#### reference (Reference)

Represents a set of selected fields and selected [items](items.docx) within those fields.

[Example:

<sh:reference [field](field.docx)="4294967294" count="1" selected="0">  
 <sh:x [v](v.docx)="0"/>  
</sh:reference>

end example]

|  |
| --- |
| Parent Elements |
| [references](references.docx) (§) |

|  |  |
| --- | --- |
| Child Elements | Subclause |
| [extLst](extLst.docx) (Future Feature Data Storage Area) | § |
| [x](x.docx) (Shared Items Index) | § |

|  |  |
| --- | --- |
| Attributes | Description |
| avgSubtotal (Include Average Filter) | Specifies a boolean value that indicates whether the 'average' aggregate function is included in the filter.  A value of on, 1, or true indicates the average aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| byPosition (Positional Reference) | Specifies a boolean value that indicates whether the [item](item.docx) is referred to by position rather than [item](item.docx) index.  A value of on, 1, or true indicates the [item](item.docx) is referred to by position.  A value of off, 0, or false indicates the [item](item.docx) is referred to by index.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| count (Item Index Count) | Specifies the number of [item](item.docx) indexes in the collection of indexes (x tags).  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedInt datatype. |
| countASubtotal (Include CountA Filter) | Specifies a boolean value that indicates whether the 'countA' subtotal is included in the filter.  A value of on, 1, or true indicates the count aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| countSubtotal (Include Count Subtotal) | Specifies a boolean value that indicates whether the count aggregate function is included in the filter.  A value of on, 1, or true indicates the count aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| defaultSubtotal (Include Default Filter) | Specifies a boolean value that indicates whether the default subtotal is included in the filter.  A value of on, 1, or true indicates the default subtotal will is included in the filter. The default is to display the total or the grand total.  A value of off, 0, or false indicates another subtotal or aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| [field](field.docx) (Field Index) | Specifies the index of the [field](field.docx) to which this [filter](filter.docx) refers. A value of -2 indicates the 'data' field.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) unsignedInt datatype. |
| maxSubtotal (Include Maximum Filter) | Specifies a boolean value that indicates whether the 'maximum' aggregate function is included in the filter.  A value of on, 1, or true indicates the maximum aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| minSubtotal (Include Minimum Filter) | Specifies a boolean value that indicates whether the 'minimum' aggregate function is included in the filter.  A value of on, 1, or true indicates the minimum aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| productSubtotal (Include Product Filter) | Specifies a boolean value that indicates whether the 'product' aggregate function is included in the filter.  A value of on, 1, or true indicates the product aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| relative (Relative Reference) | Specifies a boolean value that indicates whether the [item](item.docx) is referred to by a relative reference rather than an absolute reference. This attribute is used if posRef is set to true.  A value of on, 1, or true indicates the [item](item.docx) is referred to by a relative reference.  A value of off, 0, or false indicates the [item](item.docx) is referred to by an absolute reference.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| selected (Selected) | Specifies a boolean value that indicates whether this [field](field.docx) has selection. This attribute is used when the PivotTable is in Outline view. It is also used when both [header](header.docx) and data cells have selection.  A value of on, 1, or true indicates the [field](field.docx) has selection.  A value of off, 0, or false indicates the [field](field.docx) does not have selection.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| stdDevPSubtotal (Include StdDevP Filter) | Specifies a boolean value that indicates whether the population standard deviation aggregate function is included in the filter.  A value of on, 1, or true indicates the population standard deviation aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| stdDevSubtotal (Include StdDev Filter) | Specifies a boolean value that indicates whether the standard deviation aggregate function is included in the filter.  A value of on, 1, or true indicates the standard deviation aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| sumSubtotal (Include Sum Filter) | Specifies a boolean value that indicates whether the sum aggregate function is included in the filter.  A value of on, 1, or true indicates the sum aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| varPSubtotal (Include VarP Filter) | Specifies a boolean value that indicates whether the population variance aggregate function is included in the filter.  A value of on, 1, or true indicates the population variance aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |
| varSubtotal (Include Var Filter) | Specifies a boolean value that indicates whether the variance aggregate function is included in the filter.  A value of on, 1, or true indicates the variance aggregation function will is included in the filter.  A value of off, 0, or false indicates another aggregation function is included in the filter.  The possible values for this attribute are defined by the XML [Schema](Schema.docx) boolean datatype. |

The following XML [Schema](Schema.docx) fragment defines the contents of this element:

<complexType [name](name.docx)="CT\_PivotAreaReference">

<sequence>

<element name="x" minOccurs="0" maxOccurs="unbounded" type="CT\_Index"/>

<element [name](name.docx)="[extLst](extLst.docx)" minOccurs="0" type="CT\_ExtensionList"/>

</sequence>

<attribute [name](name.docx)="[field](field.docx)" use="optional" type="xsd:unsignedInt"/>

<attribute [name](name.docx)="count" type="xsd:unsignedInt"/>

<attribute [name](name.docx)="selected" type="xsd:boolean" default="true"/>

<attribute [name](name.docx)="byPosition" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="relative" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="defaultSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="sumSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="countASubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="avgSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="maxSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="minSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="productSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="countSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="stdDevSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="stdDevPSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="varSubtotal" type="xsd:boolean" default="false"/>

<attribute [name](name.docx)="varPSubtotal" type="xsd:boolean" default="false"/>

</complexType>