## MUFI character recommendation

Characters in the official Unicode Standard and in the Private Use Area for Medieval texts written in the Latin alphabet


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* Part 2: Code chart order
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※ Version 4.0 (22 December 2015)
※ Compliant with the Unicode Standard version 8.0
※ Medieval Unicode Font Initiative (MUFI)
※ www.mufi.info

## Editor

Odd Einar Haugen, University of Bergen, Norway.

## Background

Version 1.0 of the MUFI recommendation was published electronically and in hard copy on 8 December 2003. It was the result of an almost two-year-long electronic discussion within the Medieval Unicode Font Initiative (http://www.mufi.info), which was established in July 2001 at the International Medieval Congress in Leeds. Version 1.0 contained a total of $\mathbf{8 2 8}$ characters, of which 473 characters were selected from various charts in the official part of the Unicode Standard and 355 were located in the Private Use Area. Version 1.0 of the recommendation was compliant with the Unicode Standard version 4.0.

Version 2.0 was a major update, published electronically on 22 December 2006. The net addition in this version was $\mathbf{4 9 8}$ characters, making a total of $\mathbf{1 3 2 6}$ characters. This version of the recommendation was compliant with the Unicode Standard version 5.0.

Version 3.0 was another major update, published electronically on 24 June 2009. This version was compliant with the Unicode Standard version 5.1, and contained a total of $\mathbf{1 5 4 8}$ characters.

Version 4.0 was published electronically on 22 December 2015. It is a minor update in the sense that there are only $\mathbf{3 6}$ new characters, but it is a major update with respect to the final decommissioning of characters from the Private Use Area. While v. 3.0 listed all of these characters, the present version have removed them from the PUA entirely, and advises font producers to do the same. Version 4.0 is compliant with version 8.0 of the Unicode Standard. After correcting the number of characters for decommissioning, this version has a total of $\mathbf{1 5 1 2}$ characters (i.e. different code points).

Version 4.0 will be the last version of the MUFI character recommendation to be published in the present form. Any further updates will most likely be in the form of a database accessible from the MUFI web site.

## Part I \& 2

As of version 2.0, the recommendation has been divided into two parts, each containing the same number of characters, but in different order. Part 1 lists the characters in alphabetical order, beginning with alphabetical characters and then giving numbers, abbreviation characters, punctuation characters, symbols, and finally geometrical and metrical characters. Part 2 lists the characters according to the code charts in the Unicode Standard.

Part 1 is intended for casual users, because it is fairly easy to find any particular character simply by browsing through the document on screen or in print. Part 2 is intended for encoders and font designers, because it lists characters according to Unicode code charts and accordingly in ascending code-point order. It also shows the structure of the Private Use Area more clearly than Part 1. In general, it contains more information than Part 1; it includes appendices specifying all changes since the previous version, and it distinguishes between ISO entity names (where applicable) and MUFI-recommended entity names.

## Contributors and meetings

Since work with this recommendation began in August 2001, a number of people have given help and advice (in alphabetical order): Jim Allan (U.S.), Deborah W. Anderson (Berkeley, CA), Peter S. Baker (Charlottesville, VA), Michael Beddow (Leeds), Ingvil Brügger Budal (Bergen), Florian Grammel (København), Michael Gullick (Stevenage, UK), Guðvarður Már Gunnlaugsson (Reykjavík), António H.A. Emiliano (Lisboa), Michael Everson (Ireland), Jost Gippert (Frankfurt am Main), Paul Hardy (U.S.), Bjarki M. Karlsson (Reykjavík), Alex Speed Kjeldsen (København), Diana Luft (Cardiff), Alec McAllister (Leeds), Juan-José Marcos (Plasencia, Spain), Rick McGowan (Unicode consortium), Susana T. Pedro (Lisboa), David J. Perry (Rye, NY), Gunnar Pettersen (Oslo), Gerhard Schumacher (Köln), Andreas Stötzner (Leipzig), Vladas Tumasonis (Vilnius), Jo Rune Ugulen (Oslo), Tor Ulset (Oslo), Ken Whistler (Unicode consortium), Andrea de Leeuw van Weenen (Leiden), Tarrin Wills (Aberdeen/Sydney) and Christian Wittern (Kyoto).

In addition to electronic discussions, the MUFI group has also held informal meetings in Oxford (June 2003), Bergen (August 2003), Lisboa (March 2005), Leipzig (August 2005), Bonn (June 2006), Mainz (June 2008), and Bergen (March 2011 and September 2015). The project has also been presented at several conferences, including the International Medieval Congress in Leeds (July 2003), the ALLC/AHC congress in Göteborg (June 2004), the 27th Unicode conference in Berlin (April 2005), Open Scholarly communities on the Web (Göteborg 2009), III Incontro di filologia digitale (Verona 2010), Gestion informatisée des écritures anciennes (Tours 2013), and Bibliothèque nationale de France (Paris 2015), to name a few.

## Caveat

Many aspects of this recommendation may be controversial, and more than one of the contributors and advisors listed above may disagree with the solutions chosen in the recommendation. It is, however, clear that this recommendation would have progressed much more slowly and would have been much inferior had it not been for all the help and comments received. The editor would like to thank all contributors for their assistance in this project.

## Publication details

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## Introduction

This recommendation contains a set of characters for the use of Medievalists and, to some extent, Classicists. The two major aims of the recommendation are (1) to establish a suitable selection of characters from the official Unicode Standard and (2) to co-ordinate the usage of code points in the Private Use Area.

The selection is intended to cover transcriptions of Medieval sources at different levels of detail and also to be useful for editions, commentaries, and linguistic and lexicographical works that refer to Medieval primary sources. For this reason, it contains a number of variant letter forms, as well as many critical and editorial signs.

## I. Structure

The recommendation contains (1) a representative glyph for each character, (2) an entity name, (3) a Unicode code point, (4) a reference to a Unicode code chart, and (5) a descriptive name. In the case of unusual or sometimes misunderstood characters, short explanatory notes are added immediately below the character.

## I.I. Glyphs

The glyphs (character shapes) used in this recommendation are for guidance only. Unicode makes an important distinction between characters and glyphs; a character is the smallest component of written language that has semantic value. A character thus refers to the abstract meaning and/or shape, rather than a specific shape. A glyph, on the other hand, is the individual shape of the character. Many characters have well-defined glyphs, and no guidance will be necessary, e.g. the a-z / A-Z of the Latin alphabet. For many other characters, there are few or sometimes no printed examples available. We have spent time with font designers in order to present glyphs that look clear, sufficiently distinct from other glyphs, and consistently shaped within the limitations of the basic font design. In the case of the font used in this recommendation, this means a humanist typeface with its ultimate roots in Latin capitals and Carolingian minuscules. All glyphs in this version of the recommendation belong to the font Andron Scriptor Web and have been designed by Andreas Stötzner (Leipzig).

### 1.2. Entity names

Entities are used in numerous encoding schemes such as SGML and XML. For the sake of interchangeability, it is recommended that entities, as far as possible, conform to the standard ISO entity sets. In addition to the ISO entities, a number of entities for characters not designated in this standard are needed. This recommendation uses the syntax and inventory defined in The Menota handbook v. 2.0, ch. 2 and 5 (http://www.menota.org), summarised below.

| Base-line character | main type | variant | ligature | fixed modification | loose modification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A <br> a <br> B <br> b <br> C <br> c <br> etc. | anc <br> comb <br> enl <br> ins <br> run <br> scap <br> unc | brk <br> close <br> dotless <br> high <br> long <br> med <br> open <br> rot <br> squ | lig ligred | bar <br> baracr <br> barbl <br> des <br> flour <br> hook <br> ogon <br> ovl <br> slash <br> strok | acute <br> breve <br> car <br> circ <br> curl <br> dblac <br> dot <br> dotbl <br> grave <br> macr <br> sup <br> uml |

Note that not all slots need to be filled in; in most cases only one or two slots are used in addition to the base-line character. The meaning of the various parts is explained in this table, listed in alphabetical order:


Some entities, especially for non-alphabetical characters in Basic Latin, Latin-1 Supplement and General Punctuation, have shorter names, modelled on existing entity names. An updated list of ISO-conformant entities can be found at the Oasis web site: http://www.oasis-open.org/cover/xml-ISOents.txt.

## I.3. Code points

Code points are given in hexadecimal format and refer to the Unicode Standard version 8.0. The allocation of code points in the Private Use Area has been co-ordinated with several font projects (notably TITUS and Junicode) with the aim of establishing a common usage among Medievalists. Further information can be found on the MUFI web site (http://www.mufi.info).

Code points in the Unicode Standard are usually given with the prefix 'U+', e.g. 'U+003A' for the colon, 'U+003B' for the semicolon, etc. For reasons of brevity, in this recommendation, this prefix has been omitted.

With the exception of Ancient Symbols (pp. 82-83 below), all code points are located in the Basic Multilingual Plane (BMP) of the Unicode Standard. The Private Use Area of the BMP has a total of 6,400 slots. A large number of PUA characters in this recommendation are concentrated in the section F100-F3FF, but many are also to be found in the section E000-F0FF, co-ordinated with the TITUS project. Metrical characters are co-ordinated with the Alphabetum font and located in the F700-F76F section.

Characters in the PUA have been divided into subranges. Note that code points are not necessarily allocated contiguously.
Because TITUS and Junicode were already established when this recommendation was made, some code-point conflicts were inevitable. Fortunately, these code point conflicts have now been resolved (for an overview of previous conflicts, see v. 3.0 of this recommenation).

Characters in the PUA should be decommissioned as soon as they can be encoded with ordinary Unicode characters. Since the publication of v. 1.0 of this recommendation, more than 150 characters have been accepted by Unicode, and have subsequently been decommissioned from the Private Use Area.

## I.4. Code charts

In the Unicode Standard, characters are grouped together in code charts, containing from a handful to several hundred characters (in the case of Chinese, Japanese and Korean, several thousand characters). Characters in the Latin alphabet are found in several code charts scattered around in the Standard. In this part of the recommendation, code charts are listed in ascending code-point order, i.e. in the same order as in the Unicode Standard. This means that many categories of characters are spread on various pages, e.g. small capitals. In Part 1, for easier reference, characters are given in alphabetical order.

## I.5. Descriptive names

Each character has been given a descriptive name, as far as possible according to the rules in the Unicode Standard. The Menota handbook v. 2.0, ch. 2 has further details on the interpretation of the Unicode naming rules.

In a few cases, an alternative MUFI descriptive name has been introduced. For example, the character located at 223B in Mathematical Operators (p. 68 below) has the name HOMOTHETIC in the Unicode Standard, but, since this character could be used for a Latin abbreviation (meaning 'est'), a MUFI descriptive name has been listed, LATIN ABBREVIATION SIGN EST.

## 2. Base and precomposed characters

In addition to the base characters $\mathrm{a}-\mathrm{z} / \mathrm{A}-\mathrm{Z}$, the Unicode Standard and this recommendation contain a large numbers of precomposed characters, i.e. base characters with one or more diacritical marks. These characters belong to various ISO charts that were made part of the Unicode Standard in the 1990s, but, as of version 3.0, Unicode is unwilling to add more precomposed characters. Hereafter, new precomposed characters should be "decomposed" into a base character and one or more combining diacritical marks. This means that a character like "o with ogonek and acute accent", 'q́', should be encoded as a sequence of "o", "combining ogonek" and "combining acute accent", or 006F + 0328+0301 (or as a combination of "o with ogonek" and "combining acute accent", $01 \mathrm{~EB}+0301$ ). This also applies to precomposed characters already in the standard, e.g. "a with acute accent" which can be decomposed into "a" + "combining acute accent", or $0061+0301$. Some examples of encodings:

| Glyph | Entity name | Code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| Q́ | \&oogonacute $;=$ <br> o + \&combogon; + \&combacute; $;$ | E60C $=$ <br> $006 \mathrm{~F}+0328+0301$ | LATIN SMALL LETTER O WITH OGONEK AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING OGONEK + COMBINING ACUTE ACCENT |
| á | \&aacute $;=$ <br> $a+\& c o m b a c u t e ; ~$ | $00 E 1=$ <br> $0061+0301$ | LATIN SMALL LETTER A WITH ACUTE <br> = LATIN SMALL LETTER A + COMBINING ACUTE ACCENT |

In this part of the MUFI recommendation, characters have been given with precomposed encodings throughout, with the exception of those in the Private Use Area. They have been given with alternative, "decomposed" encodings, as exemplified with LATIN SMALL LETTER O WITH OGONEK AND ACUTE above. For LATIN SMALL LETTER A WITH ACUTE in Latin-1 Supplement, also exemplified above, a "decomposed" encoding has not been given, although this character can equally well be decomposed. All precomposed characters can in fact be reduced to sequences of base and combining characters, thus greatly reducing the number of characters needed. For the time being, precomposed encoding is widely used, especially for languages with a limited number of precomposed characters (such as many modern European languages).

Because precomposed and decomposed encodings are strictly equivalent, a text encoded with precomposed characters can at a later stage be "decomposed", and vice versa. Therefore, although the use of precomposed characters is an important consideration to make, especially when embarking on large encoding projects, it is not an irretrievable decision.

Smart font technology is needed in order to display and print decomposed characters properly. At the time of writing, this technology is not yet fully mature, and also for reasons of backwards compatibiity, we believe that precomposed characters will be needed for some time.

## 3. Unicode resources and proposals

## 3.I. The Unicode Standard

The Unicode Standard (now in version 8.0) can be accessed at http://www.unicode.org. This site contains a wealth of information on the standard, including code charts in PDF for all ranges. Version 5.0 of the Unicode Standard was the last version to be published also as a printed book.

### 3.2. The TITUS project

The TITUS project (Thesaurus Indogermanischer Text- und Sprachmaterialien), founded by Jost Gippert (University of Frankfurt), has developed a font with several thousand characters in the Private Use Area (code points E000-F0FF), primarily for use in comparative linguistics. The allocation of code points in TITUS and the MUFI character recommendation has been co-ordinated in order to avoid unneccesary code-point conflicts. For a full overview, see the TITUS website at http://titus.uni-frankfurt.de.

### 3.3. The Junicode font

Junicode is a font designed by Peter S. Baker (University of Virginia) on the basis of Junius, a 17th century font for Old English. It is available as a Unicode font (hence the name Junicode) on http://junicode.sourceforge.net and it has a number of characters in the Private Use Area. The allocation of PUA code points in the MUFI character recommendation has been co-ordinated with Junicode.

