition on a well during the production phase. This includes any relevant job which can be done while the well is shut in. This includes many jobs that occur when a well is re-entered.
unknown		The value is not known. This value should not be used in normal situations. All reasonable attempts should be made to determine the appropriate value. Use of this value may result in rejection in some situations.

Associations

Association	Notes
From**: WellStatus.** To: **TypeEnum**	
From**: ProductionWellPeriod.** To: **WellStatus**	
From**: Well.** To: **WellStatus**	
From**: Wellbore.** To: **WellStatus**	

11 CommonTypes

Package: xsd_schemas

Notes: The CommonTypes package contains classes promoted from one of the MLs into common which don't merit their own packages. Currently this includes properties with facets and time series/time index related classes.

TypeEnum
«enumeration»
Facet
I
J
K
X
Y
Z
I+
J+
K+
X+
Y+
Z+
I-
J-
K-
X-
Y-
Z-
net
gross
plus
minus
average
maximum
minimum
maximum threshold
minimum threshold
surface condition
reservoir condition
oil
water
gas
condensate
cumulative
fracture
matrix
«XSDcomplexType»
Abstract::AbstractObject
«XSDcomplexType,XSDtopLevelElement»
PropertyKind
«XSDelement»
+ DeprecationDate: TimeStamp [0..1]
+ IsAbstract: boolean
+ QuantityClass: QuantityClassKindExt
+Parent
0..1
+PropertyKind
«byValue»
2..*
«XSDcomplexType,XSDtopLevelElement»
PropertyKindDictionary
AbstractString
«XSDsimpleType»
BaseTypes::
EnumExtensionPattern
«XSDunion»
FacetExt
«XSDcomplexType»
PropertyKindFacet
«XSDelement»
+ Facet: FacetExt
+ Kind: FacetKind
TypeEnum
«enumeration»
FacetKind
conditions
side
direction
netgross
qualifier
statistics
what

«XSDcomplexType»
TimeSeriesParentage
«XSDelement»
+ HasOverlap: boolean
+TimeSeriesParentage
0..1
+ParentTimeIndex
AbstractObject
«XSDcomplexType,XSDtopLevelEle...
TimeSeries
«XSDelement»
+ Time: GeologicTime [1..-1] {ordered}
+ TimeStep: AbstractIntegerArray [0..1]
+TimeSeries
«XSDcomplexType»
TimeIndex
«XSDelement»
+ Index: NonNegativeLong
«XSDcomplexType»
GeologicTime
«XSDelement»
+ AgeOffsetAttribute: long [0..1]
+ DateTime: TimeStamp
+TimeSeries
«XSDcomplexType»
TimeOrIntervalSeries
«XSDelement»
+ UseInterval: boolean

11.1 Facet

Type: Enumeration *Stereotype:*
Detail: *Created:* 2/22/2016 *Last modified:*8/8/2018 *Status:* Proposed *Author:* Philippe Verney
Notes:

Attributes

Name	Type	Notes
I		Applies to direction facet kind. With respect to the first local grid (lateral) direction. Used for full tensor permeability.
J		Applies to direction facet kind. With respect to the second local grid (lateral) direction. Used for full tensor permeability.
K		Applies to direction facet kind. With respect to the third local grid (vertical) direction. Used for full tensor permeability.
X		Applies to direction facet kind. With respect to the first coordinate system (laterall) direction. Used for full tensor permeability.
Y		Applies to direction facet kind. With respect to the second coordinate system (lateral) direction. Used for full tensor permeability.
Z		Applies to direction facet kind. With respect to the third coordinate system (vertical) direction. Used for full tensor permeability.
I+		Applies to direction facet kind. With respect to the first local grid (lateral) increasing direction. Used for full tensor permeability.
J+		Applies to direction facet kind. With respect to the second local grid (lateral) increasing direction. Used for full tensor permeability.
K+		Applies to direction facet kind. With respect to the third local grid (vertical) increasing direction. Used for full tensor permeability.
X+		Applies to direction facet kind. With respect to the first coordinate system (laterall) increasing direction. Used for full tensor permeability.
Y+		Applies to direction facet kind. With respect to the second coordinate system (lateral) increasing direction. Used for full tensor permeability.

Z+		Applies to direction facet kind. With respect to the third coordinate system (vertical) increasing direction. Used for full tensor permeability.
I-		Applies to direction facet kind. With respect to the first local grid (lateral) decreasing direction. Used for full tensor permeability.
J-		Applies to direction facet kind. With respect to the second local grid (lateral) decreasing direction. Used for full tensor permeability.
K-		Applies to direction facet kind. With respect to the third local grid (vertical) decreasing direction. Used for full tensor permeability.
X-		Applies to direction facet kind. With respect to the first coordinate system (laterall) decreasing direction. Used for full tensor permeability.
Y-		Applies to direction facet kind. With respect to the second coordinate system (lateral) decreasing direction. Used for full tensor permeability.
Z-		Applies to direction facet kind. With respect to the third coordinate system (vertical) decreasing direction. Used for full tensor permeability.
net		Applies to netgross facet kind.
gross		Applies to netgross facet kind.
plus		
minus		
average		Applies to statistics facet kind.
maximum		Applies to statistics facet kind.
minimum		Applies to statistics facet kind.
maximum threshold		Applies to qualifier facet kind.
minimum threshold		Applies to qualifier facet kind.
surface condition		Applies to conditions facet kind.
reservoir condition		Applies to conditions facet kind.
oil		Applies to what facet kind.
water		Applies to what facet kind.
gas		Applies to what facet kind.
condensate		Applies to what facet kind.
cumulative		Applies to statistics facet kind.
fracture		
matrix		

Associations

Association	Notes
From**: Facet.** To: **TypeEnum**	
From**: FacetExt.** To: **Facet**	

11.2 FacetExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 2/22/2016 *Last modified:*8/8/2018 *Status:* Proposed *Author:* Philippe Verney
Notes: *The extensible enumeration of facets.*

Associations

Association	Notes
From**: FacetExt.** To: **Facet**	
From**: FacetExt.** To: **EnumExtensionPattern**	
From**: PropertyKindFacet.** To: **FacetExt**	

11.3 FacetKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/30/2012 *Last modified:*8/8/2018 *Status:* Approved *Author:* deny
Notes: *Enumerations of the type of qualifier that applies to a property type to provide additional context about the nature of the property. For example, may include conditions, direction, qualifiers, or statistics. Facets are used in RESQML to provide qualifiers to existing property types, which minimizes the need to create specialized property types.*

Attributes

Name	Type	Notes
conditions		Indicates condition of how the property was acquired, e.g., distinguishing surface condition of a fluid compared to reservoir conditions.
side		Indicates on which side of a surface the property applies, for example, it can indicate plus or minus.
direction		Indicates that the property is directional. Common values are X, Y, or Z for vectors; I, J, or K for properties on a grid; or tensorial coordinates, e.g., XX or IJ. For example, vertical permeability vs. horizontal permeability.
netgross		Indicates that the property is of kind net or gross, i.e., indicates that the spatial support of a property is averaged only over the net rock or all of the rock. rock or all of the rock.
qualifier		Used to capture any other context not covered by the other facet types listed here.
statistics		Indicates values such as minimum, maximum, average, etc.
what		Indicates the element that is measured, for example, the concentration of a mineral.

Associations

Association	Notes
From**: FacetKind.** To: **TypeEnum**	
From**: PropertyKindFacet.** To: **FacetKind**	

11.4 FacilityLifecyclePeriod

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *This class is used to represent a period of time when a facility was in a lifecycle state.*

Attributes

Name	Type	Notes
EndDateTime	TimeStamp	The data and time when the lifecycle state ended.
StartDateTime	TimeStamp	The date and time when the lifecycle state started.
State	FacilityLifecycleStateExt	The facility's lifecycle state.

Associations

Association	Notes
From**: FacilityLifecyclePeriod.** To: **FacilityLifecycleStateExt**	

11.5 FacilityLifecycleState

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
planning		All the activities of the Life Cycle before construction has commenced. It includes designing a well [or other facility] and obtaining management and regulatory approvals.
constructing		The approved activities of the Life Cycle prior to operation.
operating		The activities of the Life Cycle while the well [or facility] is capable of performing its intended Role. It includes periods where it is temporarily shut in [not active.]
closing		The set of activities of the Life Cycle to make the well or [other facility] permanently incapable of any Role.
closed		The phase of the Life Cycle when the well [or facility] is permanently incapable of performing any Role.

Associations

Association	Notes
From: **FacilityLifecycleState.** To: **TypeEnum**	
From: **FacilityLifecycleStateExt.** To: **FacilityLifecycleState**	

11.6 FacilityLifecycleStateExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *The extensible enumeration of facility life cycle states.*

Associations

Association	Notes
From**: FacilityLifecycleStateExt.** To: **EnumExtensionPattern**	
From**: FacilityLifecycleStateExt.** To: **FacilityLifecycleState**	
From**: FacilityLifecyclePeriod.** To: **FacilityLifecycleStateExt**	

11.7 FacilityOperator

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *This class is used to represent the BusinessAssociate that operates or operated a facility and, optionally, the time interval during which the business associated is or was the operator.*

Attributes

Name	Type	Notes
BusinessAssociate	BusinessAssociate	A pointer to the business associate that operates or operated the facility.
EffectiveDateTime	TimeStamp	The date and time when the business associate became the facility operator.
TerminationDateTime	TimeStamp	The date and time when the business associate ceased to be the facility operator.

11.8 GeologicTime

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/22/2013 *Last modified:*8/6/2018 *Status:* Approved *Author:* Jean Francois
Notes: This class is used to represent a time at several scales:

- A mandatory and precise DateTime used to characterize a TimeStep in a TimeSeries
- An optional Age Offset (corresponding to a geological event occurrence) in years. This age offset must be positive when it represents a GeologicalEvent occurrence in the past. This Age Offset is not required to be positive, to allow for the case of simulating future geological events.

When geological time is used to represent a geological event occurrence, the DateTime must be set by the software writer at a date no earlier than 01/01/1950. Any DateTime (even the creation DateTime of the instance) can be set in this attribute field.

Attributes

Name	Type	Notes
AgeOffsetAttribute	long	A value in years of the offset between the DateTime value and the DateTime of a geologic event occurrence. This value must be POSITIVE when it represents a geological event in the past.
DateTime	TimeStamp	A date, which can be represented according to the W3CDTF format.

Associations

Association	Notes
From**: GeologicTimeBasedTimeInterval.**End To: **GeologicTime**	
From**: BoundaryFeatureInterpretation.**AbsoluteAge **0..1** To: **GeologicTime**	Defines the BoundaryFeature interpretation acting as a chronoTop for the GeneticBoundaryBasedTimeInterval
From**: GeologicTimeBasedTimeInterval.**Start To: **GeologicTime**	

11.9 PropertyKind

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/27/2016 *Last modified:*12/12/2016 *Status:* Proposed *Author:* Philippe Verney
Notes: Property kinds carry the semantics of property values. They are used to identify if the values are, for example, representing porosity, length, stress tensor, etc. Energistics provides a list of standard property kind that represent the basis for the commonly used properties in the E&P subsurface workflow.

Attributes

Name	Type	Notes
DeprecationDate	TimeStamp	Date at which this property dictionary entry must no longer be used. Files generated before this date would have used this entry so it is left here for reference. A null value means the property kind is still valid.
IsAbstract	boolean	This boolean indicates whether the PropertyKind should be used as a real property or not. If the Is Abstract flag is set, then this entry should be used only as the parent of a real property. For example, the PropertyKind of "force per length" shouldn't be used directly, as it is really just a description of some units of measure. This entry should only be used as the parent of the real physical property "surface tension".
QuantityClass	QuantityClassKindExt	A reference to the name of a quantity class in the Energistics Unit of Measure Dictionary. If there is no match in the Energistics Unit of Measure Dictionary, then this attribute is purely for human information.

Associations

Association		Notes
0..1	From**: PropertyKind.**Parent To: **PropertyKind**	
	From**: PropertyKind.** To: **AbstractObject**	
	From**: Column.**PropertyKind To: **PropertyKind**	The mandatory property kind which identifies the meaning of the values of the column.
0..1	From**: PropertyKind.**Parent To: **PropertyKind**	

Association		Notes
2..*	From**: PropertyKindDictionary.**PropertyKind To: **PropertyKind**	This is the relation which brings the individual PropertyKind elements into a PropertyKindDictionary. This is done to avoid having a huge number of little PropertyKind XML documents in a single transfer. Having said that, it is not a requirement that PropertyKind instances be inside a dictionary. In particular, when transferring a single PropertyKind, it neither necessary nor encouraged to create a PropertyKindDictionary just to hold one. So the cardinality of the relationship has been set to 2..* to prevent such a dictionary from being created.

11.10 PropertyKindDictionary

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/27/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Philippe Verney
Notes: *This dictionary defines property kind which is intended to handle the requirements of the upstream oil and gas industry.*

Associations

Association	Notes
From**: PropertyKindDictionary.** To: **AbstractObject**	
From**: PropertyKindDictionary.**PropertyKind **2..*** To: **PropertyKind**	This is the relation which brings the individual PropertyKind elements into a PropertyKindDictionary. This is done to avoid having a huge number of little PropertyKind XML documents in a single transfer. Having said that, it is not a requirement that PropertyKind instances be inside a dictionary. In particular, when transferring a single PropertyKind, it neither necessary nor encouraged to create a PropertyKindDictionary just to hold one. So the cardinality of the relationship has been set to 2..* to prevent such a dictionary from being created.

11.11 PropertyKindFacet

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/30/2012 *Last modified:*8/8/2018 *Status:* Approved *Author:* deny
Notes: Qualifiers for property values, which allow users to semantically specialize a property without creating a new property kind.
For the list of enumerations, see FacetKind.

Attributes

Name	Type	Notes
Facet	FacetExt	A facet allows you to better define a property in the context of its property kind. The technical advantage of using a facet vs. a specialized property kind is to limit the number of property kinds.
Kind	FacetKind	Facet kind of the property kind (see the enumeration)

Associations

Association		Notes
	From**: PropertyKindFacet.** To: **FacetKind**	
	From**: PropertyKindFacet.** To: **FacetExt**	
0..*	From**: AbstractValuesProperty.**Facet To: **PropertyKindFacet**	BUSINESS RULE : Don't use several facets of the same kind for the same property.
0..*	From**: Column.**Facet To: **PropertyKindFacet**	

11.12 TimeIndex

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 5/22/2013 *Last modified:*10/26/2016 *Status:* Approved *Author:* philippe
Notes: *Index into a time series. Used to specify time. (Not to be confused with time step.)*

Attributes

Name	Type	Notes
Index	NonNegativeLong	The index of the time in the time series.

Associations

Association		Notes
	From**: TimeIndex.**TimeSeries To: **TimeSeries**	
	From**: TimeIndexParameter.**TimeIndex To: **TimeIndex**	
	From**: TimeIndexParameterKey.**TimeIndex To: **TimeIndex**	
	From**: TimeSeriesParentage.**ParentTimeIndex To: **TimeIndex**	Index of the first entry in the current time series, if it overlaps with the parent time series. Otherwise, the index of the last entry in the prior time series.
	From**: StreamlinesFeature.**TimeIndex To: **TimeIndex**	
0..1	From**: ElementIdentity.**FromTimeIndex To: **TimeIndex**	
0..1	From**: AbstractGeometry.**TimeIndex To: **TimeIndex**	
0..1	From**: ElementIdentity.**ToTimeIndex To: **TimeIndex**	

11.13 TimeOrIntervalSeries

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/30/2021 *Last modified:*8/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
UseInterval	boolean	

Associations

Association		Notes
	From**: TimeOrIntervalSeries.**TimeSeries To: **TimeSeries**	
0..1	From**: AbstractProperty.**TimeOrIntervalSeries To: **TimeOrIntervalSeries**	

11.14 TimeSeries

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/21/2012 *Last modified:*8/30/2021 *Status:* Approved *Author:* deny
Notes: Stores an ordered list of times, for example, for time-dependent properties, geometries, or representations. It is used in conjunction with the time index to specify times for RESQML.

Business Rule: If present TimeStep count must match Time count

Attributes

Name	Type	Notes
Time	GeologicTime	Individual times composing the series. The list ordering is used by the time index.
TimeStep	AbstractIntegerArray	

Associations

Association		Notes
	From**: TimeSeries.** To: **AbstractObject**	
0..1	From**: TimeSeries.**TimeSeriesParentage To: **TimeSeriesParentage**	
	From**: TimeIndex.**TimeSeries To: **TimeSeries**	
	From**: Activation.**TimeSeries To: **TimeSeries**	
	From**: TimeOrIntervalSeries.**TimeSeries To: **TimeSeries**	

11.15 TimeSeriesParentage

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/5/2013 *Last modified:*10/26/2016 *Status:* Approved *Author:* mike.king
Notes: *Indicates that a time series has the associated time series as a parent, i.e., that the series continues from the parent time series.*

Attributes

Name	Type	Notes
HasOverlap	boolean	Used to indicate that a time series overlaps with its parent time series, e.g., as may be done for simulation studies, where the end state of one calculation is the initial state of the next.

Associations

Association		Notes
	From**: TimeSeriesParentage.**ParentTimeIndex To: **TimeIndex**	Index of the first entry in the current time series, if it overlaps with the parent time series. Otherwise, the index of the last entry in the prior time series.
0..1	From**: TimeSeries.**TimeSeriesParentage To: **TimeSeriesParentage**	

11.16 WellStatusPeriod

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *This class is used to represent a period of time when a facility had a consistent WellStatus.*

Attributes

Name	Type	Notes
EndDateTime	TimeStamp	The date and time when the status ended.
StartDateTime	TimeStamp	The date and time when the status started.
Status	WellStatus	The facility's status.

12 CRS

Package: xsd_schemas

Notes: The is the package containing the Coordinate Reference System types.

«XSDcomplexType»
Abstract::AbstractObject
«XSDcomplexType»
AbstractCompoundCrs
«XSDcomplexType,XSDto...
VerticalCrs
«XSDelement»
+ Direction: VerticalDirection
«XSDattribute, XSDeleme...
+ uom: LengthUomExt
TypeEnum
«enumeration»
VerticalDirection
up
down
«XSDcomplexType»
GeographicCompoundCrs
«XSDcomplexType»
ProjectedCompoundCrs
«XSDcomplexType,XSDtopLeve...
LocalEngineeringCompoundCrs
«XSDelement»
+ OriginVerticalCoordinate: double
+VerticalAxis
1
«XSDcomplexType»
VerticalAxis
«XSDelement»
+ Direction: VerticalDirection
+ IsTime: boolean
+ Uom: LengthAndTimeUomExt
Abstract2dCrs
«XSDcomplexType,X...
Geographic2dCrs
Cartesian2dCrs
«XSDcomplexType,XSDt...
ProjectedCrs
«XSDelement»
+ AxisOrder: AxisOrder2d
«XSDattribute»
+ uom: LengthUomExt [0..1]
+OriginUncertaintyVectorAtOneSigma
0..1
«XSDcomplexType»
Vector
«XSDelement»
+ Component1: double
+ Component2: double
+ Component3: double
TypeEnum
«Enumeration»
PrincipalMeridian
1st Principal Meridian
2nd Principal Meridian
3rd Principal Meridian
4th Principal Meridian
5th Principal Meridian
6th Principal Meridian
Black Hills Meridian
Boise Meridian
Chickasaw Meridian
Choctaw Meridian
Cimarron Meridian
Copper River Meridian
Fairbanks Meridian
Gila and Salt River Meridian
Humboldt Meridian
Huntsville Meridian
Indian Meridian
Kateel River Meridian
Lousiana Meridian
Michigan Meridian
Montana Meridian
Mount Diablo Meridian
Navajo Meridian
New Mexico Meridian
Saint Helena Meridian
Saint Stephens Meridian
Salt Lake Meridian
San Bernardo Meridian
Seward Meridian
Tallahassee Meridian
Uintah Meridian
Umiat Meridian
Ute Meridian
Washington Meridian
Williamette Meridian
Wind River Meridian
TypeEnum
«Enumerati...
EastOrWest
east
west
TypeEnum
«Enumeration»
NorthOrSouth
north
south
«XSDcomplexType»
PublicLandSurveySystemLocation
«XSDelement»
+ PrincipalMeridian: PrincipalMeridian [0..1]
+ QuarterSection: PublicLandSurveySystemQuarterSection [0..1]
+ QuarterTownship: PublicLandSurveySystemQuarterTownship [0..1]
+ Range: long [0..1]
+ RangeDir: EastOrWest [0..1]
+ Section: SectionNumber [0..1]
+ Township: long [0..1]
+ TownshipDir: NorthOrSouth [0..1]
String64
«XSDsimpleType»
SectionNumber
tags
derivation = restriction
OriginalName = sectionNumber
pattern = [+]?([1-9][1-2][0-9]|3[0-6])\.?[0-9]?
+AxisOrder
1
TypeEnum
«enumeration»
AxisOrder2d
easting northing
easting southing
southing easting
northing easting
westing southing
southing westing
northing westing
westing northing
String64
«XSDsimpleType»
PublicLandSurveySystemQuarterSection
tags
derivation = restriction
OriginalName = publicLandSurveySystemQuarterSection
pattern = (NE|NW|SW|SE|N2|S2|E2|W2|C|LT[0-9]{2,2}|TR[a-zA-Z0-9]{1,2}){1,3}
String64
«XSDsimpleType»
PublicLandSurveySystemQuarterTownship
tags
derivation = restriction
OriginalName = publicLandSurveySystemQuarterTownship
pattern = NE|NW|SW|SE

12.1 Abstract2dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Abstract2dCrs.** To: **AbstractObject**	
From**: Cartesian2dCrs.** To: **Abstract2dCrs**	
From**: Geographic2dCrs.** To: **Abstract2dCrs**	

12.2 AbstractCompoundCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: AbstractCompoundCrs.** To: **VerticalCrs**	
From**: AbstractCompoundCrs.** To: **AbstractObject**	
From**: ProjectedCompoundCrs.** To: **AbstractCompoundCrs**	
From**: GeographicCompoundCrs.** To: **AbstractCompoundCrs**	
From**: LocalEngineeringCompoundCrs.** To: **AbstractCompoundCrs**	

12.3 AbstractGeographic2dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Joey Magsipok
Notes:

Associations

Association	Notes
From: **Geographic2dCrs. 1..1** To: **AbstractGeographic2dCrs**	
From: **GeodeticWktCrs.** To: **AbstractGeographic2dCrs**	
From: **GeodeticEpsgCrs.** To: **AbstractGeographic2dCrs**	
From: **GeodeticUnknownCrs.** To: **AbstractGeographic2dCrs**	
From: **GeodeticLocalAuthorityCrs.** To: **AbstractGeographic2dCrs**	

12.4 AbstractProjectedCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/18/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Joey Magsipok
Notes:

Associations

Association	Notes
From**: ProjectedCrs. 1..1** To: **AbstractProjectedCrs**	
From**: ProjectedEpsgCrs.** To: **AbstractProjectedCrs**	
From**: ProjectedWktCrs.** To: **AbstractProjectedCrs**	
From**: ProjectedUnknownCrs.** To: **AbstractProjectedCrs**	
From**: ProjectedLocalAuthorityCrs.** To: **AbstractProjectedCrs**	

12.5 AbstractVerticalCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/18/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Joey Magsipok
Notes:

Associations

Association	Notes
From**: VerticalLocalAuthorityCrs.** To: **AbstractVerticalCrs**	
From**: VerticalEpsgCrs.** To: **AbstractVerticalCrs**	
From**: VerticalCrs. 1..1** To: **AbstractVerticalCrs**	
From**: VerticalWktCrs.** To: **AbstractVerticalCrs**	
From**: VerticalUnknownCrs.** To: **AbstractVerticalCrs**	

12.6 AxisDirectionKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 3/29/2019 *Last modified:*3/29/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Direction of positive increase in the coordinate value for a coordinate system axis (from ISO 19111)*

Attributes

Name	Type	Notes
aft		
away-from		
clockwise		
column-negative		
column-positive		
counter-clockwise		
display-down		
display-left		
display-right		
display-up		
down		
east		
east-north-east		
east-south-east		
forward		
future		
geocentric x		
geocentric y		
geocentric z		
north		
north-east		
north-north-east		
north-north-west		
north-west		
past		
port		
row-negative		
row-positive		
south		
south-east		
south-south-east		

south-south-west		
south-west		
starboard		
towards		
up		
west		
west-north-west		
west-south-west		

Associations

Association	Notes
From**: AxisDirectionKind.** To: **TypeEnum**	

12.7 AxisOrder2d

Type: Enumeration Stereotype:
Detail: Created: 5/17/2012 *Last modified:*8/6/2018 *Status:* Proposed *Author:* philippe
Notes: *Defines the coordinate system axis order of the global CRS using the axis names (from EPSG database).*

Attributes

Name	Type	Notes
easting northing	TypeEnum	The first axis is easting and the second axis is northing.
easting southing		
southing easting		
northing easting	TypeEnum	The first axis is northing and the second asis is easting.
westing southing	TypeEnum	The first axis is westing and the second axis is southing.
southing westing	TypeEnum	The first axis is southing and the second axis is westing.
northing westing	TypeEnum	the first axis is northing and the second axis is westing.
westing northing	TypeEnum	the first axis is westing and the second axis is northing.

Associations

Association	Notes
From**: AxisOrder2d.** To: **TypeEnum**	
From**: PublicLandSurveySystemLocation.**AxisOrder **1** To: **AxisOrder2d**	
From**: ProjectedCrs.** To: **AxisOrder2d**	

12.8 Cartesian2dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Cartesian2dCrs.** To: **Abstract2dCrs**	
From**: ProjectedCrs.** To: **Cartesian2dCrs**	
From**: LocalEngineering2dCrs.** To: **Cartesian2dCrs**	

12.9 EastOrWest

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies east or west direction.*

Attributes

Name	Type	Notes
east		East of something.
west		West of something.

Associations

Association	Notes
From**: EastOrWest.** To: **TypeEnum**	
From**: PublicLandSurveySystemLocation.** To: **EastOrWest**	

12.10 Geocentric3dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Geocentric3dCrs.** To: **AbstractObject**	
From**: Geocentric3dPosition.** To: **Geocentric3dCrs**	

12.11 GeodeticEpsgCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains the EPSG code for a geodetic CRS.*

Attributes

Name	Type	Notes
EpsgCode	PositiveLong	

Associations

Association	Notes
From**: GeodeticEpsgCrs.** To: **AbstractGeographic2dCrs**	

12.12 GeodeticLocalAuthorityCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/21/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains a code for a geodetic CRS according to a local authority. This would be used in a case where a company or regulatory regime has chosen not to use EPSG codes.*

Attributes

Name	Type	Notes
LocalAuthorityCrsName	AuthorityQualifiedName	

Associations

Association	Notes
From: **GeodeticLocalAuthorityCrs.** To: **AbstractGeographic2dCrs**	

12.13 GeodeticUnknownCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class is used in a case where the coordinate reference system is either unknown or is intentionally not being transferred.*

Attributes

Name	Type	Notes
Unknown	String2000	

Associations

Association	Notes
From**: GeodeticUnknownCrs.** To: **AbstractGeographic2dCrs**	

12.14 GeodeticWktCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*11/12/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *ISO 19162-compliant well-known text for the Geodetic CRS.*

Attributes

Name	Type	Notes
WellKnownText	string	ISO 19162 compliant well known text of the CRS

Associations

Association	Notes
From: **GeodeticWktCrs.** To: **AbstractGeographic2dCrs**	

12.15 Geographic2dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Geographic2dCrs. 1..1** To: **AbstractGeographic2dCrs**	
From**: Geographic2dCrs.** To: **Abstract2dCrs**	
From**: GeographicCoordinates.**Crs To: **Geographic2dCrs**	
From**: Geographic2dPosition.**GeographicCrs **1** To: **Geographic2dCrs**	
From**: ProjectedCrs.** To: **Geographic2dCrs**	
From**: GeographicCompoundCrs.** To: **Geographic2dCrs**	

12.16 Geographic3dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Geographic3dCrs.** To: **AbstractObject**	
From**: Geographic3dPosition.** To: **Geographic3dCrs**	

12.17 GeographicCompoundCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: GeographicCompoundCrs.** To: **AbstractCompoundCrs**	
From**: GeographicCompoundCrs.** To: **Geographic2dCrs**	
From**: GeographicCompoundPosition.** To: **GeographicCompoundCrs**	

12.18 HorizontalAxes

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*3/28/2019 *Status:* Proposed *Author:* Philippe
Notes:

Attributes

Name	Type	Notes
Direction1	AxisDirectionKind	Direction of the axis. Commonly used for values such as "easting, northing, depth, etc.."
Direction2	AxisDirectionKind	
IsTime	boolean	
Uom	LengthAndTimeUomExt	

Associations

Association		Notes
1	From**: LocalEngineering2dCrs.**HorizontalAxes To: **HorizontalAxes**	

12.19 LocalEngineering2dCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/4/2021 *Last modified:*9/4/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Azimuth	PlaneAngleMeasureExt	
AzimuthReference	NorthReferenceKind	
OriginProjectedCoordinate1	double	
OriginProjectedCoordinate2	double	

Associations

Association	Notes
From: **LocalEngineering2dCrs.**OriginProjectedCrs **1** To: **ProjectedCrs**	
From: **LocalEngineering2dCrs.** To: **NorthReferenceKind**	
From: **LocalEngineering2dCrs.**HorizontalAxes **1** To: **HorizontalAxes**	
From: **LocalEngineering2dCrs.** To: **Cartesian2dCrs**	
From: **LocalEngineering2dPosition.** To: **LocalEngineering2dCrs**	
From: **LocalEngineeringCompoundCrs.** To: **LocalEngineering2dCrs**	

12.20 LocalEngineeringCompoundCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*9/4/2021 *Status:* Proposed *Author:* Philippe
Notes: *A local Engineering compound CRS is based on a LocalEngineering2dCRS + a vertical CRS.*

Attributes

Name	Type	Notes
OriginVerticalCoordinate	double	Vertical coordinate of the origin of the local engineering CRS in the base vertical CRS (consequently in the uom of the base vertical CRS)

Associations

Association	Notes
From: **LocalEngineeringCompoundCrs.**OriginUncertaintyVectorAtOneSigma **0..1** To: **Vector**	The 1-sigma uncertainty vector of the origin point, which can be scaled up to the desired uncertainty.
From: **LocalEngineeringCompoundCrs.**VerticalAxis **1** To: **VerticalAxis**	
From: **LocalEngineeringCompoundCrs.** To: **AbstractCompoundCrs**	
From: **LocalEngineeringCompoundCrs.** To: **LocalEngineering2dCrs**	
From: **TvdInformation.**LocalDepth3dCrs To: **LocalEngineeringCompoundCrs**	
From: **SeismicWellboreFrameRepresentation.**LocalTime3dCrs To: **LocalEngineeringCompoundCrs**	
From: **EngineeringCompoundPosition.** To: **LocalEngineeringCompoundCrs**	
From: **ReferencePointInALocalEngineeringCompoundCrs.**Crs To: **LocalEngineeringCompoundCrs**	
From: **AbstractProperty.**LocalCrs **0..1** To: **LocalEngineeringCompoundCrs**	
From: **AbstractGeometry.**LocalCrs To: **LocalEngineeringCompoundCrs**	
From: **Seismic2dPostStackRepresentation.**LocalCrs To: **LocalEngineeringCompoundCrs**	
From: **Seismic3dPostStackRepresentation.**LocalCrs To: **LocalEngineeringCompoundCrs**	

12.21 NorthOrSouth

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies the north or south direction.*

Attributes

Name	Type	Notes
north		North of something.
south		South of something.

Associations

Association	Notes
From**: NorthOrSouth.** To: **TypeEnum**	
From**: PublicLandSurveySystemLocation.** To: **NorthOrSouth**	

12.22 PrincipalMeridian

Type: Enumeration *Stereotype:* «Enumeration»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *Specifies values for the principal meridians for the United States Public Land Surveys.*

Attributes

Name	Type	Notes
1st Principal Meridian		Indiana, Ohio
2nd Principal Meridian		Indiana
3rd Principal Meridian		Illinois
4th Principal Meridian		Illinois, Wisconsin
5th Principal Meridian		Iowa, Missouri, Arkansas
6th Principal Meridian		Kansas, Nebraska
Black Hills Meridian		South Dakota
Boise Meridian		Idaho
Chickasaw Meridian		Mississippi
Choctaw Meridian		Mississippi
Cimarron Meridian		Texas
Copper River Meridian		Alaska
Fairbanks Meridian		Alaska
Gila and Salt River Meridian		Arizona
Humboldt Meridian		California
Huntsville Meridian		Alabama
Indian Meridian		Oklahome
Kateel River Meridian		Alaska
Lousiana Meridian		Lousiana
Michigan Meridian		Michigan
Montana Meridian		Montana
Mount Diablo Meridian		California
Navajo Meridian		Arizona portion of Navajo nation
New Mexico Meridian		New Mexico
Saint Helena Meridian		Louisiana
Saint Stephens Meridian		Alabama
Salt Lake Meridian		Utah
San Bernardo Meridian		California
Seward Meridian		Alaska
Tallahassee Meridian		Floridia
Uintah Meridian		Utah
Umiat Meridian		Alaska

Ute Meridian		Colorado
Washington Meridian		Mississippi
Williamette Meridian		Washington
Wind River Meridian		Wyoming

Associations

Association	Notes
From**: PrincipalMeridian.** To: **TypeEnum**	
From**: PublicLandSurveySystemLocation.** To: **PrincipalMeridian**	

12.23 ProjectedCompoundCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: ProjectedCompoundCrs.** To: **AbstractCompoundCrs**	
From**: ProjectedCompoundCrs.** To: **ProjectedCrs**	
From**: ProjectedCompoundPosition.** To: **ProjectedCompoundCrs**	

12.24 ProjectedCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*9/4/2021 *Status:* Proposed *Author:* Administrator
Notes:

Attributes

Name	Type	Notes
AxisOrder	AxisOrder2d	
uom	LengthUomExt	

Associations

Association	Notes
From**: ProjectedCrs. 1..1** To: **AbstractProjectedCrs**	
From**: ProjectedCrs.** To: **Geographic2dCrs**	
From**: ProjectedCrs.** To: **Cartesian2dCrs**	
From**: ProjectedCrs.** To: **AxisOrder2d**	
From**: LocalEngineering2dCrs.**OriginProjectedCrs **1** To: **ProjectedCrs**	
From**: ProjectedCompoundCrs.** To: **ProjectedCrs**	
From**: ProjectedCoordinates.**Crs To: **ProjectedCrs**	
From**: Projected3dPosition.** To: **ProjectedCrs**	
From**: Projected2dPosition.** To: **ProjectedCrs**	

12.25 ProjectedEpsgCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains the EPSG code for a projected CRS.*

Attributes

Name	Type	Notes
EpsgCode	PositiveLong	

Associations

Association	Notes
From**: ProjectedEpsgCrs.** To: **AbstractProjectedCrs**	

12.26 ProjectedLocalAuthorityCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/21/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains a code for a projected CRS according to a local authority. This would be used in a case where a company or regulatory regime has chosen not to use EPSG codes.*

Attributes

Name	Type	Notes
LocalAuthorityCrsName	AuthorityQualifiedName	

Associations

Association	Notes
From: **ProjectedLocalAuthorityCrs.** To: **AbstractProjectedCrs**	

12.27 ProjectedUnknownCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class is used in a case where the coordinate reference system is either unknown or is intentionally not being transferred. In this case, the uom and AxisOrder need to be provided on the ProjectedCrs class.*

Attributes

Name	Type	Notes
Unknown	String2000	

Associations

Association	Notes
From**: ProjectedUnknownCrs.** To: **AbstractProjectedCrs**	

12.28 ProjectedWktCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *ISO 19162-compliant well-known text for the projected CRS*

Attributes

Name	Type	Notes
WellKnownText	string	ISO 19162 compliant well known text of the CRS

Associations

Association	Notes
From: **ProjectedWktCrs.** To: **AbstractProjectedCrs**	

12.29 PublicLandSurveySystemLocation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/13/2015 *Last modified:*9/5/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Land survey system that describes the well by range, township, section, etc.*

Attributes

Name	Type	Notes
PrincipalMeridian	PrincipalMeridian	Principal meridian for this location.
QuarterSection	PublicLandSurveySystemQuarterSection	The location of the well within the section, with the primary component listed first. Spot location will be made from a combinationof the following codes: NE, NW, SW, SE, N2, S2, E2, W2, C (center quarter), LTxx (where xx represents a two digit lot designation), TRzz (where zz represents a one or two character trac designation). Free format allows for entries such as NESW (southwest quarter of northeast quarter), E2NESE (southeast quarter of northeast quarter of east half), CNE (northeast quarter of center quarter), etc.
QuarterTownship	PublicLandSurveySystemQuarterTownship	Quarter township.
Range	long	Range number.
RangeDir	EastOrWest	Range direction.
Section	SectionNumber	Section number.
Township	long	Township number.
TownshipDir	NorthOrSouth	Township direction.