### 3.4. The Medieval Unicode Font Initiative

The Medieval Unicode Font Initiative (MUFI) was established in July 2001 by Odd Einar Haugen (Bergen), Alec McAllister (Leeds) and Tarrin Wills (Sydney) with the aim of co-ordinating work among Medieval scholars, and disseminating inexpensive or, if possible, free fonts for Medievalists. Several fonts compliant with earlier versions of the MUFI recommendation have already been published on the MUFI web site, http://www.mufi.info/fonts. The glyphs in this recommendation are taken from the font Andron Scriptor Web, designed by Andreas Stötzner (Leipzig), http://www.signographie.de.

### 3.5. Linguistic Corporate Use Area

LINCUA (Linguistic Corporate Use Area) is a project set up by the above-mentioned Andreas Stötzner. It is intended to help in managing the Private Use Area in a way which will minimise conflicts between medieval fonts, http://stoetzner-gestaltung.prosite.com (select LINCUA on the opening page).

### 3.6. Proposals to Unicode

Members of the MUFI group and other scholars have been co-ordinating proposals to Unicode for a number of Medieval characters. For reasons explained above, it does not contain any precomposed characters, nor any obviously variant letter forms, but it does contain many base characters. Michael Everson (Ireland) and David J. Perry (U.S.) have been particularly active (and successful) in this work. Thanks to their proposals, version 3.0 (and the present version 4.0 ) of the MUFI character recommendation contain a large number of new, offically accepted characters in the ranges Combining Diacritical Marks Supplement, Latin Extended Additional, Supplemental Punctuation, Latin Extended-D and Ancient Symbols.

## 4. Private Use Area

Characters in the Private Use Area (PUA) should be used with great caution. The characters listed in this recommendation are supported by MUFI-compliant fonts, but if a document is displayed with another, non-compliant font, these characters will appear incorrectly (with the unlikely exception of characters that by coincidence are located at the same code points in two different fonts). For documents with a long life expectancy, it is strongly recommended that PUA characters should be encoded with mark-up or entities, and that PUA characters should be used for the final display only, whether on screen or in print. For documents with a short life expectancy, characters may be used with less caution, as long as future problems of storage and interchangeability are considered.

MUFI recommends that if a character in the PUA is accepted by the Unicode Standard, it should be decommissioned and moved to the new code point. Thus, newer versions of MUFI-compliant fonts may lack characters of this type. For this reason, anyone who uses a MUFI-compliant font for a document should keep a copy of that particular font, and make a PDF version of the file for future reference. Earlier versions of fonts might not be accessible at a later date. When saving the PDF file it is important to embed all fonts used in the original file.

Earlier MUFI compatible fonts may contain characters with a skull-and-dagger sign on decommissioned code points in the PUA. This convention was not widely understood, so our recommendation is now to simply delete decommissioned characters from the PUA.

## A: Characters in the Unicode Standard

## I: Basic Latin

All 96 characters ( $0020-007 \mathrm{~F}$ ) in this chart have been selected. Characters in Basic Latin may be encoded without the use of entities, but entities have been defined for characters other than the digits $0-9$ and the alphabetical characters $\mathrm{A}-\mathrm{Z}$ and $\mathrm{a}-\mathrm{z}$.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
|  |  | \&sp; | 0020 | SPACE |
| $!$ | \! |  | 0021 | EXCLAMATION MARK |
| " | \" |  | 0022 | QUOTATION MARK |

In SGML/XML encoded documents, the quotation mark is used to delimit attributes. The entity '\"' refers to the quotation mark as such.

| $\#$ | \# |  | 0023 | NUMBER SIGN |
| :--- | :--- | :--- | :--- | :--- |
| $\$$ | \$ |  | 0024 | DOLLAR SIGN |
| $\%$ | \% |  | 0025 | PERCENT SIGN |
| $\&$ | \& |  | 0026 | AMPERSAND |

In SGML/XML encoded documents, the ampersand is the opening character of an entity name, as exemplified here. To avoid confusion, the ampersand as such can be encoded with the entity '\&'. In Medieval primary sources, the ampersand was used as an abbreviation for the conjunction 'and' (Latin 'et', Nordic 'ok', etc.), in which case it can be specified by markup, e.g. by the <am> element in the Text Encoding Initiative (TEI) P5 Guidelines.

| ' | \' | 0027 | APOSTROPHE |
| :---: | :---: | :---: | :---: |
| In SGML/XML encoded documents, the apostrophe may be used in a technical sense. To be able to refer to the apostrophe as such, a separate entity is needed, '\''. In Medieval script, a sign looking like the apostrophe was used as an abbreviation for 'i' or 'e'. We recommend using the character 02BC MODIFIER LETTER APOSTROPHE in Spacing Modyfying Letters for this purpose. |  |  |  |
| ( | \( | 0028 | LEFT PARENTHESIS |
| ) | \) | 0029 | RIGHT PARENTHESIS |
| * | \* | 002A | ASTERISK |
| $\pm$ | \+ | 002B | PLUS SIGN |
| , | \, | 002C | COMMA |
| - | \‐ | 002D | HYPHEN-MINUS |
| As the name HYPHEN-MINUS indicates, this character is ambiguous. For an unambiguous hyphen character, see 2010 HYPHEN in General Punctuation (p. 58 below), and for an unambiguous minus character, see 2212 MINUS in Mathematical Operators ( p .67 ). |  |  |  |
| - | \. | 002E | FULL STOP |
| The full stop is often used as a mark of abbreviation, typically in suspended (truncated) words. If an encoder wants to make a distinction between the full stop as a punctuation mark and as an abbreviation mark, we recommend that the same character, 002E FULL STOP, should be used in both cases, but that the abbreviation mark is specified by markup, e.g. by the <am> element in the Text Encoding Initiative (TEI) P5 Guidelines. |  |  |  |
| / | \/ | 002F | SOLIDUS |


| 0 |  |  | 0030 | DIGIT ZERO |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  | 0031 | DIGIT ONE |
| 2 |  |  | 0032 | DIGIT TWO |
| 3 |  |  | 0033 | DIGIT THREE |
| 4 |  |  | 0034 | DIGIT FOUR |
| 5 |  |  | 0035 | DIGIT FIVE |
| 6 |  |  | 0036 | DIGIT SIX |
| 7 |  |  | 0037 | DIGIT SEVEN |
| $\mathbf{8}$ |  |  | 0039 | DIGIT EIGHT |
| $\mathbf{9}$ |  |  | 003 A | COLON |
| $:$ | \: |  | 003 B | SEMICOLON |

In Medieval script, a sign looking like the semicolon was commonly used as an abbreviation for 'eð' or 'ed', cf. LATIN ABBREVIATION SIGN SEMICOLON at F1AC in the Private Use Area subrange 4 below (p. 97). If an encoder wants to use 003B SEMICOLON for the abbreviation sign, we recommend that this usage should be specified by markup, e.g. by the <am> element in the Text Encoding Initiative (TEI) P5 Guidelines.


In SGML/XML encoded doccuments, the less-than sign is used as the opening character of an element name, e.g. <text>. To be able to refer to the less-than sign as such, a separate entity is needed, '\<'.

| $=$ | \= |  | 003 D | EQUALS SIGN |
| :--- | :--- | :--- | :--- | :--- |
| $>$ | $\& g t ;$ |  | 003 E | GREATER-THAN SIGN |

In SGML/XML encoded doccuments, the greater-than sign is used as a closing character of an element name, e.g. <text>. To be able to refer to the greaterthan sign as such, a separate entity is needed, '\>'.

| $?$ | \? |  | 003 F | QUESTION MARK |
| :--- | :--- | :--- | :--- | :--- |
| @ | \@ |  | 0040 | COMMERCIALAT |
| A |  |  | 0041 | LATIN CAPITAL LETTER A |
| B |  |  | 0042 | LATIN CAPITAL LETTER B |
| C |  |  | 0043 | LATIN CAPITAL LETTER C |
| D |  |  | 0044 | LATIN CAPITAL LETTER D |
| E |  |  | 0045 | LATIN CAPITAL LETTER E |
| F |  |  | 0046 | LATIN CAPITAL LETTER F |
| G |  |  | 0047 | LATIN CAPITAL LETTER G |


| H |  |  | 0048 | LATIN CAPITAL LETTER H |
| :---: | :---: | :---: | :---: | :---: |
| I |  |  | 0049 | LATIN CAPITAL LETTER I |
| J |  |  | 004A | LATIN CAPITAL LETTER J |
| K |  |  | 004B | LATIN CAPITAL LETTER K |
| L |  |  | 004C | LATIN CAPITAL LETTER L |
| M |  |  | 004D | LATIN CAPITAL LETTER M |
| N |  |  | 004E | LATIN CAPITAL LETTER N |
| O |  |  | 004F | LATIN CAPITAL LETTER O |
| P |  |  | 0050 | LATIN CAPITAL LETTER P |
| Q |  |  | 0051 | LATIN CAPITAL LETTER Q |
| R |  |  | 0052 | LATIN CAPITAL LETTER R |
| S |  |  | 0053 | LATIN CAPITAL LETTER S |
| T |  |  | 0054 | LATIN CAPITAL LETTER T |
| U |  |  | 0055 | LATIN CAPITAL LETTER U |


| V |  | 0056 | LATIN CAPITAL LETTER V |
| :---: | :---: | :---: | :---: |
| W |  | 0057 | LATIN CAPITAL LETTER W |
| X |  | 0058 | LATIN CAPITAL LETTER X |
| Y |  | 0059 | LATIN CAPITAL LETTER Y |
| Z |  | 005A | LATIN CAPITAL LETTER Z |
| [ | \[ | 005B | LEFT SQUARE BRACKET |
| $\backslash$ | \& bsol; | 005C | REVERSE SOLIDUS |
| ] | \] | 005D | RIGHT SQUARE BRACKET |
| $\wedge$ | \ˆ | 005E | CIRCUMFLEX ACCENT |
| - | \_ | 005F | LOW LINE |
| , | \` | 0060 | GRAVE ACCENT |
| a |  | 0061 | LATIN SMALL LETTER A |
| b |  | 0062 | LATIN SMALL LETTER B |
| C |  | 0063 | LATIN SMALL LETTER C |



| r |  |  | 0072 | LATIN SMALL LETTER R |
| :--- | :--- | :--- | :--- | :--- |
| S |  |  | 0073 | LATIN SMALL LETTER S |
| t |  |  | 0074 | LATIN SMALL LETTER T |
| u |  |  | 0075 | LATIN SMALL LETTER U |
| V |  |  | 0076 | LATIN SMALL LETTER V |
| $\mathbf{W}$ |  |  | 0077 | LATIN SMALL LETTER W |
| X |  |  | 0078 | LATIN SMALL LETTER X |
| y |  |  | 0079 | LATIN SMALL LETTER Y |
| Z |  |  | 007 A | LATIN SMALL LETTER Z |
| $\{$ | \{ |  | 007 B | LEFT CURLY BRACKET |
| $\boldsymbol{Z}$ | \\| |  | 007 C | VERTICAL LINE |
| $\boldsymbol{\}}$ | \} |  | 007 D | RIGHT CURLY BRACKET |
| $\sim$ |  | \&tld; | $007 E$ | TILDE |
|  |  | \&del; | 007 F | DELETE |

## 2: Latin-I Supplement

All 96 characters ( $00 \mathrm{~A} 0-00 \mathrm{FF}$ ) in this range have been selected, although many of them are not used in Medieval script. However, these characters are so frequently used in other contexts that it is advisable to include the whole range in a Medieval font. For this and all ensuing code charts, entities are being used in many SGML/XML documents.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :---: | :---: | :---: | :---: | :---: |
|  | \  |  | 00A0 | NO-BREAK SPACE |
| i | \¡ |  | 00A1 | INVERTED EXCLAMATION MARK |
| $\phi$ | \¢ |  | 00A2 | CENT SIGN |
| $£$ | \£ |  | 00A3 | POUND SIGN |
| O | \¤ |  | 00A4 | CURRENCY SIGN |
| ¥ | \¥ |  | 00A5 | YEN SIGN |
| I | \¦ |  | 00A6 | BROKEN BAR |
| $\bigcirc$ | \§ |  | 00A7 | SECTION SIGN |
| - | \¨ |  | 00A8 | DIAERESIS |
| The entities '\¨' and '\&Ddot;' are also being used for this character. |  |  |  |  |


| (C) | \© |  | 00 A 9 | COPYRIGHT SIGN |
| :--- | :--- | :--- | :--- | :--- |
| a | \ª |  | 00 AA | FEMININE ORDINAL INDICATOR |
| « | \« |  | 00 AB | LEFT-POINTING DOUBLE ANGLE QUOTATION MARK |
| ᄀ | \¬ |  | 00 AC | NOT SIGN |
|  | \­ |  | 00 AD | SOFT HYPHEN |

The soft hyphen is an invisible character.