Associations

Association	Notes
From: **PublicLandSurveySystemLocation.** To: **PrincipalMeridian**	
From: **PublicLandSurveySystemLocation.** To: **EastOrWest**	
From: **PublicLandSurveySystemLocation.** To: **SectionNumber**	
From: **PublicLandSurveySystemLocation.** To: **Note**	
From: **PublicLandSurveySystemLocation.**AxisOrder **1** To: **AxisOrder2d**	
From: **PublicLandSurveySystemLocation.** To: **PublicLandSurveySystemQuarterTownship**	
From: **PublicLandSurveySystemLocation.** To: **PublicLandSurveySystemQuarterSection**	

Association	Notes
From**: PublicLandSurveySystemLocation.** To: **NorthOrSouth**	
From**: PublicLandSurveySystem2dPosition.** To: **PublicLandSurveySystemLocation**	
From**:** **PublicLandSurveySystemCoordinates.**PublicLandSurveySystem To: **PublicLandSurveySystemLocation**	

12.30 PublicLandSurveySystemQuarterSection

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *Some combination of NE, NW, SW, SE, N2, S2, E2, W2, C, TRxx, LTnn. USA Public Land Survey System.*

Associations

Association	Notes
From: **PublicLandSurveySystemQuarterSection.** To: **String64**	
From: **PublicLandSurveySystemLocation.** To: **PublicLandSurveySystemQuarterSection**	

12.31 PublicLandSurveySystemQuarterTownship

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 4/13/2015 *Last modified:*9/5/2021 *Status:* Proposed *Author:* William McKenzie
Notes: *Designates a particular quarter of a township (Ohio only). USA Public Land Survey System.*

Associations

Association	Notes
From: **PublicLandSurveySystemQuarterTownship.** To: **String64**	
From: **PublicLandSurveySystemLocation.** To: **PublicLandSurveySystemQuarterTownship**	

12.32 SectionNumber

Type: Class *Stereotype:* «XSDsimpleType»
Detail: *Created:* 4/13/2015 *Last modified:*8/8/2018 *Status:* Proposed *Author:* William McKenzie
Notes: *Sections are numbered "1" through "36." Irregular sections may be designated with a single value after a decimal point. USA Public Land Survey System.*

Associations

Association	Notes
From**: SectionNumber.** To: **String64**	
From**: PublicLandSurveySystemLocation.** To: **SectionNumber**	

12.33 Vector

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*3/28/2019 *Status:* Proposed *Author:* Philippe
Notes:

Attributes

Name	Type	Notes
Component1	double	
Component2	double	
Component3	double	

Associations

Association	Notes
From: **LocalEngineeringCompoundCrs.**OriginUncertaintyVectorAtOneSigma **0..1** To: **Vector**	The 1-sigma uncertainty vector of the origin point, which can be scaled up to the desired uncertainty.
From: **AbstractReferencePoint.**UncertaintyVectorAtOneSigma **0..1** To: **Vector**	The 1-sigma uncertainty vector of the reference point, which can be scaled up to the desired uncertainty.

12.34 VerticalAxis

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/6/2018 *Last modified:*3/28/2019 *Status:* Proposed *Author:* Philippe
Notes:

Attributes

Name	Type	Notes
Direction	VerticalDirection	Direction of the axis. Commonly used for values such as "easting, northing, depth, etc.."
IsTime	boolean	
Uom	LengthAndTimeUomExt	

Associations

Association	Notes
From**: VerticalAxis.** To: **VerticalDirection**	
From**: LocalEngineeringCompoundCrs.**VerticalAxis **1** To: **VerticalAxis**	

12.35 VerticalCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*8/18/2021 *Status:* Proposed *Author:* Administrator
Notes:

Attributes

Name	Type	Notes
Direction	VerticalDirection	
uom	LengthUomExt	

Associations

Association	Notes
From**: VerticalCrs.** To: **AbstractObject**	
From**: VerticalCrs. 1..1** To: **AbstractVerticalCrs**	
From**: VerticalCrs.** To: **VerticalDirection**	
0..1 From**: ReferencePointInACrs.**VerticalCrs To: **VerticalCrs**	
From**: AbstractCompoundCrs.** To: **VerticalCrs**	
1 From**: VerticalPosition1d.**VerticalCrs To: **VerticalCrs**	

12.36 VerticalDirection

Type: Enumeration *Stereotype:*
Detail: *Created:* 5/17/2012 *Last modified:*8/6/2018 *Status:* Proposed *Author:* philippe
Notes:

Attributes

Name	Type	Notes
up	TypeEnum	Values are positive when moving away from the center of the Earth.
down	TypeEnum	Values are positive when moving toward the center of the Earth.

Associations

Association	Notes
From: **VerticalDirection.** To: **TypeEnum**	
From: **VerticalCrs.** To: **VerticalDirection**	
From: **VerticalAxis.** To: **VerticalDirection**	

12.37 VerticalEpsgCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains the EPSG code for a vertical CRS.*

Attributes

Name	Type	Notes
EpsgCode	PositiveLong	

Associations

Association	Notes
From: **VerticalEpsgCrs.** To: **AbstractVerticalCrs**	

12.38 VerticalLocalAuthorityCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/21/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class contains a code for a vertical CRS according to a local authority. This would be used in a case where a company or regulatory regime has chosen not to use EPSG codes.*

Attributes

Name	Type	Notes
LocalAuthorityCrsName	AuthorityQualifiedName	

Associations

Association	Notes
From: **VerticalLocalAuthorityCrs.** To: **AbstractVerticalCrs**	

12.39 VerticalUnknownCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/29/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Administrator
Notes: *This class is used in a case where the coordinate reference system is either unknown or is intentionally not being transferred. In this case, the uom and Direction need to be provided on the VerticalCrs class.*

Attributes

Name	Type	Notes
Unknown	String2000	

Associations

Association	Notes
From: **VerticalUnknownCrs.** To: **AbstractVerticalCrs**	

12.40 VerticalWktCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/18/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *ISO 19162-compliant well-known text for the vertical CRS*

Attributes

Name	Type	Notes
WellKnownText	string	ISO 19162 compliant well known text of the CRS

Associations

Association	Notes
From**: VerticalWktCrs.** To: **AbstractVerticalCrs**	

13 Datum

Package: xsd_schemas

Notes: Datum package

AbstractObject
«XSDcomplexType,XSDtopLevelElement»
AbstractReferencePoint
«XSDelement»
+ Kind: ReferencePointKindExt [0..1]
+ OSDUReferencePointIntegration: OSDUReferencePointIntegration [0..1]
+UncertaintyVectorAtOneSigma
0..1
«XSDcomplexType»
CRS::Vector
«XSDelement»
+ Component1: double
+ Component2: double
+ Component3: double
+BaseReferencePoint
+OriginUncertaintyVectorAtOneSigma
0..1
EnumExtensionPattern
«XSDunion»
ReferencePointKindExt
TypeEnum
«enumeration»
ReferencePointKind
casing flange
crown valve
derrick floor
ground level
kelly bushing
kickoff point
lowest astronomical tide
mean high water
mean higher high water
mean low water
mean lower low water
mean sea level
mean tide level
rotary bushing
rotary table
seafloor
wellhead
well surface location
«XSDcomplexType»
HorizontalCoordinates
«XSDelement»
+ Coordinate1: double
+ Coordinate2: double
+HorizontalCoordinates
0..1
«XSDcomplexType,XSDtopLevelElem...
RecursiveReferencePoint
«XSDelement»
+ VerticalCoordinate: double [0..1]
+HorizontalCoordinates
0..1
«XSDcomplexType,XSDtopLevelElem...
ReferencePointInACrs
«XSDelement»
+ VerticalCoordinate: double [0..1]
«XSDcomplexType,XSDtopLevelElement»
ReferencePointInALocalEngineeringCompoundCrs
«XSDelement»
+ VerticalCoordinate: double [0..1]
«XSDcomplexType,XSDtopLevelElem...
ReferencePointInAWellbore
«XSDelement»
+ Md: LengthMeasureExt
+ Trajectory: DataObjectReference [0..1]
+ Wellbore: DataObjectReference
+HorizontalCoordinates
0..1
+VerticalCrs
0..1
+Crs
«XSDcomplexType»
AbstractHorizontalCoordinates
«XSDelement»
+ Coordinate1: double
+ Coordinate2: double
AbstractObject
«XSDcomplexType,XSDtopLevelElem...
CRS::VerticalCrs
«XSDelement»
+ Direction: VerticalDirection
«XSDattribute, XSDelement»
+ uom: LengthUomExt
AbstractCompoundCrs
«XSDcomplexType,XSDtopLevelElement»
CRS::LocalEngineeringCompoundCrs
«XSDelement»
+ OriginVerticalCoordinate: double
«XSDcomplexType»
PublicLandSurveySystemCoordinates
«XSDcomplexType»
GeographicCoordinates
«XSDcomplexType»
ProjectedCoordinates
«XSDcomplexType»
CRS::HorizontalAxes
«XSDelement»
+ Direction1: AxisDirectionKind
+ Direction2: AxisDirectionKind
+ IsTime: boolean
+ Uom: LengthAndTimeUomExt
+PublicLandSurveySystem
+Crs
+Crs
«XSDcomplexType»
CRS::PublicLandSurveySystemLocation
«XSDelement»
+ PrincipalMeridian: PrincipalMeridian [0..1]
+ QuarterSection: PublicLandSurveySystemQuarterSection [0..1]
+ QuarterTownship: PublicLandSurveySystemQuarterTownship [0..1]
+ Range: long [0..1]
+ RangeDir: EastOrWest [0..1]
+ Section: SectionNumber [0..1]
+ Township: long [0..1]
+ TownshipDir: NorthOrSouth [0..1]
Abstract2dCrs
«XSDcomplexType,...
CRS::Geographic2dCrs
Cartesian2dCrs
«XSDcomplexType,XSDt...
CRS::ProjectedCrs
«XSDelement»
+ AxisOrder: AxisOrder2d
«XSDattribute»
+ uom: LengthUomExt [0..1]
TypeEnum
«enumeration»
CRS::AxisOrder2d
easting northing
easting southing
southing easting
northing easting
westing southing
southing westing
northing westing
westing northing
+AxisOrder
1

13.1 Abstract2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/23/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Abstract2dPosition.** To: **AbstractPosition**	
From**: Geographic2dPosition.** To: **Abstract2dPosition**	
From**: AbstractCartesian2dPosition.** To: **Abstract2dPosition**	
From**: DrillReportSurveyStation.**Location **0..*** To: **Abstract2dPosition**	The 2D coordinates of the item. Note that within the context of trajectory, the "original" coordinates are inherently local coordinates as defined above.

13.2 Abstract3dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/23/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Abstract3dPosition.** To: **AbstractPosition**	
From**: Projected3dPosition.** To: **Abstract3dPosition**	
From**: Target.**Location **0..*** To: **Abstract3dPosition**	The 2D coordinates of the item at the start of the section. The location object is mandatory for the first section starting point.
From**: LocalEngineering3dPosition.** To: **Abstract3dPosition**	
From**: Geographic3dPosition.** To: **Abstract3dPosition**	
From**: TargetSection.**Location **0..*** To: **Abstract3dPosition**	The 2D coordinates of the item at the start of the section. This is redundant information and can be computed by starting at the section origin and applying the sequence of angleArcs and lenRadius.
From**: Geocentric3dPosition.** To: **Abstract3dPosition**	

13.3 AbstractCartesian2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/4/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: A 2D position given relative to either a projected or local engineering CRS.

The meanings of the two coordinates and their units of measure are carried in the referenced CRS definition.

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	

Associations

Association	Notes
From: **AbstractCartesian2dPosition.** To: **Abstract2dPosition**	
From: **PublicLandSurveySystem2dPosition.** To: **AbstractCartesian2dPosition**	
From: **LocalEngineering2dPosition.** To: **AbstractCartesian2dPosition**	
From: **Projected2dPosition.** To: **AbstractCartesian2dPosition**	

13.4 AbstractCompoundPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*12/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: AbstractCompoundPosition.** To: **AbstractPosition**	
From**: ProjectedCompoundPosition.** To: **AbstractCompoundPosition**	
From**: GeographicCompoundPosition.** To: **AbstractCompoundPosition**	
From**: EngineeringCompoundPosition.** To: **AbstractCompoundPosition**	

13.5 AbstractHorizontalCoordinates

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Proposed *Author:* Philippe
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	

Associations

Association	Notes
From**: ProjectedCoordinates.** To: **AbstractHorizontalCoordinates**	
From**: GeographicCoordinates.** To: **AbstractHorizontalCoordinates**	
From**: ReferencePointInACrs.**HorizontalCoordinates **0..1** To: **AbstractHorizontalCoordinates**	
From**: PublicLandSurveySystemCoordinates.** To: **AbstractHorizontalCoordinates**	

13.6 AbstractPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/23/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: AbstractCompoundPosition.** To: **AbstractPosition**	
0..* From**: TrajectoryStation.**Location To: **AbstractPosition**	The 2D coordinates of the item. Note that within the context of trajectory, the "original" coordinates are inherently local coordinates as defined above.
From**: Abstract2dPosition.** To: **AbstractPosition**	
0..* From**: Well.**WellSurfaceLocation To: **AbstractPosition**	The surface location of the well. This is shared by all wellbores within the well. This is where the well crosses ground level on land and crosses the platform offshore. This is a sequence of concrete instances of reference points of different types and/or reference systems, including the PLSS location. Each of these must have the "kind"element set to "well surface location". These are not different realizations or interpretations of the well surface location, but are exactly the same location expressed differently.
From**: Abstract3dPosition.** To: **AbstractPosition**	

13.7 AbstractReferencePoint

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*11/2/2021 *Status:* Proposed *Author:* Philippe
Notes: A reference point is used as a new origin for some coordinates.

It is not a CRS. Indeed, it does not redefine axis, uom, etc... it just defines the origin of some axis.

Attributes

Name	Type	Notes
Kind	ReferencePointKindExt	
OSDUReferencePointIntegration	OSDUReferencePointIntegration	

Associations

Association	Notes
From: **AbstractReferencePoint.**UncertaintyVectorAtOneSigma **0..1** To: **Vector**	The 1-sigma uncertainty vector of the reference point, which can be scaled up to the desired uncertainty.
From: **AbstractReferencePoint.** To: **ReferencePointKindExt**	
From: **AbstractReferencePoint.** To: **AbstractObject**	
From: **ReferencePointInACrs.** To: **AbstractReferencePoint**	
From: **RecursiveReferencePoint.**BaseReferencePoint To: **AbstractReferencePoint**	
From: **RecursiveReferencePoint.** To: **AbstractReferencePoint**	
From: **WellboreTrajectoryRepresentation.** To: **AbstractReferencePoint**	
From: **ReferencePointInALocalEngineeringCompoundCrs.** To: **AbstractReferencePoint**	

13.8 EngineeringCompoundPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	
VerticalCoordinate	double	

Associations

Association	Notes
From**: EngineeringCompoundPosition.** To: **LocalEngineeringCompoundCrs**	
From**: EngineeringCompoundPosition.** To: **AbstractCompoundPosition**	

13.9 Geocentric3dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	
Coordinate3	double	

Associations

Association	Notes
From**: Geocentric3dPosition.** To: **Geocentric3dCrs**	
From**: Geocentric3dPosition.** To: **Abstract3dPosition**	

13.10 Geographic2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Epoch	double	
Latitude	PlaneAngleMeasureExt	
Longitude	PlaneAngleMeasureExt	

Associations

Association	Notes
1 From**: Geographic2dPosition.**GeographicCrs To: **Geographic2dCrs**	
From**: Geographic2dPosition.** To: **Abstract2dPosition**	

13.11 Geographic3dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
EllipsoidalHeight	double	
Latitude	double	
Longitude	double	

Associations

Association	Notes
From: **Geographic3dPosition.** To: **Geographic3dCrs**	
From: **Geographic3dPosition.** To: **Abstract3dPosition**	

13.12 GeographicCompoundPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Latitude	double	
Longitude	double	
VerticalCoordinate	double	

Associations

Association	Notes
From**: GeographicCompoundPosition.** To: **GeographicCompoundCrs**	
From**: GeographicCompoundPosition.** To: **AbstractCompoundPosition**	

13.13 GeographicCoordinates

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*9/5/2021 *Status:* Proposed *Author:* Philippe
Notes: Coordinates in a geodetic coordinate reference system.

Coordinate 1 is a latitude
Coordinate 2 is a longitude

Associations

Association	Notes
From**: GeographicCoordinates.** To: **AbstractHorizontalCoordinates**	
From**: GeographicCoordinates.**Crs To: **Geographic2dCrs**	

13.14 HorizontalCoordinates

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Proposed *Author:* Philippe
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	

Associations

Association	Notes
From: **ReferencePointInALocalEngineeringCompoundCrs.**HorizontalCoordinates **0..1** To: **HorizontalCoordinates**	
From: **RecursiveReferencePoint.**HorizontalCoordinates **0..1** To: **HorizontalCoordinates**	

13.15 LocalEngineering2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: LocalEngineering2dPosition.** To: **LocalEngineering2dCrs**	
From**: LocalEngineering2dPosition.** To: **AbstractCartesian2dPosition**	

13.16 LocalEngineering3dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	
VerticalCoordinate	double	

Associations

Association	Notes
From**: LocalEngineering3dPosition.** To: **Abstract3dPosition**	

13.17 Projected2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: Projected2dPosition.** To: **AbstractCartesian2dPosition**	
From**: Projected2dPosition.** To: **ProjectedCrs**	

13.18 Projected3dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/23/2021 *Last modified:*9/30/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	
EllipsoidalHeight	double	

Associations

Association	Notes
From: **Projected3dPosition.** To: **Abstract3dPosition**	
From: **Projected3dPosition.** To: **ProjectedCrs**	

13.19 ProjectedCompoundPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/5/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Coordinate1	double	
Coordinate2	double	
VerticalCoordinate	double	

Associations

Association	Notes
From**: ProjectedCompoundPosition.** To: **ProjectedCompoundCrs**	
From**: ProjectedCompoundPosition.** To: **AbstractCompoundPosition**	

13.20 ProjectedCoordinates

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Proposed *Author:* Philippe
Notes:

Associations

Association	Notes
From**: ProjectedCoordinates.** To: **AbstractHorizontalCoordinates**	
From**: ProjectedCoordinates.**Crs To: **ProjectedCrs**	

13.21 PublicLandSurveySystem2dPosition

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/1/2021 *Last modified:*12/1/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PublicLandSurveySystem2dPosition.** To: **PublicLandSurveySystemLocation**	
From**: PublicLandSurveySystem2dPosition.** To: **AbstractCartesian2dPosition**	

13.22 PublicLandSurveySystemCoordinates

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*9/5/2021 *Status:* Proposed *Author:* Philippe
Notes: Coordinates given in the US Public Land Survey System (Jeffersonian surveying). The parameters in the PublicLandSurveySystem element form a local engineering coordinate reference system with coordinate1 and coordinate2 being the distances in feet from the edge lines of the defined section fraction.

The order and direction of the coordinates are given in the AxisOrder element, which is validated via the AxisOrder2d enumeration.

Associations

Association	Notes
From: **PublicLandSurveySystemCoordinates.**PublicLandSurveySystem To: **PublicLandSurveySystemLocation**	
From: **PublicLandSurveySystemCoordinates.** To: **AbstractHorizontalCoordinates**	

13.23 RecursiveReferencePoint

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Proposed *Author:* Philippe
Notes: *A reference point defined in the context of another reference point.*

Attributes

Name	Type	Notes
VerticalCoordinate	double	The vertical distance in elevation (positive up) between the reference point and its BaseReferencePoint.

Associations

Association	Notes
From: **RecursiveReferencePoint.**BaseReferencePoint To: **AbstractReferencePoint**	
From: **RecursiveReferencePoint.** To: **AbstractReferencePoint**	
From: **RecursiveReferencePoint.**HorizontalCoordinates **0..1** To: **HorizontalCoordinates**	
From: **ReferencePointInAWellbore.** To: **RecursiveReferencePoint**	

13.24 ReferencePointInACrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Approved *Author:* deny
Notes: *A reference point which is defined in the context of a compound (2d horizontal + 1D vertical) CRS.*

Attributes

Name	Type	Notes
VerticalCoordinate	double	

Associations

Association	Notes
From**: ReferencePointInACrs.**VerticalCrs **0..1** To: **VerticalCrs**	
From**: ReferencePointInACrs.**HorizontalCoordinates **0..1** To: **AbstractHorizontalCoordinates**	
From**: ReferencePointInACrs.** To: **AbstractReferencePoint**	

13.25 ReferencePointInALocalEngineeringCompoundCrs

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*12/1/2021 *Status:* Approved *Author:* deny
Notes: A reference point which is defined in the context of a compound (2D horizontal + 1D vertical) CRS.
Note that a 2D compound CRS can be transferred by omitting the vertical Coordinate3

Attributes

Name	Type	Notes
VerticalCoordinate	double	

Associations

Association	Notes
From: **ReferencePointInALocalEngineeringCompoundCrs.**Crs To: **LocalEngineeringCompoundCrs**	
From: **ReferencePointInALocalEngineeringCompoundCrs.**HorizontalCoordinates **0..1** To: **HorizontalCoordinates**	
From: **ReferencePointInALocalEngineeringCompoundCrs.** To: **AbstractReferencePoint**	

13.26 ReferencePointInAWellbore

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/27/2018 *Last modified:*8/24/2021 *Status:* Proposed *Author:* Philippe
Notes: A reference point which is defined in the context of a wellbore by means of a MD.

If TVD is needed, it must be given through the inherited vertical Coordinate.

Attributes

Name	Type	Notes
Md	LengthMeasureExt	The measured depth (depth along the wellbore) from the reference point to its BaseReferencePoint.
Trajectory	DataObjectReference	An optional Trajectory used in calculation of the VerticalCoordinate if present, especially if the VerticalCoordinate is in TVD.
Wellbore	DataObjectReference	The wellbore holding the reference point.

Associations

Association	Notes
From: **ReferencePointInAWellbore.** To: **RecursiveReferencePoint**	
From: **ReferencePointInAWellbore.** To: **Note**	

13.27 ReferencePointKind

Type: Enumeration Stereotype:
Detail: Created: 7/27/2018 *Last modified:*8/24/2021 *Status:* Proposed *Author:* Philippe
Notes: *This enumeration holds the normal wellbore datum references plus Well head and well surface location, the two common reference points not along a wellbore.*

Attributes

Name	Type	Notes
casing flange		
crown valve		
derrick floor		
ground level		
kelly bushing		
kickoff point		
lowest astronomical tide		
mean high water		
mean higher high water		
mean low water		
mean lower low water		
mean sea level		
mean tide level		
rotary bushing		
rotary table		
seafloor		
wellhead		
well surface location		

Associations

Association	Notes
From**: ReferencePointKind.** To: **TypeEnum**	
From**: ReferencePointKindExt.** To: **ReferencePointKind**	

13.28 ReferencePointKindExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/27/2018 *Last modified:*5/3/2021 *Status:* Proposed *Author:* Philippe
Notes:

Associations

Association	Notes
From**: ReferencePointKindExt.** To: **ReferencePointKind**	
From**: ReferencePointKindExt.** To: **EnumExtensionPattern**	
From**: AbstractReferencePoint.** To: **ReferencePointKindExt**	

13.29 VerticalPosition1d

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/15/2021 *Last modified:*10/5/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
VerticalCoordinate	double	

Associations

Association		Notes
1	From**: VerticalPosition1d.**VerticalCrs To: **VerticalCrs**	

14 DataAssurance

Package: xsd_schemas

Notes: The DataAssurance package contains the classes related to the DataAssurance model schema. For more information about how this may be used, see the *Energistics common v2.3 Overview Guide*.

14.1 DataAssuranceRecord

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 1/21/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A little XML document describing whether or not a particular data object conforms with a pre-defined policy which consists of at least one rule.*

Attributes

Name	Type	Notes
Comment	String2000	
Conformance	boolean	Yes/no flag indicating whether this particular data ???? conforms with the policy or not.
Date	TimeStamp	Date the policy was last checked. This is the date for which the Conformance value is valid.
Origin	String2000	Agent which checked the data for conformance with the policy. This could be a person or an automated computer process or any number of other things.
PolicyId	String64	Identifier of the policy whose conformance is being described.
PolicyName	String2000	Human-readable name of the policy
ReferencedComponent	ComponentReference	If the Policy applies to a single occurrence of a component within the referenced data object this attribute holds its uid.
ReferencedElementName	String64	If the Policy applies to a single element within the referenced data object this attribute holds its element name.

Associations

Association		Notes
	From**: DataAssuranceRecord.** To: **AbstractObject**	
0..*	From**: DataAssuranceRecord.**FailingRules To: **FailingRule**	If the data do not conform to the policy then there will a FailingRule for each occurrence of a rule which failed. If the data being examined conforms to the policy then there will be no occurrences of FailingRules.
0..1	From**: DataAssuranceRecord.**IndexRange To: **IndexRange**	In the case that the ReferencedData is indexed and the conformance with the DataAssurance policy applies to a range within that index space, this class represents that range. The elements are string types because the index could be of numerous data types, including integer, float and date.
	From**: DataAssuranceRecord.**ReferencedData To: **AbstractObject**	This holds a GUID which is a reference to the data object whose conformance with the policy is being assessed.

14.2 FailingRule

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 1/21/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *The FailingRule class holds summary information on which of the rules within a policy failed.*

Attributes

Name	Type	Notes
FailingRuleExtensions	ExtensionNameValue	This allows extending the FailingRule class with as many arbitrary name-value pairs as is required at run-time. Uses for this might include why the rule failed or by how much.
RuleId	String64	Identifier of the atomic rule being checked against the data.
RuleName	String2000	Human-readable name of the atomic rule being checked against the data.
Severity	String64	Severity of the failure. This could be used to indicate that a rule is a high-priority rule whose failure is considered as severe or could be used to indicate just how badly a rule was contravened. The meaning of this field should be standardized within a company to maximize its utility.

Associations

Association	Notes
From: **DataAssuranceRecord.**FailingRules **0..*** To: **FailingRule**	If the data do not conform to the policy then there will a FailingRule for each occurrence of a rule which failed. If the data being examined conforms to the policy then there will be no occurrences of FailingRules.

14.3 IndexRange

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 1/21/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: In the case that the ReferencedData is indexed and the conformance with the DataAssurance policy applies to a range within that index space, this class represents that range.

The elements are string types because the index could be of numerous data types, including integer, float and date.

Attributes

Name	Type	Notes
IndexMaximum	String64	The maximum index for the range over which the referenced data's conformance with the policy is being assessed.
IndexMinimum	String64	The minimum index for the range over which the referenced data's conformance with the policy is being assessed.

Associations

Association	Notes
From**: DataAssuranceRecord.**IndexRange **0..1** To: **IndexRange**	In the case that the ReferencedData is indexed and the conformance with the DataAssurance policy applies to a range within that index space, this class represents that range. The elements are string types because the index could be of numerous data types, including integer, float and date.

15 GraphicalInformation

Package: xsd_schemas

Notes: The GraphicalInformation package contains classes related to the appearance of data in a user interface (e.g., color, line weight, etc.) Currently, only RESQML v2.2 specifies detailed graphical information. For more information, see the RESQML documentation.

15.1 AbstractGraphicalInformation

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/10/2016 *Last modified:*11/10/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From: **AbstractGraphicalInformation.**TargetObject **1..*** To: **AbstractObject**	
From: **ContourLineSetInformation.** To: **AbstractGraphicalInformation**	
From: **GraphicalInformationSet.**GraphicalInformation **0..*** To: **AbstractGraphicalInformation**	
From: **AlphaInformation.** To: **AbstractGraphicalInformation**	
From: **AnnotationInformation.** To: **AbstractGraphicalInformation**	
From: **ColorInformation.** To: **AbstractGraphicalInformation**	
From: **DefaultGraphicalInformation.** To: **AbstractGraphicalInformation**	
From: **SizeInformation.** To: **AbstractGraphicalInformation**	

15.2 GraphicalInformationSet

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/10/2016 *Last modified:*11/10/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From: **GraphicalInformationSet.**GraphicalInformation **0..*** To: **AbstractGraphicalInformation**	
From: **GraphicalInformationSet.** To: **AbstractObject**	

16 LegacyUnitsOfMeasure

Package: xsd_schemas

Notes: The LegacyUnitsOfMeasure package contains classes implementing certain oilfield units of measure which are deprecated in the Energistics Unit of Measure Standard but which still exist in legacy data and older systems.

These classes are incorporated into the relevant measure types while allowing the official MeasureType package to remain consistent with the UoM standard.

16.1 LegacyMassPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
kg/scm		
lbm/1000scf		
lbm/1E6scf		

Associations

Association	Notes
From**: LegacyMassPerVolumeUom.** To: **UomEnum**	
From**: MassPerVolumeUomExt.** To: **LegacyMassPerVolumeUom**	
From**: MassPerVolumeUomWithLegacy.** To: **LegacyMassPerVolumeUom**	

16.2 LegacyPressurePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*8/9/2018 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Pa/scm		
psi/1000scf		
psi/1E6scf		

Associations

Association	Notes
From**: LegacyPressurePerVolumeUom.** To: **UomEnum**	
From**: PressurePerVolumeUomExt.** To: **LegacyPressurePerVolumeUom**	
From**: PressurePerVolumeUomWithLegacy.** To: **LegacyPressurePerVolumeUom**	

16.3 LegacyPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
psia		
psig		

Associations

Association	Notes
From**: LegacyPressureUom.** To: **UomEnum**	
From**: PressureUomExt.** To: **LegacyPressureUom**	
From**: PressureUomWithLegacy.** To: **LegacyPressureUom**	

16.4 LegacyVolumePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
1E6stb/acre		
scf/ft2		
scm/m2		
stb/acre		

Associations

Association	Notes
From: **LegacyVolumePerAreaUom.** To: **UomEnum**	
From: **VolumePerAreaUomExt.** To: **LegacyVolumePerAreaUom**	
From: **VolumePerAreaUomWithLegacy.** To: **LegacyVolumePerAreaUom**	

16.5 LegacyVolumePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
1000scf/d		
1000scf/mo		
1000scm/d		
1000scm/mo		
1000stb/d		
1000stb/mo		
1E6scf/d		
1E6scf/mo		
1E6scm/d		
1E6scm/mo		
1E6stb/d		
1E6stb/mo		
scf/d		
scm/d		
scm/h		
scm/mo		
scm/s		
stb/d		
stb/mo		

Associations

Association	Notes
From**: LegacyVolumePerTimeUom.** To: **UomEnum**	
From**: VolumePerTimeUomWithLegacy.** To: **LegacyVolumePerTimeUom**	
From**: VolumePerTimeUomExt.** To: **LegacyVolumePerTimeUom**	

16.6 LegacyVolumePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
1000scf/stb		
1E6scf/stb		
1E6stb/acre.ft		
acre.ft/1E6stb		
bbl/1000scf		
bbl/1E6scf		
bbl/scf		
bbl/stb		
ft3/scf		
ft3/stb		
galUS/1000scf		
m3/scm		
ml/scm		
scf/bbl		
scf/ft3		
scf/scf		
scf/stb		
scm/m3		
scm/scm		
scm/stb		
stb/1000scf		
stb/1000scm		
stb/1E6scf		
stb/1E6scm		
stb/bbl		
stb/scm		
stb/stb		

Associations

Association	Notes
From: **LegacyVolumePerVolumeUom.** To: **UomEnum**	

Association	Notes
From**: VolumePerVolumeUomExt.** To: **LegacyVolumePerVolumeUom**	
From**: VolumePerVolumeUomWithLegacy.** To: **LegacyVolumePerVolumeUom**	

16.7 LegacyVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
1000scm		
1000stb		
1E6scf		
1E6scm		
1E6stb		
1E9scf		
kscf		
scf		
scm		
stb		

Associations

Association	Notes
From**: LegacyVolumeUom.** To: **UomEnum**	
From**: VolumeUomWithLegacy.** To: **LegacyVolumeUom**	
From**: VolumeUomExt.** To: **LegacyVolumeUom**	

16.8 MassPerVolumeUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerVolumeUomWithLegacy.** To: **LegacyMassPerVolumeUom**	
From**: MassPerVolumeUomWithLegacy.** To: **MassPerVolumeUom**	

16.9 PressurePerVolumeUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PressurePerVolumeUomWithLegacy.** To: **LegacyPressurePerVolumeUom**	
From**: PressurePerVolumeUomWithLegacy.** To: **PressurePerVolumeUom**	

16.10 PressureUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PressureUomWithLegacy.** To: **PressureUom**	
From**: PressureUomWithLegacy.** To: **LegacyPressureUom**	

16.11 VolumePerAreaUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerAreaUomWithLegacy.** To: **VolumePerAreaUom**	
From**: VolumePerAreaUomWithLegacy.** To: **LegacyVolumePerAreaUom**	

16.12 VolumePerTimeUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimeUomWithLegacy.** To: **LegacyVolumePerTimeUom**	
From**: VolumePerTimeUomWithLegacy.** To: **VolumePerTimeUom**	

16.13 VolumePerVolumeUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerVolumeUomWithLegacy.** To: **VolumePerVolumeUom**	
From**: VolumePerVolumeUomWithLegacy.** To: **LegacyVolumePerVolumeUom**	

16.14 VolumeUomWithLegacy

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 7/12/2017 *Last modified:*7/12/2017 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: VolumeUomWithLegacy.** To: **VolumeUom**	
From**: VolumeUomWithLegacy.** To: **LegacyVolumeUom**	

17 ObjectReference

Package: xsd_schemas

Notes: This package contains the types and elements to allow an EnergyML data object to refer to:

- another EnergyML data object (i.e., DataObjectReference)
- a component within another EnergyML data object (i.e., DataObjectComponentReference)

array data in an external file (i.e., ExternalDataArray or ExternalDataArrayPart)

17.1 ComponentReference

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/15/2021 *Last modified:*11/15/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A pointer to a component within the same Energistics data object or within a data object pointed to by a separate data object reference.*

Attributes

Name	Type	Notes
Index	long	The optional numerical (i.e., NOT time or depth) index of the referenced component.
Name	String2000	The optional name of the referenced component.
QualifiedType	QualifiedType	The qualified type of the referenced component.
Uid	String64	The UID of the referenced component.