| $\circledR$ | \® |  | 00 AE | REGISTERED SIGN |
| :--- | :--- | :--- | :--- | :--- |
| - | $\&$ macr; |  | 00 AF | MACRON |
| $\circ$ | $\&$ deg; |  | 00 B 0 | DEGREE SIGN |
| $\pm$ | \± |  | 00 B 1 | PLUS-MINUS SIGN |
| 2 | \² |  | 00 B 2 | SUPERSCRIPT TWO |
| 3 | \³ |  | 00 B 3 | SUPERSCRIPT THREE |
| , | \´ |  | 00 B 4 | ACUTE ACCENT |
| $\mu$ | \µ |  | 00 B 5 | MICRO SIGN |


| 9 | \¶ | 00B6 | PILCROW SIGN |
| :---: | :---: | :---: | :---: |
| - | \· | 00B7 | MIDDLE DOT |
| , | \¸ | 00B8 | CEDILLA |
| 1 | \¹ | 00B9 | SUPERSCRIPT ONE |
| o | \& ordm; | 00BA | MASCULINE ORDINAL INDICATOR |
| " | \& ${ }^{\text {aquo }}$ | 00BB | RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK |
| $1 / 4$ | \&frac 14; | 00BC | VULGAR FRACTION ONE QUARTER |
| $1 / 2$ | \&frac 12; | 00BD | VULGAR FRACTION ONE HALF |
| The entity '\½' is also being used for this character. |  |  |  |
| $3 / 4$ | \¾ | 00BE | VULGAR FRACTION THREE QUARTERS |
| ¿ | \¿ | 00BF | INVERTED QUESTION MARK |
| À | \À | 00C0 | LATIN CAPITAL LETTER A WITH GRAVE |
| Á | \Á | 00C1 | LATIN CAPITAL LETTER A WITH ACUTE |
| A | \Â | 00C2 | LATIN CAPITAL LETTER A WITH CIRCUMFLEX |


| $\tilde{\mathrm{A}}$ | \&Atild; |  | 00 C 3 | LATIN CAPITAL LETTER A WITH TILDE |
| :--- | :--- | :--- | :--- | :--- |
| $\ddot{\mathrm{A}}$ | \Ä |  | 00 C 4 | LATIN CAPITAL LETTER A WITH DIAERESIS |
| $\AA ̊$ | \Å |  | 00 C 5 | LATIN CAPITAL LETTER A WITH RING ABOVE |
| $\AA$ | \Æ |  | 00 C 6 | LATIN CAPITAL LETTER AE |
| $\mathbf{C}$ | \Ç |  | 00 C 7 | LATIN CAPITAL LETTER C WITH CEDILLA |
| $\dot{\mathrm{E}}$ | \È |  | 00 C 8 | LATIN CAPITAL LETTER E WITH GRAVE |
| $\dot{\mathrm{E}}$ | \É |  | 00 C 9 | LATIN CAPITAL LETTER E WITH ACUTE |
| $\hat{\mathrm{E}}$ | \Ê |  | 00 CA | LATIN CAPITAL LETTER E WITH CIRCUMFLEX |
| $\ddot{\mathrm{E}}$ | \Ë |  | 00 CB | LATIN CAPITAL LETTER E WITH DIAERESIS |
| $\grave{\mathrm{I}}$ | \Ì |  | 00 CC | LATIN CAPITAL LETTER I WITH GRAVE |
| $\dot{\mathrm{I}}$ | \Í |  | 00 CD | LATIN CAPITAL LETTER I WITH ACUTE |
| $\hat{\mathrm{I}}$ | \Î |  | 00 CE | LATIN CAPITAL LETTER I WITH CIRCUMFLEX |
| $\ddot{\mathrm{I}}$ | \Ï |  | 00 CF | LATIN CAPITAL LETTER I WITH DIAERESIS |
| $Ð$ | \Ð |  | 00 D 0 | LATIN CAPITAL LETTER ETH |


| $\tilde{\mathrm{N}}$ | \&Ntild; |  | 00 D 1 | LATIN CAPITAL LETTER N WITH TILDE |
| :--- | :--- | :--- | :--- | :--- |
| Ò | \Ò |  | 00 D 2 | LATIN CAPITAL LETTER O WITH GRAVE |
| Ó | \Ó |  | 00 D 3 | LATIN CAPITAL LETTER O WITH ACUTE |
| $\hat{O}$ | \Ô |  | 00 D 4 | LATIN CAPITAL LETTER O WITH CIRCUMFLEX |
| $\tilde{\mathrm{O}}$ | \Õ |  | 00 D 5 | LATIN CAPITAL LETTER O WITH TILDE |
| $\ddot{\text { Ö }}$ | \Ö |  | 00 D 6 | LATIN CAPITAL LETTER O WITH DIAERESIS |
| X | \× |  | 00 D 7 | MULTIPLICATION SIGN |
| The multiplication sign, 00D7, can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (p. 109). |  |  |  |  |
| $\varnothing$ | \Ø |  | 00 D 8 | LATIN CAPITAL LETTER O WITH STROKE |
| $\dot{U}$ | \Ù |  | 00 D 9 | LATIN CAPITAL LETTER U WITH GRAVE |
| $\dot{U}$ | \Ú |  | 00 DA | LATIN CAPITAL LETTER U WITH ACUTE |
| $\hat{U}$ | \Û |  | 00 DB | LATIN CAPITAL LETTER U WITH CIRCUMFLEX |
| $\ddot{U}$ | \Ü |  | 00 DC | LATIN CAPITAL LETTER U WITH DIAERESIS |
| $\dot{Y}$ | \Ý |  | 00 DD | LATIN CAPITAL LETTER Y WITH ACUTE |


| $\mathbf{P}$ | \Þ |  | 00 DE | LATIN CAPITAL LETTER THORN |
| :--- | :--- | :--- | :--- | :--- |
| $ß$ | \ß |  | 00 DF | LATIN SMALL LETTER SHARP S |
| In Medieval sources, the 'sharp s' can also be used as an abbreviation character, in which case it may be specified by markup, e.g. by the <am> element. |  |  |  |  |
| à | \à |  | 00 E 0 | LATIN SMALL LETTER A WITH GRAVE |
| á | \á |  | 00 E 1 | LATIN SMALL LETTER A WITH ACUTE |
| $\hat{a}$ | \â |  | $00 E 2$ | LATIN SMALL LETTER A WITH CIRCUMFLEX |
| $\tilde{\mathrm{a}}$ | \ã |  | $00 E 3$ | LATIN SMALL LETTER A WITH TILDE |
| ä | \ä |  | $00 E 4$ | LATIN SMALL LETTER A WITH DIAERESIS |
| å | \å |  | $00 E 5$ | LATIN SMALL LETTER A WITH RING ABOVE |
| $æ$ | \æ |  | $00 E 6$ | LATIN SMALL LETTER AE |
| Ç | \ç |  | $00 E 7$ | LATIN SMALL LETTER C WITH CEDILLA |
| è | \è |  | $00 E 8$ | LATIN SMALL LETTER E WITH GRAVE |
| é | \é |  | $00 E 9$ | LATIN SMALL LETTER E WITH ACUTE |
| $\hat{e}$ | \ê |  | $00 E A$ | LATIN SMALL LETTER E WITH CIRCUMFLEX |


| ë | \ë | 00EB | LATIN SMALL LETTER E WITH DIAERESIS |
| :---: | :---: | :---: | :---: |
| ì | \ì | 00EC | LATIN SMALL LETTER I WITH GRAVE |
| í | \í | 00ED | LATIN SMALL LETTER I WITH ACUTE |
| $\hat{1}$ | \î | 00EE | LATIN SMALL LETTER I WITH CIRCUMFLEX |
| $\ddot{1}$ | \ï | 00EF | LATIN SMALL LETTER I WITH DIAERESIS |
| ð | \ð | 00F0 | LATIN SMALL LETTER ETH |
| $\tilde{\mathrm{n}}$ | \ñ | 00F1 | LATIN SMALL LETTER N WITH TILDE |
| Ò | \ò | 00F2 | LATIN SMALL LETTER O WITH GRAVE |
| Ó | \ó | 00F3 | LATIN SMALL LETTER O WITH ACUTE |
| O | \ô | 00F4 | LATIN SMALL LETTER O WITH CIRCUMFLEX |
| O | \õ | 00F5 | LATIN SMALL LETTER O WITH TILDE |
| Ö | \ö | 00F6 | LATIN SMALL LETTER O WITH DIAERESIS |
| $\div$ | \÷ | 00F7 | DIVISION SIGN |
| $\emptyset$ | \& oslash; | 00F8 | LATIN SMALL LETTER O WITH STROKE |


| ù | \ù |  | $00 F 9$ | LATIN SMALL LETTER U WITH GRAVE |
| :--- | :--- | :--- | :--- | :--- |
| ú | \ú |  | 00 FA | LATIN SMALL LETTER U WITH ACUTE |
| $\hat{\mathrm{u}}$ | \û |  | 00 FB | LATIN SMALL LETTER U WITH CIRCUMFLEX |
| ü | \ü |  | 00 FC | LATIN SMALL LETTER U WITH DIAERESIS |
| $\dot{\mathrm{y}}$ | \ý |  | 00 FD | LATIN SMALL LETTER Y WITH ACUTE |
| p | \þ |  | 00 FE | LATIN SMALL LETTER THORN |
| $\ddot{\mathrm{y}}$ | \ÿ |  | 00 FF | LATIN SMALL LETTER Y WITH DIAERESIS |

## 3: Latin Extended-A

In the Unicode Standard v. 8.0, this range has 128 characters. The selection below contains 71 characters, mostly precomposed characters with macron, breve, stroke, dot above, and ogonek.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\overline{\mathrm{A}}$ | \Ā |  | 0100 | LATIN CAPITAL LETTER A WITH MACRON |
| $\overline{\mathrm{a}}$ | \ā |  | 0101 | LATIN SMALL LETTER A WITH MACRON |
| $\overline{\mathrm{A}}$ | \Ă |  | 0102 | LATIN CAPITAL LETTER A WITH BREVE |


| ă | \ă |  | 0103 | LATIN SMALL LETTER A WITH BREVE |
| :--- | :--- | :--- | :--- | :--- |
| Ą | \Ą |  | 0104 | LATIN CAPITAL LETTER A WITH OGONEK |
| ą | \ą |  | 0105 | LATIN SMALL LETTER A WITH OGONEK |
| Ć | \&Cacut;; |  | 0106 | LATIN CAPITAL LETTER C WITH ACUTE |
| ć | \ć |  | 0107 | LATIN SMALL LETTER C WITH ACUTE |
| $\dot{\text { C }}$ | \Ċ |  | 010 A | LATIN CAPITAL LETTER C WITH DOT ABOVE |
| $\dot{\mathrm{c}}$ | \ċ |  | $010 B$ | LATIN SMALL LETTER C WITH DOT ABOVE |
| Đ | \Đ |  | 0110 | LATIN CAPITAL LETTER D WITH STROKE |
| đ | \đ |  | 0111 | LATIN SMALL LETTER D WITH STROKE |
| $\overline{\mathrm{E}}$ | \Ē |  | 0112 | LATIN CAPITAL LETTER E WITH MACRON |
| $\overline{\mathrm{e}}$ | \ē |  | 0113 | LATIN SMALL LETTER E WITH MACRON |
| $\breve{\mathrm{E}}$ |  | \&Ebreve; | 0114 | LATIN CAPITAL LETTER E WITH BREVE |
| $\breve{\mathrm{e}}$ |  | \&ebreve; | 0115 | LATIN SMALL LETTER E WITH BREVE |
| $\dot{\mathrm{E}}$ | \Ė |  | 0116 | LATIN CAPITAL LETTER E WITH DOT ABOVE |


| $\dot{\text { e }}$ | \& dodo |  | 0117 | LATIN SMALL LETTER E WITH DOT ABOVE |
| :---: | :---: | :---: | :---: | :---: |
| E | \Ę |  | 0118 | LATIN CAPITAL LETTER E WITH OGONEK |
| e | \ę |  | 0119 | LATIN SMALL LETTER E WITH OGONEK |
| $\dot{G}$ | \Ġ |  | 0120 | LATIN CAPITAL LETTER G WITH DOT ABOVE |
| $\dot{\mathrm{g}}$ | \ġ |  | 0121 | LATIN SMALL LETTER G WITH DOT ABOVE |
| ћ | \ħ |  | 0127 | LATIN SMALL LETTER H WITH STROKE |
| $\overline{\mathrm{I}}$ | \Ī |  | 012A | LATIN CAPITAL LETTER I WITH MACRON |
| $\overline{1}$ | \ī |  | 012B | LATIN SMALL LETTER I WITH MACRON |
| İ |  | \& Ibreve; | 012C | LATIN CAPITAL LETTER I WITH BREVE |
| $\mathfrak{1}$ |  | \&ibreve; | 012D | LATIN SMALL LETTER I WITH BREVE |
| I | \Į |  | 012E | LATIN CAPITAL LETTER I WITH OGONEK |
| i | \į |  | 012F | LATIN SMALL LETTER I WITH OGONEK |
| $\dot{\mathrm{I}}$ | \İ |  | 0130 | LATIN CAPITAL LETTER I WITH DOT ABOVE |
| 1 | \ı |  | 0131 | LATIN SMALL LETTER DOTLESS I |


| IJ | \Ĳ |  | 0132 | LATIN CAPITAL LIGATURE IJ |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{i j}$ | \ĳ |  | 0133 | LATIN SMALL LIGATURE IJ |
| Ĺ | \Ĺ |  | 0139 | LATIN CAPITAL LETTER L WITH ACUTE |
| $\mathbf{l}$ | \ĺ |  | 013 A | LATIN SMALL LETTER L WITH ACUTE |
| $\mathbf{Ł}$ | \Ł |  | 0141 | LATIN CAPITAL LETTER L WITH STROKE |
| $\mathbf{1}$ | \ł |  | 0142 | LATIN SMALL LETTER L WITH STROKE |
| $\mathbf{N}$ | \Ń |  | 0143 | LATIN CAPITAL LETTER N WITH ACUTE |
| $\mathbf{n}$ | \ń |  | 0144 | LATIN SMALL LETTER N WITH ACUTE |
| $\mathbf{N}$ | \Ŋ |  | 014 A | LATIN CAPITALLETTER ENG |
| $\mathbf{y}$ | \ŋ |  | 014 B | LATIN SMALL LETTER ENG |
| $\overline{\mathrm{O}}$ | \Ō |  | 014 C | LATIN CAPITAL LETTER O WITH MACRON |
| $\overline{\text { Ó }}$ | \ō |  | 014 D | LATIN SMALL LETTER O WITH MACRON |
| Ŏ |  | \&Obreve; | 014 E | LATIN CAPITAL LETTER O WITH BREVE |
| Ó |  | \&obreve; | 014 F | LATIN SMALL LETTER O WITH BREVE |



| Ú | \Ű |  | 0170 | LATIN CAPITAL LETTER U WITH DOUBLE ACUTE |
| :--- | :--- | :--- | :--- | :--- |
| ú | \ű |  | 0171 | LATIN SMALL LETTER U WITH DOUBLE ACUTE |
| $\mathbf{U}$ | \Ų |  | 0172 | LATIN CAPITAL LETTER U WITH OGONEK |
| u | \ų |  | 0173 | LATIN SMALL LETTER U WITH OGONEK |
| $\hat{W}$ | \Ŵ |  | 0174 | LATIN CAPITAL LETTER W WITH CIRCUMFLEX |
| $\hat{W}$ | \ŵ |  | 0175 | LATIN SMALL LETTER W WITH CIRCUMFLEX |
| $\hat{Y}$ | \Ŷ |  | 0176 | LATIN CAPITAL LETTER Y WITH CIRCUMFLEX |
| $\hat{\mathrm{Y}}$ | \ŷ |  | 0177 | LATIN SMALL LETTER Y WITH CIRCUMFLEX |
| $\ddot{Y}$ | \Ÿ |  | 0178 | LATIN CAPITAL LETTER Y WITH DIAERESIS |
| $\dot{Z}$ | \Ż |  | 017 B | LATIN CAPITAL LETTER Z WITH DOT ABOVE |
| $\dot{Z}$ | \ż |  | 017 C | LATIN SMALL LETTER Z WITH DOT ABOVE |
| $\mathbb{Y}$ |  | \&slong; | 017 F | LATIN SMALL LETTER LONG S |

## 4: Latin Extended-B

In the Unicode Standard v. 8.0, this range has 208 characters, of which 46 characters have been selected here. Some of these have acute accent, macron, dot above, or ogonek; others are individual base characters, including Gothic and Old English ones.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b |  | \&bstrok; | 0180 | LATIN SMALL LETTER B WITH STROKE |  |
| h |  | \&hwair; | 0195 | LATIN SMALL LETTER HV | LATIN SMALL LETTER HWAIR |
| K | \&khook; | 0199 | LATIN SMALL LETTER K WITH HOOK |  |  |

For a similar-looking but separate character, the ligature of ' $k$ ' and long 's', see PUA subrange 5, p. 98. (Note the hackle of the long 's' in that character.)

| $\mathbf{I}$ | \&lbar; | 019 A | LATIN SMALL LETTER L WITH BAR |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| UU | \&Mturn; | 019 C | LATIN CAPITAL LETTER TURNED M |  |

The small variant is located in IPA Extensions at 026 F . Note that both 019 C and 026 F can be described as ligatures of $u u$, as has been done in subrange 1 of the Private Use Area (p. 91-92 below), and that the precomposed characters with $u u+$ double acute accent are assigned to subrange 17 (p. 130-131 below).

| $\boldsymbol{\eta}$ |  | $\& n l r l e g ;$ | $019 E$ | LATIN SMALL LETTER N WITH LONG RIGHT LEG |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{R}$ | $\& Y R ;$ | 01 A 6 | LATIN LETTER YR |  |
| This is the capital form of the character and is seldom used. For the small form, the small capital R should be used, cf. 0280 on p. 38 below. |  |  |  |  |


| Z | \&Zstrok; | 01B5 | LATIN CAPITAL LETTER Z WITH STROKE |  |
| :---: | :---: | :---: | :---: | :---: |
| z | \&zstrok; | 01B6 | LATIN SMALL LETTER Z WITH STROKE |  |
| 3 | \&EZH; | 01B7 | LATIN CAPITAL LETTER EZH |  |
| P | \&wynn; | 01BF | LATIN LETTER WYNN |  |
| O | \& Ocar; | 01D1 | LATIN CAPITAL LETTER O WITH CARON |  |
| Ǒ | \& ocar; | 01D2 | LATIN SMALL LETTER O WITH CARON |  |
| U | \& Ucar; | 01D3 | LATIN CAPITAL LETTER U WITH CARON |  |
| ǔ | \&ucar; | 01D4 | LATIN SMALL LETTER U WITH CARON |  |
| $\overline{\mathrm{U}}$ | \&Uumlmacr; | 01D5 | LATIN CAPITAL LETTER U WITH DIAERESIS | MACRON |
| $\overline{\mathrm{u}}$ | \&uumlmacr; | 01D6 | LATIN SMALL LETTER U WITH DIAERESIS AN | MACRON |
| $\overline{\text { E }}$ | \&AEligmacr; | 01E2 | LATIN CAPITAL LETTER AE WITH MACRON |  |
| $\bar{æ}$ | \&aeligmacr; | 01E3 | LATIN SMALL LETTER AE WITH MACRON |  |
| G | \&Gstrok; | 01 E 4 | LATIN CAPITAL LETTER G WITH STROKE |  |
| g | \& gstrok; | 01 E 5 | LATIN SMALL LETTER G WITH STROKE |  |



| 3 | \&yogh; | 021D | LATIN SMALL LETTER YOGH |  |
| :---: | :---: | :---: | :---: | :---: |
| The 'yogh' character is usually drawn with a rounded top in contradistinction to the flat top of EZH (0292 and 01B7). |  |  |  |  |
| $\dot{\mathrm{A}}$ | \&Adot; | 0226 | LATIN CAPITAL LETTER A WITH DOT ABOVE |  |
| $\dot{\mathrm{a}}$ | \&adot; | 0227 | LATIN SMALL LETTER A WITH DOT ABOVE |  |
| $\overline{\mathrm{O}}$ | \&Oumlmacr; | 022A | LATIN CAPITAL LETTER O WITH DIAERESIS AN | D MACRON |
| Ö | \&oumlmacr; | 022B | LATIN CAPITAL LETTER O WITH DIAERESIS AN | D MACRON |
| $\dot{\bigcirc}$ | \&Odot; | 022E | LATIN CAPITAL LETTER O WITH DOT ABOVE |  |
| $\dot{O}$ | \& odot; | 022F | LATIN SMALL LETTER O WITH DOT ABOVE |  |
| $\bar{Y}$ | \&Ymacr; | 0232 | LATIN CAPITAL LETTER Y WITH MACRON |  |
| $\bar{y}$ | \& ymacr; | 0233 | LATIN SMALL LETTER Y WITH MACRON |  |
| J | \&jnodot; | 0237 | LATIN SMALL LETTER DOTLESS J |  |
| f | \& Jbar; | 0248 | LATIN CAPITAL LETTER J WITH STROKE |  |
| $\mathfrak{j}$ | \&jbar; | 0249 | LATIN SMALL LETTER J WITH STROKE |  |

## 5: IPA Extensions

In the Unicode Standard v. 8.0, this range has 96 characters. The selection below contains 21 characters, mostly small capitals. Additional small capitals are located in Phonetic Extensions, pp. 45-46 below, and PUA subrange 2 Small capitals, p. 92 below.

In many contexts, the whole set of IPA characters are used, e.g. in the phonological analysis of Medieval languages. Although they are not needed for the actual transcription of Medieval texts, we recommend that MUFI-compatible fonts should include the complete range of IPA characters.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\partial}$ |  | \&oopen; | 0254 | LATIN SMALL LETTER OPEN O |  |

This character is primarily used in phonetic transcriptions, e.g. for the Old Norse low back vowel ' $q$ '. It can also be used for the Latin abbreviation sign 'con', but we recommend using a separate character for the abbreviation sign, either 2183 and 2184 in Number forms (pp. 65-66) or the characters A73E, A73F, A76E and A76F in Latin Extended-D (pp. 75 and 79). Also note that the LATIN SMALL LETTER OPEN O is usually rendered as a turned ' $c$ ' glyph, ' $\rho$ ' (i.e. rotated $180^{\circ}$ ). The con abbreviation sign should rather be rendered with a reversed 'c' glyph, ' $J$ ' (i.e. flipped horizontally)

| d |  | $\& \mathrm{dtail} ;$ | 0256 | LATIN SMALL LETTER D WITH TAIL |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\partial}$ | \&schwa; | 0259 | LATIN SMALL LETTER SCHWA |  |  |
| $\boldsymbol{f}$ | \&jnodotstrok; | 025 F | LATIN SMALL LETTER DOTLESS J WITH STROKE |  |  |

In many fonts, this character looks like an ' $f$ ' that has been turned (i.e. rotated $180^{\circ}$ ), but according to the descriptive name it should be designed as a dotless ' j ' with a horizontal stroke. The turned ' f ' should be seen as a typographical short-cut which was understandable in the day of lead typesetting. For a dotted ' j ' with stroke, see 0248 and 0249 in Latin Extended- $B$ above.

| $g$ | \&gopen; | 0261 | LATIN SMALL LETTER SCRIPT G |  |
| :--- | :--- | :--- | :--- | :--- | :--- |


| G | \& gscap; | 0262 | LATIN LETTER SMALL CAPITAL G |  |
| :---: | :---: | :---: | :---: | :---: |
| 6 | \&hhook; | 0266 | LATIN SMALL LETTER H WITH HOOK |  |
| See PUA subrange 5 (p.98) for a similar-looking but separate character, the ligature of ' h ' and long ' s ' (note the hackle of the long ' s ' in that character). |  |  |  |  |
| $\dot{1}$ | \&istrok; | 0268 | LATIN SMALL LETTER I WITH STROKE |  |
| I | \&iscap; | 026A | LATIN LETTER SMALL CAPITAL I |  |
| Uu | \&mturn; | 026F | LATIN SMALL LETTER TURNED M |  |
| The capital variant is located in Latin Extended-B at 019C. Note that both 026F and 019C can be described as ligatures of $u u$, as has been done in subrange 1 of the Private Use Area (pp. 91-92), and that the precomposed characters with $u u+$ double acute accent are assigned to subrange 17 (pp. 130-131). |  |  |  |  |
| J | \&nlfhook; | 0272 | LATIN SMALL LETTER N WITH LEFT HOOK |  |
| N | \&nscap; | 0274 | LATIN LETTER SMALL CAPITAL N |  |
| © | \&oeligscap; | 0276 | LATIN LETTER SMALL CAPITAL OE |  |
| I | \&rdes; | 027C | LATIN SMALL LETTER R WITH LONG LEG |  |
| R | \&rscap; | 0280 | LATIN LETTER SMALL CAPITAL R |  |
| 4 | \&ubar; | 0289 | LATIN SMALL LETTER U BAR |  |
| Y | \&yscap; | 028F | LATIN LETTER SMALL CAPITAL Y |  |


| 3 |  | \&ezh; | 0292 | LATIN SMALL LETTER EZH |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| The capital form of 'ezh' is located at 01B7 in Latin Extended-B above. |  |  |  |  |  |
| B | \&bscap; | 0299 | LATIN LETTER SMALL CAPITAL B |  |  |
| H | \&hscap; | 029 C | LATIN LETTER SMALL CAPITAL H |  |  |
| L | \&lscap; | 029 F | LATIN LETTER SMALL CAPITAL L |  |  |

## 6: Spacing Modifier Letters

In the Unicode Standard v. 8.0, this range has 80 characters. The selection below contains 9 modifying letters. Note that these letters are spacing, i.e. occupying a separate position on the base line. Combining diacritical marks are listed in the next section.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| , |  | \&apomod; | 02 BC | MODIFIER LETTER APOSTROPHE | LATIN ABBREVIATION SIGN APOSTROPHE |

In general usage as an abbreviation mark, often meaning 'i' or 'e' (cf. D.A. Seip, Palceografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 125). We recommend that this character rather than 0027 APOSTROPHE in Basic Latin should be used as an abbreviation character (p. 13 above).

| $\prime$ |  | \&verbarup; | 02 C 8 | MODIFIER LETTER VERTICAL LINE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\smile$ | $\&$ breve; |  | 02 D 8 | BREVE |  |


| $\cdot$ | \˙ |  | 02 D 9 | DOT ABOVE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\circ$ | \˚ |  | 02 DA | RING ABOVE |  |
|  | \˛ |  | 02 DB | OGONEK |  |
| $\sim$ | \˜ |  | 02 DC | SMALL TILDE |  |
| $״$ | \˝ |  | 02 DD | DOUBLE ACUTE ACCENT |  |
| $\mathbf{x}$ |  | \&xmod; | 02E3 | MODIFIER LETTER SMALL X |  |

This character is used to indicate paper manuscripts by the Ordbog over det norrøne prosasprog project in Copenhagen and by the international Old Norse skaldic project. Since it easily can be confused with superscript Roman numeral ' $x$ ' it should either be designed with a cursive form, or there should be a cursive (italic) counterpart to this character in the typeface.

## 7: Combining Diacritical Marks

In the Unicode Standard v. 8.0, this range has 112 characters, of which 39 have been selected here. The combining characters at the end are recent additions to the Unicode Standard. Additional superscript characters are located in PUA subrange 7 below, pp. 102-104. A dotted circle has been used throughout to illustrate the position of the marks in relation to a typical base-line character.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\vdots$ |  | \&combgrave; | 0300 | COMBINING GRAVE ACCENT |  |
| $\vdots$ |  | \&combacute; | 0301 | COMBINING ACUTE ACCENT |  |


| н | \&combcirc; | 0302 | COMBINING CIRCUMFLEX ACCENT |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| н | \&combtilde; | 0303 | COMBINING TILDE |  |  |
| $\overline{\text { - }}$ |  | \&combmacr; | 0304 | COMBINING MACRON | COMBINING ABBREVIATION MARK <br> BAR ABOVE |

The character above is frequently used as an abbreviation mark in Medieval (and Classical) manuscripts. We therefore recommend the entity name '\&bar;' rather than the more cumbersome '\&combovl;'. As a rule, abbreviation marks behave as overlines, i.e. they should connect with adjoining characters. In that way, a continuous overline over more than one character can be displayed by a sequence of single-character overlines.

| " | \&combbreve; | 0306 | COMBINING BREVE |  |
| :---: | :---: | :---: | :---: | :---: |
| $\dot{\text { ¢ }}$ | \&combdot; | 0307 | COMBINING DOT ABOVE |  |
| $\because$ | \&combuml; | 0308 | COMBINING DIAERESIS |  |
| ? | \&combhook; | 0309 | COMBINING HOOK ABOVE |  |
| \% | \&combring; | 030A | COMBINING RING ABOVE |  |
| " | \&combdblac; | 030B | COMBINING DOUBLE ACUTE ACCENT |  |
| \% | \&combsgvertl; | 030D | COMBINING VERTICAL LINE ABOVE |  |
| " | \&combdbvertl; | 030E | COMBINING DOUBLE VERTICAL LINE ABOVE |  |


| ' | \&combcomma; | 0315 | COMBINING COMMA ABOVE RIGHT | COMBINING ABBREVIATION MARK COMMA ABOVE RIGHT |
| :---: | :---: | :---: | :---: | :---: |
| ¢ | \&combdotbl; | 0323 | COMBINING DOT BELOW |  |
| 3 | \&combced; | 0327 | COMBINING CEDILLA |  |
| 亿 | \&combogon; | 0328 | COMBINING OGONEK |  |
| $\underline{\square}$ | \&barbl; | 0332 | COMBINING LOW LINE | COMBINING ABBREVIATION MARK BAR BELOW |
| $\underline{\square}$ | \&dblbarbl; | 0333 | COMBINING DOUBLE LOW LINE |  |
| $\cdots$ | \&baracr; | 0336 | COMBINING LONG STROKE OVERLAY | COMBINING ABBREVIATION MARK BAR ACROSS |
| - | \&combtildevert; | 033E | COMBINING VERTICAL TILDE | COMBINING ABBREVIATION MARK VERTICAL TILDE |
| $\overline{\text { F }}$ | \&dblovl; | 033F | COMBINING DOUBLE OVERLINE |  |
| \% | \&combastbl; | 0359 | COMBINING ASTERISK BELOW |  |
| \% | \&er; | 035B | COMBINING ZIGZAG ABOVE | COMBINING ABBREVIATION MARK ZIGZAG ABOVE |
| ¢ | \&combdblbrevebl; | 035C | COMBINING DOUBLE BREVE BELOW |  |


| a | \&asup; | 0363 | COMBINING LATIN SMALL LETTER A |  |
| :---: | :---: | :---: | :---: | :---: |
| e | \&esup; | 0364 | COMBINING LATIN SMALL LETTER E |  |
| i | \&isup; | 0365 | COMBINING LATIN SMALL LETTER I |  |
| $\stackrel{\circ}{\circ}$ | \&osup; | 0366 | COMBINING LATIN SMALL LETTER O |  |
| $\stackrel{\square}{\square}$ | \&usup; | 0367 | COMBINING LATIN SMALL LETTER U |  |
| $\stackrel{\text { c }}{ }$ | \⫐ | 0368 | COMBINING LATIN SMALL LETTER C |  |
| d | \&dsup; | 0369 | COMBINING LATIN SMALL LETTER D |  |
| $\stackrel{\mathrm{h}}{ }$ | \&hsup; | 036A | COMBINING LATIN SMALL LETTER H |  |
| $\stackrel{m}{ }$ | \&msup; | 036B | COMBINING LATIN SMALL LETTER M |  |
| $\stackrel{\mathrm{r}}{ }$ | \&rsup; | 036C | COMBINING LATIN SMALL LETTER R |  |
| ${ }_{\text {t }}$ | \&tsup; | 036D | COMBINING LATIN SMALL LETTER T |  |
| v | \&vsup; | 036E | COMBINING LATIN SMALL LETTER V |  |
| $\stackrel{\mathrm{x}}{\mathrm{x}}$ | \&xsup; | 036F | COMBINING LATIN SMALL LETTER X |  |