17.2 DataObjectComponentReference

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/15/2021 *Last modified:*11/15/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *A pointer to a component within another Energistics data object.*

Attributes

Name	Type	Notes
Component	ComponentReference	A component within the data object that is being referenced by its UID. If more than one Component is included, it is a reference to a component that is nested within the previous component.
DataObject	DataObjectReference	The data object containing the component.

17.3 DataObjectReference

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/30/2014 *Last modified:*11/15/2021 *Status:* Proposed *Author:* deny
Notes: *A pointer to another Energistics data object.*

Attributes

Name	Type	Notes
EnergisticsUri	anyURI	The canonical URI of a referenced data object. This element is intended for use with the Energistics Transfer Protocol (ETP) . Do not use this element to store the path and file names of an external data object object. Optionally use one or more LocatorUrl elements to provide hints on how to resolve the URI into a data object.
ExtensionNameValue	ExtensionNameValue	A standard Energistics extension mechanism used to add custom data in the format of name:value pairs.
LocatorUrl	anyURI	An optional location to help in finding the correct referenced data object.
ObjectVersion	String64	Indicates the version of the data object that is referenced. This must be identical to the objectVersion attribute that is inherited from AbstractObject. If this element is empty, then the latest version of the data object is assumed.
QualifiedType	QualifiedType	The qualified type of the referenced data object. It is the semantic equivalent of a qualifiedEntityType in OData (which is the DataObjectType used in the Energistics Transfer Protocol (ETP)). For more information, see the Energistics Identifier Specification v5.0. The QualifiedType is composed of: • The Energistics domain standard or Energistics *common* (designated by *eml*) and version where the data object type is defined. • The data object type name as defined by its schema. Examples: • witsml20.Well • resqml20.UnstructuredGridRepresentation • prodml20.ProductVolume • eml21.DataAssuranceRecord

Title	String2000	The title of the referenced data object. It should be the value in the Title attribute of the Citation element in AbstractObject. It is used as a hint for human readers; it is not enforced to match the Title of the referenced data object.
Uuid	UuidString	Universally unique identifier (UUID) of the referenced data object. For rules and guidelines about the format of UUIDs with the current version of Energistics standards, see the Energistics Identifier Specification v5.0.

Associations

Association	Notes
1 From**: FiberFacilityWell.**Wellbore To: **DataObjectReference**	It only applies for Energistics data object.
From**: ContactElement.** To: **DataObjectReference**	

17.4 ExternalDataArray

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/30/2014 *Last modified:*12/13/2021 *Status:* Proposed *Author:* philippe
Notes: A concatenation of ExternalDataArrayPart s, which are pointers to a whole or to a sub-selection of an existing array that is in a different file (than the Energistics data object). It generally and historically points to an HDF5 dataset in an Energistics Packaging Conventions (EPC) context.
It is common to have only 1 ExternalDataArrayPart in an ExternalDataArray.
BUSINESS RULE: A data array must be referenced by exactly 1 data object.

Associations

Association		Notes
1..*	From**: ExternalDataArray.**ExternalDataArrayPart To: **ExternalDataArrayPart**	There can be many ExternalFileProxy instances, to allow a dataset to span multiple operating system files

17.5 ExternalDataArrayPart

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*12/13/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: Pointers to a whole or to a sub-selection of an existing array that is in a different file than the Energistics data object.
BUSINESS RULE: A data array must be referenced by exactly 1 data object.

Attributes

Name	Type	Notes
Count	PositiveLong	For each dimension, the count of elements to select, starting from the corresponding StartIndex in the data set identified by the attribute PathInExternalFile. If you want to select the whole data set identified by PathInExternalFile, then put the whole data set dimension count in each dimension.
MimeType	String2000	If the resource being pointed to is a file, then this is the MIME type of the file.
PathInExternalFile	String2000	A string that is meaningful to the API that will store and retrieve data from the external file. • For an HDF file, it is the path of the referenced data set in the external file. The separator between groups and final data set is a slash '/' • For a LAS file, it could be the list of mnemonics in the ~A block. • For a SEG-Y file, it could be a list of trace headers.
StartIndex	NonNegativeLong	For each dimension, the start index of the selection of the data set identified by the attribute PathInExternalFile. If you want to select the whole data set identified by PathInExternalFile, then put 0 in each dimension.
URI	String2000	The URI where the DataArrayPart is stored. In an EPC context, it should follow the corresponding rel entry URI syntax.

Associations

Association	Notes
1..* From**: ExternalDataArray.**ExternalDataArrayPart To: **ExternalDataArrayPart**	There can be many ExternalFileProxy instances, to allow a dataset to span multiple operating system files
From**: DasExternalDatasetPart.** To: **ExternalDataArrayPart**	

18 OSDUIntegration

Package: xsd_schemas

Notes: This package contains schemas for elements that are shared by the Energistics domain standards and have been added to EnergyML for better support of and integration with OSDU.

18.1 GeographicContext

Type: Class *Stereotype:* «XSDgroup»
Detail: *Created:* 7/9/2021 *Last modified:*7/9/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Basin	String64	
Block	String64	
City	String64	
Country	String64	
County	String64	
District	String64	
Field	String64	
Play	String64	
Prospect	String64	
Region	String64	
State	String64	

Associations

Association	Notes
From**: OSDUIntegration.** To: **GeographicContext**	

18.2 OSDUIntegration

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/9/2021 *Last modified:*7/9/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Container for elemnts and types needed solely for intagration within OSDU.*

Attributes

Name	Type	Notes
LegalTags	String256	
LineageAssertions	OSDULineageAssertion	
OSDUGeoJSON	string	Optional copy of the GeoJSON created by or for OSDU. This presumably contains a WGS84-only version of whatever shape represents the toplevel object.
OwnerGroup	String256	
ViewerGroup	String256	
WGS84Latitude	PlaneAngleMeasure	
WGS84LocationMetadata	OSDUSpatialLocationIntegration	
WGS84Longitude	PlaneAngleMeasure	

Associations

Association	Notes
From**: OSDUIntegration.** To: **GeographicContext**	
From**: OSDUIntegration.** To: **OSDULineageAssertion**	
From**: AbstractObject.** To: **OSDUIntegration**	

18.3 OSDULineageAssertion

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: Defines relationships with other objects (any kind of Resource) upon which this work product component depends. The assertion is directed only from the asserting WPC to ancestor objects, not children. It should not be used to refer to files or artefacts within the WPC -- the association within the WPC is sufficient and Artefacts are actually children of the main WPC file.

Attributes

Name	Type	Notes
ID	String256	The OSDU identifier of the dependent object.
LineageRelationshipKind	OSDULineageRelationship Kind	

Associations

Association	Notes
From: **OSDULineageAssertion.** To: **OSDULineageRelationshipKind**	
From: **OSDUIntegration.** To: **OSDULineageAssertion**	

18.4 OSDULineageRelationshipKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/16/2021 *Last modified:*11/16/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
direct		A resource which was used to derive the asserting work product component through a set of processes and transformations. The prior data type is usually the same as the derived data type. For example, the input well log used in creating a new log curve.
indirect		A resource which was used during the derivation of the asserting work product component to control the process, but is not directly transformed. The prior data type is usually different from the derived data type. For example, the velocity model used in migrating a seismic volume, the horizons used to constrain a velocity model.
reference		A resource which captures information about the process to create the asserting work product component, but is not used directly in the process. The prior data type is not a required ancestor of the asserting object. For example, a bibliography relative to a published paper, a published paper used as the basis for the processing algorithm, a geologic interpretation used to QC a seismic velocity model.

Associations

Association	Notes
From**: OSDULineageRelationshipKind.** To: **TypeEnum**	
From**: OSDULineageAssertion.** To: **OSDULineageRelationshipKind**	

18.5 OSDUReferencePointIntegration

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/19/2021 *Last modified:*11/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *OSDU-specific details about reference point.*

Attributes

Name	Type	Notes
EffectiveDateTime	TimeStamp	The date and time when the reference point became effective.
TerminationDateTime	TimeStamp	The data and time when the reference point ceased to be effective.

18.6 OSDUSpatialLocationIntegration

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/19/2021 *Last modified:*11/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: *Details about an OSDU Spatial Location.*

Attributes

Name	Type	Notes
AppliedOperation	String256	The audit trail of operations applied to the coordinates from the original state to the current state. The list may contain operations applied prior to ingestion as well as the operations applied to produce the Wgs84Coordinates. The text elements refer to ESRI style CRS and Transformation names, which may have to be translated to EPSG standard names.
CoordinateQualityCheckDateTime	TimeStamp	The date of the Quality Check.
CoordinateQualityCheckPerformedBy	String64	The user who performed the Quality Check.
CoordinateQualityCheckRemark	String256	Freetext remarks on Quality Check.
QualitativeSpatialAccuracyType	String64	A qualitative description of the quality of a spatial location, e.g. unverifiable, not verified, basic validation.
QuantitativeAccuracyBand	String64	An approximate quantitative assessment of the quality of a location (accurate to > 500 m (i.e. not very accurate)), to < 1 m, etc.
SpatialLocationCoordinatesDate	TimeStamp	Date when coordinates were measured or retrieved.

19 QuantityClass

Package: xsd_schemas

Notes: This package defines a set of standard POSC units of measure for various quantity classes. This units list captures information contained in the POSC units dictionary.

The enumerated lists do not contain any deprecated units.

A quantity class represents a set of units with the same dimension and same underlying measurement concept. For example, length is a quantity class.

Quantity classes are used to constrain items in the data model because the class defines all of the units that are allowed to be used with something that represents a specialization of that class.

For more information, see the Energistics Unit of Measure Standard.

19.1 AbsorbedDoseUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cGy		centigray
crd		hundredth of rad
dGy		decigray
drd		tenth of rad
EGy		exagray
Erd		million million million rad
fGy		femtogray
frd		femtorad
GGy		gigagray
Grd		thousand million rad
Gy		gray
kGy		kilogray
krd		thousand rad
mGy		milligray
MGy		megagray
Mrd		million rad
mrd		thousandth of rad
nGy		nanogray
nrd		nanorad
pGy		picogray
prd		picorad
rd		rad
TGy		teragray
Trd		million million rad
uGy		microgray
urd		millionth of rad

Associations

Association	Notes
From**: AbsorbedDoseUom.** To: **UomEnum**	
From**: AbsorbedDoseUomExt.** To: **AbsorbedDoseUom**	

19.2 AbsorbedDoseUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AbsorbedDoseUomExt.** To: **AbsorbedDoseUom**	
From**: AbsorbedDoseUomExt.** To: **EnumExtensionPattern**	

19.3 ActivityOfRadioactivityPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
Bq/m3		

Associations

Association	Notes
From**: ActivityOfRadioactivityPerVolumeUom.** To: **UomEnum**	
From**: ActivityOfRadioactivityPerVolumeUomExt.** To: **ActivityOfRadioactivityPerVolumeUom**	

19.4 ActivityOfRadioactivityPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From: **ActivityOfRadioactivityPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **ActivityOfRadioactivityPerVolumeUomExt.** To: **ActivityOfRadioactivityPerVolumeUom**	

19.5 ActivityOfRadioactivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Bq		becquerel
Ci		curie
GBq		gigabecquerel
MBq		megabecquerel
mCi		thousandth of curie
nCi		nanocurie
pCi		picocurie
TBq		terabecquerel
uCi		millionth of curie

Associations

Association	Notes
From**: ActivityOfRadioactivityUom.** To: **UomEnum**	
From**: ActivityOfRadioactivityUomExt.** To: **ActivityOfRadioactivityUom**	

19.6 ActivityOfRadioactivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ActivityOfRadioactivityUomExt.** To: **ActivityOfRadioactivityUom**	
From**: ActivityOfRadioactivityUomExt.** To: **EnumExtensionPattern**	

19.7 AmountOfSubstancePerAmountOfSubstanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
%		percent
%[molar]		percent [molar basis]
Euc		euclid
mol/mol		mole per mole
nEuc		nanoeuclid
ppk		part per thousand
ppm		part per million

Associations

Association	Notes
From: **AmountOfSubstancePerAmountOfSubstanceUom.** To: **UomEnum**	
From: **AmountOfSubstancePerAmountOfSubstanceUomExt.** To: **AmountOfSubstancePerAmountOfSubstanceUom**	

19.8 AmountOfSubstancePerAmountOfSubstanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AmountOfSubstancePerAmountOfSubstanceUomExt.** To: **AmountOfSubstancePerAmountOfSubstanceUom**	
From: **AmountOfSubstancePerAmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	

19.9 AmountOfSubstancePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
mol/m2		gram-mole per square metre

Associations

Association	Notes
From**: AmountOfSubstancePerAreaUom.** To: **UomEnum**	
From**: AmountOfSubstancePerAreaUomExt.** To: **AmountOfSubstancePerAreaUom**	

19.10 AmountOfSubstancePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AmountOfSubstancePerAreaUomExt.** To: **EnumExtensionPattern**	
From**: AmountOfSubstancePerAreaUomExt.** To: **AmountOfSubstancePerAreaUom**	

19.11 AmountOfSubstancePerTimePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
lbmol/(h.ft2)		pound-mass-mole per hour square foot
lbmol/(s.ft2)		pound-mass-mole per second square foot
mol/(s.m2)		gram-mole per second square metre

Associations

Association	Notes
From: **AmountOfSubstancePerTimePerAreaUom.** To: **UomEnum**	
From: **AmountOfSubstancePerTimePerAreaUomExt.** To: **AmountOfSubstancePerTimePerAreaUom**	

19.12 AmountOfSubstancePerTimePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AmountOfSubstancePerTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **AmountOfSubstancePerTimePerAreaUomExt.** To: **AmountOfSubstancePerTimePerAreaUom**	

19.13 AmountOfSubstancePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kat		katal
kmol/h		kilogram-mole per hour
kmol/s		kilogram-mole per second
lbmol/h		pound-mass-mole per hour
lbmol/s		pound-mass-mole per second
mol/s		gram-mole per second

Associations

Association	Notes
From: **AmountOfSubstancePerTimeUom.** To: **UomEnum**	
From: **AmountOfSubstancePerTimeUomExt.** To: **AmountOfSubstancePerTimeUom**	

19.14 AmountOfSubstancePerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AmountOfSubstancePerTimeUomExt.** To: **AmountOfSubstancePerTimeUom**	
From: **AmountOfSubstancePerTimeUomExt.** To: **EnumExtensionPattern**	

19.15 AmountOfSubstancePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kmol/m3		kilogram-mole per cubic metre
lbmol/ft3		pound-mass-mole per cubic foot
lbmol/gal[UK]		pound-mass-mole per UK gallon
lbmol/gal[US]		pound-mass-mole per US gallon
mol/m3		gram-mole per cubic metre

Associations

Association	Notes
From**: AmountOfSubstancePerVolumeUom.** To: **UomEnum**	
From**: AmountOfSubstancePerVolumeUomExt.** To: **AmountOfSubstancePerVolumeUom**	

19.16 AmountOfSubstancePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AmountOfSubstancePerVolumeUomExt.** To: **AmountOfSubstancePerVolumeUom**	
From**: AmountOfSubstancePerVolumeUomExt.** To: **EnumExtensionPattern**	

19.17 AmountOfSubstanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kmol		kilogram-mole
lbmol		pound-mass-mole
mmol		milligram-mole
mol		gram-mole
umol		microgram-mole

Associations

Association	Notes
From: **AmountOfSubstanceUom.** To: **UomEnum**	
From: **AmountOfSubstanceUomExt.** To: **AmountOfSubstanceUom**	

19.18 AmountOfSubstanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AmountOfSubstanceUomExt.** To: **AmountOfSubstanceUom**	
From**: AmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	

19.19 AnglePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.01 dega/ft		angular degree per hundred foot
1/30 dega/ft		angular degree per thirty foot
1/30 dega/m		angular degree per thirty metre
dega/ft		angular degree per foot
dega/m		angular degree per metre
rad/ft		radian per foot
rad/m		radian per metre
rev/ft		revolution per foot
rev/m		revolution per metre

Associations

Association	Notes
From**: AnglePerLengthUom.** To: **UomEnum**	
From**: AnglePerLengthUomExt.** To: **AnglePerLengthUom**	

19.20 AnglePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AnglePerLengthUomExt.** To: **AnglePerLengthUom**	
From**: AnglePerLengthUomExt.** To: **EnumExtensionPattern**	

19.21 AnglePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
rad/ft3		radian per cubic foot
rad/m3		radian per cubic metre

Associations

Association	Notes
From**: AnglePerVolumeUom.** To: **UomEnum**	
From**: AnglePerVolumeUomExt.** To: **AnglePerVolumeUom**	

19.22 AnglePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AnglePerVolumeUomExt.** To: **EnumExtensionPattern**	
From**: AnglePerVolumeUomExt.** To: **AnglePerVolumeUom**	

19.23 AngularAccelerationUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
rad/s2		radian per second squared
rpm/s		(revolution per minute) per second

Associations

Association	Notes
From: **AngularAccelerationUom.** To: **UomEnum**	
From: **AngularAccelerationUomExt.** To: **AngularAccelerationUom**	

19.24 AngularAccelerationUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AngularAccelerationUomExt.** To: **EnumExtensionPattern**	
From: **AngularAccelerationUomExt.** To: **AngularAccelerationUom**	

19.25 AngularVelocityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
dega/h		angular degree per hour
dega/min		angular degree per minute
dega/s		angular degree per second
rad/s		radian per second
rev/s		revolution per second
rpm		revolution per minute

Associations

Association	Notes
From**: AngularVelocityUom.** To: **UomEnum**	
From**: AngularVelocityUomExt.** To: **AngularVelocityUom**	

19.26 AngularVelocityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AngularVelocityUomExt.** To: **EnumExtensionPattern**	
From: **AngularVelocityUomExt.** To: **AngularVelocityUom**	

19.27 APIGammaRayUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
gAPI		API gamma ray unit

Associations

Association	Notes
From**: APIGammaRayUom.** To: **UomEnum**	
From**: APIGammaRayUomExt.** To: **APIGammaRayUom**	

19.28 APIGammaRayUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: APIGammaRayUomExt.** To: **EnumExtensionPattern**	
From**: APIGammaRayUomExt.** To: **APIGammaRayUom**	

19.29 APIGravityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
dAPI		API gravity unit

Associations

Association	Notes
From**: APIGravityUom.** To: **UomEnum**	
From**: APIGravityUomExt.** To: **APIGravityUom**	

19.30 APIGravityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **APIGravityUomExt.** To: **EnumExtensionPattern**	
From: **APIGravityUomExt.** To: **APIGravityUom**	

19.31 APINeutronUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
nAPI		API neutron unit

Associations

Association	Notes
From**: APINeutronUom.** To: **UomEnum**	
From**: APINeutronUomExt.** To: **APINeutronUom**	

19.32 APINeutronUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/5/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **APINeutronUomExt.** To: **EnumExtensionPattern**	
From: **APINeutronUomExt.** To: **APINeutronUom**	

19.33 AreaPerAmountOfSubstanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
m2/mol		square metre per gram-mole

Associations

Association	Notes
From**: AreaPerAmountOfSubstanceUom.** To: **UomEnum**	
From**: AreaPerAmountOfSubstanceUomExt.** To: **AreaPerAmountOfSubstanceUom**	

19.34 AreaPerAmountOfSubstanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AreaPerAmountOfSubstanceUomExt.** To: **EnumExtensionPattern**	
From**: AreaPerAmountOfSubstanceUomExt.** To: **AreaPerAmountOfSubstanceUom**	

19.35 AreaPerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
%[area]		percent [area basis]
cEuc		centieuclid
Euc		euclid
in2/ft2		square inch per square foot
in2/in2		square inch per square inch
m2/m2		square metre per square metre
mm2/mm2		square millimetre per square millimetre

Associations

Association	Notes
From: **AreaPerAreaUom.** To: **UomEnum**	
From: **AreaPerAreaUomExt.** To: **AreaPerAreaUom**	

19.36 AreaPerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AreaPerAreaUomExt.** To: **AreaPerAreaUom**	
From: **AreaPerAreaUomExt.** To: **EnumExtensionPattern**	

19.37 AreaPerCountUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 9/20/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
b/electron		

Associations

Association	Notes
From**: AreaPerCountUom.** To: **UomEnum**	
From**: AreaPerCountUomExt.** To: **AreaPerCountUom**	

19.38 AreaPerCountUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 9/20/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AreaPerCountUomExt.** To: **AreaPerCountUom**	
From**: AreaPerCountUomExt.** To: **EnumExtensionPattern**	

19.39 AreaPerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cm2/g		square centimetre per gram
ft2/lbm		square foot per pound-mass
m2/g		square metre per gram
m2/kg		square metre per kilogram

Associations

Association	Notes
From**: AreaPerMassUom.** To: **UomEnum**	
From**: AreaPerMassUomExt.** To: **AreaPerMassUom**	

19.40 AreaPerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AreaPerMassUomExt.** To: **AreaPerMassUom**	
From**: AreaPerMassUomExt.** To: **EnumExtensionPattern**	

19.41 AreaPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cm2/s		square centimetre per second
ft2/h		square foot per hour
ft2/s		square foot per second
in2/s		square inch per second
m2/d		square metre per day
m2/h		square metre per hour
m2/s		square metre per second
mm2/s		square millimetre per second

Associations

Association	Notes
From: **AreaPerTimeUom.** To: **UomEnum**	
From: **AreaPerTimeUomExt.** To: **AreaPerTimeUom**	

19.42 AreaPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AreaPerTimeUomExt.** To: **AreaPerTimeUom**	
From: **AreaPerTimeUomExt.** To: **EnumExtensionPattern**	

19.43 AreaPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/m		per metre
b/cm3		barn per cubic centimetre
cu		capture unit
ft2/in3		square foot per cubic inch
m2/cm3		square metre per cubic centimetre
m2/m3		square metre per cubic metre

Associations

Association	Notes
From: **AreaPerVolumeUom.** To: **UomEnum**	
From: **AreaPerVolumeUomExt.** To: **AreaPerVolumeUom**	

19.44 AreaPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AreaPerVolumeUomExt.** To: **AreaPerVolumeUom**	
From: **AreaPerVolumeUomExt.** To: **EnumExtensionPattern**	

19.45 AreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
acre		acre
b		barn
cm2		square centimetre
ft2		square foot
ha		hectare
in2		square inch
km2		square kilometre
m2		square metre
mi[US]2		square US survey mile
mi2		square mile
mm2		square millimetre
section		section
um2		square micrometre
yd2		square yard

Associations

Association	Notes
From: **AreaUom.** To: **UomEnum**	
From: **AreaUomExt.** To: **AreaUom**	

19.46 AreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: AreaUomExt.** To: **EnumExtensionPattern**	
From**: AreaUomExt.** To: **AreaUom**	

19.47 AttenuationPerFrequencyIntervalUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
B/O		bel per octave
dB/O		decibel per octave

Associations

Association	Notes
From: **AttenuationPerFrequencyIntervalUom.** To: **UomEnum**	
From: **AttenuationPerFrequencyIntervalUomExt.** To: **AttenuationPerFrequencyIntervalUom**	

19.48 AttenuationPerFrequencyIntervalUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **AttenuationPerFrequencyIntervalUomExt.** To: **EnumExtensionPattern**	
From: **AttenuationPerFrequencyIntervalUomExt.** To: **AttenuationPerFrequencyIntervalUom**	

19.49 CapacitanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cF		centifarad
dF		decifarad
EF		exafarad
F		farad
fF		femtofarad
GF		gigafarad
kF		kilofarad
mF		millifarad
MF		megafarad
nF		nanofarad
pF		picofarad
TF		terafarad
uF		microfarad

Associations

Association	Notes
From**: CapacitanceUom.** To: **UomEnum**	
From**: CapacitanceUomExt.** To: **CapacitanceUom**	

19.50 CapacitanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **CapacitanceUomExt.** To: **EnumExtensionPattern**	
From: **CapacitanceUomExt.** To: **CapacitanceUom**	

19.51 CationExchangeCapacityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 9/20/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
.01 meq/g		

Associations

Association	Notes
From**: CationExchangeCapacityUom.** To: **UomEnum**	
From**: CationExchangeCapacityUomExt.** To: **CationExchangeCapacityUom**	

19.52 CationExchangeCapacityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 9/20/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: CationExchangeCapacityUomExt.** To: **CationExchangeCapacityUom**	
From**: CationExchangeCapacityUomExt.** To: **EnumExtensionPattern**	

19.53 DataTransferSpeedUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bit/s		bit per second
byte/s		byte per second

Associations

Association	Notes
From: **DataTransferSpeedUom.** To: **UomEnum**	
From: **DataTransferSpeedUomExt.** To: **DataTransferSpeedUom**	

19.54 DataTransferSpeedUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **DataTransferSpeedUomExt.** To: **DataTransferSpeedUom**	
From: **DataTransferSpeedUomExt.** To: **EnumExtensionPattern**	

19.55 DiffusionCoefficientUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
m2/s		square metre per second

Associations

Association	Notes
From: **DiffusionCoefficientUom.** To: **UomEnum**	
From: **DiffusionCoefficientUomExt.** To: **DiffusionCoefficientUom**	

19.56 DiffusionCoefficientUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **DiffusionCoefficientUomExt.** To: **DiffusionCoefficientUom**	
From: **DiffusionCoefficientUomExt.** To: **EnumExtensionPattern**	

19.57 DiffusiveTimeOfFlightUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
h(0.5)		
s(0.5)		square root of second

Associations

Association	Notes
From: **DiffusiveTimeOfFlightUom.** To: **UomEnum**	
From: **DiffusiveTimeOfFlightUomExt.** To: **DiffusiveTimeOfFlightUom**	

19.58 DiffusiveTimeOfFlightUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **DiffusiveTimeOfFlightUomExt.** To: **EnumExtensionPattern**	
From: **DiffusiveTimeOfFlightUomExt.** To: **DiffusiveTimeOfFlightUom**	

19.59 DigitalStorageUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bit		bit
byte		byte
Kibyte		kibibyte
Mibyte		mebibyte

Associations

Association	Notes
From**: DigitalStorageUom.** To: **UomEnum**	
From**: DigitalStorageUomExt.** To: **DigitalStorageUom**	

19.60 DigitalStorageUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: DigitalStorageUomExt.** To: **DigitalStorageUom**	
From**: DigitalStorageUomExt.** To: **EnumExtensionPattern**	

19.61 DimensionlessUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
cEuc		centieuclid
dEuc		decieuclid
EEuc		exaeuclid
Euc		euclid
fEuc		femtoeuclid
GEuc		gigaeuclid
kEuc		kiloeuclid
MEuc		megaeuclid
mEuc		millieuclid
nEuc		nanoeuclid
pEuc		picoeuclid
ppk		part per thousand
ppm		part per million
TEuc		teraeuclid
uEuc		microeuclid

Associations

Association	Notes
From: **DimensionlessUom.** To: **UomEnum**	
From: **DimensionlessUomExt.** To: **DimensionlessUom**	

19.62 DimensionlessUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: DimensionlessUomExt.** To: **DimensionlessUom**	
From**: DimensionlessUomExt.** To: **EnumExtensionPattern**	

19.63 DipoleMomentUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
C.m		coulomb metre

Associations

Association	Notes
From**: DipoleMomentUom.** To: **UomEnum**	
From**: DipoleMomentUomExt.** To: **DipoleMomentUom**	

19.64 DipoleMomentUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: DipoleMomentUomExt.** To: **DipoleMomentUom**	
From**: DipoleMomentUomExt.** To: **EnumExtensionPattern**	

19.65 DoseEquivalentUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
mrem		thousandth of rem
mSv		millisievert
rem		rem
Sv		sievert

Associations

Association	Notes
From**: DoseEquivalentUom.** To: **UomEnum**	
From**: DoseEquivalentUomExt.** To: **DoseEquivalentUom**	

19.66 DoseEquivalentUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **DoseEquivalentUomExt.** To: **EnumExtensionPattern**	
From: **DoseEquivalentUomExt.** To: **DoseEquivalentUom**	

19.67 DynamicViscosityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
cP		centipoise
dP		decipoise
dyne.s/cm2		dyne second per square centimetre
EP		exapoise
fP		femtopoise
GP		gigapoise
kgf.s/m2		thousand gram-force second per square metre
kP		kilopoise
lbf.s/ft2		pound-force second per square foot
lbf.s/in2		pound-force second per square inch
mP		millipoise
MP		megapoise
mPa.s		millipascal second
N.s/m2		newton second per square metre
nP		nanopoise
P		poise
Pa.s		pascal second
pP		picopoise
psi.s		psi second
TP		terapoise
uP		micropoise

Associations

Association	Notes
From: **DynamicViscosityUom.** To: **UomEnum**	
From: **DynamicViscosityUomExt.** To: **DynamicViscosityUom**	

19.68 DynamicViscosityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **DynamicViscosityUomExt.** To: **DynamicViscosityUom**	
From: **DynamicViscosityUomExt.** To: **EnumExtensionPattern**	

19.69 ElectricalResistivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kohm.m		kiloohm metre
nohm.mil2/ft		nanoohm square mil per foot
nohm.mm2/m		nanoohm square milimetre per metre
ohm.cm		ohm centimetre
ohm.m		ohm metre
ohm.m2/m		ohm square metre per metre

Associations

Association	Notes
From: **ElectricalResistivityUom.** To: **UomEnum**	
From: **ElectricalResistivityUomExt.** To: **ElectricalResistivityUom**	

19.70 ElectricalResistivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricalResistivityUomExt.** To: **EnumExtensionPattern**	
From: **ElectricalResistivityUomExt.** To: **ElectricalResistivityUom**	

19.71 ElectricChargePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
C/cm2		coulomb per square centimetre
C/m2		coulomb per square metre
C/mm2		coulomb per square millimetre
mC/m2		millicoulomb per square metre

Associations

Association	Notes
From: **ElectricChargePerAreaUom.** To: **UomEnum**	
From: **ElectricChargePerAreaUomExt.** To: **ElectricChargePerAreaUom**	

19.72 ElectricChargePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricChargePerAreaUomExt.** To: **EnumExtensionPattern**	
From**: ElectricChargePerAreaUomExt.** To: **ElectricChargePerAreaUom**	

19.73 ElectricChargePerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A.s/kg		ampere second per kilogram
C/g		coulomb per gram
C/kg		coulomb per kilogram

Associations

Association	Notes
From: **ElectricChargePerMassUom.** To: **UomEnum**	
From: **ElectricChargePerMassUomExt.** To: **ElectricChargePerMassUom**	

19.74 ElectricChargePerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricChargePerMassUomExt.** To: **ElectricChargePerMassUom**	
From**: ElectricChargePerMassUomExt.** To: **EnumExtensionPattern**	

19.75 ElectricChargePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A.s/m3		ampere second per cubic metre
C/cm3		coulomb per cubic centimetre
C/m3		coulomb per cubic metre
C/mm3		coulomb per cubic millimetre

Associations

Association	Notes
From**: ElectricChargePerVolumeUom.** To: **UomEnum**	
From**: ElectricChargePerVolumeUomExt.** To: **ElectricChargePerVolumeUom**	

19.76 ElectricChargePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricChargePerVolumeUomExt.** To: **ElectricChargePerVolumeUom**	
From**: ElectricChargePerVolumeUomExt.** To: **EnumExtensionPattern**	

19.77 ElectricChargeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A.h		ampere hour
A.s		ampere second
C		coulomb
cC		centicoulomb
dC		decicoulomb
EC		exacoulomb
fC		femtocoulomb
GC		gigacoulomb
kC		kilocoulomb
MC		megacoulomb
mC		millicoulomb
nC		nanocoulomb
pC		picocoulomb
TC		teracoulomb
uC		microcoulomb

Associations

Association	Notes
From**: ElectricChargeUom.** To: **UomEnum**	
From**: ElectricChargeUomExt.** To: **ElectricChargeUom**	

19.78 ElectricChargeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricChargeUomExt.** To: **EnumExtensionPattern**	
From: **ElectricChargeUomExt.** To: **ElectricChargeUom**	

19.79 ElectricConductanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cS		centisiemens
dS		decisiemens
ES		exasiemens
fS		femtosiemens
GS		gigasiemens
kS		kilosiemens
mS		millisiemens
MS		megasiemens
nS		nanosiemens
pS		picosiemens
S		siemens
TS		terasiemens
uS		microsiemens

Associations

Association	Notes
From: **ElectricConductanceUom.** To: **UomEnum**	
From: **ElectricConductanceUomExt.** To: **ElectricConductanceUom**	

19.80 ElectricConductanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricConductanceUomExt.** To: **ElectricConductanceUom**	
From: **ElectricConductanceUomExt.** To: **EnumExtensionPattern**	

19.81 ElectricConductivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kS/m		kilosiemens per metre
mS/cm		millisiemens per centimetre
mS/m		millisiemens per metre
S/m		siemens per metre

Associations

Association	Notes
From: **ElectricConductivityUom.** To: **UomEnum**	
From: **ElectricConductivityUomExt.** To: **ElectricConductivityUom**	

19.82 ElectricConductivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricConductivityUomExt.** To: **EnumExtensionPattern**	
From: **ElectricConductivityUomExt.** To: **ElectricConductivityUom**	

19.83 ElectricCurrentDensityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A/cm2		ampere per square centimetre
A/ft2		ampere per square foot
A/m2		ampere per square metre
A/mm2		ampere per square millimetre
mA/cm2		milliampere per square centimetre
mA/ft2		milliampere per square foot
uA/cm2		microampere per square centimetre
uA/in2		microampere per square inch

Associations

Association	Notes
From: **ElectricCurrentDensityUom.** To: **UomEnum**	
From: **ElectricCurrentDensityUomExt.** To: **ElectricCurrentDensityUom**	

19.84 ElectricCurrentDensityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricCurrentDensityUomExt.** To: **EnumExtensionPattern**	
From**: ElectricCurrentDensityUomExt.** To: **ElectricCurrentDensityUom**	

19.85 ElectricCurrentUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
A		ampere
cA		centiampere
dA		deciampere
EA		exaampere
fA		femtoampere
GA		gigaampere
kA		kiloampere
MA		megaampere
mA		milliampere
nA		nanoampere
pA		picoampere
TA		teraampere
uA		microampere

Associations

Association	Notes
From**: ElectricCurrentUom.** To: **UomEnum**	
From**: ElectricCurrentUomExt.** To: **ElectricCurrentUom**	

19.86 ElectricCurrentUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricCurrentUomExt.** To: **EnumExtensionPattern**	
From: **ElectricCurrentUomExt.** To: **ElectricCurrentUom**	

19.87 ElectricFieldStrengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
mV/ft		millivolt per foot
mV/m		millivolt per metre
uV/ft		microvolt per foot
uV/m		microvolt per metre
V/m		volt per metre

Associations

Association	Notes
From: **ElectricFieldStrengthUom.** To: **UomEnum**	
From: **ElectricFieldStrengthUomExt.** To: **ElectricFieldStrengthUom**	

19.88 ElectricFieldStrengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricFieldStrengthUomExt.** To: **ElectricFieldStrengthUom**	
From: **ElectricFieldStrengthUomExt.** To: **EnumExtensionPattern**	

19.89 ElectricPotentialDifferenceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
cV		centivolt
dV		decivolt
fV		femtovolt
GV		gigavolt
kV		kilovolt
mV		millivolt
MV		megavolt
nV		nanovolt
pV		picovolt
TV		teravolt
uV		microvolt
V		volt

Associations

Association	Notes
From: **ElectricPotentialDifferenceUom.** To: **UomEnum**	
From: **ElectricPotentialDifferenceUomExt.** To: **ElectricPotentialDifferenceUom**	

19.90 ElectricPotentialDifferenceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricPotentialDifferenceUomExt.** To: **ElectricPotentialDifferenceUom**	
From**: ElectricPotentialDifferenceUomExt.** To: **EnumExtensionPattern**	

19.91 ElectricResistancePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ohm/m		ohm per metre
uohm/ft		microhm per foot
uohm/m		microhm per metre

Associations

Association	Notes
From**: ElectricResistancePerLengthUom.** To: **UomEnum**	
From**: ElectricResistancePerLengthUomExt.** To: **ElectricResistancePerLengthUom**	

19.92 ElectricResistancePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectricResistancePerLengthUomExt.** To: **ElectricResistancePerLengthUom**	
From**: ElectricResistancePerLengthUomExt.** To: **EnumExtensionPattern**	

19.93 ElectricResistanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cohm		centiohm
dohm		deciohm
Eohm		exaohm
fohm		femtoohm
Gohm		gigaohm
kohm		kilohm
Mohm		megohm
mohm		milliohm
nohm		nanoohm
ohm		ohm
pohm		picoohm
Tohm		teraohm
uohm		microohm

Associations

Association	Notes
From: **ElectricResistanceUom.** To: **UomEnum**	
From: **ElectricResistanceUomExt.** To: **ElectricResistanceUom**	

19.94 ElectricResistanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ElectricResistanceUomExt.** To: **EnumExtensionPattern**	
From: **ElectricResistanceUomExt.** To: **ElectricResistanceUom**	

19.95 ElectromagneticMomentUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A.m2		ampere square metre

Associations

Association	Notes
From**: ElectromagneticMomentUom.** To: **UomEnum**	
From**: ElectromagneticMomentUomExt.** To: **ElectromagneticMomentUom**	

19.96 ElectromagneticMomentUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ElectromagneticMomentUomExt.** To: **ElectromagneticMomentUom**	
From**: ElectromagneticMomentUomExt.** To: **EnumExtensionPattern**	

19.97 EnergyLengthPerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
J.m/m2		joule metre per square metre
kcal[th].m/cm2		thousand calorie metre per square centimetre

Associations

Association	Notes
From: **EnergyLengthPerAreaUom.** To: **UomEnum**	
From: **EnergyLengthPerAreaUomExt.** To: **EnergyLengthPerAreaUom**	

19.98 EnergyLengthPerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyLengthPerAreaUomExt.** To: **EnumExtensionPattern**	
From: **EnergyLengthPerAreaUomExt.** To: **EnergyLengthPerAreaUom**	

19.99 EnergyLengthPerTimeAreaTemperatureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT].in/(h.ft2.deltaF)		BTU per (hour square foot delta Fahrenheit per inch)
J.m/(s.m2.deltaK)		joule metre per second square metre delta kelvin
kJ.m/(h.m2.deltaK)		kilojoule metre per hour square metre delta kelvin
W/(m.deltaK)		watt per metre delta kelvin

Associations

Association	Notes
From: **EnergyLengthPerTimeAreaTemperatureUom.** To: **UomEnum**	
From: **EnergyLengthPerTimeAreaTemperatureUomExt.** To: **EnergyLengthPerTimeAreaTemperatureUom**	

19.100 EnergyLengthPerTimeAreaTemperatureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyLengthPerTimeAreaTemperatureUomExt.** To: **EnergyLengthPerTimeAreaTemperatureUom**	
From: **EnergyLengthPerTimeAreaTemperatureUomExt.** To: **EnumExtensionPattern**	

19.101 EnergyPerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
erg/cm2		erg per square centimetre
J/cm2		joule per square centimetre
J/m2		joule per square metre
kgf.m/cm2		thousand gram-force metre per square centimetre
lbf.ft/in2		foot pound-force per square inch
mJ/cm2		millijoule per square centimetre
mJ/m2		millijoule per square metre
N/m		newton per metre

Associations

Association	Notes
From: **EnergyPerAreaUom.** To: **UomEnum**	
From: **EnergyPerAreaUomExt.** To: **EnergyPerAreaUom**	

19.102 EnergyPerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyPerAreaUomExt.** To: **EnergyPerAreaUom**	
From: **EnergyPerAreaUomExt.** To: **EnumExtensionPattern**	

19.103 EnergyPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
J/m		joule per metre
MJ/m		megajoule per metre

Associations

Association	Notes
From: **EnergyPerLengthUom.** To: **UomEnum**	
From: **EnergyPerLengthUomExt.** To: **EnergyPerLengthUom**	

19.104 EnergyPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyPerLengthUomExt.** To: **EnergyPerLengthUom**	
From: **EnergyPerLengthUomExt.** To: **EnumExtensionPattern**	

19.105 EnergyPerMassPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
mrem/h		thousandth of irem per hour
mSv/h		millisievert per hour
rem/h		rem per hour
Sv/h		sievert per hour
Sv/s		sievert per second

Associations

Association	Notes
From: **EnergyPerMassPerTimeUom.** To: **UomEnum**	
From: **EnergyPerMassPerTimeUomExt.** To: **EnergyPerMassPerTimeUom**	

19.106 EnergyPerMassPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: EnergyPerMassPerTimeUomExt.** To: **EnergyPerMassPerTimeUom**	
From**: EnergyPerMassPerTimeUomExt.** To: **EnumExtensionPattern**	

19.107 EnergyPerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/lbm		BTU per pound-mass
cal[th]/g		calorie per gram
cal[th]/kg		calorie per kilogram
cal[th]/lbm		calorie per pound-mass
erg/g		erg per gram
erg/kg		erg per kilogram
hp.h/lbm		horsepower hour per pound-mass
J/g		joule per gram
J/kg		joule per kilogram
kcal[th]/g		thousand calorie per gram
kcal[th]/kg		thousand calorie per kilogram
kJ/kg		kilojoule per kilogram
kW.h/kg		kilowatt hour per kilogram
lbf.ft/lbm		foot pound-force per pound-mass
MJ/kg		megajoule per kilogram
MW.h/kg		megawatt hour per kilogram

Associations

Association	Notes
From: **EnergyPerMassUom.** To: **UomEnum**	
From: **EnergyPerMassUomExt.** To: **EnergyPerMassUom**	

19.108 EnergyPerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyPerMassUomExt.** To: **EnumExtensionPattern**	
From: **EnergyPerMassUomExt.** To: **EnergyPerMassUom**	

19.109 EnergyPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/bbl		BTU per barrel
Btu[IT]/ft3		BTU per cubic foot
Btu[IT]/gal[UK]		BTU per UK gallon
Btu[IT]/gal[US]		BTU per US gallon
cal[th]/cm3		calorie per cubic centimetre
cal[th]/mL		calorie per millilitre
cal[th]/mm3		calorie per cubic millimetre
erg/cm3		erg per cubic centimetre
erg/m3		erg per cubic metre
hp.h/bbl		horsepower hour per barrel
J/dm3		joule per cubic decimetre
J/m3		joule per cubic metre
kcal[th]/cm3		thousand calorie per cubic centimetre
kcal[th]/m3		thousand calorie per cubic metre
kJ/dm3		kilojoule per cubic decimetre
kJ/m3		kilojoule per cubic metre
kW.h/dm3		kilowatt hour per cubic decimetre
kW.h/m3		kilowatt hour per cubic metre
lbf.ft/bbl		foot pound-force per barrel
lbf.ft/gal[US]		foot pound-force per US gallon
MJ/m3		megajoule per cubic metre
MW.h/m3		megawatt hour per cubic metre
tonf[US].mi/bbl		US ton-force mile per barrel

Associations

Association	Notes
From: **EnergyPerVolumeUom.** To: **UomEnum**	
From: **EnergyPerVolumeUomExt.** To: **EnergyPerVolumeUom**	

19.110 EnergyPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **EnergyPerVolumeUomExt.** To: **EnergyPerVolumeUom**	

19.111 EnergyUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1E6 Btu[IT]		million BTU
aJ		attojoule
Btu[IT]		British thermal unit
Btu[th]		thermochemical British thermal unit
Btu[UK]		United Kingdom British thermal unit
cal[IT]		calorie [International Table]
cal[th]		calorie
ccal[th]		hundredth of calorie
ceV		centielectronvolt
cJ		centijoule
dcal[th]		tenth of calorie
deV		decielectronvolt
dJ		decijoule
Ecal[th]		million million million calorie
EeV		exaelectronvolt
EJ		exajoule
erg		erg
eV		electronvolt
fcal[th]		femtocalorie
feV		femtoelectronvolt
fJ		femtojoule
Gcal[th]		thousand million calorie
GeV		gigaelectronvolt
GJ		gigajoule
GW.h		gigawatt hour
hp.h		horsepower hour
hp[metric].h		metric-horsepower hour
J		joule
kcal[th]		thousand calorie
keV		kiloelectronvolt
kJ		kilojoule
kW.h		kilowatt hour

mcal[th]		thousandth of calorie
Mcal[th]		million calorie
meV		millielectronvolt
MeV		megaelectronvolt
MJ		megajoule
mJ		millijoule
MW.h		megawatt hour
ncal[th]		nanocalorie
neV		nanoelectronvolt
nJ		nanojoule
pcal[th]		picocalorie
peV		picoelectronvolt
pJ		picojoule
quad		quad
Tcal[th]		million million calorie
TeV		teraelectronvolt
therm[EC]		European Community therm
therm[UK]		United Kingdom therm
therm[US]		United States therm
TJ		terajoule
TW.h		terrawatt hour
ucal[th]		millionth of calorie
ueV		microelectronvolt
uJ		microjoule

Associations

Association	Notes
From: **EnergyUom.** To: **UomEnum**	
From: **EnergyUomExt.** To: **EnergyUom**	

19.112 EnergyUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **EnergyUomExt.** To: **EnergyUom**	
From: **EnergyUomExt.** To: **EnumExtensionPattern**	

19.113 ForceAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
dyne.cm2		dyne square centimetre
kgf.m2		thousand gram-force square metre
kN.m2		kilonewton square metre
lbf.in2		pound-force square inch
mN.m2		millinewton square metre
N.m2		newton square metre
pdl.cm2		poundal square centimetre
tonf[UK].ft2		UK ton-force square foot
tonf[US].ft2		US ton-force square foot

Associations

Association	Notes
From: **ForceAreaUom.** To: **UomEnum**	
From: **ForceAreaUomExt.** To: **ForceAreaUom**	

19.114 ForceAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ForceAreaUomExt.** To: **EnumExtensionPattern**	
From: **ForceAreaUomExt.** To: **ForceAreaUom**	

19.115 ForceLengthPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kgf.m/m		thousand gram-force metre per metre
lbf.ft/in		foot pound-force per inch
lbf.in/in		pound-force inch per inch
N.m/m		newton metre per metre
tonf[US].mi/ft		US ton-force mile per foot

Associations

Association	Notes
From**: ForceLengthPerLengthUom.** To: **UomEnum**	
From**: ForceLengthPerLengthUomExt.** To: **ForceLengthPerLengthUom**	

19.116 ForceLengthPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ForceLengthPerLengthUomExt.** To: **EnumExtensionPattern**	
From**: ForceLengthPerLengthUomExt.** To: **ForceLengthPerLengthUom**	

19.117 ForcePerForceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
%		percent
Euc		euclid
kgf/kgf		thousand gram-force per kilogram-force
lbf/lbf		pound-force per pound-force
N/N		newton per newton

Associations

Association	Notes
From: **ForcePerForceUom.** To: **UomEnum**	
From: **ForcePerForceUomExt.** To: **ForcePerForceUom**	

19.118 ForcePerForceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ForcePerForceUomExt.** To: **ForcePerForceUom**	
From**: ForcePerForceUomExt.** To: **EnumExtensionPattern**	

19.119 ForcePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.01 lbf/ft		pound-force per hundred foot
1/30 lbf/m		pound-force per thirty metre
1/30 N/m		newton per thirty metre
dyne/cm		dyne per centimetre
kgf/cm		thousand gram-force per centimetre
kN/m		kilonewton per metre
lbf/ft		pound-force per foot
lbf/in		pound-force per inch
mN/km		millinewton per kilometre
mN/m		millinewton per metre
N/m		newton per metre
pdl/cm		poundal per centimetre
tonf[UK]/ft		UK ton-force per foot
tonf[US]/ft		US ton-force per foot

Associations

Association	Notes
From**: ForcePerLengthUom.** To: **UomEnum**	
From**: ForcePerLengthUomExt.** To: **ForcePerLengthUom**	

19.120 ForcePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ForcePerLengthUomExt.** To: **ForcePerLengthUom**	
From: **ForcePerLengthUomExt.** To: **EnumExtensionPattern**	

19.121 ForcePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.001 psi/ft		psi per thousand foot
0.01 psi/ft		psi per hundred foot
atm/ft		standard atmosphere per foot
atm/hm		standard atmosphere per hundred metre
atm/m		standard atmosphere per metre
bar/km		bar per kilometre
bar/m		bar per metre
GPa/cm		gigapascal per centimetre
kPa/hm		kilopascal per hectometre
kPa/m		kilopascal per metre
lbf/ft3		pound-force per cubic foot
lbf/gal[US]		pound-force per US gallon
MPa/m		megapascal per metre
N/m3		newton per cubic metre
Pa/m		pascal per metre
psi/ft		psi per foot
psi/m		psi per metre

Associations

Association	Notes
From: **ForcePerVolumeUom.** To: **UomEnum**	
From: **ForcePerVolumeUomExt.** To: **ForcePerVolumeUom**	

19.122 ForcePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ForcePerVolumeUomExt.** To: **EnumExtensionPattern**	
From**: ForcePerVolumeUomExt.** To: **ForcePerVolumeUom**	

19.123 ForceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
10 kN		ten kilonewton
cN		centinewton
daN		dekanewton
dN		decinewton
dyne		dyne
EN		exanewton
fN		femtonewton
gf		gram-force
GN		giganewton
hN		hectonewton
kdyne		kilodyne
kgf		thousand gram-force
klbf		thousand pound-force
kN		kilonewton
lbf		pound-force
Mgf		million gram-force
mN		millinewton
MN		meganewton
N		newton
nN		nanonewton
ozf		ounce-force
pdl		poundal
pN		piconewton
TN		teranewton
tonf[UK]		UK ton-force
tonf[US]		US ton-force
uN		micronewton

Associations

Association	Notes
From: **ForceUom.** To: **UomEnum**	
From: **ForceUomExt.** To: **ForceUom**	

19.124 ForceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ForceUomExt.** To: **ForceUom**	
From**: ForceUomExt.** To: **EnumExtensionPattern**	

19.125 FrequencyIntervalUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
O		octave

Associations

Association	Notes
From**: FrequencyIntervalUom.** To: **UomEnum**	
From**: FrequencyIntervalUomExt.** To: **FrequencyIntervalUom**	

19.126 FrequencyIntervalUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **FrequencyIntervalUomExt.** To: **EnumExtensionPattern**	
From: **FrequencyIntervalUomExt.** To: **FrequencyIntervalUom**	

19.127 FrequencyUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cHz		centihertz
dHz		decihertz
EHz		exahertz
fHz		femtohertz
GHz		gigahertz
Hz		hertz
kHz		kilohertz
mHz		millihertz
MHz		megahertz
nHz		nanohertz
pHz		picohertz
THz		terahertz
uHz		microhertz

Associations

Association	Notes
From: **FrequencyUom.** To: **UomEnum**	
From: **FrequencyUomExt.** To: **FrequencyUom**	

19.128 FrequencyUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **FrequencyUomExt.** To: **FrequencyUom**	
From: **FrequencyUomExt.** To: **EnumExtensionPattern**	

19.129 HeatCapacityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
J/deltaK		joule per delta kelvin

Associations

Association	Notes
From**: HeatCapacityUom.** To: **UomEnum**	
From**: HeatCapacityUomExt.** To: **HeatCapacityUom**	

19.130 HeatCapacityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: HeatCapacityUomExt.** To: **EnumExtensionPattern**	
From**: HeatCapacityUomExt.** To: **HeatCapacityUom**	

19.131 HeatFlowRateUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1E6 Btu[IT]/h		million BTU per hour
Btu[IT]/h		BTU per hour
Btu[IT]/min		BTU per minute
Btu[IT]/s		BTU per second
cal[th]/h		calorie per hour
EJ/a		exajoule per julian-year
erg/a		erg per julian-year
GW		gigawatt
J/s		joule per second
kcal[th]/h		thousand calorie per hour
kW		kilowatt
lbf.ft/min		foot pound-force per minute
lbf.ft/s		foot pound-force per second
MJ/a		megajoule per julian-year
mW		milliwatt
MW		megawatt
nW		nanowatt
quad/a		quad per julian-year
TJ/a		terajoule per julian-year
TW		terawatt
ucal[th]/s		millionth of calorie per second
uW		microwatt
W		watt

Associations

Association	Notes
From: **HeatFlowRateUom.** To: **UomEnum**	
From: **HeatFlowRateUomExt.** To: **HeatFlowRateUom**	

19.132 HeatFlowRateUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: HeatFlowRateUomExt.** To: **EnumExtensionPattern**	
From**: HeatFlowRateUomExt.** To: **HeatFlowRateUom**	

19.133 HeatTransferCoefficientUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(h.ft2.deltaF)		BTU per hour square foot delta Fahrenheit
Btu[IT]/(h.ft2.deltaR)		BTU per hour square foot delta Rankine
Btu[IT]/(h.m2.deltaC)		BTU per hour square metre delta Celsius
Btu[IT]/(s.ft2.deltaF)		(BTU per second) per square foot delta Fahrenheit
cal[th]/(h.cm2.deltaC)		calorie per hour square centimetre delta Celsius
cal[th]/(s.cm2.deltaC)		calorie per second square centimetre delta Celsius
J/(s.m2.deltaC)		joule per second square metre delta Celsius
kcal[th]/(h.m2.deltaC)		thousand calorie per hour square metre delta Celsius
kJ/(h.m2.deltaK)		kilojoule per hour square metre delta kelvin
kW/(m2.deltaK)		kilowatt per square metre delta kelvin
W/(m2.deltaK)		watt per square metre delta kelvin

Associations

Association	Notes
From**: HeatTransferCoefficientUom.** To: **UomEnum**	
From**: HeatTransferCoefficientUomExt.** To: **HeatTransferCoefficientUom**	

19.134 HeatTransferCoefficientUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: HeatTransferCoefficientUomExt.** To: **EnumExtensionPattern**	
From**: HeatTransferCoefficientUomExt.** To: **HeatTransferCoefficientUom**	

19.135 IlluminanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
footcandle		footcandle
klx		kilolux
lm/m2		lumen per square metre
lx		lux

Associations

Association	Notes
From**: IlluminanceUom.** To: **UomEnum**	
From**: IlluminanceUomExt.** To: **IlluminanceUom**	

19.136 IlluminanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: IlluminanceUomExt.** To: **IlluminanceUom**	
From**: IlluminanceUomExt.** To: **EnumExtensionPattern**	

19.137 InductanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cH		centihenry
dH		decihenry
EH		exahenry
fH		femtohenry
GH		gigahenry
H		henry
kH		kilohenry
MH		megahenry
mH		millihenry
nH		nanohenry
TH		terahenry
uH		microhenry

Associations

Association	Notes
From: **InductanceUom.** To: **UomEnum**	
From: **InductanceUomExt.** To: **InductanceUom**	

19.138 InductanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: InductanceUomExt.** To: **EnumExtensionPattern**	
From**: InductanceUomExt.** To: **InductanceUom**	

19.139 IsothermalCompressibilityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
dm3/(kW.h)		cubic decimetre per kilowatt hour
dm3/MJ		cubic decimetre per megajoule
m3/(kW.h)		cubic metre per kilowatt hour
m3/J		cubic metre per joule
mm3/J		cubic millimetre per joule
pt[UK]/(hp.h)		UK pint per horsepower hour

Associations

Association	Notes
From**: IsothermalCompressibilityUom.** To: **UomEnum**	
From**: IsothermalCompressibilityUomExt.** To: **IsothermalCompressibilityUom**	

19.140 IsothermalCompressibilityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: IsothermalCompressibilityUomExt.** To: **EnumExtensionPattern**	
From**: IsothermalCompressibilityUomExt.** To: **IsothermalCompressibilityUom**	

19.141 KinematicViscosityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cm2/s		square centimetre per second
cSt		centistokes
ft2/h		square foot per hour
ft2/s		square foot per second
in2/s		square inch per second
m2/h		square metre per hour
m2/s		square metre per second
mm2/s		square millimetre per second
Pa.s.m3/kg		pascal second square metre per kilogram
St		stokes

Associations

Association	Notes
From: **KinematicViscosityUom.** To: **UomEnum**	
From: **KinematicViscosityUomExt.** To: **KinematicViscosityUom**	

19.142 KinematicViscosityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **KinematicViscosityUomExt.** To: **EnumExtensionPattern**	
From: **KinematicViscosityUomExt.** To: **KinematicViscosityUom**	

19.143 LengthAndTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/28/2019 *Last modified:*3/28/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: This is a union of the units of measure for both length and time, plus the extensibility pattern.

Use of this will allow an attribute to validate on either time or depth (or lateral distance) units.

Associations

Association	Notes
From: **LengthAndTimeUomExt.** To: **LengthUom**	
From: **LengthAndTimeUomExt.** To: **TimeUom**	
From: **LengthAndTimeUomExt.** To: **EnumExtensionPattern**	

19.144 LengthPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
0.01 ft/ft		foot per hundred foot
1/30 m/m		metre per thirty metre
Euc		euclid
ft/ft		foot per foot
ft/in		foot per inch
ft/m		foot per metre
ft/mi		foot per mile
km/cm		kilometre per centimetre
m/cm		metre per centimetre
m/km		metre per kilometre
m/m		metre per metre
mi/in		mile per inch

Associations

Association	Notes
From**: LengthPerLengthUom.** To: **UomEnum**	
From**: LengthPerLengthUomExt.** To: **LengthPerLengthUom**	

19.145 LengthPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerLengthUomExt.** To: **EnumExtensionPattern**	
From**: LengthPerLengthUomExt.** To: **LengthPerLengthUom**	

19.146 LengthPerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft/lbm		foot per pound-mass
m/kg		metre per kilogram

Associations

Association	Notes
From: **LengthPerMassUom.** To: **UomEnum**	
From: **LengthPerMassUomExt.** To: **LengthPerMassUom**	

19.147 LengthPerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerMassUomExt.** To: **EnumExtensionPattern**	
From**: LengthPerMassUomExt.** To: **LengthPerMassUom**	

19.148 LengthPerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft/psi		foot per psi
m/kPa		metre per kilopascal
m/Pa		metre per Pascal

Associations

Association	Notes
From: **LengthPerPressureUom.** To: **UomEnum**	
From: **LengthPerPressureUomExt.** To: **LengthPerPressureUom**	

19.149 LengthPerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerPressureUomExt.** To: **LengthPerPressureUom**	
From**: LengthPerPressureUomExt.** To: **EnumExtensionPattern**	

19.150 LengthPerTemperatureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft/deltaF		foot per delta Fahrenheit
m/deltaK		metre per delta kelvin

Associations

Association	Notes
From**: LengthPerTemperatureUom.** To: **UomEnum**	
From**: LengthPerTemperatureUomExt.** To: **LengthPerTemperatureUom**	

19.151 LengthPerTemperatureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerTemperatureUomExt.** To: **LengthPerTemperatureUom**	
From**: LengthPerTemperatureUomExt.** To: **EnumExtensionPattern**	

19.152 LengthPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1000 ft/h		thousand foot per hour
1000 ft/s		thousand foot per second
cm/a		centimetre per julian-year
cm/s		centimetre per second
dm/s		decimetre per second
ft/d		foot per day
ft/h		foot per hour
ft/min		foot per minute
ft/ms		foot per millisecond
ft/s		foot per second
ft/us		foot per microsecond
in/a		inch per julian-year
in/min		inch per minute
in/s		inch per second
km/h		kilometre per hour
km/s		kilometre per second
knot		knot
m/d		metre per day
m/h		metre per hour
m/min		metre per minute
m/ms		metre per millisecond
m/s		metre per second
mi/h		mile per hour
mil/a		mil per julian-year
mm/a		millimetre per julian-year
mm/s		millimetre per second
nm/s		nanometre per second
um/s		micrometre per second

Associations

Association	Notes
From**: LengthPerTimeUom.** To: **UomEnum**	

Association	Notes
From**: LengthPerTimeUomExt.** To: **LengthPerTimeUom**	

19.153 LengthPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerTimeUomExt. EnumExtensionPattern** To:	
From**: LengthPerTimeUomExt. LengthPerTimeUom** To:	

19.154 LengthPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft/bbl		foot per barrel
ft/ft3		foot per cubic foot
ft/gal[US]		foot per US gallon
km/dm3		kilometre per cubic decimetre
km/L		kilometre per litre
m/m3		metre per cubic metre
mi/gal[UK]		mile per UK gallon
mi/gal[US]		mile per US gallon

Associations

Association	Notes
From: **LengthPerVolumeUom.** To: **UomEnum**	
From: **LengthPerVolumeUomExt.** To: **LengthPerVolumeUom**	

19.155 LengthPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthPerVolumeUomExt.** To: **LengthPerVolumeUom**	
From**: LengthPerVolumeUomExt.** To: **EnumExtensionPattern**	

19.156 LengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.1 ft		tenth of foot
0.1 ft[US]		tenth of US survey foot
0.1 in		tenth of inch
0.1 yd		tenth of yard
1/16 in		sixteenth of inch
1/2 ft		half of Foot
1/32 in		thirty-second of inch
1/64 in		sixty-fourth of inch
10 ft		ten foot
10 in		ten inch
10 km		10 kilometre
100 ft		hundred foot
100 km		100 kilometre
1000 ft		thousand foot
30 ft		thirty foot
30 m		thirty metres
angstrom		angstrom
chain		chain
chain[BnA]		British chain [Benoit 1895 A]
chain[BnB]		British chain [Benoit 1895 B]
chain[Cla]		Clarke chain
chain[Ind37]		Indian Chain [1937]
chain[Se]		British chain [Sears 1922]
chain[SeT]		British chain [Sears 1922 truncated]
chain[US]		US survey chain
cm		centimetre
dam		dekametre
dm		decimetre
Em		exametre
fathom		international fathom
fm		femtometre
ft		foot

ft[BnA]		British foot [Benoit 1895 A]
ft[BnB]		British foot [Benoit 1895 B]
ft[Br36]		British foot [1936]
ft[Br65]		British foot [1865]
ft[Cla]		Clarke foot
ft[GC]		Gold Coast foot
ft[Ind]		indian foot
ft[Ind37]		indian foot [1937]
ft[Ind62]		indian foot]1962]
ft[Ind75]		indian foot [1975]
ft[Se]		British foot [Sears 1922]
ft[SeT]		British foot [Sears 1922 truncated]
ft[US]		US survey foot
fur[US]		furlong US survey
Gm		gigametre
hm		hectometre
in		inch
in[US]		US survey inch
km		kilometre
link		link
link[BnA]		British link [Benoit 1895 A]
link[BnB]		British link [Benoit 1895 B]
link[Cla]		Clarke link
link[Se]		British link [Sears 1922]
link[SeT]		British link [Sears 1922 truncated]
link[US]		US survey link
m		metre
m[Ger]		German legal metre
mi		mile
mi[naut]		international nautical mile
mi[nautUK]		United Kingdom nautical mile
mi[US]		US survey mile
mil		mil
mm		millimetre
Mm		megametre
nm		nanometre
pm		picometre
rod[US]		rod US Survey
Tm		terametre
um		micrometre

yd		yard
yd[BnA]		British yard [Benoit 1895 A]
yd[BnB]		British yard [Benoit 1895 B]
yd[Cla]		Clarke yard
yd[Ind]		Indian yard
yd[Ind37]		Indian yard [1937]
yd[Ind62]		Indian yard [1962]
yd[Ind75]		Indian yard [1975]
yd[Se]		British yard [Sears 1922]
yd[SeT]		British yard [Sears 1922 truncated]
yd[US]		US survey yard

Associations

Association	Notes
From: **LengthUom.** To: **UomEnum**	
From: **LengthAndTimeUomExt.** To: **LengthUom**	
From: **LengthUomExt.** To: **LengthUom**	

19.157 LengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LengthUomExt.** To: **LengthUom**	
From**: LengthUomExt.** To: **EnumExtensionPattern**	

19.158 LightExposureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
footcandle.s		footcandle second
lx.s		lux second

Associations

Association	Notes
From**: LightExposureUom.** To: **UomEnum**	
From**: LightExposureUomExt.** To: **LightExposureUom**	

19.159 LightExposureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LightExposureUomExt.** To: **EnumExtensionPattern**	
From**: LightExposureUomExt.** To: **LightExposureUom**	

19.160 LinearAccelerationUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
cm/s2		centimetre per square second
ft/s2		foot per second squared
Gal		galileo
gn		gravity
in/s2		inch per second squared
m/s2		metre per second squared
mGal		milligalileo
mgn		thousandth of gravity

Associations

Association	Notes
From: **LinearAccelerationUom.** To: **UomEnum**	
From: **LinearAccelerationUomExt.** To: **LinearAccelerationUom**	

19.161 LinearAccelerationUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **LinearAccelerationUomExt.** To: **LinearAccelerationUom**	
From: **LinearAccelerationUomExt.** To: **EnumExtensionPattern**	

19.162 LinearThermalExpansionUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*1/16/2019 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/deltaK		per delta kelvin
in/(in.deltaF)		inch per inch delta Fahrenheit
m/(m.deltaK)		metre per metre delta kelvin
mm/(mm.deltaK)		millimetre per millimetre delta kelvin

Associations

Association	Notes
From**: LinearThermalExpansionUom.** To: **UomEnum**	
From**: LinearThermalExpansionUomExt.** To: **LinearThermalExpansionUom**	

19.163 LinearThermalExpansionUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LinearThermalExpansionUomExt.** To: **LinearThermalExpansionUom**	
From**: LinearThermalExpansionUomExt.** To: **EnumExtensionPattern**	

19.164 LogarithmicPowerRatioPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
B/m		bel per metre
dB/ft		decibel per foot
dB/km		decibel per kilometre
dB/m		decibel per metre

Associations

Association	Notes
From: **LogarithmicPowerRatioPerLengthUom.** To: **UomEnum**	
From: **LogarithmicPowerRatioPerLengthUomExt.** To: **LogarithmicPowerRatioPerLengthUom**	

19.165 LogarithmicPowerRatioPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **LogarithmicPowerRatioPerLengthUomExt.** To: **LogarithmicPowerRatioPerLengthUom**	
From: **LogarithmicPowerRatioPerLengthUomExt.** To: **EnumExtensionPattern**	

19.166 LogarithmicPowerRatioUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
B		bel
dB		decibel

Associations

Association	Notes
From: **LogarithmicPowerRatioUom.** To: **UomEnum**	
From: **LogarithmicPowerRatioUomExt.** To: **LogarithmicPowerRatioUom**	

19.167 LogarithmicPowerRatioUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LogarithmicPowerRatioUomExt.** To: **LogarithmicPowerRatioUom**	
From**: LogarithmicPowerRatioUomExt.** To: **EnumExtensionPattern**	

19.168 LuminanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cd/m2		candela per square metre

Associations

Association	Notes
From**: LuminanceUom.** To: **UomEnum**	
From**: LuminanceUomExt.** To: **LuminanceUom**	

19.169 LuminanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LuminanceUomExt.** To: **EnumExtensionPattern**	
From**: LuminanceUomExt.** To: **LuminanceUom**	

19.170 LuminousEfficacyUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
lm/W		lumen per watt

Associations

Association	Notes
From**: LuminousEfficacyUom.** To: **UomEnum**	
From**: LuminousEfficacyUomExt.** To: **LuminousEfficacyUom**	

19.171 LuminousEfficacyUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **LuminousEfficacyUomExt.** To: **EnumExtensionPattern**	
From: **LuminousEfficacyUomExt.** To: **LuminousEfficacyUom**	

19.172 LuminousFluxUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
lm		lumen

Associations

Association	Notes
From**: LuminousFluxUom.** To: **UomEnum**	
From**: LuminousFluxUomExt.** To: **LuminousFluxUom**	

19.173 LuminousFluxUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LuminousFluxUomExt.** To: **LuminousFluxUom**	
From**: LuminousFluxUomExt.** To: **EnumExtensionPattern**	

19.174 LuminousIntensityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cd		candela
kcd		kilocandela

Associations

Association	Notes
From: **LuminousIntensityUom.** To: **UomEnum**	
From: **LuminousIntensityUomExt.** To: **LuminousIntensityUom**	

19.175 LuminousIntensityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: LuminousIntensityUomExt.** To: **EnumExtensionPattern**	
From**: LuminousIntensityUomExt.** To: **LuminousIntensityUom**	

19.176 MagneticDipoleMomentUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Wb.m		weber metre

Associations

Association	Notes
From: **MagneticDipoleMomentUom.** To: **UomEnum**	
From: **MagneticDipoleMomentUomExt.** To: **MagneticDipoleMomentUom**	

19.177 MagneticDipoleMomentUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticDipoleMomentUomExt.** To: **EnumExtensionPattern**	
From**: MagneticDipoleMomentUomExt.** To: **MagneticDipoleMomentUom**	

19.178 MagneticFieldStrengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
A/m		ampere per metre
A/mm		ampere per millimetre
Oe		oersted

Associations

Association	Notes
From: **MagneticFieldStrengthUom.** To: **UomEnum**	
From: **MagneticFieldStrengthUomExt.** To: **MagneticFieldStrengthUom**	

19.179 MagneticFieldStrengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticFieldStrengthUomExt.** To: **EnumExtensionPattern**	
From**: MagneticFieldStrengthUomExt.** To: **MagneticFieldStrengthUom**	

19.180 MagneticFluxDensityPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
gauss/cm		gauss per centimetre
mT/dm		millitesla per decimetre
T/m		tesla per metre

Associations

Association	Notes
From**: MagneticFluxDensityPerLengthUom.** To: **UomEnum**	
From**: MagneticFluxDensityPerLengthUomExt.** To: **MagneticFluxDensityPerLengthUom**	

19.181 MagneticFluxDensityPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticFluxDensityPerLengthUomExt.** To: **MagneticFluxDensityPerLengthUom**	
From**: MagneticFluxDensityPerLengthUomExt.** To: **EnumExtensionPattern**	

19.182 MagneticFluxDensityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
cgauss		centigauss
cT		centitesla
dgauss		decigauss
dT		decitesla
Egauss		exagauss
ET		exatesla
fgauss		femtogauss
fT		femtotesla
gauss		gauss
Ggauss		gigagauss
GT		gigatesla
kgauss		kilogauss
kT		kilotesla
mgauss		milligauss
Mgauss		megagauss
mT		millitesla
ngauss		nanogauss
nT		nanotesla
pgauss		picogauss
pT		picotesla
T		tesla
Tgauss		teragauss
TT		teratesla
ugauss		microgauss
uT		microtesla

Associations

Association	Notes
From: **MagneticFluxDensityUom.** To: **UomEnum**	
From: **MagneticFluxDensityUomExt.** To: **MagneticFluxDensityUom**	

19.183 MagneticFluxDensityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticFluxDensityUomExt.** To: **EnumExtensionPattern**	
From**: MagneticFluxDensityUomExt.** To: **MagneticFluxDensityUom**	

19.184 MagneticFluxUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cWb		centiweber
dWb		deciweber
EWb		exaweber
fWb		femtoweber
GWb		gigaweber
kWb		kiloweber
mWb		milliweber
MWb		megaweber
nWb		nanoweber
pWb		picoweber
TWb		teraweber
uWb		microweber
Wb		weber

Associations

Association	Notes
From: **MagneticFluxUom.** To: **UomEnum**	
From: **MagneticFluxUomExt.** To: **MagneticFluxUom**	

19.185 MagneticFluxUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticFluxUomExt.** To: **EnumExtensionPattern**	
From**: MagneticFluxUomExt.** To: **MagneticFluxUom**	

19.186 MagneticPermeabilityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
H/m		henry per metre
uH/m		microhenry per metre

Associations

Association	Notes
From: **MagneticPermeabilityUom.** To: **UomEnum**	
From: **MagneticPermeabilityUomExt.** To: **MagneticPermeabilityUom**	

19.187 MagneticPermeabilityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticPermeabilityUomExt.** To: **MagneticPermeabilityUom**	
From**: MagneticPermeabilityUomExt.** To: **EnumExtensionPattern**	

19.188 MagneticVectorPotentialUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Wb/m		weber per metre
Wb/mm		weber per millimetre

Associations

Association	Notes
From: **MagneticVectorPotentialUom.** To: **UomEnum**	
From: **MagneticVectorPotentialUomExt.** To: **MagneticVectorPotentialUom**	

19.189 MagneticVectorPotentialUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MagneticVectorPotentialUomExt.** To: **EnumExtensionPattern**	
From**: MagneticVectorPotentialUomExt.** To: **MagneticVectorPotentialUom**	

19.190 MassLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kg.m		kilogram metre
lbm.ft		pound-mass foot

Associations

Association	Notes
From: **MassLengthUom.** To: **UomEnum**	
From: **MassLengthUomExt.** To: **MassLengthUom**	

19.191 MassLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassLengthUomExt.** To: **MassLengthUom**	
From**: MassLengthUomExt.** To: **EnumExtensionPattern**	

19.192 MassPerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
0.01 lbm/ft2		pound-mass per hundred square foot
kg/m2		kilogram per square metre
lbm/ft2		pound-mass per square foot
Mg/m2		megagram per square metre
ton[US]/ft2		US ton-mass per square foot

Associations

Association	Notes
From**: MassPerAreaUom.** To: **UomEnum**	
From**: MassPerAreaUomExt.** To: **MassPerAreaUom**	

19.193 MassPerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerAreaUomExt.** To: **MassPerAreaUom**	
From**: MassPerAreaUomExt.** To: **EnumExtensionPattern**	

19.194 MassPerEnergyUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kg/(kW.h)		kilogram per kilowatt hour
kg/J		kilogram per joule
kg/MJ		kilogram per megajoule
lbm/(hp.h)		pound-mass per horsepower hour
mg/J		milligram per joule

Associations

Association	Notes
From**: MassPerEnergyUom.** To: **UomEnum**	
From**: MassPerEnergyUomExt.** To: **MassPerEnergyUom**	

19.195 MassPerEnergyUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MassPerEnergyUomExt.** To: **EnumExtensionPattern**	
From: **MassPerEnergyUomExt.** To: **MassPerEnergyUom**	

19.196 MassPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
kg.m/cm2		kilogram metre per square centimetre
kg/m		kilogram per metre
klbm/in		thousand pound-mass per inch
lbm/ft		pound-mass per foot
Mg/in		megagram per inch

Associations

Association	Notes
From**: MassPerLengthUom.** To: **UomEnum**	
From**: MassPerLengthUomExt.** To: **MassPerLengthUom**	

19.197 MassPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MassPerLengthUomExt.** To: **EnumExtensionPattern**	
From: **MassPerLengthUomExt.** To: **MassPerLengthUom**	

19.198 MassPerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
%[mass]		percent [mass basis]
Euc		euclid
g/kg		gram per kilogram
g/t		gram per tonne
kg/kg		kilogram per kilogram
kg/sack[94lbm]		kilogram per 94-pound-sack
kg/t		kilogram per tonne
mg/g		milligram per gram
mg/kg		milligram per kilogram
ng/g		nanogram per gram
ng/mg		nanogram per milligram
ppk		part per thousand
ppm		part per million
ppm[mass]		part per million [mass basis]
ug/g		microgram per gram
ug/mg		microgram per milligram

Associations

Association	Notes
From**: MassPerMassUom.** To: **UomEnum**	
From**: MassPerMassUomExt.** To: **MassPerMassUom**	

19.199 MassPerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerMassUomExt.** To: **EnumExtensionPattern**	
From**: MassPerMassUomExt.** To: **MassPerMassUom**	

19.200 MassPerTimePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
g.ft/(cm3.s)		gram foot per cubic centimetre second
g.m/(cm3.s)		gram metre per cubic centimetre second
kg/(m2.s)		kilogram per square metre second
kPa.s/m		kilopascal second per metre
lbm/(ft2.h)		pound-mass per square foot hour
lbm/(ft2.s)		pound-mass per square foot second
MPa.s/m		megapascal second per metre

Associations

Association	Notes
From: **MassPerTimePerAreaUom.** To: **UomEnum**	
From: **MassPerTimePerAreaUomExt.** To: **MassPerTimePerAreaUom**	

19.201 MassPerTimePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MassPerTimePerAreaUomExt.** To: **MassPerTimePerAreaUom**	
From: **MassPerTimePerAreaUomExt.** To: **EnumExtensionPattern**	

19.202 MassPerTimePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kg/(m.s)		kilogram per metre second
lbm/(ft.h)		pound-mass per hour foot
lbm/(ft.s)		pound-mass per second foot
Pa.s		pascal second

Associations

Association	Notes
From: **MassPerTimePerLengthUom.** To: **UomEnum**	
From: **MassPerTimePerLengthUomExt.** To: **MassPerTimePerLengthUom**	

19.203 MassPerTimePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerTimePerLengthUomExt.** To: **MassPerTimePerLengthUom**	
From**: MassPerTimePerLengthUomExt.** To: **EnumExtensionPattern**	

19.204 MassPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1E6 lbm/a		million pound-mass per julian-year
g/s		gram per second
kg/d		kilogram per day
kg/h		kilogram per hour
kg/min		kilogram per min
kg/s		kilogram per second
lbm/d		pound-mass per day
lbm/h		pound-mass per hour
lbm/min		pound-mass per minute
lbm/s		pound-mass per second
Mg/a		megagram per julian-year
Mg/d		megagram per day
Mg/h		megagram per hour
Mg/min		megagram per minute
t/a		tonne per julian-year
t/d		tonne per day
t/h		tonne per hour
t/min		tonne per minute
ton[UK]/a		UK ton-mass per julian-year
ton[UK]/d		UK ton-mass per day
ton[UK]/h		UK ton-mass per hour
ton[UK]/min		UK ton-mass per minute
ton[US]/a		US ton-mass per julian-year
ton[US]/d		US ton-mass per day
ton[US]/h		US ton-mass per hour
ton[US]/min		US ton-mass per minute

Associations

Association	Notes
From: **MassPerTimeUom.** To: **UomEnum**	
From: **MassPerTimeUomExt.** To: **MassPerTimeUom**	

19.205 MassPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerTimeUomExt.** To: **EnumExtensionPattern**	
From**: MassPerTimeUomExt.** To: **MassPerTimeUom**	

19.206 MassPerVolumePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
g/cm4		gram per centimetre to the fourth power
kg/dm4		kilogram per decimetre to the fourth power
kg/m4		kilogram per metre to the fourth power
lbm/(gal[UK].ft)		pound-mass per UK gallon foot
lbm/(gal[US].ft)		pound-mass per US gallon foot
lbm/ft4		pound-mass per foot to the fourth power
Pa.s2/m3		pascal second squared per cubic metre

Associations

Association	Notes
From: **MassPerVolumePerLengthUom.** To: **UomEnum**	
From: **MassPerVolumePerLengthUomExt.** To: **MassPerVolumePerLengthUom**	

19.207 MassPerVolumePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerVolumePerLengthUomExt.** To: **EnumExtensionPattern**	
From**: MassPerVolumePerLengthUomExt.** To: **MassPerVolumePerLengthUom**	

19.208 MassPerVolumePerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
kg/m3.kPa		
lb/ft.psi		

Associations

Association	Notes
From**: MassPerVolumePerPressureUom.** To: **UomEnum**	
From**: MassPerVolumePerPressureUomExt.** To: **MassPerVolumePerPressureUom**	

19.209 MassPerVolumePerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/11/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: MassPerVolumePerPressureUomExt.** To: **MassPerVolumePerPressureUom**	
From**: MassPerVolumePerPressureUomExt.** To: **EnumExtensionPattern**	

19.210 MassPerVolumePerTemperatureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
kg/m3.degC		
kg/m3.K		
lb/ft.degF		

Associations

Association	Notes
From**: MassPerVolumePerTemperatureUom.** To: **UomEnum**	
From**: MassPerVolumePerTemperatureUomExt.** To: **MassPerVolumePerTemperatureUom**	

19.211 MassPerVolumePerTemperatureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 11/11/2016 *Last modified:*12/6/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From: **MassPerVolumePerTemperatureUomExt.** To: **MassPerVolumePerTemperatureUom**	
From: **MassPerVolumePerTemperatureUomExt.** To: **EnumExtensionPattern**	

19.212 MassPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.001 lbm/bbl		pound-mass per thousand barrel
0.001 lbm/gal[UK]		pound-mass per thousand UK gallon
0.001 lbm/gal[US]		pound-mass per thousand US gallon
0.01 grain/ft3		grain per hundred cubic foot
0.1 lbm/bbl		pound-mass per ten barrel
10 Mg/m3		ten thousand kilogram per cubic metre
g/cm3		gram per cubic centimetre
g/dm3		gram per cubic decimetre
g/gal[UK]		gram per UK gallon
g/gal[US]		gram per US gallon
g/L		gram per litre
g/m3		gram per cubic metre
grain/ft3		grain per cubic foot
grain/gal[US]		grain per US gallon
kg/dm3		kilogram per cubic decimetre
kg/L		kilogram per litre
kg/m3		kilogram per cubic metre
lbm/bbl		pound-mass per barrel
lbm/ft3		pound-mass per cubic foot
lbm/gal[UK]		pound-mass per UK gallon
lbm/gal[US]		pound-mass per US gallon
lbm/in3		pound-mass per cubic inch
mg/dm3		milligram per cubic decimetre
mg/gal[US]		milligram per US gallon
mg/L		milligram per litre
mg/m3		milligram per cubic metre
Mg/m3		megagram per cubic metre
ng/l		
ng/m3		
ng/ml		
t/m3		tonne per cubic metre
ug/cm3		microgram per cubic centimetre

Associations

Association	Notes
From**: MassPerVolumeUom.** To: **UomEnum**	
From**: MassPerVolumeUomExt.** To: **MassPerVolumeUom**	
From**: MassPerVolumeUomWithLegacy.** To: **MassPerVolumeUom**	

19.213 MassPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MassPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **MassPerVolumeUomExt.** To: **LegacyMassPerVolumeUom**	
From: **MassPerVolumeUomExt.** To: **MassPerVolumeUom**	

19.214 MassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
ag		attogram
cg		centigram
ct		carat
cwt[UK]		UK hundredweight
cwt[US]		US hundredweight
Eg		exagram
fg		femtogram
g		gram
Gg		gigagram
grain		grain
hg		hectogram
kg		kilogram
klbm		thousand pound-mass
lbm		pound-mass
mg		milligram
Mg		megagram
ng		nanogram
ozm		ounce-mass
ozm[troy]		troy ounce-mass
pg		picogram
sack[94lbm]		94 pound-mass sack
t		tonne
Tg		teragram
ton[UK]		UK ton-mass
ton[US]		US ton-mass
ug		microgram

Associations

Association	Notes
From: **MassUom.** To: **UomEnum**	
From: **MassUomExt.** To: **MassUom**	

19.215 MassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MassUomExt.** To: **EnumExtensionPattern**	
From**: MassUomExt.** To: **MassUom**	

19.216 MobilityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
D/(Pa.s)		darcy per pascal second
D/cP		darcy per centipoise
mD.ft2/(lbf.s)		millidarcy square foot per pound-force second
mD.in2/(lbf.s)		millidarcy square inch per pound-force second
mD/(Pa.s)		millidarcy per pascal second
mD/cP		millidarcy per centipoise
TD[API]/(Pa.s)		teradarcy-API per pascal second

Associations

Association	Notes
From**: MobilityUom.** To: **UomEnum**	
From**: MobilityUomExt.** To: **MobilityUom**	

19.217 MobilityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MobilityUomExt.EnumExtensionPattern** To:	
From**: MobilityUomExt.** To: **MobilityUom**	

19.218 MolarEnergyUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/lbmol		BTU per pound-mass-mole
J/mol		joule per gram-mole
kcal[th]/mol		thousand calorie per gram-mole
kJ/kmol		kilojoule per kilogram-mole
MJ/kmol		megajoule per kilogram-mole

Associations

Association	Notes
From**: MolarEnergyUom.** To: **UomEnum**	
From**: MolarEnergyUomExt.** To: **MolarEnergyUom**	

19.219 MolarEnergyUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MolarEnergyUomExt.** To: **EnumExtensionPattern**	
From: **MolarEnergyUomExt.** To: **MolarEnergyUom**	

19.220 MolarHeatCapacityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(lbmol.deltaF)		BTU per pound-mass-mole delta Fahrenheit
cal[th]/(mol.deltaC)		calorie per gram-mole delta Celsius
J/(mol.deltaK)		joule per gram-mole delta kelvin
kJ/(kmol.deltaK)		kilojoule per kilogram-mole delta kelvin

Associations

Association	Notes
From: **MolarHeatCapacityUom.** To: **UomEnum**	
From: **MolarHeatCapacityUomExt.** To: **MolarHeatCapacityUom**	

19.221 MolarHeatCapacityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **MolarHeatCapacityUomExt.** To: **EnumExtensionPattern**	
From: **MolarHeatCapacityUomExt.** To: **MolarHeatCapacityUom**	

19.222 MolarVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
dm3/kmol		cubic decimetre per kilogram-mole
ft3/lbmol		cubic foot per pound-mass-mole
L/kmol		litre per kilogram-mole
L/mol		litre per gram-mole
m3/kmol		cubic metre per kilogram-mole
m3/mol		cubic metre per gram-mole

Associations

Association	Notes
From: **MolarVolumeUom.** To: **UomEnum**	
From: **MolarVolumeUomExt.** To: **MolarVolumeUom**	

19.223 MolarVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MolarVolumeUomExt.** To: **EnumExtensionPattern**	
From**: MolarVolumeUomExt.** To: **MolarVolumeUom**	

19.224 MolecularWeightUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
g/mol		gram per mole
kg/mol		kilogram per mole
lbm/lbmol		pound-mass per pound-mole

Associations

Association	Notes
From: **MolecularWeightUom.** To: **UomEnum**	
From: **MolecularWeightUomExt.** To: **MolecularWeightUom**	

19.225 MolecularWeightUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MolecularWeightUomExt.** To: **EnumExtensionPattern**	
From**: MolecularWeightUomExt.** To: **MolecularWeightUom**	

19.226 MomentOfForceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1000 lbf.ft		thousand foot pound-force
daN.m		dekanewton metre
dN.m		decinewton metre
J		joule
kgf.m		thousand gram-force metre
kN.m		kilonewton metre
lbf.ft		foot pound-force
lbf.in		inch pound-force
lbm.ft2/s2		pound-mass square foot per second squared
N.m		newton metre
pdl.ft		foot poundal
tonf[US].ft		US ton-force foot
tonf[US].mi		US ton-force mile

Associations

Association	Notes
From: **MomentOfForceUom.** To: **UomEnum**	
From: **MomentOfForceUomExt.** To: **MomentOfForceUom**	

19.227 MomentOfForceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MomentOfForceUomExt.** To: **EnumExtensionPattern**	
From**: MomentOfForceUomExt.** To: **MomentOfForceUom**	

19.228 MomentOfInertiaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kg.m2		kilogram square metre
lbm.ft2		pound-mass square foot

Associations

Association	Notes
From: **MomentOfInertiaUom.** To: **UomEnum**	
From: **MomentOfInertiaUomExt.** To: **MomentOfInertiaUom**	

19.229 MomentOfInertiaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MomentOfInertiaUomExt.** To: **EnumExtensionPattern**	
From**: MomentOfInertiaUomExt.** To: **MomentOfInertiaUom**	

19.230 MomentumUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
kg.m/s		kilogram metre per second
lbm.ft/s		foot pound-mass per second

Associations

Association	Notes
From**: MomentumUom.** To: **UomEnum**	
From**: MomentumUomExt.** To: **MomentumUom**	

19.231 MomentumUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: MomentumUomExt.** To: **MomentumUom**	
From**: MomentumUomExt.** To: **EnumExtensionPattern**	

19.232 NormalizedPowerUom

Type: Enumeration Stereotype:
Detail: Created: 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
B.W		bel watt
dB.mW		decibel milliwatt
dB.MW		decibel megawatt
dB.W		decibel watt

Associations

Association	Notes
From**: NormalizedPowerUom.** To: **UomEnum**	
From**: NormalizedPowerUomExt.** To: **NormalizedPowerUom**	

19.233 NormalizedPowerUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: NormalizedPowerUomExt.** To: **EnumExtensionPattern**	
From**: NormalizedPowerUomExt.** To: **NormalizedPowerUom**	

19.234 PermeabilityLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
D.ft		darcy foot
D.m		darcy metre
mD.ft		millidarcy foot
mD.m		millidarcy metre
TD[API].m		teradarcy-API metre

Associations

Association	Notes
From: **PermeabilityLengthUom.** To: **UomEnum**	
From: **PermeabilityLengthUomExt.** To: **PermeabilityLengthUom**	

19.235 PermeabilityLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PermeabilityLengthUomExt.** To: **PermeabilityLengthUom**	
From: **PermeabilityLengthUomExt.** To: **EnumExtensionPattern**	

19.236 PermeabilityRockUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
D		darcy
D[API]		darcy-API
mD		millidarcy
TD[API]		teradarcy-API

Associations

Association	Notes
From**: PermeabilityRockUom.** To: **UomEnum**	
From**: PermeabilityRockUomExt.** To: **PermeabilityRockUom**	

19.237 PermeabilityRockUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PermeabilityRockUomExt.** To: **PermeabilityRockUom**	
From: **PermeabilityRockUomExt.** To: **EnumExtensionPattern**	

19.238 PermittivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
F/m		farad per metre
uF/m		microfarad per metre

Associations

Association	Notes
From**: PermittivityUom.** To: **UomEnum**	
From**: PermittivityUomExt.** To: **PermittivityUom**	

19.239 PermittivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PermittivityUomExt.** To: **PermittivityUom**	
From**: PermittivityUomExt.** To: **EnumExtensionPattern**	

19.240 PlaneAngleUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.001 seca		angular millisecond
ccgr		centesimal-second
cgr		centesimal-minute
dega		angular degree
gon		gon
krad		kiloradian
mila		angular mil
mina		angular minute
Mrad		megaradian
mrad		milliradian
rad		radian
rev		revolution
seca		angular second
urad		microradian

Associations

Association	Notes
From**: PlaneAngleUom.** To: **UomEnum**	
From**: PlaneAngleUomExt.** To: **PlaneAngleUom**	

19.241 PlaneAngleUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PlaneAngleUomExt.** To: **PlaneAngleUom**	
From: **PlaneAngleUomExt.** To: **EnumExtensionPattern**	

19.242 PotentialDifferencePerPowerDropUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
V/B		volt per bel
V/dB		volt per decibel

Associations

Association	Notes
From: **PotentialDifferencePerPowerDropUom.** To: **UomEnum**	
From: **PotentialDifferencePerPowerDropUomExt.** To: **PotentialDifferencePerPowerDropUom**	

19.243 PotentialDifferencePerPowerDropUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PotentialDifferencePerPowerDropUomExt.** To: **PotentialDifferencePerPowerDropUom**	
From: **PotentialDifferencePerPowerDropUomExt.** To: **EnumExtensionPattern**	

19.244 PowerPerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(h.ft2)		(BTU per hour) per square foot
Btu[IT]/(s.ft2)		BTU per second square foot
cal[th]/(h.cm2)		calorie per hour square centimetre
hp/in2		horsepower per square inch
hp[hyd]/in2		hydraulic-horsepower per square inch
kW/cm2		kilowatt per square centimetre
kW/m2		kilowatt per square metre
mW/m2		milliwatt per square metre
ucal[th]/(s.cm2)		millionth of calorie per second square centimetre
W/cm2		watt per square centimetre
W/m2		watt per square metre
W/mm2		watt per square millimetre

Associations

Association	Notes
From: **PowerPerAreaUom.** To: **UomEnum**	
From: **PowerPerAreaUomExt.** To: **PowerPerAreaUom**	

19.245 PowerPerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PowerPerAreaUomExt.** To: **PowerPerAreaUom**	
From**: PowerPerAreaUomExt.** To: **EnumExtensionPattern**	

19.246 PowerPerPowerUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
Btu[IT]/(hp.h)		BTU per horsepower hour
Euc		euclid
W/kW		watt per kilowatt
W/W		watt per watt

Associations

Association	Notes
From: **PowerPerPowerUom.** To: **UomEnum**	
From: **PowerPerPowerUomExt.** To: **PowerPerPowerUom**	

19.247 PowerPerPowerUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PowerPerPowerUomExt.** To: **PowerPerPowerUom**	
From: **PowerPerPowerUomExt.** To: **EnumExtensionPattern**	

19.248 PowerPerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(h.ft3)		BTU per hour cubic foot
Btu[IT]/(s.ft3)		(BTU per second) per cubic foot
cal[th]/(h.cm3)		calorie per hour cubic centimetre
cal[th]/(s.cm3)		calorie per second cubic centimetre
hp/ft3		horsepower per cubic foot
kW/m3		kilowatt per cubic metre
uW/m3		microwatt per cubic metre
W/m3		watt per cubic metre

Associations

Association	Notes
From: **PowerPerVolumeUom.** To: **UomEnum**	
From: **PowerPerVolumeUomExt.** To: **PowerPerVolumeUom**	

19.249 PowerPerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PowerPerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **PowerPerVolumeUomExt.** To: **PowerPerVolumeUom**	

19.250 PowerUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
cW		centiwatt
dW		deciwatt
EW		exawatt
fW		femtowatt
GW		gigawatt
hp		horsepower
hp[elec]		electric-horsepower
hp[hyd]		hydraulic-horsepower
hp[metric]		metric-horsepower
kW		kilowatt
MW		megawatt
mW		milliwatt
nW		nanowatt
pW		picowatt
tonRefrig		ton-refrigeration
TW		terawatt
uW		microwatt
W		watt

Associations

Association	Notes
From**: PowerUom.** To: **UomEnum**	
From**: PowerUomExt.** To: **PowerUom**	

19.251 PowerUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PowerUomExt.** To: **EnumExtensionPattern**	
From**: PowerUomExt.** To: **PowerUom**	

19.252 PressurePerFlowrateSquaredUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/8/2017 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Mark Hollier
Notes:

Attributes

Name	Type	Notes
bar/(1000m3/day)2		
bar/(m3/day)2		
Pa/(1000m3/day)2		
Pa/(m3/day)2		
psi/(1000000ft3/day)2		
psi/(1000ft3/day)2		
psi/(bbl/day)2		

Associations

Association	Notes
From**: PressurePerFlowrateSquaredUom.** To: **UomEnum**	
From**: PressurePerFlowrateSquaredUomExt.** To: **PressurePerFlowrateSquaredUom**	

19.253 PressurePerFlowrateSquaredUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PressurePerFlowrateSquaredUomExt.** To: **PressurePerFlowrateSquaredUom**	
From**: PressurePerFlowrateSquaredUomExt.** To: **EnumExtensionPattern**	

19.254 PressurePerFlowrateUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 10/24/2018 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Mark Hollier
Notes:

Attributes

Name	Type	Notes
bar/(1000m3/day)		
bar/(m3/day)		
Pa/(1000m3/day)		
Pa/(m3/day)		
psi/(1000000ft3/day)		
psi/(1000ft3/day)		
psi/(bbl/day)		

Associations

Association	Notes
From: **PressurePerFlowrateUom.** To: **UomEnum**	
From: **PressurePerFlowrateUomExt.** To: **PressurePerFlowrateUom**	

19.255 PressurePerFlowrateUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PressurePerFlowrateUomExt.** To: **EnumExtensionPattern**	
From**: PressurePerFlowrateUomExt.** To: **PressurePerFlowrateUom**	

19.256 PressurePerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
atm/atm		standard atmosphere per standard atmosphere
bar/bar		bar per bar
Euc		euclid
kPa/kPa		kilopascal per kilopascal
MPa/MPa		megapascal per megapascal
Pa/Pa		pascal per pascal
psi/psi		psi per psi

Associations

Association	Notes
From: **PressurePerPressureUom.** To: **UomEnum**	
From: **PressurePerPressureUomExt.** To: **PressurePerPressureUom**	

19.257 PressurePerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PressurePerPressureUomExt.** To: **PressurePerPressureUom**	
From**: PressurePerPressureUomExt.** To: **EnumExtensionPattern**	

19.258 PressurePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
atm/h		standard atmosphere per hour
bar/h		bar per hour
kPa/h		kilopascal per hour
kPa/min		kilopascal per min
MPa/h		megapascal per hour
Pa/h		pascal per hour
Pa/s		pascal per second
psi/h		psi per hour
psi/min		psi per minute

Associations

Association	Notes
From: **PressurePerTimeUom.** To: **UomEnum**	
From: **PressurePerTimeUomExt.** To: **PressurePerTimeUom**	

19.259 PressurePerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PressurePerTimeUomExt.** To: **PressurePerTimeUom**	
From: **PressurePerTimeUomExt.** To: **EnumExtensionPattern**	

19.260 PressurePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Pa/m3		pascal per cubic metre
psi2.d/(cP.ft3)		psi squared day per centipoise cubic foot

Associations

Association	Notes
From: **PressurePerVolumeUom.** To: **UomEnum**	
From: **PressurePerVolumeUomWithLegacy.** To: **PressurePerVolumeUom**	
From: **PressurePerVolumeUomExt.** To: **PressurePerVolumeUom**	

19.261 PressurePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PressurePerVolumeUomExt.** To: **LegacyPressurePerVolumeUom**	
From: **PressurePerVolumeUomExt.** To: **EnumExtensionPattern**	
From: **PressurePerVolumeUomExt.** To: **PressurePerVolumeUom**	

19.262 PressureSquaredPerForceTimePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
0.001 kPa2/cP		kilopascal squared per thousand centipoise
bar2/cP		bar squared per centipoise
kPa2/cP		kilopascal squared per centipoise
Pa2/(Pa.s)		pascal squared per pascal second
psi2/cP		psi squared per centipoise

Associations

Association	Notes
From: **PressureSquaredPerForceTimePerAreaUom.** To: **UomEnum**	
From: **PressureSquaredPerForceTimePerAreaUomExt.** To: **PressureSquaredPerForceTimePerAreaUom**	

19.263 PressureSquaredPerForceTimePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PressureSquaredPerForceTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From: **PressureSquaredPerForceTimePerAreaUomExt.** To: **PressureSquaredPerForceTimePerAreaUom**	

19.264 PressureSquaredUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bar2		bar squared
GPa2		gigapascal squared
kPa2		kilopascal squared
kpsi2		(thousand psi) squared
Pa2		pascal squared
psi2		psi squared

Associations

Association	Notes
From: **PressureSquaredUom.** To: **UomEnum**	
From: **PressureSquaredUomExt.** To: **PressureSquaredUom**	

19.265 PressureSquaredUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **PressureSquaredUomExt.** To: **PressureSquaredUom**	
From: **PressureSquaredUomExt.** To: **EnumExtensionPattern**	

19.266 PressureTimePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Pa.s/m3		pascal second per cubic metre
psi.d/bbl		psi day per barrel

Associations

Association	Notes
From**: PressureTimePerVolumeUom.** To: **UomEnum**	
From**: PressureTimePerVolumeUomExt.** To: **PressureTimePerVolumeUom**	

19.267 PressureTimePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PressureTimePerVolumeUomExt.** To: **EnumExtensionPattern**	
From**: PressureTimePerVolumeUomExt.** To: **PressureTimePerVolumeUom**	

19.268 PressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.01 lbf/ft2		pound-force per hundred square foot
at		technical atmosphere
atm		standard atmosphere
bar		bar
cmH2O[4degC]		centimetre of water at 4 degree Celsius
cPa		centipascal
dPa		decipascal
dyne/cm2		dyne per square centimetre
EPa		exapascal
fPa		femtopascal
GPa		gigapascal
hbar		hundred bar
inH2O[39degF]		inch of water at 39.2 degree Fahrenheit
inH2O[60degF]		inch of water at 60 degree Fahrenheit
inHg[32degF]		inch of mercury at 32 degree Fahrenheit
inHg[60degF]		inch of mercury at 60 degree Fahrenheit
kgf/cm2		thousand gram-force per square centimetre
kgf/m2		thousand gram-force per square metre
kgf/mm2		thousand gram-force per square millimetre
kN/m2		kilonewton per square metre
kPa		kilopascal
kpsi		thousand psi
lbf/ft2		pound-force per square foot
mbar		thousandth of bar
mmHg[0degC]		millimetres of Mercury at 0 deg C
mPa		millipascal
MPa		megapascal
Mpsi		million psi
N/m2		newton per square metre
N/mm2		newton per square millimetre
nPa		nanopascal

Pa		pascal
pPa		picopascal
psi		pound-force per square inch
tonf[UK]/ft2		UK ton-force per square foot
tonf[US]/ft2		US ton-force per square foot
tonf[US]/in2		US ton-force per square inch
torr		torr
TPa		terapascal
ubar		millionth of bar
umHg[0degC]		micrometre of mercury at 0 degree Celsius
uPa		micropascal
upsi		millionth of psi

Associations

Association	Notes
From: **PressureUom.** To: **UomEnum**	
From: **PressureUomWithLegacy.** To: **PressureUom**	
From: **PressureUomExt.** To: **PressureUom**	

19.269 PressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: PressureUomExt. LegacyPressureUom** To:	
From**: PressureUomExt. PressureUom** To:	
From**: PressureUomExt. EnumExtensionPattern** To:	

19.270 QuantityOfLightUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
lm.s		lumen second

Associations

Association	Notes
From**: QuantityOfLightUom.** To: **UomEnum**	
From**: QuantityOfLightUomExt.** To: **QuantityOfLightUom**	

19.271 QuantityOfLightUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **QuantityOfLightUomExt.** To: **EnumExtensionPattern**	
From: **QuantityOfLightUomExt.** To: **QuantityOfLightUom**	

19.272 RadianceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
W/(m2.sr)		watt per square metre steradian

Associations

Association	Notes
From**: RadianceUom.** To: **UomEnum**	
From**: RadianceUomExt.** To: **RadianceUom**	

19.273 RadianceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: RadianceUomExt.** To: **RadianceUom**	
From**: RadianceUomExt.** To: **EnumExtensionPattern**	

19.274 RadiantIntensityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
W/sr		watt per steradian

Associations

Association	Notes
From**: RadiantIntensityUom.** To: **UomEnum**	
From**: RadiantIntensityUomExt.** To: **RadiantIntensityUom**	

19.275 RadiantIntensityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: RadiantIntensityUomExt.** To: **RadiantIntensityUom**	
From**: RadiantIntensityUomExt.** To: **EnumExtensionPattern**	

19.276 ReciprocalAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/ft2		per square foot
1/km2		per square kilometre
1/m2		per square metre
1/mi2		per square mile

Associations

Association	Notes
From: **ReciprocalAreaUom.** To: **UomEnum**	
From: **ReciprocalAreaUomExt.** To: **ReciprocalAreaUom**	

19.277 ReciprocalAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ReciprocalAreaUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalAreaUomExt.** To: **ReciprocalAreaUom**	

19.278 ReciprocalElectricPotentialDifferenceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/uV		per microvolt
1/V		per volt

Associations

Association	Notes
From: **ReciprocalElectricPotentialDifferenceUom.** To: **UomEnum**	
From: **ReciprocalElectricPotentialDifferenceUomExt.** To: **ReciprocalElectricPotentialDifferenceUom**	

19.279 ReciprocalElectricPotentialDifferenceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ReciprocalElectricPotentialDifferenceUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalElectricPotentialDifferenceUomExt.** To: **ReciprocalElectricPotentialDifferenceUom**	

19.280 ReciprocalForceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/lbf		per pound-force
1/N		per Newton

Associations

Association	Notes
From: **ReciprocalForceUom.** To: **UomEnum**	
From: **ReciprocalForceUomExt.** To: **ReciprocalForceUom**	

19.281 ReciprocalForceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReciprocalForceUomExt.** To: **ReciprocalForceUom**	
From**: ReciprocalForceUomExt.** To: **EnumExtensionPattern**	

19.282 ReciprocalLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1/angstrom		per angstrom
1/cm		per centimetre
1/ft		per foot
1/in		per inch
1/m		per metre
1/mi		per mile
1/mm		per millimetre
1/nm		per nanometre
1/yd		per yard
1E-9 1/ft		per thousand million foot

Associations

Association	Notes
From: **ReciprocalLengthUom.** To: **UomEnum**	
From: **ReciprocalLengthUomExt.** To: **ReciprocalLengthUom**	

19.283 ReciprocalLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReciprocalLengthUomExt.** To: **ReciprocalLengthUom**	
From**: ReciprocalLengthUomExt.** To: **EnumExtensionPattern**	

19.284 ReciprocalMassTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/(kg.s)		per (kilogram per second)
Bq/kg		becquerel per kilogram
pCi/g		picocurie per gram

Associations

Association	Notes
From: **ReciprocalMassTimeUom.** To: **UomEnum**	
From: **ReciprocalMassTimeUomExt.** To: **ReciprocalMassTimeUom**	

19.285 ReciprocalMassTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReciprocalMassTimeUomExt.** To: **ReciprocalMassTimeUom**	
From**: ReciprocalMassTimeUomExt.** To: **EnumExtensionPattern**	

19.286 ReciprocalMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/g		per gram
1/kg		per kilogram
1/lbm		per pound

Associations

Association	Notes
From**: ReciprocalMassUom.** To: **UomEnum**	
From**: ReciprocalMassUomExt.** To: **ReciprocalMassUom**	

19.287 ReciprocalMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReciprocalMassUomExt.** To: **ReciprocalMassUom**	
From**: ReciprocalMassUomExt.** To: **EnumExtensionPattern**	

19.288 ReciprocalPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1/bar		per bar
1/kPa		per kilopascal
1/Pa		per pascal
1/pPa		per picopascal
1/psi		per psi
1/upsi		per millionth of psi

Associations

Association	Notes
From: **ReciprocalPressureUom.** To: **UomEnum**	
From: **ReciprocalPressureUomExt.** To: **ReciprocalPressureUom**	

19.289 ReciprocalPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ReciprocalPressureUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalPressureUomExt.** To: **ReciprocalPressureUom**	