## 8: Greek and Coptic

Only two characters have been selected from this range, which contains 135 characters (and 9 reserved code points) in the Unicode Standard v. 8.0. Coptic has been disambiguated from Greek and given a separate range in the Unicode Standard, 2C80-2CFF. However, the old range, 0370-03FF, has retained its name 'Greek and Coptic'. Although not a part of the Latin alphabet, Greek characters are often found in bibliographic or text critical usage among Medievalists, e.g. in quoted text, in manuscript sigla (e.g. Copenhagen, Arnamagnæan Collection, AM $243 \mathrm{~b} \alpha$ fol, 'The King's Mirror') or in stemmatic recensions (for hyparchetypes or lost manuscripts). We therefore recommend that MUFI-compatible fonts should include the whole range of Greek characters.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\Theta$ | \Θ |  | 0398 | GREEK CAPITAL LETTER THETA |
| $\Theta$ | \θ |  | $03 B 8$ | GREEK SMALL LETTER THETA | | The theta characters are sometimes used as an abbreviation sign for obiit 'he/she died', but we recommend using the alternative obiit pair of characters in |
| :--- |
| subrange 5 of the Private Use Area (p. 76 below). See also the introduction in Ernst W.E. Hübner, Exempla Scripturae Epigraphicae Latinae, Berlin: Rei- |
| mer 1885 (rpt. Berlin: de Gruyter, 1979), in which he states that the theta should be kept apart from the obiit sign (barred 'o'). |

## 9: Georgian

A single punctuation character has been selected from this range, which contains 88 characters (and 8 reserved code points) in the Unicode Standard v. 8.0 .

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\therefore$ |  | \&tridotright; | 10 FB | GEORGIAN PARAGRAPH <br> SEPARATOR | PUNCTUATION MARK RIGHT-POINTING <br> TRIANGULAR DOTS |

## 10: Runic

Two characters have been selected from this range, which contains 89 characters in the Unicode Standard v. 8.0. Both characters were used as abbreviation signs in Medieval Nordic manuscripts written in the Latin alphabet; $\mu$ for 'fé' (cattle/goods) and $\Psi$ for 'maðr' (man). Although not a part of the Latin alphabet, we recommend that MUFI-compatible fonts should include the whole Runic alphabet.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mu$ |  | \&fMedrun; | 16 A 0 | RUNIC LETTER FEHU FEOH FE F | RUNIC MEDIEVAL LETTER F |
| $\Psi$ |  | \&mMedrun; | 16 D 8 | RUNIC LETTER LONG-BRANCH-MADR M | RUNIC MEDIEVAL LETTER M |

## I I: Phonetic Extensions

In the Unicode Standard v. 8.0, this range has 128 characters, of which 19 have been selected here, the majority being small capitals. For additional small capitals, see IPA Extensions, pp. 37-39 above, and PUA subrange 2 Small capitals, pp. 92 below.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| A |  | \&ascap; | 1 D00 | LATIN LETTER SMALL CAPITAL A |
| A |  | \&aeligscap; | 1 D01 | LATIN LETTER SMALL CAPITAL AE |
| C | \&cscap; | 1 D04 | LATIN LETTER SMALL CAPITAL C |  |
| D |  | \&dscap; | 1 D05 | LATIN LETTER SMALL CAPITAL D |


| Đ | \&ethscap; | 1D06 | LATIN LETTER SMALL CAPITAL ETH |
| :---: | :---: | :---: | :---: |
| E | \&escap; | 1D07 | LATIN LETTER SMALL CAPITAL E |
| J | \&jscap; | 1D0A | LATIN LETTER SMALL CAPITAL J |
| K | \&kscap; | 1D0B | LATIN LETTER SMALL CAPITAL K |
| M | \&mscap; | 1D0D | LATIN LETTER SMALL CAPITAL M |
| O | \& oscap; | 1D0F | LATIN LETTER SMALL CAPITAL O |
| P | \&pscap; | 1D18 | LATIN LETTER SMALL CAPITAL P |
| T | \&tscap; | 1D1B | LATIN LETTER SMALL CAPITAL T |
| U | \&uscap; | 1D1C | LATIN LETTER SMALL CAPITAL U |
| V | \&vscap; | 1D20 | LATIN LETTER SMALL CAPITAL V |
| W | \&wscap; | 1D21 | LATIN LETTER SMALL CAPITAL W |
| Z | \&zscap; | 1D22 | LATIN LETTER SMALL CAPITAL Z |
| I | \&Imod; | 1D35 | MODIFIER LETTER CAPITAL I |


| Ue | \&uelig; | 1D6B | LATIN SMALL LETTER UE |
| :--- | :--- | :--- | :--- |
| The capital variant is assigned to E8C8 in subrange 1 of the Private Use Area (p. 91). Note that both 1D6B and E8C8 can be described as ligatures of $u e$, <br> and for this reason, they have both been included in subrange 1 below, pp. 91-92. |  |  |  |
| $\zeta$ | \&gins; | 1 1D79 | LATIN SMALL LETTER INSULAR G |

## 12: Combining Diacritical Marks Supplement

In the Unicode Standard v. 8.0, this range has 58 characters (and 6 reserved code points), of which 26 have been selected here. All 26 characters were part of the Private Use Area in v. 2.0 of the MUFI character recommendation and were successfully proposed for inclusion in the Unicode Standard.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name |
| :---: | :---: | :---: | :---: | :---: |
| 㐅 |  | \&combcircdbl; | 1DCD | COMBINING DOUBLE CIRCUMFLEX ABOVE |
| 2 |  | \&combcurl; | 1DCE | COMBINING OGONEK ABOVE |
| \% |  | \&ersub; | 1DCF | COMBINING ZIGZAG BELOW |
| Z |  | \&combisbelow; | 1DD0 | COMBINING IS BELOW |
| \% |  | \&ur; | 1DD1 | COMBINING UR ABOVE |
| $\stackrel{9}{\square}$ |  | \&us; | 1DD2 | COMBINING US ABOVE |
| $\because$ |  | \&ra; | 1DD3 | COMBINING LATIN SMALL LETTER FLATTENED OPEN A ABOVE |


| ${ }^{\text {æ }}$ | \&aeligsup; | 1DD4 | COMBINING LATIN SMALL LETTER AE |
| :---: | :---: | :---: | :---: |
| $\stackrel{2}{0}$ | \&aoligsup; | 1DD5 | COMBINING LATIN SMALL LETTER AO |
| $\stackrel{\text { w }}{ }$ | \&avligsup; | 1DD6 | COMBINING LATIN SMALL LETTER AV |
| $\stackrel{\text { ¢ }}{ }$ | \&ccedilsup; | 1DD7 | COMBINING LATIN SMALL LETTER C CEDILLA |
| д | \&drotsup; | 1DD8 | COMBINING LATIN SMALL LETTER INSULAR D |
| б | \&ethsup; | 1DD9 | COMBINING LATIN SMALL LETTER ETH |
| $\stackrel{\mathrm{g}}{ }$ | \&gsup; | 1DDA | COMBINING LATIN SMALL LETTER G |
| $\stackrel{\text { ¢ }}{6}$ | \&gscapsup; | 1DDB | COMBINING LATIN LETTER SMALL CAPITAL G |
| $\stackrel{\mathrm{k}}{ }$ | \&ksup; | 1DDC | COMBINING LATIN SMALL LETTER K |
| $\stackrel{1}{1}$ | \&lsup; | 1DDD | COMBINING LATIN SMALL LETTER L |
| $\stackrel{1}{4}$ | \&lscapsup; | 1DDE | COMBINING LATIN LETTER SMALL CAPITAL L |
| M | \&mscapsup; | 1DDF | COMBINING LATIN LETTER SMALL CAPITAL M |
| $\stackrel{n}{n}$ | \⊅ | 1DE0 | COMBINING LATIN SMALL LETTER N |


| N |  | \&nscapsup; | 1 DE 1 | COMBINING LATIN LETTER SMALL CAPITAL N |
| :--- | :--- | :--- | :--- | :--- |
| R |  | \&rscapsup; | 1 DE2 | COMBINING LATIN LETTER SMALL CAPITAL R |
| R |  | \&rrotsup; | 1 DE 3 | COMBINING LATIN SMALL LETTER R ROTUNDA |
| s |  | \&ssup; | 1 DE 4 | COMBINING LATIN SMALL LETTER S |
| r |  | \&slongsup; | $1 \mathrm{DE5}$ | COMBINING LATIN SMALL LETTER LONG S |
| z |  | \&zsup; | 1 DE6 | COMBINING LATIN SMALL LETTER Z |

## 13: Latin Extended Additional

In the Unicode Standard v. 8.0, this range has 256 characters. The selection below contains 104 characters, many with dot above or below, others with hook above, or macron and acute. For additional precomposed characters of these types, see PUA subranges 19, 21 and 47, pp. 136, 143 and 171 below.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\dot{\mathrm{B}}$ |  | $\&$ Bdot; | 1 E 02 | LATIN CAPITAL LETTER B WITH DOT ABOVE |
| $\dot{\mathrm{b}}$ |  | $\& b d o t ;$ | 1 E 03 | LATIN SMALL LETTER B WITH DOT ABOVE |
| B |  | $\& B d o t b l ;$ | 1 E 04 | LATIN CAPITAL LETTER B WITH DOT BELOW |
| $\mathbf{b}$ |  | $\& b d o t b l ;$ | $1 E 05$ | LATIN SMALL LETTER B WITH DOT BELOW |


| $\dot{\mathrm{D}}$ |  | \&Ddot; | 1 E 0 A | LATIN CAPITAL LETTER D WITH DOT ABOVE |
| :--- | :--- | :--- | :--- | :--- |
| $\dot{\mathrm{d}}$ |  | \&ddot; | 1 E 0 B | LATIN SMALL LETTER D WITH DOT ABOVE |
| D |  | \&Ddotbl; | 1 E 0 C | LATIN CAPITAL LETTER D WITH DOT BELOW |
| d |  | \&ddotbl; | 1E0D | LATIN SMALL LETTER D WITH DOT BELOW |
| $\dot{\mathrm{E}}$ |  | \&Emacracute; | 1 E 16 | LATIN CAPITAL LETTER E WITH MACRON AND ACUTE |
| $\dot{\mathrm{e}}$ |  | \&emacracute; | 1 E 17 | LATIN SMALL LETTER E WITH MACRON AND ACUTE |
| $\dot{\mathrm{F}}$ | \&Fdot; | 1 E 1 E | LATIN CAPITAL LETTER F WITH DOT ABOVE |  |
| $\dot{\mathrm{f}}$ | \&fdot; | 1 E 1 F | LATIN SMALL LETTER F WITH DOT ABOVE |  |
| $\dot{\mathrm{H}}$ |  | \&Hdot; | 1 E 22 | LATIN CAPITAL LETTER H WITH DOT ABOVE |
| $\dot{\mathrm{h}}$ |  | \&hdot; | 1 E 23 | LATIN SMALL LETTER H WITH DOT ABOVE |
| H |  | \&Hdotbl; | 1 E 24 | LATIN CAPITAL LETTER H WITH DOT BELOW |
| h |  | \&hdotbl; | 1 E 25 | LATIN SMALL LETTER H WITH DOT BELOW |
| $\dot{\mathrm{K}}$ |  | \&Kacute; | 1 E 30 | LATIN CAPITAL LETTER K WITH ACUTE |
| k |  | \&kacute; | 1 E 31 | LATIN SMALL LETTER K WITH ACUTE |


| K | \&Kdotbl; | 1E32 | LATIN CAPITAL LETTER K WITH DOT BELOW |
| :---: | :---: | :---: | :---: |
| K | \&kdotbl; | 1E33 | LATIN SMALL LETTER K WITH DOT BELOW |
| L | \&Ldotbl; | 1E36 | LATIN CAPITAL LETTER L WITH DOT BELOW |
| 1 | \&ldotbl; | 1E37 | LATIN SMALL LETTER L WITH DOT BELOW |
| M' | \&Macute; | 1E3E | LATIN CAPITAL LETTER M WITH ACUTE |
| ḿ | \&macute; | 1E3F | LATIN SMALL LETTER M WITH ACUTE |
| $\dot{M}$ | \&Mdot; | 1E40 | LATIN CAPITAL LETTER M WITH DOT ABOVE |
| $\dot{\mathrm{m}}$ | \&mdot; | 1E41 | LATIN SMALL LETTER M WITH DOT ABOVE |
| M | \&Mdotbl; | 1E42 | LATIN CAPITAL LETTER M WITH DOT BELOW |
| m | \&mdotbl; | 1E43 | LATIN SMALL LETTER M WITH DOT BELOW |
| $\stackrel{\circ}{\mathrm{N}}$ | \&Ndot; | 1E44 | LATIN CAPITAL LETTER N WITH DOT ABOVE |
| $\dot{\mathrm{n}}$ | \&ndot; | 1 E 45 | LATIN SMALL LETTER N WITH DOT ABOVE |
| N | \&Ndotbl; | 1E46 | LATIN CAPITAL LETTER N WITH DOT BELOW |
| n | \&ndotbl; | 1 E 47 | LATIN SMALL LETTER N WITH DOT BELOW |