19.290 ReciprocalTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/a		per julian-year
1/d		per day
1/h		per hour
1/min		per minute
1/ms		per millisecond
1/s		per second
1/us		per microsecond
1/wk		per week

Associations

Association	Notes
From: **ReciprocalTimeUom.** To: **UomEnum**	
From: **ReciprocalTimeUomExt.** To: **ReciprocalTimeUom**	

19.291 ReciprocalTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ReciprocalTimeUomExt.** To: **EnumExtensionPattern**	
From: **ReciprocalTimeUomExt.** To: **ReciprocalTimeUom**	

19.292 ReciprocalVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/bbl		per barrel
1/ft3		per cubic foot
1/gal[UK]		per UK gallon
1/gal[US]		per US gallon
1/L		per litre
1/m3		per cubic metre

Associations

Association	Notes
From: **ReciprocalVolumeUom.** To: **UomEnum**	
From: **ReciprocalVolumeUomExt.** To: **ReciprocalVolumeUom**	

19.293 ReciprocalVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReciprocalVolumeUomExt.** To: **ReciprocalVolumeUom**	
From**: ReciprocalVolumeUomExt.** To: **EnumExtensionPattern**	

19.294 ReluctanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1/H		per henry

Associations

Association	Notes
From**: ReluctanceUom.** To: **UomEnum**	
From**: ReluctanceUomExt.** To: **ReluctanceUom**	

19.295 ReluctanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ReluctanceUomExt.** To: **ReluctanceUom**	
From**: ReluctanceUomExt.** To: **EnumExtensionPattern**	

19.296 SecondMomentOfAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cm4		centimetre to the fourth power
in4		inch to the fourth power
m4		metre to the fourth power

Associations

Association	Notes
From: **SecondMomentOfAreaUom.** To: **UomEnum**	
From: **SecondMomentOfAreaUomExt.** To: **SecondMomentOfAreaUom**	

19.297 SecondMomentOfAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: SecondMomentOfAreaUomExt.** To: **SecondMomentOfAreaUom**	
From**: SecondMomentOfAreaUomExt.** To: **EnumExtensionPattern**	

19.298 SignalingEventPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Bd		baud

Associations

Association	Notes
From: **SignalingEventPerTimeUom.** To: **UomEnum**	
From: **SignalingEventPerTimeUomExt.** To: **SignalingEventPerTimeUom**	

19.299 SignalingEventPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: SignalingEventPerTimeUomExt.** To: **EnumExtensionPattern**	
From**: SignalingEventPerTimeUomExt.** To: **SignalingEventPerTimeUom**	

19.300 SolidAngleUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
sr		steradian

Associations

Association	Notes
From**: SolidAngleUom.** To: **UomEnum**	
From**: SolidAngleUomExt.** To: **SolidAngleUom**	

19.301 SolidAngleUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: SolidAngleUomExt.** To: **SolidAngleUom**	
From**: SolidAngleUomExt.** To: **EnumExtensionPattern**	

19.302 SpecificHeatCapacityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(lbm.deltaF)		BTU per pound-mass delta Fahrenheit
Btu[IT]/(lbm.deltaR)		BTU per pound-mass delta Rankine
cal[th]/(g.deltaK)		calorie per gram delta kelvin
J/(g.deltaK)		joule per gram delta kelvin
J/(kg.deltaK)		joule per kilogram delta kelvin
kcal[th]/(kg.deltaC)		thousand calorie per kilogram delta Celsius
kJ/(kg.deltaK)		kilojoule per kilogram delta kelvin
kW.h/(kg.deltaC)		kilowatt hour per kilogram delta Celsius

Associations

Association	Notes
From: **SpecificHeatCapacityUom.** To: **UomEnum**	
From: **SpecificHeatCapacityUomExt.** To: **SpecificHeatCapacityUom**	

19.303 SpecificHeatCapacityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **SpecificHeatCapacityUomExt.** To: **SpecificHeatCapacityUom**	
From: **SpecificHeatCapacityUomExt.** To: **EnumExtensionPattern**	

19.304 TemperatureIntervalPerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
0.01 deltaF/ft		delta Fahrenheit per hundred foot
deltaC/ft		delta Celsius per foot
deltaC/hm		delta Celsius per hectometre
deltaC/km		delta Celsius per kilometre
deltaC/m		delta Celsius per metre
deltaF/ft		delta Fahrenheit per foot
deltaF/m		delta Fahrenheit per metre
deltaK/km		delta kelvin per kilometre
deltaK/m		delta kelvin per metre

Associations

Association	Notes
From**: TemperatureIntervalPerLengthUom.** To: **UomEnum**	
From**: TemperatureIntervalPerLengthUomExt.** To: **TemperatureIntervalPerLengthUom**	

19.305 TemperatureIntervalPerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TemperatureIntervalPerLengthUomExt.** To: **TemperatureIntervalPerLengthUom**	
From**: TemperatureIntervalPerLengthUomExt.** To: **EnumExtensionPattern**	

19.306 TemperatureIntervalPerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
deltaC/kPa		delta Celsius per kilopascal
deltaF/psi		delta Fahrenheit per psi
deltaK/Pa		delta kelvin per Pascal

Associations

Association	Notes
From: **TemperatureIntervalPerPressureUom.** To: **UomEnum**	
From: **TemperatureIntervalPerPressureUomExt.** To: **TemperatureIntervalPerPressureUom**	

19.307 TemperatureIntervalPerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **TemperatureIntervalPerPressureUomExt.** To: **TemperatureIntervalPerPressureUom**	
From: **TemperatureIntervalPerPressureUomExt.** To: **EnumExtensionPattern**	

19.308 TemperatureIntervalPerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
deltaC/h		delta Celsius per hour
deltaC/min		delta Celsius per minute
deltaC/s		delta Celsius per second
deltaF/h		delta Fahrenheit per hour
deltaF/min		delta Fahrenheit per minute
deltaF/s		delta Fahrenheit per second
deltaK/s		delta kelvin per second

Associations

Association	Notes
From**: TemperatureIntervalPerTimeUom.** To: **UomEnum**	
From**: TemperatureIntervalPerTimeUomExt.** To: **TemperatureIntervalPerTimeUom**	

19.309 TemperatureIntervalPerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TemperatureIntervalPerTimeUomExt.** To: **TemperatureIntervalPerTimeUom**	
From**: TemperatureIntervalPerTimeUomExt.** To: **EnumExtensionPattern**	

19.310 TemperatureIntervalUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
deltaC		delta Celsius
deltaF		delta Fahrenheit
deltaK		delta kelvin
deltaR		delta Rankine

Associations

Association	Notes
From: **TemperatureIntervalUom.** To: **UomEnum**	
From: **TemperatureIntervalUomExt.** To: **TemperatureIntervalUom**	

19.311 TemperatureIntervalUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **TemperatureIntervalUomExt.** To: **EnumExtensionPattern**	
From: **TemperatureIntervalUomExt.** To: **TemperatureIntervalUom**	

19.312 ThermalConductanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
W/deltaK		watt per delta kelvin

Associations

Association	Notes
From: **ThermalConductanceUom.** To: **UomEnum**	
From: **ThermalConductanceUomExt.** To: **ThermalConductanceUom**	

19.313 ThermalConductanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ThermalConductanceUomExt.** To: **EnumExtensionPattern**	
From**: ThermalConductanceUomExt.** To: **ThermalConductanceUom**	

19.314 ThermalConductivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(h.ft.deltaF)		BTU per hour foot delta Fahrenheit
cal[th]/(h.cm.deltaC)		calorie per hour centimetre delta Celsius
cal[th]/(s.cm.deltaC)		calorie per second centimetre delta Celsius
kcal[th]/(h.m.deltaC)		thousand calorie per hour metre delta Celsius
W/(m.deltaK)		watt per metre delta kelvin

Associations

Association	Notes
From**: ThermalConductivityUom.** To: **UomEnum**	
From**: ThermalConductivityUomExt.** To: **ThermalConductivityUom**	

19.315 ThermalConductivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ThermalConductivityUomExt.** To: **EnumExtensionPattern**	
From: **ThermalConductivityUomExt.** To: **ThermalConductivityUom**	

19.316 ThermalDiffusivityUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
cm2/s		square centimetre per second
ft2/h		square foot per hour
ft2/s		square foot per second
in2/s		square inch per second
m2/h		square metre per hour
m2/s		square metre per second
mm2/s		square millimetre per second

Associations

Association	Notes
From: **ThermalDiffusivityUom.** To: **UomEnum**	
From: **ThermalDiffusivityUomExt.** To: **ThermalDiffusivityUom**	

19.317 ThermalDiffusivityUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ThermalDiffusivityUomExt.** To: **EnumExtensionPattern**	
From: **ThermalDiffusivityUomExt.** To: **ThermalDiffusivityUom**	

19.318 ThermalInsulanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
deltaC.m2.h/kcal[th]		delta Celsius square metre hour per thousand calory
deltaF.ft2.h/Btu[IT]		delta Fahrenheit square foot hour per BTU
deltaK.m2/kW		delta kelvin square metre per kilowatt
deltaK.m2/W		delta kelvin square metre per watt

Associations

Association	Notes
From: **ThermalInsulanceUom.** To: **UomEnum**	
From: **ThermalInsulanceUomExt.** To: **ThermalInsulanceUom**	

19.319 ThermalInsulanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ThermalInsulanceUomExt.** To: **EnumExtensionPattern**	
From: **ThermalInsulanceUomExt.** To: **ThermalInsulanceUom**	

19.320 ThermalResistanceUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
deltaK/W		delta kelvin per watt

Associations

Association	Notes
From: **ThermalResistanceUom.** To: **UomEnum**	
From: **ThermalResistanceUomExt.** To: **ThermalResistanceUom**	

19.321 ThermalResistanceUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ThermalResistanceUomExt.** To: **EnumExtensionPattern**	
From: **ThermalResistanceUomExt.** To: **ThermalResistanceUom**	

19.322 ThermodynamicTemperaturePerThermodynamicTemperatureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
degC/degC		degree Celsius per degree Celsius
degF/degF		degree Fahrenheit per degree Fahrenheit
degR/degR		degree Rankine per degree Rankine
Euc		euclid
K/K		kelvin per kelvin

Associations

Association	Notes
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUom.** To: **UomEnum**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUomExt.** To: **ThermodynamicTemperaturePerThermodynamicTemperatureUom**	

19.323 ThermodynamicTemperaturePerThermodynamicTemperatureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 8/4/2016 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUomExt.** To: **ThermodynamicTemperaturePerThermodynamicTemperatureUom**	
From: **ThermodynamicTemperaturePerThermodynamicTemperatureUomExt.** To: **EnumExtensionPattern**	

19.324 ThermodynamicTemperatureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
degC		degree Celsius
degF		degree Fahrenheit
degR		degree Rankine
K		degree kelvin

Associations

Association	Notes
From**: ThermodynamicTemperatureUom.** To: **UomEnum**	
From**: ThermodynamicTemperatureUomExt.** To: **ThermodynamicTemperatureUom**	

19.325 ThermodynamicTemperatureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: ThermodynamicTemperatureUomExt.** To: **EnumExtensionPattern**	
From**: ThermodynamicTemperatureUomExt.** To: **ThermodynamicTemperatureUom**	

19.326 TimePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
0.001 h/ft		hour per thousand foot
h/km		hour per kilometre
min/ft		minute per foot
min/m		minute per metre
ms/cm		millisecond per centimetre
ms/ft		millisecond per foot
ms/in		millisecond per inch
ms/m		millisecond per metre
ns/ft		nanosecond per foot
ns/m		nanosecond per metre
s/cm		second per centimetre
s/ft		second per foot
s/in		second per inch
s/m		second per metre
us/ft		microsecond per foot
us/in		microsecond per inch
us/m		microsecond per metre

Associations

Association	Notes
From**: TimePerLengthUom.** To: **UomEnum**	
From**: TimePerLengthUomExt.** To: **TimePerLengthUom**	

19.327 TimePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TimePerLengthUomExt.** To: **TimePerLengthUom**	
From**: TimePerLengthUomExt.** To: **EnumExtensionPattern**	

19.328 TimePerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
s/kg		second per kilogram

Associations

Association	Notes
From: **TimePerMassUom.** To: **UomEnum**	
From: **TimePerMassUomExt.** To: **TimePerMassUom**	

19.329 TimePerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TimePerMassUomExt.** To: **EnumExtensionPattern**	
From**: TimePerMassUomExt.** To: **TimePerMassUom**	

19.330 TimePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
%		percent
Euc		euclid
ms/s		millisecond per second
s/s		second per second

Associations

Association	Notes
From**: TimePerTimeUom.** To: **UomEnum**	
From**: TimePerTimeUomExt.** To: **TimePerTimeUom**	

19.331 TimePerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TimePerTimeUomExt.** To: **TimePerTimeUom**	
From**: TimePerTimeUomExt.** To: **EnumExtensionPattern**	

19.332 TimePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
0.001 d/ft3		day per thousand cubic foot
d/bbl		day per barrel
d/ft3		day per cubic foot
d/m3		day per cubic metre
h/ft3		hour per cubic foot
h/m3		hour per cubic metre
s/ft3		second per cubic foot
s/L		second per litre
s/m3		second per cubic metre
s/qt[UK]		second per UK quart
s/qt[US]		second per US quart

Associations

Association	Notes
From: **TimePerVolumeUom.** To: **UomEnum**	
From: **TimePerVolumeUomExt.** To: **TimePerVolumeUom**	

19.333 TimePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TimePerVolumeUomExt. EnumExtensionPattern** To:	
From**: TimePerVolumeUomExt. TimePerVolumeUom** To:	

19.334 TimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1/2 ms		half of millisecond
100 ka[t]		hundred thousand tropical-year
a		julian-year
a[t]		tropical-year
ca		hundredth of julian-year
cs		centisecond
d		day
ds		decisecond
Ea[t]		million million million tropical-year
fa		femtojulian-year
Ga[t]		thousand million tropical-year
h		hour
hs		hectosecond
ka[t]		thousand tropical-year
Ma[t]		million tropical-year
min		minute
ms		millisecond
na		nanojulian-year
ns		nanosecond
ps		picosecond
s		second
Ta[t]		million million tropical-year
us		microsecond
wk		week

Associations

Association	Notes
From: **TimeUom.** To: **UomEnum**	
From: **LengthAndTimeUomExt.** To: **TimeUom**	
From: **TimeUomExt.** To: **TimeUom**	

19.335 TimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: TimeUomExt.** To: **EnumExtensionPattern**	
From**: TimeUomExt.** To: **TimeUom**	

19.336 VerticalCoordinateUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Hari Koduru
Notes: *The units of measure that are valid for vertical gravity based coordinates (i.e., elevation or vertical depth).*

Attributes

Name	Type	Notes
m		meter
ft		International Foot
ftUS		US Survey Foot
ftBr(65)		British Foot 1865

Associations

Association	Notes
From: **VerticalCoordinateUom.** To: **UomEnum**	
From: **VerticalCoordinateUomExt.** To: **VerticalCoordinateUom**	

19.337 VerticalCoordinateUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VerticalCoordinateUomExt.** To: **VerticalCoordinateUom**	
From**: VerticalCoordinateUomExt.** To: **EnumExtensionPattern**	

19.338 VolumeFlowRatePerVolumeFlowRateUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
%		percent
(bbl/d)/(bbl/d)		(barrel per day) per (barrel per day)
(m3/d)/(m3/d)		(cubic metre per day) per (cubic metre per day)
(m3/s)/(m3/s)		(cubic metre per second) per (cubic metre per second)
1E6 (ft3/d)/(bbl/d)		(million cubic foot per day) per (barrel per day)
Euc		euclid

Associations

Association	Notes
From: **VolumeFlowRatePerVolumeFlowRateUom.** To: **UomEnum**	
From: **VolumeFlowRatePerVolumeFlowRateUomExt.** To: **VolumeFlowRatePerVolumeFlowRateUom**	

19.339 VolumeFlowRatePerVolumeFlowRateUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumeFlowRatePerVolumeFlowRateUomExt.** To: **VolumeFlowRatePerVolumeFlowRateUom**	
From: **VolumeFlowRatePerVolumeFlowRateUomExt.** To: **EnumExtensionPattern**	

19.340 VolumePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1E6 bbl/acre		million barrel per acre
bbl/acre		barrel per acre
ft3/ft2		cubic foot per square foot
m3/m2		cubic metre per square metre

Associations

Association	Notes
From**: VolumePerAreaUom.** To: **UomEnum**	
From**: VolumePerAreaUomWithLegacy.** To: **VolumePerAreaUom**	
From**: VolumePerAreaUomExt.** To: **VolumePerAreaUom**	

19.341 VolumePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*7/12/2017 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerAreaUomExt.** To: **LegacyVolumePerAreaUom**	
From: **VolumePerAreaUomExt.** To: **VolumePerAreaUom**	
From: **VolumePerAreaUomExt.** To: **EnumExtensionPattern**	

19.342 VolumePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.01 dm3/km		cubic decimetre per hundred kilometre
0.01 L/km		litre per hundred kilometre
bbl/ft		barrel per foot
bbl/in		barrel per inch
bbl/mi		barrel per mile
dm3/m		cubic decimetre per metre
ft3/ft		cubic foot per foot
gal[UK]/mi		UK gallon per mile
gal[US]/ft		US gallon per foot
gal[US]/mi		US gallon per mile
in3/ft		cubic inch per foot
L/m		litre per metre
m3/km		cubic metre per kilometre
m3/m		cubic metre per metre

Associations

Association	Notes
From: **VolumePerLengthUom.** To: **UomEnum**	
From: **VolumePerLengthUomExt.** To: **VolumePerLengthUom**	

19.343 VolumePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerLengthUomExt.** To: **VolumePerLengthUom**	
From: **VolumePerLengthUomExt.** To: **EnumExtensionPattern**	

19.344 VolumePerMassUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
0.01 L/kg		litre per hundred kilogram
bbl/ton[UK]		barrel per UK ton-mass
bbl/ton[US]		barrel per US ton-mass
cm3/g		cubic centimetre per gram
dm3/kg		cubic decimetre per kilogram
dm3/t		cubic decimetre per ton
ft3/kg		cubic foot per kilogram
ft3/lbm		cubic foot per pound-mass
ft3/sack[94lbm]		cubic foot per 94-pound-sack
gal[UK]/lbm		UK gallon per pound-mass
gal[US]/lbm		US gallon per pound-mass
gal[US]/sack[94lbm]		US gallon per 94-pound-sack
gal[US]/ton[UK]		US gallon per UK ton-mass
gal[US]/ton[US]		US gallon per US ton-mass
L/kg		litre per kilogram
L/t		litre per tonne
L/ton[UK]		litre per UK ton-mass
m3/g		cubic metre per gram
m3/kg		cubic metre per kilogram
m3/t		cubic metre per tonne
m3/ton[UK]		cubic metre per UK ton-mass
m3/ton[US]		cubic metre per US ton-mass

Associations

Association	Notes
From: **VolumePerMassUom.** To: **UomEnum**	
From: **VolumePerMassUomExt.** To: **VolumePerMassUom**	

19.345 VolumePerMassUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerMassUomExt.** To: **EnumExtensionPattern**	
From**: VolumePerMassUomExt.** To: **VolumePerMassUom**	

19.346 VolumePerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bbl/psi		barrel per psi
m3/kPa		cubic metre per kilopascal
m3/Pa		cubic metre per Pascal

Associations

Association	Notes
From: **VolumePerPressureUom.** To: **UomEnum**	
From: **VolumePerPressureUomExt.** To: **VolumePerPressureUom**	

19.347 VolumePerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerPressureUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerPressureUomExt.** To: **VolumePerPressureUom**	

19.348 VolumePerRotationUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft3/rad		cubic foot per radian
m3/rad		cubic metre per radian
m3/rev		cubic metre per revolution

Associations

Association	Notes
From: **VolumePerRotationUom.** To: **UomEnum**	
From: **VolumePerRotationUomExt.** To: **VolumePerRotationUom**	

19.349 VolumePerRotationUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerRotationUomExt.** To: **VolumePerRotationUom**	
From: **VolumePerRotationUomExt.** To: **EnumExtensionPattern**	

19.350 VolumePerTimeLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1000 bbl.ft/d		thousand barrel foot per day
1000 m4/d		thousand (cubic metre per day) metre
m4/s		metre to the fourth power per second

Associations

Association	Notes
From: **VolumePerTimeLengthUom.** To: **UomEnum**	
From: **VolumePerTimeLengthUomExt.** To: **VolumePerTimeLengthUom**	

19.351 VolumePerTimeLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimeLengthUomExt.** To: **EnumExtensionPattern**	
From**: VolumePerTimeLengthUomExt.** To: **VolumePerTimeLengthUom**	

19.352 VolumePerTimePerAreaUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
ft3/(min.ft2)		cubic foot per minute square foot
ft3/(s.ft2)		cubic foot per second square foot
gal[UK]/(h.ft2)		UK gallon per hour square foot
gal[UK]/(h.in2)		UK gallon per hour square inch
gal[UK]/(min.ft2)		UK gallon per minute square foot
gal[US]/(h.ft2)		US gallon per hour square foot
gal[US]/(h.in2)		US gallon per hour square inch
gal[US]/(min.ft2)		US gallon per minute square foot
m3/(s.m2)		cubic metre per second square metre

Associations

Association	Notes
From**: VolumePerTimePerAreaUom.** To: **UomEnum**	
From**: VolumePerTimePerAreaUomExt.** To: **VolumePerTimePerAreaUom**	

19.353 VolumePerTimePerAreaUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimePerAreaUomExt.** To: **EnumExtensionPattern**	
From**: VolumePerTimePerAreaUomExt.** To: **VolumePerTimePerAreaUom**	

19.354 VolumePerTimePerLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1000 ft3/(d.ft)		(thousand cubic foot per day) per foot
1000 m3/(d.m)		(thousand cubic metre per day) per metre
1000 m3/(h.m)		(thousand cubic metre per hour) per metre
bbl/(d.ft)		barrel per day foot
ft3/(d.ft)		(cubic foot per day) per foot
gal[UK]/(h.ft)		UK gallon per hour foot
gal[UK]/(h.in)		UK gallon per hour inch
gal[UK]/(min.ft)		UK gallon per minute foot
gal[US]/(h.ft)		US gallon per hour foot
gal[US]/(h.in)		US gallon per hour inch
gal[US]/(min.ft)		US gallon per minute foot
m3/(d.m)		(cubic metre per day) per metre
m3/(h.m)		(cubic metre per hour) per metre
m3/(s.ft)		(cubic metre per second) per foot
m3/(s.m)		cubic metre per second metre

Associations

Association	Notes
From**: VolumePerTimePerLengthUom.** To: **UomEnum**	
From**: VolumePerTimePerLengthUomExt.** To: **VolumePerTimePerLengthUom**	

19.355 VolumePerTimePerLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimePerLengthUomExt.** To: **EnumExtensionPattern**	
From**: VolumePerTimePerLengthUomExt.** To: **VolumePerTimePerLengthUom**	

19.356 VolumePerTimePerPressureLengthUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bbl/(ft.psi.d)		barrel per day foot psi
ft3/(ft.psi.d)		cubic foot per day foot psi
m2/(kPa.d)		square metre per kilopascal day
m2/(Pa.s)		square metre per pascal second

Associations

Association	Notes
From: **VolumePerTimePerPressureLengthUom.** To: **UomEnum**	
From: **VolumePerTimePerPressureLengthUomExt.** To: **VolumePerTimePerPressureLengthUom**	

19.357 VolumePerTimePerPressureLengthUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerTimePerPressureLengthUomExt.** To: **EnumExtensionPattern**	
From: **VolumePerTimePerPressureLengthUomExt.** To: **VolumePerTimePerPressureLengthUom**	

19.358 VolumePerTimePerPressureUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
1000 ft3/(psi.d)		(thousand cubic foot per day) per psi
bbl/(kPa.d)		(barrel per day) per kilopascal
bbl/(psi.d)		(barrel per day) per psi
L/(bar.min)		(litre per minute) per bar
m3/(bar.d)		(cubic metre per day) per bar
m3/(bar.h)		(cubic metre per hour) per bar
m3/(bar.min)		(cubic metre per minute) per bar
m3/(kPa.d)		(cubic metre per day) per kilopascal
m3/(kPa.h)		(cubic metre per hour) per kilopascal
m3/(Pa.s)		cubic metre per pascal second
m3/(psi.d)		(cubic metre per day) per psi

Associations

Association	Notes
From: **VolumePerTimePerPressureUom.** To: **UomEnum**	
From: **VolumePerTimePerPressureUomExt.** To: **VolumePerTimePerPressureUom**	

19.359 VolumePerTimePerPressureUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimePerPressureUomExt.** To: **VolumePerTimePerPressureUom**	
From**: VolumePerTimePerPressureUomExt.** To: **EnumExtensionPattern**	

19.360 VolumePerTimePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bbl/d2		(barrel per day) per day
bbl/h2		(barrel per hour) per hour
dm3/s2		(cubic decimetre per second) per second
ft3/d2		(cubic foot per day) per day
ft3/h2		(cubic foot per hour) per hour
ft3/min2		(cubic foot per minute) per minute
ft3/s2		(cubic foot per second) per second
gal[UK]/h2		(UK gallon per hour) per hour
gal[UK]/min2		(UK gallon per minute) per minute
gal[US]/h2		(US gallon per hour) per hour
gal[US]/min2		(US gallon per minute) per minute
L/s2		(litre per second) per second
m3/d2		(cubic metre per day) per day
m3/s2		cubic metre per second squared

Associations

Association	Notes
From: **VolumePerTimePerTimeUom.** To: **UomEnum**	
From: **VolumePerTimePerTimeUomExt.** To: **VolumePerTimePerTimeUom**	

19.361 VolumePerTimePerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimePerTimeUomExt.** To: **VolumePerTimePerTimeUom**	
From**: VolumePerTimePerTimeUomExt.** To: **EnumExtensionPattern**	

19.362 VolumePerTimePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
bbl/(d.acre.ft)		barrel per day acre foot
m3/(s.m3)		cubic metre per time cubic metre

Associations

Association	Notes
From**: VolumePerTimePerVolumeUom.** To: **UomEnum**	
From**: VolumePerTimePerVolumeUomExt.** To: **VolumePerTimePerVolumeUom**	

19.363 VolumePerTimePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumePerTimePerVolumeUomExt.** To: **EnumExtensionPattern**	
From**: VolumePerTimePerVolumeUomExt.** To: **VolumePerTimePerVolumeUom**	

19.364 VolumePerTimeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1/30 cm3/min		cubic centimetre per thirty minute
1000 bbl/d		thousand barrel per day
1000 ft3/d		thousand cubic foot per day
1000 m3/d		thousand cubic metre per day
1000 m3/h		thousand cubic metre per hour
1E6 bbl/d		million barrel per day
1E6 ft3/d		million cubic foot per day
1E6 m3/d		million cubic metre per day
bbl/d		barrel per day
bbl/h		barrel per hour
bbl/min		barrel per minute
cm3/h		cubic centimetre per hour
cm3/min		cubic centimetre per minute
cm3/s		cubic centimetre per second
dm3/s		cubic decimetre per second
ft3/d		cubic foot per day
ft3/h		cubic foot per hour
ft3/min		cubic foot per minute
ft3/s		cubic foot per second
gal[UK]/d		UK gallon per day
gal[UK]/h		UK gallon per hour
gal[UK]/min		UK gallon per minute
gal[US]/d		US gallon per day
gal[US]/h		US gallon per hour
gal[US]/min		US gallon per minute
L/h		litre per hour
L/min		litre per minute
L/s		litre per second
m3/d		cubic metre per day
m3/h		cubic metre per hour
m3/min		cubic metre per minute
m3/s		cubic metre per second

Associations

Association	Notes
From**: VolumePerTimeUom.** To: **UomEnum**	
From**: VolumePerTimeUomExt.** To: **VolumePerTimeUom**	
From**: VolumePerTimeUomWithLegacy.** To: **VolumePerTimeUom**	

19.365 VolumePerTimeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerTimeUomExt.** To: **VolumePerTimeUom**	
From: **VolumePerTimeUomExt.** To: **LegacyVolumePerTimeUom**	
From: **VolumePerTimeUomExt.** To: **EnumExtensionPattern**	

19.366 VolumePerVolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
%		percent
%[vol]		percent [volume basis]
0.001 bbl/ft3		barrel per thousand cubic foot
0.001 bbl/m3		barrel per thousand cubic metre
0.001 gal[UK]/bbl		UK gallon per thousand barrel
0.001 gal[UK]/gal[UK]		UK gallon per thousand UK gallon
0.001 gal[US]/bbl		US gallon per thousand barrel
0.001 gal[US]/ft3		US gallon per thousand cubic foot
0.001 gal[US]/gal[US]		US gallon per thousand US gallon
0.001 pt[UK]/bbl		UK pint per thousand barrel
0.01 bbl/bbl		barrel per hundred barrel
0.1 gal[US]/bbl		US gallon per ten barrel
0.1 L/bbl		litre per ten barrel
0.1 pt[US]/bbl		US pint per ten barrel
1000 ft3/bbl		thousand cubic foot per barrel
1000 m3/m3		thousand cubic metre per cubic metre
1E-6 acre.ft/bbl		acre foot per million barrel
1E-6 bbl/ft3		barrel per million cubic foot
1E-6 bbl/m3		barrel per million cubic metre
1E6 bbl/(acre.ft)		million barrel per acre foot
1E6 ft3/(acre.ft)		million cubic foot per acre foot
1E6 ft3/bbl		million cubic foot per barrel
bbl/(acre.ft)		barrel per acre foot
bbl/bbl		barrel per barrel
bbl/ft3		barrel per cubic foot
bbl/m3		barrel per cubic metre
cEuc		centieuclid
cm3/cm3		cubic centimetre per cubic centimetre
cm3/L		cubic centimetre per litre
cm3/m3		cubic centimetre per cubic metre
dm3/m3		cubic decimetre per cubic metre
Euc		euclid

ft3/bbl		cubic foot per barrel
ft3/ft3		cubic foot per cubic foot
gal[UK]/ft3		UK gallon per cubic foot
gal[US]/bbl		US gallon per barrel
gal[US]/ft3		US gallon per cubic foot
L/m3		litre per cubic metre
m3/(ha.m)		cubic metre per hectare metre
m3/bbl		cubic metre per barrel
m3/m3		cubic metre per cubic metre
mL/gal[UK]		millilitre per UK gallon
mL/gal[US]		millilitre per US gallon
mL/mL		millilitre per millilitre
ppk		part per thousand
ppm		part per million
ppm[vol]		part per million [volume basis]

Associations

Association	Notes
From: **VolumePerVolumeUom.** To: **UomEnum**	
From: **VolumePerVolumeUomWithLegacy.** To: **VolumePerVolumeUom**	
From: **VolumePerVolumeUomExt.** To: **VolumePerVolumeUom**	

19.367 VolumePerVolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumePerVolumeUomExt.** To: **LegacyVolumePerVolumeUom**	
From: **VolumePerVolumeUomExt.** To: **VolumePerVolumeUom**	
From: **VolumePerVolumeUomExt.** To: **EnumExtensionPattern**	

19.368 VolumetricHeatTransferCoefficientUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 8/5/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
Btu[IT]/(h.ft3.deltaF)		BTU per hour cubic foot delta Fahrenheit
Btu[IT]/(s.ft3.deltaF)		(BTU per second) per cubic foot delta Fahrenheit
kW/(m3.deltaK)		killowatt per cubic metre delta kelvin
W/(m3.deltaK)		watt per cubic metre delta kelvin

Associations

Association	Notes
From: **VolumetricHeatTransferCoefficientUom.** To: **UomEnum**	
From: **VolumetricHeatTransferCoefficientUomExt.** To: **VolumetricHeatTransferCoefficientUom**	

19.369 VolumetricHeatTransferCoefficientUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From: **VolumetricHeatTransferCoefficientUomExt.** To: **VolumetricHeatTransferCoefficientUom**	
From: **VolumetricHeatTransferCoefficientUomExt.** To: **EnumExtensionPattern**	

19.370 VolumetricThermalExpansionUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*1/16/2019 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1/deltaC		per delta Celsius
1/deltaF		per delta Fahrenheit
1/deltaK		per delta kelvin
1/deltaR		per delta Rankine
1E-6 m3/(m3.deltaC)		(cubic metre per million cubic metre) per delta Celsius
1E-6 m3/(m3.deltaF)		(cubic metre per million cubic metre) per delta Fahrenheit
m3/(m3.deltaK)		cubic metre per cubic metre delta kelvin
ppm[vol]/deltaC		(part per million [volume basis]) per delta Celsius
ppm[vol]/deltaF		(part per million [volume basis)] per delta Fahrenheit

Associations

Association	Notes
From: **VolumetricThermalExpansionUom.** To: **UomEnum**	
From: **VolumetricThermalExpansionUomExt.** To: **VolumetricThermalExpansionUom**	

19.371 VolumetricThermalExpansionUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumetricThermalExpansionUomExt.** To: **VolumetricThermalExpansionUom**	
From**: VolumetricThermalExpansionUomExt.** To: **EnumExtensionPattern**	

19.372 VolumeUom

Type: Enumeration *Stereotype:*
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
1000 bbl		thousand barrel
1000 ft3		thousand cubic foot
1000 gal[UK]		thousand UK gallon
1000 gal[US]		thousand US gallon
1000 m3		thousand cubic metre
1E-6 gal[US]		millionth of US gallon
1E12 ft3		million million cubic foot
1E6 bbl		million barrel
1E6 ft3		million cubic foot
1E6 m3		million cubic metre
1E9 bbl		thousand million barrel
1E9 ft3		thousand million cubic foot
acre.ft		acre foot
bbl		barrel
cm3		cubic centimetre
dm3		cubic decimetre
floz[UK]		UK fluid-ounce
floz[US]		US fluid-ounce
ft3		cubic foot
gal[UK]		UK gallon
gal[US]		US gallon
ha.m		hectare metre
hL		hectolitre
in3		cubic inch
km3		cubic kilometre
L		litre
m3		cubic metre
mi3		cubic mile
mL		millilitre
mm3		cubic millimetre
pt[UK]		UK pint
pt[US]		US pint

qt[UK]		UK quart
qt[US]		US quart
um2.m		square micrometre metre
yd3		cubic yard

Associations

Association	Notes
From: **VolumeUom.** To: **UomEnum**	
From: **VolumeUomWithLegacy.** To: **VolumeUom**	
From: **VolumeUomExt.** To: **VolumeUom**	

19.373 VolumeUomExt

Type: Class *Stereotype:* «XSDunion»
Detail: *Created:* 3/6/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* jay hollingsworth
Notes:

Associations

Association	Notes
From**: VolumeUomExt. EnumExtensionPattern** To:	
From**: VolumeUomExt.** To: **VolumeUom**	
From**: VolumeUomExt. LegacyVolumeUom** To:	

20 ValueTypes

Package: xsd_schemas

Notes: The ValueTypes package contains classes related to certain production-related measurements which are given relative to a pressure bases (typically a variant of atmospheric pressure).

Some measurement values need to have certain measurement conditions included. For example, pressure and temperature can reference a standard condition. Or pressure measurements can be absolute or relative to another pressure (either gauge pressure or another value).

The value types package includes classes to define these types of relationships.