| Ó | \&Omacracute; | 1 E 22 | LATIN CAPITAL LETTER O WITH MACRON AND ACUTE |
| :---: | :---: | :---: | :---: |
| Ó | \&omacracute; | 1 E 53 | LATIN SMALL LETTER O WITH MACRON AND ACUTE |
| Ṕ | \&Pacute; | 1 E 4 | LATIN CAPITAL LETTER P WITH ACUTE |
| ṕ | \&pacute; | 1 E 55 | LATIN SMALL LETTER P WITH ACUTE |
| $\dot{\mathrm{P}}$ | \&Pdot; | 1 E 56 | LATIN CAPITAL LETTER P WITH DOT ABOVE |
| $\dot{\mathrm{p}}$ | \&pdot; | 1 E 77 | LATIN SMALL LETTER P WITH DOT ABOVE |
| $\dot{\mathrm{R}}$ | \&Rdot; | 1E58 | LATIN CAPITAL LETTER R WITH DOT ABOVE |
| $\dot{\mathrm{r}}$ | \&rdot; | 1E59 | LATIN SMALL LETTER R WITH DOT ABOVE |
| R | \&Rdotbl; | 1E5A | LATIN CAPITAL LETTER R WITH DOT BELOW |
| $\stackrel{r}{\square}$ | \&rdotbl; | 1E5B | LATIN SMALL LETTER R WITH DOT BELOW |
| $\dot{\mathrm{S}}$ | \&Sdot; | 1 E 60 | LATIN CAPITAL LETTER S WITH DOT ABOVE |
| $\dot{\text { S }}$ | \⋅ | 1E61 | LATIN SMALL LETTER S WITH DOT ABOVE |
| S | \&Sdotbl; | 1E62 | LATIN CAPITAL LETTER S WITH DOT BELOW |
| S | \&sdotbl; | 1E63 | LATIN SMALL LETTER S WITH DOT BELOW |


| $\dot{\mathrm{T}}$ | \&Tdot; | 1E6A | LATIN CAPITAL LETTER T WITH DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{t}$ | \⃛ | 1E6B | LATIN SMALL LETTER T WITH DOT ABOVE |
| T | \&Tdotbl; | 1E6C | LATIN CAPITAL LETTER T WITH DOT BELOW |
| t | \&tdotbl; | 1E6D | LATIN SMALL LETTER T WITH DOT BELOW |
| V | \&Vdotbl; | 1E7E | LATIN CAPITAL LETTER V WITH DOT BELOW |
| Y | \&vdotbl; | 1E7F | LATIN SMALL LETTER V WITH DOT BELOW |
| W | \&Wgrave; | 1 E 80 | LATIN CAPITAL LETTER W WITH GRAVE |
| W | \&wgrave; | 1 E 81 | LATIN SMALL LETTER W WITH GRAVE |
| Ẃ | \&Wacute; | 1E82 | LATIN CAPITAL LETTER W WITH ACUTE |
| W' | \&wacute; | 1 E 83 | LATIN SMALL LETTER W WITH ACUTE |
| $\ddot{\mathrm{W}}$ | \&Wuml; | 1 E 84 | LATIN CAPITAL LETTER W WITH DIAERESIS |
| $\ddot{W}$ | \&wuml; | 1 E 85 | LATIN SMALL LETTER W WITH DIAERESIS |
| W | \&Wdot; | 1 E 86 | LATIN CAPITAL LETTER W WITH DOT ABOVE |
| $\dot{\mathrm{W}}$ | \&wdot; | 1E87 | LATIN SMALL LETTER W WITH DOT ABOVE |


| W | \&Wdotbl; | 1 E 88 | LATIN CAPITAL LETTER W WITH DOT BELOW |
| :---: | :---: | :---: | :---: |
| W | \&wdotbl; | 1 E 89 | LATIN SMALL LETTER W WITH DOT BELOW |
| $\dot{Y}$ | \&Ydot; | 1E8E | LATIN CAPITAL LETTER Y WITH DOT ABOVE |
| $\dot{\mathrm{y}}$ | \&ydot; | 1E8F | LATIN SMALL LETTER Y WITH DOT ABOVE |
| Z | \&Zdotbl; | 1E92 | LATIN CAPITAL LETTER Z WITH DOT BELOW |
| Z | \&zdotbl; | 1 E 93 | LATIN SMALL LETTER Z WITH DOT BELOW |
| $\stackrel{\circ}{\text { W }}$ | \&wring; | 1E98 | LATIN SMALL LETTER W WITH RING ABOVE |
| $\stackrel{\circ}{\mathrm{y}}$ | \&yring; | 1E99 | LATIN SMALL LETTER Y WITH RING ABOVE |
| $f$ | \&slongbarslash; | 1E9C | LATIN SMALL LETTER LONG S WITH DIAGONAL STROKE |
| f | \&slongbar; | 1E9D | LATIN SMALL LETTER LONG S WITH HIGH STROKE |
| $\beta$ | \&SZlig; | 1E9E | LATIN CAPITAL LETTER SHARP S |
| $\delta$ | \&dscript; | 1E9F | LATIN SMALL LETTER DELTA |
| A | \&Adotbl; | 1EA0 | LATIN CAPITAL LETTER A WITH DOT BELOW |
| a | \& adotbl; | 1EA1 | LATIN SMALL LETTER A WITH DOT BELOW |


| Ả | \&Ahook; | 1EA2 | LATIN CAPITAL LETTER A WITH HOOK ABOVE |
| :---: | :---: | :---: | :---: |
| ả | \&ahook; | 1EA3 | LATIN SMALL LETTER A WITH HOOK ABOVE |
| Å | \& Abreveacute; | 1EAE | LATIN CAPITAL LETTER A WITH BREVE AND ACUTE |
| ă | \&abreveacute; | 1EAF | LATIN SMALL LETTER A WITH BREVE AND ACUTE |
| E | \& Edotbl; | 1EB8 | LATIN CAPITAL LETTER E WITH DOT BELOW |
| e | \&edotbl; | 1EB9 | LATIN SMALL LETTER E WITH DOT BELOW |
| İ | \&Ihook; | 1EC8 | LATIN CAPITAL LETTER I WITH HOOK ABOVE |
| 1 | \&ihook; | 1EC9 | LATIN SMALL LETTER I WITH HOOK ABOVE |
| I | \&Idotbl; | 1ECA | LATIN CAPITAL LETTER I WITH DOT BELOW |
| i | \&idotbl; | 1ECB | LATIN SMALL LETTER I WITH DOT BELOW |
| O | \&Odotbl; | 1ECC | LATIN CAPITAL LETTER O WITH DOT BELOW |
| O | \&odotbl; | 1ECD | LATIN SMALL LETTER O WITH DOT BELOW |
| O̧ | \&Ohook; | 1ECE | LATIN CAPITAL LETTER O WITH HOOK ABOVE |
| Ő | \&ohook; | 1ECF | LATIN SMALL LETTER O WITH HOOK ABOVE |


| U | \& Udotbl; | 1EE4 | LATIN CAPITAL LETTER U WITH DOT BELOW |
| :---: | :---: | :---: | :---: |
| 4 | \&udotbl; | 1EE5 | LATIN SMALL LETTER U WITH DOT BELOW |
| $U^{2}$ | \&Uhook; | 1EE6 | LATIN CAPITAL LETTER U WITH HOOK ABOVE |
| $\vec{u}$ | \&uhook; | 1EE7 | LATIN SMALL LETTER U WITH HOOK ABOVE |
| '̇ | \&Ygrave; | 1EF2 | LATIN CAPITAL LETTER Y WITH GRAVE |
| y | \&ygrave; | 1EF3 | LATIN SMALL LETTER Y WITH GRAVE |
| Y | \&Ydotbl; | 1EF4 | LATIN CAPITAL LETTER Y WITH DOT BELOW |
| Y. | \&ydotbl; | 1EF5 | LATIN SMALL LETTER Y WITH DOT BELOW |
| Y' | \&Yhook; | 1EF6 | LATIN CAPITAL LETTER Y WITH HOOK ABOVE |
| $\stackrel{3}{y}$ | \&yhook; | 1EF7 | LATIN SMALL LETTER Y WITH HOOK ABOVE |
| U | \&LLwelsh; | 1EFA | LATIN CAPITAL LETTER MIDDLE-WELSH LL |
| II | \&llwelsh; | 1EFB | LATIN SMALL LETTER MIDDLE-WELSH LL |
| $1)$ | \&Vwelsh; | 1EFC | LATIN CAPITAL LETTER MIDDLE-WELSH V |
| 0 | \&vwelsh; | 1EFD | LATIN SMALL LETTER MIDDLE-WELSH V |


| Y |  | \&Yloop; | 1 EFE | LATIN CAPITAL LETTER Y WITH LOOP |
| :--- | :--- | :--- | :--- | :--- |
| y |  | \&yloop; | 1 EFF | LATIN SMALL LETTER Y WITH LOOP |

## 14: General Punctuation

In the Unicode Standard v. 8.0, this range has 105 characters (plus one reserved and 6 deprecated ones). The selection below contains 51 characters, including a number of spaces with no visible glyph. Note that some of the space characters, e.g. 2009, can be used to distinguish between varying widths of space between words. Some scholars believe there may be two different widths of the space in some Medieval manuscripts, the thinner space being used in compounds or sequences of e.g. preposition and noun.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | \&enqd; | 2000 | EN QUAD |  |
|  | \&emqd; | 2001 | EM QUAD |  |  |
|  | \  |  | 2002 | EN SPACE |  |
|  | \  |  | 2003 | EM SPACE |  |
|  | \  |  | 2004 | THREE-PER-EM SPACE |  |
|  |  | $\& e m s p 16 ;$ | 2006 | SIX-PER-EM SPACE |  |


|  | \  |  | 2007 | FIGURE SPACE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | \  |  | 2008 | PUNCTUATION SPACE |  |
|  | \  |  | 2009 | THIN SPACE |  |
|  | \  |  | 200 A | HAIR SPACE |  |
|  |  | \&zerosp; | 200 B | ZERO WIDTH SPACE |  |
| - | \‐ |  | 2010 | HYPHEN |  |

This is an unambiguous hyphen character. See also 002D HYPHEN-MINUS in Basic Latin (p. 13 above).

| - | \&nbhy; | 2011 | NON-BREAKING HYPHEN |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| - | \&numdash; | 2012 | FIGURE DASH |  |

The figure dash, 2012, can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (p. 109).

| - | \– |  | 2013 | EN DASH |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| - | \— |  | 2014 | EM DASH |  |
| - | \― |  | 2015 | HORIZONTAL BAR |  |
| $\\|$ | \‖ |  | 2016 | DOUBLE VERTICAL LINE |  |
| ، | \‘ |  | 2018 | LEFT SINGLE QUOTATION MARK |  |


| , | \’ |  | 2019 | RIGHT SINGLE QUOTATION MARK |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The entity '\’' is also being used for this character. An analogous variant to 2018, '\‚', has not been included in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above). |  |  |  |  |  |
| , | \‚ | \&lsquolow; | 201A | SINGLE LOW-9 QUOTATION MARK |  |
| The final ' $r$ ' in the ISO entity is ambiguous, since it is otherwise being used for raised quotation marks, such as 201B and 201F. For this reason, the suffix 'low' has been used in the recommended MUFI entity. |  |  |  |  |  |
| - |  | \&rsquorev; | 201B | SINGLE HIGH-REVERSED-9 QUOTATION MARK |  |
| * | \“ |  | 201C | LEFT DOUBLE QUOTATION MARK |  |
| " | \” |  | 201D | RIGHT DOUBLE QUOTATION MARK |  |
| The entity '\”' is also being used for this character. An analogous variant to 201C, '\„', has not been included in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above). |  |  |  |  |  |
| " | \„ | \&ldquolow; | 201E | DOUBLE LOW-9 QUOTATION MARK |  |
| The final ' $r$ ' in the ISO entity is ambiguous, since it is otherwise being used for raised quotation marks, such as 201B and 201F. For this reason, the suffix 'low' has been used in the recommended MUFI entity. |  |  |  |  |  |
| " |  | \&rdquorev; | 201F | DOUBLE HIGH-REVERSED-9 QUOTATION MARK |  |
| $\dagger$ | \† |  | 2020 | DAGGER |  |



Most likely by mistake, two entities, '\‥' ("en leader") and '\…' ("em leader"), have been recorded for 2025 TWO DOT LEADER in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above).

| $\ldots$ | \… |  | 2026 | HORIZONTAL ELLIPSIS |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| . |  | \&hyphpoint; | 2027 | HYPHENATION POINT |  |
|  |  | \&nnbsp; | 202 F | NARROW NO-BREAK SPACE |  |
| \%o | \‰ |  | 2030 | PER MILLE SIGN |  |
| , | \′ |  | 2032 | PRIME |  |
| " | \″ |  | 2033 | DOUBLE PRIME |  |
| < |  | \‹ | 2039 | SINGLE LEFT-POINTING ANGLE QUOTATION MARK |  |

The entity '\«' is also being used for this character, but has here been reserved for 00AB in Latin-1 Supplement (p. 21 above).

| $>$ |  | \› | 203A | SINGLE RIGHT-POINTING ANGLE QUOTATION MARK |
| :--- | :--- | :--- | :--- | :--- |

The entity '\»' is also being used for this character, but has here been reserved for 00BB in Latin-1 Supplement (p. 22 above).

| $※$ |  | \&refmark; | 203 B | REFERENCE MARK |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $*^{*}$ |  | \&triast; | 2042 | ASTERISM |  |
| $/$ | \&fracsol; | 2044 | FRACTION SLASH |  |  |
| F | \&lsqbqu; | 2045 | LEFT SQUARE BRACKET WITH QUILL |  |  |
| J | \&rsqbqu; | 2046 | RIGHT SQUARE BRACKET WITH QUILL |  |  |
| 7 | \&et; | 204 A | TIRONIAN SIGN ET | LATIN ABBREVIATION SIGN SMALLET |  |
| $\mathbb{P}$ |  | \&revpara; | 204 B | REVERSED PILCROW SIGN |  |
| $\because$ | \&tridotleft; | 2056 | THREE DOT PUNCTUATION |  |  |
| $\because$ |  | \&lozengedot; | 2058 | FOUR DOT PUNCTUATION |  |
| $\because:$ |  | \&dotcross; | 205 C | DOTTED CROSS |  |

## 15: Superscripts and subscripts

In the Unicode Standard v. 8.0, this range has 42 characters (and 6 reserved code points), of which 17 characters have been selected here. Superscript numbers can be used to differentiate variant character forms (allographs) in display and in print, while subscript numbers are often used to indicate line numbers, also both in display and in print. The superscript numbers 1, 2 and 3 are included in Latin-1 Supplement, p. 21-22 above, as 00B9, 00B2 and 00B3 respectively.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{0}$ |  | $\&$ sup0; | 2070 | SUPERSCRIPT ZERO |
| $\mathbf{4}$ |  | $\&$ sup4; | 2074 | SUPERSCRIPT FOUR |
| $\mathbf{5}$ |  | $\&$ sup5; | 2075 | SUPERSCRIPT FIVE |
| $\mathbf{6}$ |  | $\& s u p 6 ;$ | 2076 | SUPERSCRIPT SIX |
| $\mathbf{7}$ |  | $\& \sup 7 ;$ | 2077 | SUPERSCRIPT SEVEN |
| $\mathbf{8}$ |  | $\& s u p 9 ;$ | 2078 | SUPERSCRIPT EIGHT |
| $\mathbf{0}$ |  | $\& s u b 0 ;$ | 2079 | SUPERSCRIPT NINE |
| $\mathbf{1}$ |  | $\& s u b 1 ;$ | 2081 | SUBSCRIPT ZERO |


| 2 |  | $\& s u b 2 ;$ | 2082 | SUBSCRIPT TWO |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3}$ |  | $\&$ sub3; | 2083 | SUBSCRIPT THREE |
| $\mathbf{4}$ |  | $\&$ sub4; | 2084 | SUBSCRIPT FOUR |
| $\mathbf{5}$ |  | $\&$ sub5; | 2085 | SUBSCRIPT FIVE |
| $\mathbf{6}$ |  | $\&$ sub6; | 2086 | SUBSCRIPT SIX |
| $\mathbf{7}$ |  | $\& s u b 7 ;$ | 2087 | SUBSCRIPT SEVEN |
| $\mathbf{8}$ |  | $\& s u b 8 ;$ | 2088 | SUBSCRIPT EIGHT |
| $\mathbf{9}$ |  | $\& s u b 9 ;$ | 2089 | SUBSCRIPT NINE |

## 16: Currency Symbols

In the Unicode Standard v. 8.0, this range has 31 characters. Only a single character has been chosen here, the German penny sign. For other monetary (and weight) symbols, see the Private Use Area, subrange 12 (pp. 112-116 below). The 02BB NORDIC MARK SIGN should be investigated for unification with F2F0 OLD MARK SIGN below (p. 115).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\mathcal{Y}$ |  | \&pennygerm; | 20 B 0 | GERMAN PENNY SIGN |

## 17: Letterlike Symbols

In the Unicode Standard v. 8.0, this range has 80 characters. Here, eight characters have been selected. Additional or alternative forms for several of these characters are found in the Private Use Area below.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $Э$ |  | \&scruple; | 2108 | SCRUPLE |  |
| Tb |  | \&lbbar; | 2114 | L B BAR SYMBOL |  |

See subrange 12 in the Private Use Area for additional forms of this symbol (p. 114 below).

| R |  | \&Rtailstrok; | 211 E | PRESCRIPTION TAKE | LATIN CAPITAL LETTER R WITH TAIL STROKE |
| :--- | :--- | :--- | :--- | :--- | :--- |
| R |  | \&Rslstrok; | 211 F | RESPONSE | LATIN CAPITAL LETTER R WITH DIAGONAL STROKE |

It is questionable whether 211E PRESCRIPTION TAKE and 211F RESPONSE should be recognised as different characters, but, because they in fact appear as different characters in the Unicode Standard, we recommend that both should be included in MUFI-compatible fonts.


See A 75E and A75F in Latin Extended-D for a pair of similar-looking characters used in other types of abbreviation (p. 78 below).

| $\boldsymbol{\zeta}$ | \&ounce; | 2125 | OUNCE SIGN |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

This character is similar to, but not identical with, the scudi sign, cf. subrange 12 in the Private Use Area below (p. 116 below). Attested in Medieval Nordic sources for 'uns', cf. Mål og vekt (Nordisk Kultur vol. 30), Oslo-Stockholm-København 1933, p. 283.

| $J$ |  | \&Fturn; | 2132 | TURNED CAPITAL F | LATIN CAPITAL LETTER TURNED F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I | \&fturn; | 214 E | TURNED SMALL F | LATIN SMALL LETTER TURNED F |  |

This pair of characters is used for one of the Claudian letters in Latin epigraphy. Note that the small form is a turned small capital ' F ' rather than a turned minuscule ' $f$ '. TURNED SMALL F at 214E was added in the Unicode Standard v. 5.0 for reasons of case pairing. For additional Claudian letters, see the two reversed 'C' characters at 2183 and 2184 in Number forms (below) and the two half ' H ' characters at 2C75 and 2C76 in Latin Extended-C (p. 71 below).

## 18: Number Forms

In the Unicode Standard v. 8.0, this range has 60 characters, comprising a number of vulgar fractions and Roman numerals. As a rule, we recommend that Roman numerals should be encoded using the ordinary characters $\mathrm{I}, \mathrm{V}, \mathrm{X}, \mathrm{L}, \mathrm{C}$ and D . The five numerals selected here are combinations of ' C ' and/or ' D ' outside the ordinary alphabet, and the reversed 'C', which could be used as a Roman numeral as well as an abbreviation sign for 'con', and a Claudian letter.
Note that two modifier Roman numerals have been added in the Private Use Area, subrange 11 (pp. 112 below).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| D |  | \&romnumCDlig; | 2180 | ROMAN NUMERAL ONE THOUSAND C D |  |
| D |  | \&romnumDDlig; | 2181 | ROMAN NUMERAL FIVE THOUSAND |  |
| (D |  | \&romunmDDdblig; | 2182 | ROMAN NUMERAL TEN THOUSAND |  |
| O |  | \&CONbase; | 2183 | ROMAN NUMERAL REVERSED ONE HUNDRED | LATIN ABBREVIATION SIGN <br> CAPITAL CON |

In addition to its usage as a Roman numeral, this character was frequently used as an abbreviation for 'con'. It is also known as a Claudian letter, antisigma, cf. 03FD in Greek and Coptic. The suggested entity name here is based upon its usage as an abbreviation character for 'con'.

| כ | \&conbase; | 2184 | LATIN SMALL LETTER REVERSED C | LATIN ABBREVIATION SIGN <br> SMALL CON |
| :--- | :--- | :--- | :--- | :--- | :--- |

This is the lowercase version of 2183 ROMAN NUMERAL REVERSED ONE HUNDRED. It was added in v. 5.0 of the Unicode Standard for reasons of case pairing. The suggested entity name refers to the usage as an abbreviation character for 'con'. A similar-looking character is 0254 LATIN SMALL LETTER OPEN O in IPA Extensions above (p.37), but that character is usually rendered as a turned 'c' glyph, ' 0 ' (i.e. rotated $180^{\circ}$ ). The 'con' abbreviation sign should rather be rendered with a reversed ' $c$ ' glyph, ' $\supset$ ' (i.e. flipped horizontally).

## 19: Arrows

In the Unicode Standard v. 8.0, this range has 112 characters. The selection below contains four commonly used arrows.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\leftarrow$ |  | \&arrsgllw; | 2190 | LEFTWARDS ARROW |
| $\uparrow$ |  | \&arrsglupw; | 2191 | UPWARDS ARROW |
| $\rightarrow$ | \&arrsglrw; | 2192 | RIGHTWARDS ARROW |  |
| $\downarrow$ |  | $\&$ arrsgldw; | 2193 | DOWNWARDS ARROW |

## 20: Mathematical Operators

Ten characters have been selected from this range, which contains 256 characters in the Unicode Standard v. 8.0, of which ten have been selected here. Since six of them have a non-mathematical usage, alternative MUFI descriptive names have been assigned.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - | \− |  | 2212 | MINUS |  |
| $\infty$ |  | \∞ | 221E | INFINITY |  |
| $\wedge$ |  | \&logand; | 2227 | LOGICAL AND |  |
| This character can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (p. 109). |  |  |  |  |  |
| $\therefore$ |  | \&tridotupw; | 2234 | THEREFORE | PUNCTUATION MARK UPWARDSPOINTING TRIANGULAR DOTS |
| There is an ISO entity name for this character, '\∴', but we have given an entity name which better reflects the shape. This character can also be used as a punctuation mark, but we recommend 2E2B in Supplemental Punctuation (p. 74) as a punctuation character. |  |  |  |  |  |
| $\because$ |  | \&tridotdw; | 2235 | BECAUSE | PUNCTUATION MARK DOWNWARDSPOINTING TRIANGULAR DOTS |
| This character can also be used as a punctuation mark, but we recommend 2E2A in Supplemental Punctuation (p. 74) as a punctuation character. |  |  |  |  |  |
| $\ldots$ |  | \&quaddot; | 2237 | PROPORTION | PUNCTUATION MARK FOUR DOTS |
| This character can also be used as a punctuation mark, but we recommend 2E2C in Supplemental Punctuation (p. 74) as a punctuation character. |  |  |  |  |  |


| $\dot{\leftarrow}$ |  | \&est; | 223 B | HOMOTHETIC | LATIN ABBREVIATION SIGN EST |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\approx$ | \&esse; | 2248 | ALMOST EQUAL TO | LATIN ABBREVIATION SIGN ESSE |  |
| $\neq$ | \&notequals; | 2260 | NOT EQUAL TO |  |  |
| $\odot$ | \&dipledot; | 22 D 7 | GREATER-THAN WITH DOT | DIPLE WITH DOT |  |
| This character can also be used as a punctuation mark. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 303. |  |  |  |  |  |

## 21: Miscellaneous Technical

Four metrical characters have been selected from this range, which contains a total of 249 characters in the Unicode Standard v. 8.0. The metrical characters are an addition in v. 4.1 and were proposed by the Thesaurus Linguae Graeca (TLG) project. In addition to the four metrical characters listed below, it should be noted that the anceps, $\times$, can be identified with MULTIPLICATION SIGN (00D7) in Latin-1 Supplement and the symbol for long syllable (longum) can be identified with FIGURE DASH (2012) or EN DASH (2013) in General Punctuation. All of these characters can be combined with COMBINING ACUTE ACCENT (0301), COMBINING GRAVE ACCENT (0300) and COMBINING DOUBLE ACUTE ACCENT (030B) in Combining Diacritical Marks in order to indicate stress and alliterative patterns. However, for those who would like to use precomposed metrical characters, there is a full selection in the Private Use Area, subrange 10 below (p. 109-111).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\checkmark$ |  | $\& m e t r s h o r t ;$ | 23 D 1 | METRICAL BREVE |
| $\checkmark$ |  | \&metrshortlong; | 23 D 2 | METRICAL LONG OVER SHORT |


|  |  | $\& m e t r l o n g s h o r t ;$ | 23 D 3 | METRICAL SHORT OVER LONG |
| :--- | :--- | :--- | :--- | :--- |
|  |  | \&metrdblshortlong; | 23 D 4 | METRICAL LONG OVER TWO SHORTS |

## 22: Geometric Shapes

Five characters have been selected from this range, which contains 96 characters in the Unicode Standard v. 8.0. Note that the size and line thickness vary from font to font. Many of the characters in this range are used by Ordbog over det norrøne prosasprog (Copenhagen 1989 ff .).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ |  | $\&$ squareblsm; | 25 AA | BLACK SMALL SQUARE |
| $\square$ |  | $\&$ squarewhsm; | 25 AB | WHITE SMALL SQUARE |
| $\square$ | $\&$ trirightwh; | 25 B 9 | WHITE RIGHT-POINTING SMALL TRIANGLE |  |
| $\triangleleft$ | \&trileftwh; | 25 C 3 | WHITE LEFT-POINTING SMALL TRIANGLE |  |
| $\square$ | \&circledot; | 25 CC | DOTTED CIRCLE |  |

The character above can be used as a place holder for base-line characters when displaying diacritical marks. See examples in Combining Diacritical Marks above (p. 40-43). Although the Unicode character 25CC has a size similar to capital 'O', we recommend that it should be drawn with the size of a small 'o'.

## 23: Dingbats

Three characters have been selected from this range, which contains 192 characters in the Unicode Standard v. 8.0.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| † |  | \✗ | 271 D | LATIN CROSS | LATIN ABBREVIATION SIGN CROSS |
| T | \&hedera; | 2766 | FLORAL HEART | HEDERA |  |
| 20 |  | \&hederarot; | 2767 | ROTATED FLORAL HEART BULLET | ROTATED HEDERA |

The two characters above are also known as Aldine leaf (English) or Aldusblatt (German). The name hedera refers to HEDERA (HELIX), the Latin name for ivy, which this leaf resembles.

## 24: Miscellaneous Mathematical Symbols-A

Four characters have been selected from this range, which contains 48 characters in the Unicode Standard v. 8.0. Note that the angle brackets from this range have been chosen rather than 2329 and 232A in Miscellaneous Technical, because the latter are canonically equivalent to the very wide brackets 3008 and 3009 in CJK Symbols and Punctuation. This is to avoid spacing problems which might arise if the CJK brackets were substituted.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\llbracket$ |  | \&lwhsqb; | 27 E 6 | MATHEMATICAL LEFT WHITE <br> SQUARE BRACKET | LEFT WHITE SQUARE BRACKET |
| $\rrbracket$ | \&rwhsqb; | $27 E 7$ | MATHEMATICAL RIGHT WHITE <br> SQUARE BRACKET | RIGHT WHITE SQUARE BRACKET |  |


| $\langle$ | \&langb; | 27 E 8 | MATHEMATICAL LEFT ANGLE <br> BRACKET | LEFT ANGLE BRACKET |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\rangle$ | \&rangb; | 27 E 9 | MATHEMATICAL RIGHT ANGLE <br> BRACKET | RIGHT ANGLE BRACKET |

## 25: Supplemental Mathematical Operators

A single character has been selected from this range, which contains 256 characters in the Unicode Standard v. 8.0.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $/ /$ |  | $\& d b l s o l ;$ | 2 AFD | DOUBLE SOLIDUS OPERATOR | PUNCTUATION MARK DOUBLE SOLIDUS |
| This character can be used as a punctuation mark in addition to the single solidus, 002F in Basic Latin (p. 13 above). Cf. Malcolm B. Parkes, Pause and <br> Effect, Aldershot, 1992, p. 301. |  |  |  |  |  |

## 26: Latin Extended-C

Two characters have been selected from this range, which contains 32 characters in the Unicode Standard v. 8.0. This range was introduced v. 5.0 of the Unicode Standard.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| F |  | $\&$ Hhalf; | $2 C 75$ | LATIN CAPITAL LETTER HALF H |
| F |  | $\& h h a l f ;$ | $2 C 76$ | LATIN SMALL LETTER HALF H |

This casing pair is used for a Claudian letter in Latin epigraphy. Note that the small form is based on a small capital 'H' rather than a minuscule ' $h$ '. For additional Claudian letters, see the two turned ' F ' characters at 2132 and 214E in Letterlike Symbols (pp. 65-66), and the two reversed 'C' characters at 2183 and 2184 in Number forms (pp. 65-66).