«XSDcomplexType»
DensityValue
«XSDelement»
+ Density: MassPerVolumeMeasure
«XSDcomplexType»
FlowRateValue
«XSDelement»
+ FlowRate: VolumePerTimeMeasure
«XSDcomplexType»
VolumeValue
«XSDelement»
+ Volume: VolumeMeasure
+MeasurementPressureTemperature
0..1
0..1
0..1
+MeasurementPressureTemperature
+MeasurementPressureTemperature
«XSDcomplexType»
AbstractTemperaturePressure
«XSDcomplexType»
ReferenceTemperaturePressure
«XSDelement»
+ ReferenceTempPres: ReferenceConditionExt
«XSDcomplexType»
TemperaturePressure
«XSDelement»
+ Pressure: PressureMeasure
+ Temperature: ThermodynamicTemperatureMeasure

20.1 AbsolutePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
AbsolutePressure	PressureMeasureExt	

Associations

Association	Notes
From**: AbsolutePressure.** To: **AbstractPressureValue**	

20.2 AbstractPressureValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: RelativePressure.** To: **AbstractPressureValue**	
From**: GaugePressure.** To: **AbstractPressureValue**	
From**: PressureValue.** To: **AbstractPressureValue**	
From**: AbsolutePressure.** To: **AbstractPressureValue**	

20.3 AbstractTemperaturePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *The Abstract base type of standard pressure and temperature*

Associations

Association	Notes
From**: ReferenceTemperaturePressure.** To: **AbstractTemperaturePressure**	
From**:** **FlowRateValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	
From**:** **VolumeValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	
From**: TemperaturePressure.** To: **AbstractTemperaturePressure**	
From**:** **DensityValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	

20.4 DensityValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/17/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *A possibly temperature and pressure corrected desity value.*

Attributes

Name	Type	Notes
Density	MassPerVolumeMeasure	The density of the product.

Associations

Association	Notes
From: **DensityValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	
From: **CommonPropertiesProductVolume.**DensityValue **0..*** To: **DensityValue**	A possibly temperature and pressure corrected desity value.

20.5 FlowRateValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/17/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *A possibly temperature and pressure corrected flow rate value.*

Attributes

Name	Type	Notes
FlowRate	VolumePerTimeMeasure	The flow rate of the product. If the 'status' attribute is absent and the value is not "NaN", the data value can be assumed to be good with no restrictions. A value of "NaN" should be interpreted as null and should be not be given unless a status is also specified to explain why it is null.

Associations

Association	Notes
From: **FlowRateValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	
From: **CommonPropertiesProductVolume.**FlowRateValue **0..*** To: **FlowRateValue**	A possibly temperature and pressure corrected flow rate value.

20.6 GaugePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
GaugePressure	PressureMeasureExt	

Associations

Association	Notes
0..1 From**: GaugePressure.**ReferencePressure To: **ReferencePressure**	
From**: GaugePressure.** To: **AbstractPressureValue**	

20.7 PressureValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Associations

Association	Notes
From**: PressureValue.** To: **AbstractPressureValue**	

20.8 ReferencePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
referencePressureKind	ReferencePressureKind	
uom	PressureUom	

Associations

Association	Notes
From**: ReferencePressure.** To: **ReferencePressureKind**	
From**: ReferencePressure.** To: **AbstractMeasure**	
0..1 From**: GaugePressure.**ReferencePressure To: **ReferencePressure**	
1 From**: RelativePressure.**ReferencePressure To: **ReferencePressure**	

20.9 ReferencePressureKind

Type: Enumeration *Stereotype:*
Detail: *Created:* 3/21/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *ReferencePressureKind*

Attributes

Name	Type	Notes
absolute		absolute
ambient		ambient
legal		

Associations

Association	Notes
From**: ReferencePressureKind.** To: **TypeEnum**	
From**: ReferencePressure.** To: **ReferencePressureKind**	

20.10 ReferenceTemperaturePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *StdTempPress*

Attributes

Name	Type	Notes
ReferenceTempPres	ReferenceConditionExt	Defines the reference temperature and pressure to which the density has been corrected. If neither standardTempPres nor temp,pres are specified then the standard condition is defined by standardTempPres at the procuctVolume root.

Associations

Association	Notes
From**: ReferenceTemperaturePressure.** To: **AbstractTemperaturePressure**	

20.11 RelativePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/8/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
RelativePressure	PressureMeasure	

Associations

Association	Notes
From**: RelativePressure.** To: **AbstractPressureValue**	
From**: RelativePressure.**ReferencePressure **1** To: **ReferencePressure**	

20.12 TemperaturePressure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 7/2/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *temperature and pressure*

Attributes

Name	Type	Notes
Pressure	PressureMeasure	The pressure to which the density has been corrected. If given, then a temperature must also be given. Common standard pressures are: 1 atm and 14.696 psi (which are equivalent). If neither standardTempPres nor temp,pres are specified then the standard condition is defined by standardTempPres at the productVolume root.
Temperature	ThermodynamicTemperatureMeasure	The temperature to which the density has been corrected. If given, then a pressure must also be given. Common standard temperatures are: 0 degC, 15 degC, 60 degF. If neither standardTempPres nor temp,pres are specified then the standard condition is defined by standardTempPres at the productVolume root.

Associations

Association	Notes
From**: TemperaturePressure.** To: **AbstractTemperaturePressure**	

20.13 VolumeValue

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 4/17/2014 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Mark Mao
Notes: *A possibly temperature and pressure corrected volume value.*

Attributes

Name	Type	Notes
Volume	VolumeMeasure	The volume of the product. If the 'status' attribute is absent and the value is not "NaN", the data value can be assumed to be good with no restrictions. A value of "NaN" should be interpreted as null and should be not be given unless a status is also specified to explain why it is null.

Associations

Association	Notes
From: **VolumeValue.**MeasurementPressureTemperature **0..1** To: **AbstractTemperaturePressure**	
From: **ProductVolumeBalanceDetail.**VolumeValue **0..*** To: **VolumeValue**	A possibly temperature and pressure corrected volume value.
From: **CommonPropertiesProductVolume.**VolumeValue **0..*** To: **VolumeValue**	A possibly temperature and pressure corrected volume value.

21 MeasureType

Package: xsd_schemas

Notes: These types represent numeric quantities with a unit of measure implemented as a uom attribute. The units are gathered into a single quantity class (QuantityClass) which represents a group of units. The unit symbols appropriate for the class are captured as enumerated lists. The implementation of this is to develop a type for each uom class that is a union of a standard list, the unknown value, and the Other: extension. Additional files contain these structures.
For more information, see the Energistics Unit of Measure Standard.

21.1 AbsorbedDoseMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AbsorbedDoseUom	

Associations

Association	Notes
From**: AbsorbedDoseMeasure.** To: **AbstractMeasure**	

21.2 AbsorbedDoseMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AbsorbedDoseUomExt	

Associations

Association	Notes
From**: AbsorbedDoseMeasureExt.** To: **AbstractMeasure**	

21.3 ActivityOfRadioactivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ActivityOfRadioactivityUom	

Associations

Association	Notes
From**: ActivityOfRadioactivityMeasure.** To: **AbstractMeasure**	

21.4 ActivityOfRadioactivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ActivityOfRadioactivityUomExt	

Associations

Association	Notes
From: **ActivityOfRadioactivityMeasureExt.** To: **AbstractMeasure**	

21.5 ActivityOfRadioactivityPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	ActivityOfRadioactivityPerVolumeUom	

Associations

Association	Notes
From: **ActivityOfRadioactivityPerVolumeMeasure.** To: **AbstractMeasure**	

21.6 ActivityOfRadioactivityPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	ActivityOfRadioactivityPerVolumeUomExt	

Associations

Association	Notes
From: **ActivityOfRadioactivityPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.7 AmountOfSubstanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstanceUom	

Associations

Association	Notes
From**: AmountOfSubstanceMeasure.** To: **AbstractMeasure**	

21.8 AmountOfSubstanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstanceUomExt	

Associations

Association	Notes
From: **AmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	

21.9 AmountOfSubstancePerAmountOfSubstanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerAmountOfSubstanceUom	

Associations

Association	Notes
From: **AmountOfSubstancePerAmountOfSubstanceMeasure**. To: **AbstractMeasure**	
From: **RefInjectedGasAdded.** To: **AmountOfSubstancePerAmountOfSubstanceMeasure**	

21.10 AmountOfSubstancePerAmountOfSubstanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerAmountOfSubstanceUomExt	

Associations

Association	Notes
From: **AmountOfSubstancePerAmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	

21.11 AmountOfSubstancePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerAreaUom	

Associations

Association	Notes
From: **AmountOfSubstancePerAreaMeasure.** To: **AbstractMeasure**	

21.12 AmountOfSubstancePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerAreaUomExt	

Associations

Association	Notes
From: **AmountOfSubstancePerAreaMeasureExt.** To: **AbstractMeasure**	

21.13 AmountOfSubstancePerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerTimeUom	

Associations

Association	Notes
From: **AmountOfSubstancePerTimeMeasure.** To: **AbstractMeasure**	

21.14 AmountOfSubstancePerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerTimeUomExt	

Associations

Association	Notes
From: **AmountOfSubstancePerTimeMeasureExt.** To: **AbstractMeasure**	

21.15 AmountOfSubstancePerTimePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerTimePerAreaUom	

Associations

Association	Notes
From: **AmountOfSubstancePerTimePerAreaMeasure.** To: **AbstractMeasure**	

21.16 AmountOfSubstancePerTimePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerTimePerAreaUomExt	

Associations

Association	Notes
From: **AmountOfSubstancePerTimePerAreaMeasureExt.** To: **AbstractMeasure**	

21.17 AmountOfSubstancePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerVolumeUom	

Associations

Association	Notes
From: **AmountOfSubstancePerVolumeMeasure.** To: **AbstractMeasure**	

21.18 AmountOfSubstancePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AmountOfSubstancePerVolumeUomExt	

Associations

Association	Notes
From: **AmountOfSubstancePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.19 AnglePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AnglePerLengthUom	

Associations

Association	Notes
From**: AnglePerLengthMeasure. 1..1** To: **AbstractMeasure**	

21.20 AnglePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AnglePerLengthUomExt	

Associations

Association	Notes
From**: AnglePerLengthMeasureExt.** To: **AbstractMeasure**	

21.21 AnglePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AnglePerVolumeUom	

Associations

Association	Notes
From**: AnglePerVolumeMeasure.** To: **AbstractMeasure**	

21.22 AnglePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AnglePerVolumeUomExt	

Associations

Association	Notes
From**: AnglePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.23 AngularAccelerationMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AngularAccelerationUom	

Associations

Association	Notes
From**: AngularAccelerationMeasure.** To: **AbstractMeasure**	

21.24 AngularAccelerationMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AngularAccelerationUomExt	

Associations

Association	Notes
From: **AngularAccelerationMeasureExt.** To: **AbstractMeasure**	

21.25 AngularVelocityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AngularVelocityUom	

Associations

Association	Notes
From**: AngularVelocityMeasure. 1..1** To: **AbstractMeasure**	

21.26 AngularVelocityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AngularVelocityUomExt	

Associations

Association	Notes
From**: AngularVelocityMeasureExt.** To: **AbstractMeasure**	

21.27 APIGammaRayMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APIGammaRayUom	

Associations

Association	Notes
From**: APIGammaRayMeasure.** To: **AbstractMeasure**	

21.28 APIGammaRayMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APIGammaRayUomExt	

Associations

Association	Notes
From**: APIGammaRayMeasureExt.** To: **AbstractMeasure**	

21.29 APIGravityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APIGravityUom	

Associations

Association	Notes
From**: APIGravityMeasure.** To: **AbstractMeasure**	

21.30 APIGravityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APIGravityUomExt	

Associations

Association	Notes
From**: APIGravityMeasureExt.** To: **AbstractMeasure**	

21.31 APINeutronMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APINeutronUom	

Associations

Association	Notes
From**: APINeutronMeasure.** To: **AbstractMeasure**	

21.32 APINeutronMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	APINeutronUomExt	

Associations

Association	Notes
From**: APINeutronMeasureExt.** To: **AbstractMeasure**	

21.33 AreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AreaUom	

Associations

Association	Notes
From**: AreaMeasure. 1..1** To: **AbstractMeasure**	

21.34 AreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AreaUomExt	

Associations

Association	Notes
From**: AreaMeasureExt.** To: **AbstractMeasure**	

21.35 AreaPerAmountOfSubstanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerAmountOfSubstanceUom	

Associations

Association	Notes
From**: AreaPerAmountOfSubstanceMeasure.** To: **AbstractMeasure**	

21.36 AreaPerAmountOfSubstanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerAmountOfSubstanceUomExt	

Associations

Association	Notes
From: **AreaPerAmountOfSubstanceMeasureExt.** To: **AbstractMeasure**	

21.37 AreaPerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AreaPerAreaUom	

Associations

Association	Notes
From**: AreaPerAreaMeasure. 1..1** To: **AbstractMeasure**	

21.38 AreaPerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	AreaPerAreaUomExt	

Associations

Association	Notes
From**: AreaPerAreaMeasureExt.** To: **AbstractMeasure**	

21.39 AreaPerCountMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/20/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerCountUom	

Associations

Association	Notes
From**: AreaPerCountMeasure.** To: **AbstractMeasure**	

21.40 AreaPerCountMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/20/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerCountUomExt	

Associations

Association	Notes
From**: AreaPerCountMeasureExt.** To: **AbstractMeasure**	

21.41 AreaPerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerMassUom	

Associations

Association	Notes
From**: AreaPerMassMeasure.** To: **AbstractMeasure**	

21.42 AreaPerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerMassUomExt	

Associations

Association	Notes
From**: AreaPerMassMeasureExt.** To: **AbstractMeasure**	

21.43 AreaPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerTimeUom	

Associations

Association	Notes
From**: AreaPerTimeMeasure.** To: **AbstractMeasure**	

21.44 AreaPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerTimeUomExt	

Associations

Association	Notes
From**: AreaPerTimeMeasureExt.** To: **AbstractMeasure**	

21.45 AreaPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerVolumeUom	

Associations

Association	Notes
From**: AreaPerVolumeMeasure.** To: **AbstractMeasure**	

21.46 AreaPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AreaPerVolumeUomExt	

Associations

Association	Notes
From**: AreaPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.47 AttenuationPerFrequencyIntervalMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AttenuationPerFrequencyIntervalUom	

Associations

Association	Notes
From: **AttenuationPerFrequencyIntervalMeasure.** To: **AbstractMeasure**	

21.48 AttenuationPerFrequencyIntervalMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	AttenuationPerFrequencyIntervalUomExt	

Associations

Association	Notes
From: **AttenuationPerFrequencyIntervalMeasureExt.** To: **AbstractMeasure**	

21.49 CapacitanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	CapacitanceUom	

Associations

Association	Notes
From**: CapacitanceMeasure.** To: **AbstractMeasure**	

21.50 CapacitanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	CapacitanceUomExt	

Associations

Association	Notes
From: **CapacitanceMeasureExt.** To: **AbstractMeasure**	

21.51 CationExchangeCapacityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/20/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	CationExchangeCapacityUom	

Associations

Association	Notes
From**: CationExchangeCapacityMeasure.** To: **AbstractMeasure**	

21.52 CationExchangeCapacityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/20/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	CationExchangeCapacityUomExt	

Associations

Association	Notes
From: **CationExchangeCapacityMeasureExt.** To: **AbstractMeasure**	

21.53 DataTransferSpeedMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DataTransferSpeedUom	

Associations

Association	Notes
From**: DataTransferSpeedMeasure.** To: **AbstractMeasure**	

21.54 DataTransferSpeedMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DataTransferSpeedUomExt	

Associations

Association	Notes
From**: DataTransferSpeedMeasureExt.** To: **AbstractMeasure**	

21.55 DiffusionCoefficientMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DiffusionCoefficientUom	

Associations

Association	Notes
From: **DiffusionCoefficientMeasure.** To: **AbstractMeasure**	

21.56 DiffusionCoefficientMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DiffusionCoefficientUomExt	

Associations

Association	Notes
From**: DiffusionCoefficientMeasureExt.** To: **AbstractMeasure**	

21.57 DiffusiveTimeOfFlightMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DiffusiveTimeOfFlightUom	

Associations

Association	Notes
From**: DiffusiveTimeOfFlightMeasure.** To: **AbstractMeasure**	

21.58 DiffusiveTimeOfFlightMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DiffusiveTimeOfFlightUomExt	

Associations

Association	Notes
From: **DiffusiveTimeOfFlightMeasureExt.** To: **AbstractMeasure**	

21.59 DigitalStorageMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DigitalStorageUom	

Associations

Association	Notes
From**: DigitalStorageMeasure.** To: **AbstractMeasure**	

21.60 DigitalStorageMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DigitalStorageUomExt	

Associations

Association	Notes
From**: DigitalStorageMeasureExt.** To: **AbstractMeasure**	

21.61 DimensionlessMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	DimensionlessUom	

Associations

Association	Notes
From**: DimensionlessMeasure. 1..1** To: **AbstractMeasure**	

21.62 DimensionlessMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	DimensionlessUomExt	

Associations

Association	Notes
From**: DimensionlessMeasureExt.** To: **AbstractMeasure**	

21.63 DipoleMomentMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DipoleMomentUom	

Associations

Association	Notes
From**: DipoleMomentMeasure.** To: **AbstractMeasure**	

21.64 DipoleMomentMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DipoleMomentUomExt	

Associations

Association	Notes
From**: DipoleMomentMeasureExt.** To: **AbstractMeasure**	

21.65 DoseEquivalentMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DoseEquivalentUom	

Associations

Association	Notes
From**: DoseEquivalentMeasure.** To: **AbstractMeasure**	

21.66 DoseEquivalentMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	DoseEquivalentUomExt	

Associations

Association	Notes
From**: DoseEquivalentMeasureExt.** To: **AbstractMeasure**	

21.67 DynamicViscosityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	DynamicViscosityUom	

Associations

Association	Notes
From**: DynamicViscosityMeasure. 1..1** To: **AbstractMeasure**	

21.68 DynamicViscosityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	DynamicViscosityUomExt	

Associations

Association	Notes
From**: DynamicViscosityMeasureExt.** To: **AbstractMeasure**	

21.69 ElectricalResistivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricalResistivityUom	

Associations

Association	Notes
From**: ElectricalResistivityMeasure.** To: **AbstractMeasure**	

21.70 ElectricalResistivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricalResistivityUomExt	

Associations

Association	Notes
From**: ElectricalResistivityMeasureExt.** To: **AbstractMeasure**	

21.71 ElectricChargeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargeUom	

Associations

Association	Notes
From**: ElectricChargeMeasure.** To: **AbstractMeasure**	

21.72 ElectricChargeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargeUomExt	

Associations

Association	Notes
From**: ElectricChargeMeasureExt.** To: **AbstractMeasure**	

21.73 ElectricChargePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerAreaUom	

Associations

Association	Notes
From: **ElectricChargePerAreaMeasure.** To: **AbstractMeasure**	

21.74 ElectricChargePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerAreaUomExt	

Associations

Association	Notes
From: **ElectricChargePerAreaMeasureExt.** To: **AbstractMeasure**	

21.75 ElectricChargePerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerMassUom	

Associations

Association	Notes
From: **ElectricChargePerMassMeasure.** To: **AbstractMeasure**	

21.76 ElectricChargePerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerMassUomExt	

Associations

Association	Notes
From: **ElectricChargePerMassMeasureExt.** To: **AbstractMeasure**	

21.77 ElectricChargePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerVolumeUom	

Associations

Association	Notes
From**: ElectricChargePerVolumeMeasure.** To: **AbstractMeasure**	

21.78 ElectricChargePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricChargePerVolumeUomExt	

Associations

Association	Notes
From: **ElectricChargePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.79 ElectricConductanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricConductanceUom	

Associations

Association	Notes
From**: ElectricConductanceMeasure.** To: **AbstractMeasure**	

21.80 ElectricConductanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricConductanceUomExt	

Associations

Association	Notes
From: **ElectricConductanceMeasureExt.** To: **AbstractMeasure**	

21.81 ElectricConductivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricConductivityUom	

Associations

Association	Notes
From**: ElectricConductivityMeasure.** To: **AbstractMeasure**	

21.82 ElectricConductivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricConductivityUomExt	

Associations

Association	Notes
From**: ElectricConductivityMeasureExt.** To: **AbstractMeasure**	

21.83 ElectricCurrentDensityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricCurrentDensityUom	

Associations

Association	Notes
From**: ElectricCurrentDensityMeasure.** To: **AbstractMeasure**	

21.84 ElectricCurrentDensityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricCurrentDensityUomExt	

Associations

Association	Notes
From: **ElectricCurrentDensityMeasureExt.** To: **AbstractMeasure**	

21.85 ElectricCurrentMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ElectricCurrentUom	

Associations

Association	Notes
From**: ElectricCurrentMeasure. 1..1** To: **AbstractMeasure**	

21.86 ElectricCurrentMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ElectricCurrentUomExt	

Associations

Association	Notes
From**: ElectricCurrentMeasureExt.** To: **AbstractMeasure**	

21.87 ElectricFieldStrengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricFieldStrengthUom	

Associations

Association	Notes
From**: ElectricFieldStrengthMeasure.** To: **AbstractMeasure**	

21.88 ElectricFieldStrengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricFieldStrengthUomExt	

Associations

Association	Notes
From: **ElectricFieldStrengthMeasureExt.** To: **AbstractMeasure**	

21.89 ElectricPotentialDifferenceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ElectricPotentialDifference Uom	

Associations

Association	Notes
From**: ElectricPotentialDifferenceMeasure. 1..1** To: **AbstractMeasure**	

21.90 ElectricPotentialDifferenceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ElectricPotentialDifference UomExt	

Associations

Association	Notes
From**: ElectricPotentialDifferenceMeasureExt.** To: **AbstractMeasure**	

21.91 ElectricResistanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricResistanceUom	

Associations

Association	Notes
From**: ElectricResistanceMeasure.** To: **AbstractMeasure**	

21.92 ElectricResistanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricResistanceUomExt	

Associations

Association	Notes
From**: ElectricResistanceMeasureExt.** To: **AbstractMeasure**	

21.93 ElectricResistancePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricResistancePerLengthUom	

Associations

Association	Notes
From: **ElectricResistancePerLengthMeasure.** To: **AbstractMeasure**	

21.94 ElectricResistancePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectricResistancePerLengthUomExt	

Associations

Association	Notes
From: **ElectricResistancePerLengthMeasureExt.** To: **AbstractMeasure**	

21.95 ElectromagneticMomentMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectromagneticMomentUom	

Associations

Association	Notes
From: **ElectromagneticMomentMeasure.** To: **AbstractMeasure**	

21.96 ElectromagneticMomentMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ElectromagneticMomentUomExt	

Associations

Association	Notes
From: **ElectromagneticMomentMeasureExt.** To: **AbstractMeasure**	

21.97 EnergyLengthPerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyLengthPerAreaUom	

Associations

Association	Notes
From**: EnergyLengthPerAreaMeasure.** To: **AbstractMeasure**	

21.98 EnergyLengthPerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyLengthPerAreaUomExt	

Associations

Association	Notes
From: **EnergyLengthPerAreaMeasureExt.** To: **AbstractMeasure**	

21.99 EnergyLengthPerTimeAreaTemperatureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyLengthPerTimeAreaTemperatureUom	

Associations

Association	Notes
From: **EnergyLengthPerTimeAreaTemperatureMeasure.** To: **AbstractMeasure**	

21.100 EnergyLengthPerTimeAreaTemperatureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyLengthPerTimeAreaTemperatureUomExt	

Associations

Association	Notes
From: **EnergyLengthPerTimeAreaTemperatureMeasureExt.** To: **AbstractMeasure**	

21.101 EnergyMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyUom	

Associations

Association	Notes
From**: EnergyMeasure.** To: **AbstractMeasure**	

21.102 EnergyMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyUomExt	

Associations

Association	Notes
From**: EnergyMeasureExt.** To: **AbstractMeasure**	

21.103 EnergyPerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerAreaUom	

Associations

Association	Notes
From**: EnergyPerAreaMeasure.** To: **AbstractMeasure**	

21.104 EnergyPerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerAreaUomExt	

Associations

Association	Notes
From**: EnergyPerAreaMeasureExt.** To: **AbstractMeasure**	

21.105 EnergyPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerLengthUom	

Associations

Association	Notes
From**: EnergyPerLengthMeasure.** To: **AbstractMeasure**	

21.106 EnergyPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerLengthUomExt	

Associations

Association	Notes
From**: EnergyPerLengthMeasureExt.** To: **AbstractMeasure**	

21.107 EnergyPerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerMassUom	

Associations

Association	Notes
From**: EnergyPerMassMeasure.** To: **AbstractMeasure**	

21.108 EnergyPerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerMassUomExt	

Associations

Association	Notes
From**: EnergyPerMassMeasureExt.** To: **AbstractMeasure**	

21.109 EnergyPerMassPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerMassPerTimeUom	

Associations

Association	Notes
From**: EnergyPerMassPerTimeMeasure.** To: **AbstractMeasure**	

21.110 EnergyPerMassPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerMassPerTimeUomExt	

Associations

Association	Notes
From: **EnergyPerMassPerTimeMeasureExt.** To: **AbstractMeasure**	

21.111 EnergyPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerVolumeUom	

Associations

Association	Notes
From**: EnergyPerVolumeMeasure.** To: **AbstractMeasure**	

21.112 EnergyPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	EnergyPerVolumeUomExt	

Associations

Association	Notes
From**: EnergyPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.113 ForceAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForceAreaUom	

Associations

Association	Notes
From**: ForceAreaMeasure.** To: **AbstractMeasure**	

21.114 ForceAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForceAreaUomExt	

Associations

Association	Notes
From**: ForceAreaMeasureExt.** To: **AbstractMeasure**	

21.115 ForceLengthPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForceLengthPerLengthUom	

Associations

Association	Notes
From: **ForceLengthPerLengthMeasure.** To: **AbstractMeasure**	

21.116 ForceLengthPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForceLengthPerLengthUomExt	

Associations

Association	Notes
From: **ForceLengthPerLengthMeasureExt.** To: **AbstractMeasure**	

21.117 ForceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForceUom	

Associations

Association	Notes
From**: ForceMeasure. 1..1** To: **AbstractMeasure**	

21.118 ForceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForceUomExt	

Associations

Association	Notes
From**: ForceMeasureExt.** To: **AbstractMeasure**	

21.119 ForcePerForceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForcePerForceUom	

Associations

Association	Notes
From**: ForcePerForceMeasure.** To: **AbstractMeasure**	

21.120 ForcePerForceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ForcePerForceUomExt	

Associations

Association	Notes
From**: ForcePerForceMeasureExt.** To: **AbstractMeasure**	

21.121 ForcePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForcePerLengthUom	

Associations

Association	Notes
From**: ForcePerLengthMeasure. 1..1** To: **AbstractMeasure**	

21.122 ForcePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForcePerLengthUomExt	

Associations

Association	Notes
From**: ForcePerLengthMeasureExt.** To: **AbstractMeasure**	

21.123 ForcePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForcePerVolumeUom	

Associations

Association	Notes
From**: ForcePerVolumeMeasure. 1..1** To: **AbstractMeasure**	

21.124 ForcePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ForcePerVolumeUomExt	

Associations

Association	Notes
From: **ForcePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.125 FrequencyIntervalMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	FrequencyIntervalUom	

Associations

Association	Notes
From**: FrequencyIntervalMeasure.** To: **AbstractMeasure**	

21.126 FrequencyIntervalMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	FrequencyIntervalUomExt	

Associations

Association	Notes
From**: FrequencyIntervalMeasureExt.** To: **AbstractMeasure**	

21.127 FrequencyMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	FrequencyUom	

Associations

Association	Notes
From**: FrequencyMeasure.** To: **AbstractMeasure**	

21.128 FrequencyMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	FrequencyUomExt	

Associations

Association	Notes
From**: FrequencyMeasureExt.** To: **AbstractMeasure**	

21.129 HeatCapacityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatCapacityUom	

Associations

Association	Notes
From**: HeatCapacityMeasure.** To: **AbstractMeasure**	

21.130 HeatCapacityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatCapacityUomExt	

Associations

Association	Notes
From**: HeatCapacityMeasureExt.** To: **AbstractMeasure**	

21.131 HeatFlowRateMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatFlowRateUom	

Associations

Association	Notes
From**: HeatFlowRateMeasure.** To: **AbstractMeasure**	

21.132 HeatFlowRateMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatFlowRateUomExt	

Associations

Association	Notes
From**: HeatFlowRateMeasureExt.** To: **AbstractMeasure**	

21.133 HeatTransferCoefficientMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatTransferCoefficientUom	

Associations

Association	Notes
From**: HeatTransferCoefficientMeasure.** To: **AbstractMeasure**	

21.134 HeatTransferCoefficientMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	HeatTransferCoefficientUomExt	

Associations

Association	Notes
From**: HeatTransferCoefficientMeasureExt.** To: **AbstractMeasure**	

21.135 IlluminanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	IlluminanceUom	

Associations

Association	Notes
From**: IlluminanceMeasure. 1..1** To: **AbstractMeasure**	

21.136 IlluminanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	IlluminanceUomExt	

Associations

Association	Notes
From**: IlluminanceMeasureExt.** To: **AbstractMeasure**	

21.137 InductanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	InductanceUom	

Associations

Association	Notes
From**: InductanceMeasure.** To: **AbstractMeasure**	

21.138 InductanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	InductanceUomExt	

Associations

Association	Notes
From**: InductanceMeasureExt.** To: **AbstractMeasure**	

21.139 IsothermalCompressibilityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	IsothermalCompressibilityUom	

Associations

Association	Notes
From**: IsothermalCompressibilityMeasure.** To: **AbstractMeasure**	

21.140 IsothermalCompressibilityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	IsothermalCompressibilityUomExt	

Associations

Association	Notes
From**: IsothermalCompressibilityMeasureExt.** To: **AbstractMeasure**	

21.141 KinematicViscosityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	KinematicViscosityUom	

Associations

Association	Notes
From**: KinematicViscosityMeasure.** To: **AbstractMeasure**	

21.142 KinematicViscosityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	KinematicViscosityUomExt	

Associations

Association	Notes
From**: KinematicViscosityMeasureExt.** To: **AbstractMeasure**	

21.143 LengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthUom	

Associations

Association	Notes
From**: LengthMeasure. 1..1** To: **AbstractMeasure**	

21.144 LengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthUomExt	

Associations

Association	Notes
From**: LengthMeasureExt.** To: **AbstractMeasure**	

21.145 LengthOrTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 3/28/2019 *Last modified:*3/29/2019 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	LengthAndTimeUomExt	

Associations

Association	Notes
From**: LengthOrTimeMeasureExt.** To: **AbstractMeasure**	

21.146 LengthPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthPerLengthUom	

Associations

Association	Notes
From**: LengthPerLengthMeasure. 1..1** To: **AbstractMeasure**	

21.147 LengthPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthPerLengthUomExt	

Associations

Association	Notes
From**: LengthPerLengthMeasureExt.** To: **AbstractMeasure**	

21.148 LengthPerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerMassUom	

Associations

Association	Notes
From**: LengthPerMassMeasure.** To: **AbstractMeasure**	

21.149 LengthPerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerMassUomExt	

Associations

Association	Notes
From**: LengthPerMassMeasureExt.** To: **AbstractMeasure**	

21.150 LengthPerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerPressureUom	

Associations

Association	Notes
From**: LengthPerPressureMeasure.** To: **AbstractMeasure**	

21.151 LengthPerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerPressureUomExt	

Associations

Association	Notes
From**: LengthPerPressureMeasureExt.** To: **AbstractMeasure**	

21.152 LengthPerTemperatureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerTemperatureUom	

Associations

Association	Notes
From**: LengthPerTemperatureMeasure.** To: **AbstractMeasure**	

21.153 LengthPerTemperatureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerTemperatureUomExt	

Associations

Association	Notes
From**: LengthPerTemperatureMeasureExt.** To: **AbstractMeasure**	

21.154 LengthPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthPerTimeUom	

Associations

Association	Notes
From**: LengthPerTimeMeasure. 1..1** To: **AbstractMeasure**	

21.155 LengthPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LengthPerTimeUomExt	

Associations

Association	Notes
From**: LengthPerTimeMeasureExt.** To: **AbstractMeasure**	

21.156 LengthPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerVolumeUom	

Associations

Association	Notes
From**: LengthPerVolumeMeasure.** To: **AbstractMeasure**	

21.157 LengthPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LengthPerVolumeUomExt	

Associations

Association	Notes
From**: LengthPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.158 LightExposureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LightExposureUom	

Associations

Association	Notes
From**: LightExposureMeasure.** To: **AbstractMeasure**	

21.159 LightExposureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LightExposureUomExt	

Associations

Association	Notes
From**: LightExposureMeasureExt.** To: **AbstractMeasure**	

21.160 LinearAccelerationMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LinearAccelerationUom	

Associations

Association	Notes
From**: LinearAccelerationMeasure. 1..1** To: **AbstractMeasure**	

21.161 LinearAccelerationMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	LinearAccelerationUomExt	

Associations

Association	Notes
From**: LinearAccelerationMeasureExt.** To: **AbstractMeasure**	

21.162 LinearThermalExpansionMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LinearThermalExpansionUom	

Associations

Association	Notes
From**: LinearThermalExpansionMeasure.** To: **AbstractMeasure**	

21.163 LinearThermalExpansionMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LinearThermalExpansionUomExt	

Associations

Association	Notes
From**: LinearThermalExpansionMeasureExt.** To: **AbstractMeasure**	

21.164 LogarithmicPowerRatioMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LogarithmicPowerRatioUom	

Associations

Association	Notes
From**: LogarithmicPowerRatioMeasure.** To: **AbstractMeasure**	

21.165 LogarithmicPowerRatioMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LogarithmicPowerRatioUomExt	

Associations

Association	Notes
From**: LogarithmicPowerRatioMeasureExt.** To: **AbstractMeasure**	

21.166 LogarithmicPowerRatioPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LogarithmicPowerRatioPerLengthUom	

Associations

Association	Notes
From: **LogarithmicPowerRatioPerLengthMeasure.** To: **AbstractMeasure**	

21.167 LogarithmicPowerRatioPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LogarithmicPowerRatioPer LengthUomExt	

Associations

Association	Notes
From: **LogarithmicPowerRatioPerLengthMeasureExt.** To: **AbstractMeasure**	

21.168 LuminanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminanceUom	

Associations

Association	Notes
From**: LuminanceMeasure.** To: **AbstractMeasure**	

21.169 LuminanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminanceUomExt	

Associations

Association	Notes
From**: LuminanceMeasureExt.** To: **AbstractMeasure**	

21.170 LuminousEfficacyMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousEfficacyUom	

Associations

Association	Notes
From**: LuminousEfficacyMeasure.** To: **AbstractMeasure**	

21.171 LuminousEfficacyMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousEfficacyUomExt	

Associations

Association	Notes
From**: LuminousEfficacyMeasureExt.** To: **AbstractMeasure**	

21.172 LuminousFluxMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousFluxUom	

Associations

Association	Notes
From**: LuminousFluxMeasure.** To: **AbstractMeasure**	

21.173 LuminousFluxMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousFluxUomExt	

Associations

Association	Notes
From**: LuminousFluxMeasureExt.** To: **AbstractMeasure**	

21.174 LuminousIntensityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousIntensityUom	

Associations

Association	Notes
From**: LuminousIntensityMeasure.** To: **AbstractMeasure**	

21.175 LuminousIntensityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	LuminousIntensityUomExt	

Associations

Association	Notes
From**: LuminousIntensityMeasureExt.** To: **AbstractMeasure**	

21.176 MagneticDipoleMomentMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticDipoleMomentUom	

Associations

Association	Notes
From**: MagneticDipoleMomentMeasure.** To: **AbstractMeasure**	

21.177 MagneticDipoleMomentMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticDipoleMomentUomExt	

Associations

Association	Notes
From: **MagneticDipoleMomentMeasureExt.** To: **AbstractMeasure**	

21.178 MagneticFieldStrengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFieldStrengthUom	

Associations

Association	Notes
From**: MagneticFieldStrengthMeasure.** To: **AbstractMeasure**	

21.179 MagneticFieldStrengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFieldStrengthUomExt	

Associations

Association	Notes
From**: MagneticFieldStrengthMeasureExt.** To: **AbstractMeasure**	

21.180 MagneticFluxDensityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxDensityUom	

Associations

Association	Notes
From**: MagneticFluxDensityMeasure. 1..1** To: **AbstractMeasure**	

21.181 MagneticFluxDensityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxDensityUomExt	

Associations

Association	Notes
From**: MagneticFluxDensityMeasureExt.** To: **AbstractMeasure**	

21.182 MagneticFluxDensityPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxDensityPerLengthUom	

Associations

Association	Notes
From: **MagneticFluxDensityPerLengthMeasure.** To: **AbstractMeasure**	

21.183 MagneticFluxDensityPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxDensityPerLengthUomExt	

Associations

Association	Notes
From: **MagneticFluxDensityPerLengthMeasureExt.** To: **AbstractMeasure**	

21.184 MagneticFluxMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxUom	

Associations

Association	Notes
From**: MagneticFluxMeasure.** To: **AbstractMeasure**	

21.185 MagneticFluxMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticFluxUomExt	

Associations

Association	Notes
From**: MagneticFluxMeasureExt.** To: **AbstractMeasure**	

21.186 MagneticPermeabilityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticPermeabilityUom	

Associations

Association	Notes
From**: MagneticPermeabilityMeasure.** To: **AbstractMeasure**	

21.187 MagneticPermeabilityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticPermeabilityUomExt	

Associations

Association	Notes
From: **MagneticPermeabilityMeasureExt.** To: **AbstractMeasure**	

21.188 MagneticVectorPotentialMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticVectorPotentialUom	

Associations

Association	Notes
From**: MagneticVectorPotentialMeasure.** To: **AbstractMeasure**	

21.189 MagneticVectorPotentialMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MagneticVectorPotentialUomExt	

Associations

Association	Notes
From: **MagneticVectorPotentialMeasureExt.** To: **AbstractMeasure**	

21.190 MassLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassLengthUom	

Associations

Association	Notes
From**: MassLengthMeasure.** To: **AbstractMeasure**	

21.191 MassLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassLengthUomExt	

Associations

Association	Notes
From**: MassLengthMeasureExt.** To: **AbstractMeasure**	

21.192 MassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassUom	

Associations

Association	Notes
From**: MassMeasure. 1..1** To: **AbstractMeasure**	

21.193 MassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassUomExt	

Associations

Association	Notes
From**: MassMeasureExt.** To: **AbstractMeasure**	

21.194 MassPerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerAreaUom	

Associations

Association	Notes
From**: MassPerAreaMeasure.** To: **AbstractMeasure**	

21.195 MassPerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerAreaUomExt	

Associations

Association	Notes
From**: MassPerAreaMeasureExt.** To: **AbstractMeasure**	

21.196 MassPerEnergyMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerEnergyUom	

Associations

Association	Notes
From**: MassPerEnergyMeasure.** To: **AbstractMeasure**	

21.197 MassPerEnergyMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerEnergyUomExt	

Associations

Association	Notes
From: **MassPerEnergyMeasureExt.** To: **AbstractMeasure**	

21.198 MassPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerLengthUom	

Associations

Association	Notes
From**: MassPerLengthMeasure. 1..1** To: **AbstractMeasure**	

21.199 MassPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerLengthUomExt	

Associations

Association	Notes
From**: MassPerLengthMeasureExt.** To: **AbstractMeasure**	

21.200 MassPerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerMassUom	

Associations

Association	Notes
From**: MassPerMassMeasure. 1..1** To: **AbstractMeasure**	

21.201 MassPerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerMassUomExt	

Associations

Association	Notes
From**: MassPerMassMeasureExt.** To: **AbstractMeasure**	

21.202 MassPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimeUom	

Associations

Association	Notes
From**: MassPerTimeMeasure.** To: **AbstractMeasure**	

21.203 MassPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimeUomExt	

Associations

Association	Notes
From**: MassPerTimeMeasureExt.** To: **AbstractMeasure**	

21.204 MassPerTimePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimePerAreaUom	

Associations

Association	Notes
From**: MassPerTimePerAreaMeasure.** To: **AbstractMeasure**	

21.205 MassPerTimePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimePerAreaUomExt	

Associations

Association	Notes
From: **MassPerTimePerAreaMeasureExt.** To: **AbstractMeasure**	

21.206 MassPerTimePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimePerLengthUom	

Associations

Association	Notes
From**: MassPerTimePerLengthMeasure.** To: **AbstractMeasure**	

21.207 MassPerTimePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerTimePerLengthUomExt	

Associations

Association	Notes
From**: MassPerTimePerLengthMeasureExt.** To: **AbstractMeasure**	

21.208 MassPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumeUomWithLegacy	

Associations

Association	Notes
From: **MassPerVolumeMeasure. 1..1** To: **AbstractMeasure**	

21.209 MassPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumeUomExt	

Associations

Association	Notes
From**: MassPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.210 MassPerVolumePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerLengthUom	

Associations

Association	Notes
From**: MassPerVolumePerLengthMeasure.** To: **AbstractMeasure**	

21.211 MassPerVolumePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerLength UomExt	

Associations

Association	Notes
From**: MassPerVolumePerLengthMeasureExt.** To: **AbstractMeasure**	

21.212 MassPerVolumePerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerPressureUom	

Associations

Association	Notes
From**: MassPerVolumePerPressureMeasure.** To: **AbstractMeasure**	

21.213 MassPerVolumePerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerPressureUomExt	

Associations

Association	Notes
From: **MassPerVolumePerPressureMeasureExt.** To: **AbstractMeasure**	

21.214 MassPerVolumePerTemperatureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerTemperatureUom	

Associations

Association	Notes
From: **MassPerVolumePerTemperatureMeasure.** To: **AbstractMeasure**	

21.215 MassPerVolumePerTemperatureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	MassPerVolumePerTemperatureUomExt	

Associations

Association	Notes
From: **MassPerVolumePerTemperatureMeasureExt.** To: **AbstractMeasure**	

21.216 MobilityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MobilityUom	

Associations

Association	Notes
From**: MobilityMeasure.** To: **AbstractMeasure**	

21.217 MobilityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MobilityUomExt	

Associations

Association	Notes
From**: MobilityMeasureExt.** To: **AbstractMeasure**	

21.218 MolarEnergyMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarEnergyUom	

Associations

Association	Notes
From**: MolarEnergyMeasure.** To: **AbstractMeasure**	

21.219 MolarEnergyMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarEnergyUomExt	

Associations

Association	Notes
From**: MolarEnergyMeasureExt.** To: **AbstractMeasure**	

21.220 MolarHeatCapacityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarHeatCapacityUom	

Associations

Association	Notes
From**: MolarHeatCapacityMeasure.** To: **AbstractMeasure**	

21.221 MolarHeatCapacityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarHeatCapacityUomExt	

Associations

Association	Notes
From**: MolarHeatCapacityMeasureExt.** To: **AbstractMeasure**	

21.222 MolarVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarVolumeUom	

Associations

Association	Notes
From**: MolarVolumeMeasure.** To: **AbstractMeasure**	

21.223 MolarVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolarVolumeUomExt	

Associations

Association	Notes
From**: MolarVolumeMeasureExt.** To: **AbstractMeasure**	

21.224 MolecularWeightMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolecularWeightUom	

Associations

Association	Notes
From**: MolecularWeightMeasure.** To: **AbstractMeasure**	

21.225 MolecularWeightMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MolecularWeightUomExt	

Associations

Association	Notes
From**: MolecularWeightMeasureExt.** To: **AbstractMeasure**	

21.226 MomentOfForceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MomentOfForceUom	

Associations

Association	Notes
From**: MomentOfForceMeasure. 1..1** To: **AbstractMeasure**	

21.227 MomentOfForceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	MomentOfForceUomExt	

Associations

Association	Notes
From**: MomentOfForceMeasureExt.** To: **AbstractMeasure**	

21.228 MomentOfInertiaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MomentOfInertiaUom	

Associations

Association	Notes
From**: MomentOfInertiaMeasure.** To: **AbstractMeasure**	

21.229 MomentOfInertiaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MomentOfInertiaUomExt	

Associations

Association	Notes
From**: MomentOfInertiaMeasureExt.** To: **AbstractMeasure**	

21.230 MomentumMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MomentumUom	

Associations

Association	Notes
From**: MomentumMeasure.** To: **AbstractMeasure**	

21.231 MomentumMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	MomentumUomExt	

Associations

Association	Notes
From**: MomentumMeasureExt.** To: **AbstractMeasure**	

21.232 NormalizedPowerMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	NormalizedPowerUom	

Associations

Association	Notes
From**: NormalizedPowerMeasure.** To: **AbstractMeasure**	

21.233 NormalizedPowerMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	NormalizedPowerUomExt	

Associations

Association	Notes
From**: NormalizedPowerMeasureExt.** To: **AbstractMeasure**	

21.234 PermeabilityLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PermeabilityLengthUom	

Associations

Association	Notes
From**: PermeabilityLengthMeasure.** To: **AbstractMeasure**	

21.235 PermeabilityLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PermeabilityLengthUomExt	

Associations

Association	Notes
From**: PermeabilityLengthMeasureExt.** To: **AbstractMeasure**	

21.236 PermeabilityRockMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PermeabilityRockUom	

Associations

Association	Notes
From**: PermeabilityRockMeasure. 1..1** To: **AbstractMeasure**	

21.237 PermeabilityRockMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PermeabilityRockUomExt	

Associations

Association	Notes
From**: PermeabilityRockMeasureExt.** To: **AbstractMeasure**	

21.238 PermittivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PermittivityUom	

Associations

Association	Notes
From**: PermittivityMeasure.** To: **AbstractMeasure**	

21.239 PermittivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PermittivityUomExt	

Associations

Association	Notes
From**: PermittivityMeasureExt.** To: **AbstractMeasure**	

21.240 PlaneAngleMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PlaneAngleUom	

Associations

Association	Notes
From**: PlaneAngleMeasure. 1..1** To: **AbstractMeasure**	

21.241 PlaneAngleMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PlaneAngleUomExt	

Associations

Association	Notes
From**: PlaneAngleMeasureExt.** To: **AbstractMeasure**	

21.242 PotentialDifferencePerPowerDropMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PotentialDifferencePerPowerDropUom	

Associations

Association	Notes
From: **PotentialDifferencePerPowerDropMeasure.** To: **AbstractMeasure**	

21.243 PotentialDifferencePerPowerDropMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PotentialDifferencePerPowerDropUomExt	

Associations

Association	Notes
From: **PotentialDifferencePerPowerDropMeasureExt.** To: **AbstractMeasure**	

21.244 PowerMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PowerUom	

Associations

Association	Notes
From**: PowerMeasure. 1..1** To: **AbstractMeasure**	

21.245 PowerMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PowerUomExt	

Associations

Association	Notes
From**: PowerMeasureExt.** To: **AbstractMeasure**	

21.246 PowerPerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PowerPerAreaUom	

Associations

Association	Notes
From**: PowerPerAreaMeasure.** To: **AbstractMeasure**	

21.247 PowerPerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PowerPerAreaUomExt	

Associations

Association	Notes
From**: PowerPerAreaMeasureExt.** To: **AbstractMeasure**	

21.248 PowerPerPowerMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PowerPerPowerUom	

Associations

Association	Notes
From**: PowerPerPowerMeasure. 1..1** To: **AbstractMeasure**	

21.249 PowerPerPowerMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PowerPerPowerUomExt	

Associations

Association	Notes
From**: PowerPerPowerMeasureExt.** To: **AbstractMeasure**	

21.250 PowerPerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PowerPerVolumeUom	

Associations

Association	Notes
From**: PowerPerVolumeMeasure.** To: **AbstractMeasure**	

21.251 PowerPerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PowerPerVolumeUomExt	

Associations

Association	Notes
From**: PowerPerVolumeMeasureExt.** To: **AbstractMeasure**	

21.252 PressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PressureUomWithLegacy	

Associations

Association	Notes
From**: PressureMeasure. 1..1** To: **AbstractMeasure**	

21.253 PressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	PressureUomExt	

Associations

Association	Notes
From**: PressureMeasureExt.** To: **AbstractMeasure**	
From**: SaturationPressure.** To: **PressureMeasureExt**	

21.254 PressurePerFlowrateMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/24/2018 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Mark Hollier
Notes: *PressurePerFlowrateSquared, P/Q^2 is the unit for turbulent flow pressure drop in the layer inflow relationship.*

Attributes

Name	Type	Notes
uom	PressurePerFlowrateUom	One of uoms from PressurePerFlowrateUom list

Associations

Association	Notes
From: **PressurePerFlowrateMeasure.** To: **AbstractMeasure**	

21.255 PressurePerFlowrateMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	PressurePerFlowrateUomExt	

Associations

Association	Notes
From**: PressurePerFlowrateMeasureExt.** To: **AbstractMeasure**	

21.256 PressurePerFlowrateSquaredMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/8/2017 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Mark Hollier
Notes: *PressurePerFlowrateSquared, P/Q^2 is the unit for turbulent flow pressure drop in the layer inflow relationship.*

Attributes

Name	Type	Notes
uom	PressurePerFlowrateSquaredUom	One of uoms from PressurePerFlowrateSquaredUom list

Associations

Association	Notes
From: **PressurePerFlowrateSquaredMeasure.** To: **AbstractMeasure**	

21.257 PressurePerFlowrateSquaredMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 10/19/2021 *Last modified:*10/19/2021 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	PressurePerFlowrateSquaredUomExt	

Associations

Association	Notes
From: **PressurePerFlowrateSquaredMeasureExt.** To: **AbstractMeasure**	

21.258 PressurePerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerPressureUom	

Associations

Association	Notes
From**: PressurePerPressureMeasure.** To: **AbstractMeasure**	

21.259 PressurePerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerPressureUomExt	

Associations

Association	Notes
From: **PressurePerPressureMeasureExt.** To: **AbstractMeasure**	

21.260 PressurePerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerTimeUom	

Associations

Association	Notes
From**: PressurePerTimeMeasure.** To: **AbstractMeasure**	

21.261 PressurePerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerTimeUomExt	

Associations

Association	Notes
From**: PressurePerTimeMeasureExt.** To: **AbstractMeasure**	

21.262 PressurePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerVolumeUomWithLegacy	

Associations

Association	Notes
From: **PressurePerVolumeMeasure.** To: **AbstractMeasure**	

21.263 PressurePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressurePerVolumeUomExt	

Associations

Association	Notes
From: **PressurePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.264 PressureSquaredMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureSquaredUom	

Associations

Association	Notes
From**: PressureSquaredMeasure.** To: **AbstractMeasure**	

21.265 PressureSquaredMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureSquaredUomExt	

Associations

Association	Notes
From**: PressureSquaredMeasureExt.** To: **AbstractMeasure**	

21.266 PressureSquaredPerForceTimePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureSquaredPerForce TimePerAreaUom	

Associations

Association	Notes
From: **PressureSquaredPerForceTimePerAreaMeasure.** To: **AbstractMeasure**	

21.267 PressureSquaredPerForceTimePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureSquaredPerForce TimePerAreaUomExt	

Associations

Association	Notes
From: **PressureSquaredPerForceTimePerAreaMeasureExt.** To: **AbstractMeasure**	

21.268 PressureTimePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureTimePerVolumeUom	

Associations

Association	Notes
From**: PressureTimePerVolumeMeasure.** To: **AbstractMeasure**	

21.269 PressureTimePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	PressureTimePerVolumeUomExt	

Associations

Association	Notes
From: **PressureTimePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.270 QuantityOfLightMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	QuantityOfLightUom	

Associations

Association	Notes
From**: QuantityOfLightMeasure.** To: **AbstractMeasure**	

21.271 QuantityOfLightMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	QuantityOfLightUomExt	

Associations

Association	Notes
From**: QuantityOfLightMeasureExt.** To: **AbstractMeasure**	

21.272 RadianceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	RadianceUom	

Associations

Association	Notes
From**: RadianceMeasure.** To: **AbstractMeasure**	

21.273 RadianceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	RadianceUomExt	

Associations

Association	Notes
From**: RadianceMeasureExt.** To: **AbstractMeasure**	

21.274 RadiantIntensityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	RadiantIntensityUom	

Associations

Association	Notes
From**: RadiantIntensityMeasure.** To: **AbstractMeasure**	

21.275 RadiantIntensityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	RadiantIntensityUomExt	

Associations

Association	Notes
From**: RadiantIntensityMeasureExt.** To: **AbstractMeasure**	

21.276 ReciprocalAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalAreaUom	

Associations

Association	Notes
From: **ReciprocalAreaMeasure.** To: **AbstractMeasure**	

21.277 ReciprocalAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalAreaUomExt	

Associations

Association	Notes
From**: ReciprocalAreaMeasureExt.** To: **AbstractMeasure**	

21.278 ReciprocalElectricPotentialDifferenceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalElectricPotential DifferenceUom	

Associations

Association	Notes
From: **ReciprocalElectricPotentialDifferenceMeasure.** To: **AbstractMeasure**	

21.279 ReciprocalElectricPotentialDifferenceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalElectricPotential DifferenceUomExt	

Associations

Association	Notes
From: **ReciprocalElectricPotentialDifferenceMeasureExt.** To: **AbstractMeasure**	

21.280 ReciprocalForceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalForceUom	

Associations

Association	Notes
From**: ReciprocalForceMeasure.** To: **AbstractMeasure**	

21.281 ReciprocalForceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalForceUomExt	

Associations

Association	Notes
From**: ReciprocalForceMeasureExt.** To: **AbstractMeasure**	

21.282 ReciprocalLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalLengthUom	

Associations

Association	Notes
From**: ReciprocalLengthMeasure. 1..1** To: **AbstractMeasure**	

21.283 ReciprocalLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalLengthUomExt	

Associations

Association	Notes
From**: ReciprocalLengthMeasureExt.** To: **AbstractMeasure**	

21.284 ReciprocalMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalMassUom	

Associations

Association	Notes
From**: ReciprocalMassMeasure.** To: **AbstractMeasure**	

21.285 ReciprocalMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalMassUomExt	

Associations

Association	Notes
From**: ReciprocalMassMeasureExt.** To: **AbstractMeasure**	

21.286 ReciprocalMassTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalMassTimeUom	

Associations

Association	Notes
From**: ReciprocalMassTimeMeasure.** To: **AbstractMeasure**	

21.287 ReciprocalMassTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalMassTimeUomExt	

Associations

Association	Notes
From: **ReciprocalMassTimeMeasureExt.** To: **AbstractMeasure**	

21.288 ReciprocalPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalPressureUom	

Associations

Association	Notes
From**: ReciprocalPressureMeasure. 1..1** To: **AbstractMeasure**	
From**: OilCompressibility.** To: **ReciprocalPressureMeasure**	

21.289 ReciprocalPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalPressureUomExt	

Associations

Association	Notes
From**: ReciprocalPressureMeasureExt.** To: **AbstractMeasure**	

21.290 ReciprocalTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalTimeUom	

Associations

Association	Notes
From**: ReciprocalTimeMeasure.** To: **AbstractMeasure**	

21.291 ReciprocalTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalTimeUomExt	

Associations

Association	Notes
From**: ReciprocalTimeMeasureExt.** To: **AbstractMeasure**	

21.292 ReciprocalVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalVolumeUom	

Associations

Association	Notes
From**: ReciprocalVolumeMeasure.** To: **AbstractMeasure**	

21.293 ReciprocalVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReciprocalVolumeUomExt	

Associations

Association	Notes
From**: ReciprocalVolumeMeasureExt.** To: **AbstractMeasure**	

21.294 ReluctanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReluctanceUom	

Associations

Association	Notes
From**: ReluctanceMeasure.** To: **AbstractMeasure**	

21.295 ReluctanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ReluctanceUomExt	

Associations

Association	Notes
From**: ReluctanceMeasureExt.** To: **AbstractMeasure**	

21.296 SecondMomentOfAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SecondMomentOfAreaUom	

Associations

Association	Notes
From**: SecondMomentOfAreaMeasure.** To: **AbstractMeasure**	

21.297 SecondMomentOfAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SecondMomentOfAreaUomExt	

Associations

Association	Notes
From: **SecondMomentOfAreaMeasureExt.** To: **AbstractMeasure**	

21.298 SignalingEventPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SignalingEventPerTimeUom	

Associations

Association	Notes
From**: SignalingEventPerTimeMeasure.** To: **AbstractMeasure**	

21.299 SignalingEventPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SignalingEventPerTimeUomExt	

Associations

Association	Notes
From: **SignalingEventPerTimeMeasureExt.** To: **AbstractMeasure**	

21.300 SolidAngleMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SolidAngleUom	

Associations

Association	Notes
From**: SolidAngleMeasure.** To: **AbstractMeasure**	

21.301 SolidAngleMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	SolidAngleUomExt	

Associations

Association	Notes
From**: SolidAngleMeasureExt.** To: **AbstractMeasure**	

21.302 SpecificHeatCapacityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	SpecificHeatCapacityUom	

Associations

Association	Notes
From**: SpecificHeatCapacityMeasure. 1..1** To: **AbstractMeasure**	

21.303 SpecificHeatCapacityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	SpecificHeatCapacityUomExt	

Associations

Association	Notes
From**: SpecificHeatCapacityMeasureExt.** To: **AbstractMeasure**	

21.304 TemperatureIntervalMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalUom	

Associations

Association	Notes
From**: TemperatureIntervalMeasure.** To: **AbstractMeasure**	

21.305 TemperatureIntervalMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalUomExt	

Associations

Association	Notes
From**: TemperatureIntervalMeasureExt.** To: **AbstractMeasure**	

21.306 TemperatureIntervalPerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerLengthUom	

Associations

Association	Notes
From**: TemperatureIntervalPerLengthMeasure.** To: **AbstractMeasure**	

21.307 TemperatureIntervalPerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerLengthUomExt	

Associations

Association	Notes
From: **TemperatureIntervalPerLengthMeasureExt.** To: **AbstractMeasure**	

21.308 TemperatureIntervalPerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerPressureUom	

Associations

Association	Notes
From: **TemperatureIntervalPerPressureMeasure.** To: **AbstractMeasure**	

21.309 TemperatureIntervalPerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerPressureUomExt	

Associations

Association	Notes
From: **TemperatureIntervalPerPressureMeasureExt.** To: **AbstractMeasure**	

21.310 TemperatureIntervalPerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerTimeUom	

Associations

Association	Notes
From**: TemperatureIntervalPerTimeMeasure.** To: **AbstractMeasure**	

21.311 TemperatureIntervalPerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TemperatureIntervalPerTimeUomExt	

Associations

Association	Notes
From: **TemperatureIntervalPerTimeMeasureExt.** To: **AbstractMeasure**	

21.312 ThermalConductanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalConductanceUom	

Associations

Association	Notes
From**: ThermalConductanceMeasure.** To: **AbstractMeasure**	

21.313 ThermalConductanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalConductanceUomExt	

Associations

Association	Notes
From: **ThermalConductanceMeasureExt.** To: **AbstractMeasure**	

21.314 ThermalConductivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ThermalConductivityUom	

Associations

Association	Notes
From**: ThermalConductivityMeasure. 1..1** To: **AbstractMeasure**	

21.315 ThermalConductivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ThermalConductivityUomExt	

Associations

Association	Notes
From: **ThermalConductivityMeasureExt.** To: **AbstractMeasure**	

21.316 ThermalDiffusivityMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalDiffusivityUom	

Associations

Association	Notes
From**: ThermalDiffusivityMeasure.** To: **AbstractMeasure**	

21.317 ThermalDiffusivityMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalDiffusivityUomExt	

Associations

Association	Notes
From**: ThermalDiffusivityMeasureExt.** To: **AbstractMeasure**	

21.318 ThermalInsulanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalInsulanceUom	

Associations

Association	Notes
From**: ThermalInsulanceMeasure.** To: **AbstractMeasure**	

21.319 ThermalInsulanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalInsulanceUomExt	

Associations

Association	Notes
From**: ThermalInsulanceMeasureExt.** To: **AbstractMeasure**	

21.320 ThermalResistanceMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalResistanceUom	

Associations

Association	Notes
From**: ThermalResistanceMeasure.** To: **AbstractMeasure**	

21.321 ThermalResistanceMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermalResistanceUomExt	

Associations

Association	Notes
From**: ThermalResistanceMeasureExt.** To: **AbstractMeasure**	

21.322 ThermodynamicTemperatureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ThermodynamicTemperatureUom	

Associations

Association	Notes
1..1 From**: ThermodynamicTemperatureMeasure.** To: **AbstractMeasure**	
From**: SaturationTemperature.** To: **ThermodynamicTemperatureMeasure**	

21.323 ThermodynamicTemperatureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	ThermodynamicTemperatureUomExt	

Associations

Association	Notes
From: **ThermodynamicTemperatureMeasureExt.** To: **AbstractMeasure**	

21.324 ThermodynamicTemperaturePerThermodynamicTemperatureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermodynamicTemperaturePerThermodynamicTemperatureUom	

Associations

Association	Notes
From: **ThermodynamicTemperaturePerThermodynamicTemperatureMeasure.** To: **AbstractMeasure**	

21.325 ThermodynamicTemperaturePerThermodynamicTemperatureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/4/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	ThermodynamicTemperaturePerThermodynamicTemperatureUomExt	

Associations

Association	Notes
From: **ThermodynamicTemperaturePerThermodynamicTemperatureMeasureExt.** To: **AbstractMeasure**	

21.326 TimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	TimeUom	

Associations

Association	Notes
From**: TimeMeasure. 1..1** To: **AbstractMeasure**	

21.327 TimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	TimeUomExt	

Associations

Association	Notes
From**: TimeMeasureExt.** To: **AbstractMeasure**	

21.328 TimePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerLengthUom	

Associations

Association	Notes
From: **TimePerLengthMeasure.** To: **AbstractMeasure**	

21.329 TimePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerLengthUomExt	

Associations

Association	Notes
From**: TimePerLengthMeasureExt.** To: **AbstractMeasure**	

21.330 TimePerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerMassUom	

Associations

Association	Notes
From**: TimePerMassMeasure.** To: **AbstractMeasure**	

21.331 TimePerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerMassUomExt	

Associations

Association	Notes
From: **TimePerMassMeasureExt.** To: **AbstractMeasure**	

21.332 TimePerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerTimeUom	

Associations

Association	Notes
From**: TimePerTimeMeasure.** To: **AbstractMeasure**	

21.333 TimePerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerTimeUomExt	

Associations

Association	Notes
From**: TimePerTimeMeasureExt.** To: **AbstractMeasure**	

21.334 TimePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerVolumeUom	

Associations

Association	Notes
From**: TimePerVolumeMeasure.** To: **AbstractMeasure**	

21.335 TimePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	TimePerVolumeUomExt	

Associations

Association	Notes
From**: TimePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.336 UnitlessMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 12/8/2016 *Last modified:*12/8/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes: A unitless measure is a measure which has no unit of measure symbol, but could be a real physical measurement. Examples would be pH, wire gauge (AWG and BWG) and shoe size.

This is different from a dimensionless measure which represents a ratio whose units of measure have cancelled each other. DImensionless measures can have units of measure (like ppm or %) or may not have a displayable unit of measure symbol (in which case the units symbol Euc is used in a data transfer).

Associations

Association	Notes
From: **UnitlessMeasure.** To: **AbstractMeasure**	

21.337 VerticalCoordinateMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	VerticalCoordinateUom	

Associations

Association	Notes
From**: VerticalCoordinateMeasure.** To: **AbstractMeasure**	

21.338 VerticalCoordinateMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 11/11/2016 *Last modified:*11/11/2016 *Status:* Proposed *Author:* Jay Hollingsworth
Notes:

Attributes

Name	Type	Notes
uom	VerticalCoordinateUomExt	

Associations

Association	Notes
From**: VerticalCoordinateMeasureExt.** To: **AbstractMeasure**	

21.339 VolumeFlowRatePerVolumeFlowRateMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumeFlowRatePerVolumeFlowRateUom	

Associations

Association	Notes
From: **VolumeFlowRatePerVolumeFlowRateMeasure.** To: **AbstractMeasure**	

21.340 VolumeFlowRatePerVolumeFlowRateMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumeFlowRatePerVolumeFlowRateUomExt	

Associations

Association	Notes
From: **VolumeFlowRatePerVolumeFlowRateMeasureExt.** To: **AbstractMeasure**	

21.341 VolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumeUomWithLegacy	

Associations

Association	Notes
From**: VolumeMeasure. 1..1** To: **AbstractMeasure**	
From**: LostVolumeAndReason.** To: **VolumeMeasure**	

21.342 VolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumeUomExt	

Associations

Association	Notes
From**: VolumeMeasureExt.** To: **AbstractMeasure**	

21.343 VolumePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerAreaUomWithLegacy	

Associations

Association	Notes
From: **VolumePerAreaMeasure.** To: **AbstractMeasure**	

21.344 VolumePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerAreaUomExt	

Associations

Association	Notes
From**: VolumePerAreaMeasureExt.** To: **AbstractMeasure**	

21.345 VolumePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerLengthUom	

Associations

Association	Notes
From**: VolumePerLengthMeasure. 1..1** To: **AbstractMeasure**	

21.346 VolumePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerLengthUomExt	

Associations

Association	Notes
From**: VolumePerLengthMeasureExt.** To: **AbstractMeasure**	

21.347 VolumePerMassMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerMassUom	

Associations

Association	Notes
From**: VolumePerMassMeasure. 1..1** To: **AbstractMeasure**	

21.348 VolumePerMassMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerMassUomExt	

Associations

Association	Notes
From**: VolumePerMassMeasureExt.** To: **AbstractMeasure**	

21.349 VolumePerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerPressureUom	

Associations

Association	Notes
From**: VolumePerPressureMeasure.** To: **AbstractMeasure**	

21.350 VolumePerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerPressureUomExt	

Associations

Association	Notes
From**: VolumePerPressureMeasureExt.** To: **AbstractMeasure**	

21.351 VolumePerRotationMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerRotationUom	

Associations

Association	Notes
From**: VolumePerRotationMeasure.** To: **AbstractMeasure**	

21.352 VolumePerRotationMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*12/8/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerRotationUomExt	

Associations

Association	Notes
From**: VolumePerRotationMeasureExt.** To: **AbstractMeasure**	

21.353 VolumePerTimeLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimeLengthUom	

Associations

Association	Notes
From**: VolumePerTimeLengthMeasure.** To: **AbstractMeasure**	

21.354 VolumePerTimeLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimeLengthUomExt	

Associations

Association	Notes
From**: VolumePerTimeLengthMeasureExt.** To: **AbstractMeasure**	

21.355 VolumePerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimeUomWithLegacy	

Associations

Association	Notes
From: **VolumePerTimeMeasure. 1..1** To: **AbstractMeasure**	

21.356 VolumePerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimeUomExt	

Associations

Association	Notes
From**: VolumePerTimeMeasureExt.** To: **AbstractMeasure**	

21.357 VolumePerTimePerAreaMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerAreaUom	

Associations

Association	Notes
From**: VolumePerTimePerAreaMeasure.** To: **AbstractMeasure**	

21.358 VolumePerTimePerAreaMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerAreaUomExt	

Associations

Association	Notes
From**: VolumePerTimePerAreaMeasureExt.** To: **AbstractMeasure**	

21.359 VolumePerTimePerLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerLengthUom	

Associations

Association	Notes
From**: VolumePerTimePerLengthMeasure.** To: **AbstractMeasure**	

21.360 VolumePerTimePerLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerLength UomExt	

Associations

Association	Notes
From**: VolumePerTimePerLengthMeasureExt.** To: **AbstractMeasure**	

21.361 VolumePerTimePerPressureLengthMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerPressureLengthUom	

Associations

Association	Notes
From: **VolumePerTimePerPressureLengthMeasure.** To: **AbstractMeasure**	

21.362 VolumePerTimePerPressureLengthMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerPressureLengthUomExt	

Associations

Association	Notes
From: **VolumePerTimePerPressureLengthMeasureExt.** To: **AbstractMeasure**	

21.363 VolumePerTimePerPressureMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerPressureUom	

Associations

Association	Notes
From**: VolumePerTimePerPressureMeasure.** To: **AbstractMeasure**	

21.364 VolumePerTimePerPressureMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerPressureUomExt	

Associations

Association	Notes
From: **VolumePerTimePerPressureMeasureExt.** To: **AbstractMeasure**	

21.365 VolumePerTimePerTimeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerTimeUom	

Associations

Association	Notes
From**: VolumePerTimePerTimeMeasure.** To: **AbstractMeasure**	

21.366 VolumePerTimePerTimeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerTimeUomExt	

Associations

Association	Notes
From**: VolumePerTimePerTimeMeasureExt.** To: **AbstractMeasure**	

21.367 VolumePerTimePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerVolumeUom	

Associations

Association	Notes
From: **VolumePerTimePerVolumeMeasure.** To: **AbstractMeasure**	

21.368 VolumePerTimePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumePerTimePerVolumeUomExt	

Associations

Association	Notes
From: **VolumePerTimePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.369 VolumePerVolumeMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerVolumeUomWithLegacy	

Associations

Association	Notes
From**: VolumePerVolumeMeasure. 1..1** To: **AbstractMeasure**	
From**: RelativeVolumeRatio.** To: **VolumePerVolumeMeasure**	

21.370 VolumePerVolumeMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumePerVolumeUomExt	

Associations

Association	Notes
From**: VolumePerVolumeMeasureExt.** To: **AbstractMeasure**	

21.371 VolumetricHeatTransferCoefficientMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 8/8/2014 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumetricHeatTransferCoefficientUom	

Associations

Association	Notes
From: **VolumetricHeatTransferCoefficientMeasure.** To: **AbstractMeasure**	

21.372 VolumetricHeatTransferCoefficientMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* wsmckenz
Notes:

Attributes

Name	Type	Notes
uom	VolumetricHeatTransferCoefficientUomExt	

Associations

Association	Notes
From: **VolumetricHeatTransferCoefficientMeasureExt.** To: **AbstractMeasure**	

21.373 VolumetricThermalExpansionMeasure

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 6/4/2012 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumetricThermalExpansionUom	

Associations

Association	Notes
1..1 From**: VolumetricThermalExpansionMeasure.** To: **AbstractMeasure**	

21.374 VolumetricThermalExpansionMeasureExt

Type: Class *Stereotype:* «XSDcomplexType»
Detail: *Created:* 9/1/2015 *Last modified:*10/26/2016 *Status:* Proposed *Author:* Hari Koduru
Notes:

Attributes

Name	Type	Notes
uom	VolumetricThermalExpansionUomExt	

Associations

Association	Notes
From: **VolumetricThermalExpansionMeasureExt.** To: **AbstractMeasure**	