| V |  | $\& V \bmod ;$ | 2C7D | MODIFIER LETTER CAPITAL V |
| :--- | :--- | :--- | :--- | :--- |

## 27: Supplemental Punctuation

Twenty-three characters have been selected from this range, which contains 67 characters in the Unicode Standard v. 8.0. The Unicode descriptive names for these characters, especially for the first one, can be misleading. For a full set of half square brackets, see 2E22-2E25 below (next page).

| Glyph | ISO <br> entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| r |  | \&luhsqbNT; | 2E00 | RIGHT ANGLE SUBSTITUTION MARKER | LEFT UPPER HALF SQUARE BRACKET |

This character was interpreted as a half bracket in v. 2.0 of the MUFI character recommendation. However, since the whole set of half brackets were introduced in the Unicode Standard v. 5.1, these should be used rather than the present specific New Testament editorial symbol. See 2E22-2E25 below (p. 73). The recommended MUFI entity has been changed from '\&luhsqb;' to '\&luhsqbNT;'. The entity '\&luhsqb;' is now being used for 2E22 (p. 73).

| । | \&luslst; | 2E0C | LEFT RAISED OMISSION BRACKET | LEFT UPPER SLANTED STROKE |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\prime}$ | \&ruslst; | 2E0D | RIGHT RAISED OMISSION BRACKET | RIGHT UPPER SLANTED STROKE |
| $=$ | \&dbloblhyph; | 2E17 | DOUBLE OBLIQUE HYPHEN |  |
| $\neq$ | \&ramus; | 2E19 | PALM BRANCH |  |


| , | \&rlslst; | 2E1C | LEFT LOW PARAPHRASE BRACKET | RIGHT LOWER SLANTED STROKE |
| :---: | :---: | :---: | :---: | :---: |
| In Medieval Nordic editing this stroke is typically used to indicate the end of text added in the margin and is for this reason called 'RIGHT'. |  |  |  |  |
| / | \& llsslst; | 2E1D | RIGHT LOW PARAPHRASE BRACKET | LEFT LOWER SLANTED STROKE |
| In Medieval Nordic editing this stroke is typically used to indicate the beginning of text added in the margin and is for this reason called 'LEFT'. |  |  |  |  |
| - | \& verbarql; | 2E20 | LEFT VERTICAL BAR WITH QUILL |  |
| $\dagger$ | \& verbarqr; | 2E21 | RIGHT VERTICAL BAR WITH QUILL |  |
| 「 | \&luhsqb; | 2E22 | TOP LEFT HALF BRACKET |  |
| 7 | \&ruhsqb; | 2E23 | TOP RIGHT HALF BRACKET |  |
| L | \& llhsqb; | 2E24 | BOTTOM LEFT HALF BRACKET |  |
| 」 | \&rlhsqb; | 2E25 | BOTTOM RIGHT HALF BRACKET |  |
| C | \&IUbrack; | 2E26 | LEFT SIDEWAYS U BRACKET |  |
| ว | \&rUbrack; | 2E27 | RIGHT SIDEWAYS U BRACKET |  |
| (( | \&ldblpar; | 2E28 | LEFT DOUBLE PARENTHESIS |  |
| )) | \&rdblpar; | 2E29 | RIGHT DOUBLE PARENTHESIS |  |


| $\because$ |  | \&tridotsdownw; | 2E2A | TWO DOTS OVER ONE DOT PUNCTUATION |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\therefore$ |  | \&tridotsupw; | 2E2B | ONE DOT OVER TWO DOTS PUNCTUATION |  |
| $\because$ | \&quaddots; | 2E2C | SQUARED FOUR DOT PUNCTUATION |  |  |
| $\because$ | \&fivedots; | 2E2D | FIVE DOT MARK |  |  |
| $\varsigma$ | \&punctpercont; | 2E2E | REVERSED QUESTION MARK |  |  |
| $=$ | \&dblhyph; | 2E40 | DOUBLE HYPHEN |  |  |

## 28: Latin Extended-D

In the Unicode Standard v. 8.0, this range contains 159 characters, of which 93 have been selected here. The majority of characters in Latin Extended-D were part of the Private Use Area of MUFI and were successfully proposed for inclusion in the Unicode Standard. This range contains a number of ligatures used in Medieval Nordic manuscripts and an even larger number of general Medieval abbreviation characters.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| F |  | \&fscap; | A730 | LATIN LETTER SMALL CAPITAL F |
| S |  | \&sscap; | A731 | LATIN LETTER SMALL CAPITAL S |
| AA |  | \&AAlig; | A732 | LATIN CAPITAL LETTER AA |
| a |  | \&aalig; | A733 | LATIN SMALL LETTER AA |


| AO | \& AOlig; | A734 | LATIN CAPITAL LETTER AO |
| :---: | :---: | :---: | :---: |
| æ0 | \&aolig; | A735 | LATIN SMALL LETTER AO |
| $A$ | \&AUlig; | A736 | LATIN CAPITAL LETTER AU |
| a | \&aulig; | A737 | LATIN SMALL LETTER AU |
| A | \& AVlig; | A738 | LATIN CAPITAL LETTER AV |
| a | \&avlig; | A739 | LATIN SMALL LETTER AV |
| A | \&AVligslash; | A73A | LATIN CAPITAL LETTER AV WITH HORIZONTAL BAR |
| a | \&avligslash; | A73B | LATIN SMALL LETTER AV WITH HORIZONTAL BAR |
| A | \&AYlig; | A73C | LATIN CAPITAL LETTER AY |
| a | \&aylig; | A73D | LATIN SMALL LETTER AY |
| $\bigcirc$ | \&CONdot; | A73E | LATIN CAPITAL LETTER REVERSED C WITH DOT |
| Э | \&condot; | A73F | LATIN SMALL LETTER REVERSED C WITH DOT |
| K | \&Kbar; | A740 | LATIN CAPITAL LETTER K WITH STROKE |
| k | \& bbar; | A741 | LATIN SMALL LETTER K WITH STROKE |


| K | \&Kstrleg; | A742 | LATIN CAPITAL LETTER K WITH DIAGONAL STROKE |
| :---: | :---: | :---: | :---: |
| 18 | \&kstrleg; | A743 | LATIN SMALL LETTER K WITH DIAGONAL STROKE |
| K | \&Kstrascleg; | A744 | LATIN CAPITAL LETTER K WITH STROKE AND DIAGONAL STROKE |
| 7 | \&kstrascleg; | A745 | LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE |
| $L$ | \&Lbrk; | A746 | LATIN CAPITAL LETTER BROKEN L |
| 1 | \&lbrk; | A747 | LATIN SMALL LETTER BROKEN L |
| 区 | \&Lhighstrok; | A748 | LATIN CAPITAL LETTER L WITH HIGH STROKE |
| 1 | \&lhighstrok; | A749 | LATIN SMALL LETTER L WITH HIGH STROKE |
| $\bigcirc$ | \& OBIIT; | A74A | LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY |
| $\theta$ | \&obiit; | A74B | LATIN SMALL LETTER O WITH LONG STROKE OVERLAY |
| $\bigcirc$ | \&Oloop; | A74C | LATIN CAPITAL LETTER O WITH LOOP |
| $\mathrm{O}^{\circ}$ | \&oloop; | A74D | LATIN SMALL LETTER O WITH LOOP |
| OO | \& OOlig; | A74E | LATIN CAPITAL LETTER OO |
| 00 | \&oolig; | A74F | LATIN SMALL LETTER OO |


| P | \&Pbardes; | A750 | LATIN CAPITAL LETTER P WITH STROKE THROUGH DESCENDER |
| :---: | :---: | :---: | :---: |
| p | \&pbardes; | A751 | LATIN SMALL LETTER P WITH STROKE THROUGH DESCENDER |
| $\checkmark$ | \&Pflour; | A752 | LATIN CAPITAL LETTER P WITH FLOURISH |
| SP | \&pflour; | A753 | LATIN SMALL LETTER P WITH FLOURISH |
| $\Psi$ | \&Psquirrel; | A754 | LATIN CAPITAL LETTER P WITH SQUIRREL TAIL |
| 2 | \&psquirrel; | A755 | LATIN SMALL LETTER P WITH SQUIRREL TAIL |
| $Q$ | \&Qbardes; | A756 | LATIN CAPITAL LETTER Q WITH STROKE THROUGH DESCENDER |
| q | \&qbardes; | A757 | LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER |
| Q | \&Qslstrok; | A758 | LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE |
| $q$ | \&qsistrok; | A759 | LATIN SMALL LETTER Q WITH DIAGONAL STROKE |
| 2 | \&Rrot; | A75A | LATIN CAPITAL LETTER R ROTUNDA |
| 2 | \&rrot; | A75B | LATIN SMALL LETTER R ROTUNDA |
| 27 | \&RUM; | A75C | LATIN CAPITAL LETTER RUM ROTUNDA |
| 4 | \&rum; | A75D | LATIN SMALL LETTER RUM ROTUNDA |


| W | \&Vdiagstrok; | A75E | LATIN CAPITAL LETTER V WITH DIAGONAL STROKE |
| :---: | :---: | :---: | :---: |
| J | \&vdiagstrok; | A75F | LATIN SMALL LETTER V WITH DIAGONAL STROKE |
| W | \&YYlig; | A760 | LATIN CAPITAL LETTER VY |
| y | \&yylig; | A761 | LATIN SMALL LETTER VY |
| $\xi$ | \&Zvisigot; | A762 | LATIN CAPITAL LETTER VISIGOTHIC Z |
| § | \&zvisigot; | A763 | LATIN SMALL LETTER VISIGOTHIC Z |
| ¢ | \&THORNbar; | A764 | LATIN CAPITAL LETTER THORN WITH STROKE |
| 方 | \&thornbar, | A765 | LATIN SMALL LETTER THORN WITH STROKE |
| $\underline{p}$ | \&THORNbardes; | A766 | LATIN CAPITAL LETTER THORN WITH STROKE THROUGH DESCENDER |
| b | \&thornbardes; | A767 | LATIN SMALL LETTER THORN WITH STROKE THROUGH DESCENDER |
| 1 | \&Vins; | A768 | LATIN CAPITAL LETTER VEND |
| $v$ | \&vins; | A769 | LATIN SMALL LETTER VEND |
| 3 | \&ETfin; | A76A | LATIN CAPITAL LETTER ET |
| 3 | \&etfin; | A76B | LATIN SMALL LETTER ET |


| 9 | \&IS; | A76C | LATIN CAPITAL LETTER IS |
| :---: | :---: | :---: | :---: |
| $\rho$ | \&is; | A76D | LATIN SMALL LETTER IS |
| 9 | \&CONdes; | A76E | LATIN CAPITAL LETTER CON |
| 9 | \&condes; | A76F | LATIN SMALL LETTER CON |
| 9 | \&usmod; | A770 | MODIFIER LETTER US |
| d4 | \&dtailstrok; | A771 | LATIN SMALL LETTER DUM |
| 4 | \&1tailstrok; | A772 | LATIN SMALL LETTER LUM |
| m | \&mtailstrok; | A773 | LATIN SMALL LETTER MUM |
| n | \&ntailstrok; | A774 | LATIN SMALL LETTER NUM |
| 17 | \&rtailstrok; | A775 | LATIN SMALL LETTER RUM |
| R | \&rscaptailstrok; | A776 | LATIN LETTER SMALL CAPITAL RUM |
| 4 | \&ttailstrok; | A777 | LATIN SMALL LETTER TUM |
| 8 | \&sstrok; | A778 | LATIN SMALL LETTER UM |
| $\bigcirc$ | \& Drot; | A779 | LATIN CAPITAL LETTER INSULAR D |


| ठ | \&drot; | A77A | LATIN SMALL LETTER INSULAR D |
| :---: | :---: | :---: | :---: |
| F | \&Fins; | A77B | LATIN CAPITAL LETTER INSULAR F |
| F | \&fins; | A77C | LATIN SMALL LETTER INSULAR F |
| $\delta$ | \&Gins; | A77D | LATIN CAPITAL LETTER INSULAR G |
| 9 | \&Ginsturn; | A77E | LATIN CAPITAL LETTER TURNED INSULAR G |
| 9 | \&ginsturn; | A77F | LATIN SMALL LETTER TURNED INSULAR G |
| T | \&Lturn; | A780 | LATIN CAPITAL LETTER TURNED L |
| I | \& Iturn; | A781 | LATIN SMALL LETTER TURNED L |
| n | \&Rins; | A782 | LATIN CAPITAL LETTER INSULAR R |
| n | \&rins; | A783 | LATIN SMALL LETTER INSULAR R |
| $\Gamma$ | \&Sins; | A784 | LATIN CAPITAL LETTER INSULAR S |
| r | \&sins; | A785 | LATIN SMALL LETTER INSULAR S |
| $\tau$ | \&Trot; | A786 | LATIN CAPITAL LETTER INSULAR T |
| $\tau$ | \&trot; | A787 | LATIN SMALL LETTER INSULAR T |


| Э | \&Frev; | A7FB | LATIN EPIGRAPHIC LETTER REVERSED F |
| :--- | :--- | :--- | :--- |
| 耳 | $\& P r e v ;$ | A7FC | LATIN EPIGRAPHIC LETTER REVERSED P |
| $\mathbf{W}$ | $\& M i n v ;$ | A7FD | LATIN EPIGRAPHIC LETTER INVERTED M |
| $\mathbf{I}$ | \&Ilong; | A7FE | LATIN EPIGRAPHIC LETTER I LONGA |
| $\mathbf{W}$ | \&M5leg; | A7FF | LATIN EPIGRAPHIC LETTER ARCHAIC M |

## 29: Latin Extended-E

In v. 8.0 of the Unicode Standard, this range contains 54 characters, mostly used in German dialectology. Of these, one character have been selected.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{X}$ |  | \&xldes; | AB57 | LATIN LETTER SMALL X WITH LONG LEFT LEG |

## 30: Alphabetic Presentation Forms

All seven Latin characters have been selected from this range, which in the Unicode Standard v. 8.0 contains a total of 58 characters from various scripts. The ligatures below are found in early printed sources and in many modern fonts. Additional ligatures of this type are found in subrange 1 in the Private Use Area below (pp. 86-92).

| Glyph | ISO entity | MuFl entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| ff |  | \ﬀ | FB00 | LATIN SMALL LIGATURE FF |
| fi |  | \ﬁ | FB01 | LATIN SMALL LIGATURE FI |
| fl |  | \&flig; | FB02 | LATIN SMALL LIGATURE FL |
| ffi |  | \ﬃ | FB03 | LATIN SMALL LIGATURE FFI |
| ffl |  | \ﬄ | FB04 | LATIN SMALL LIGATURE FFL |
| ft |  | \&slongtlig; | FB05 | LATIN SMALLLIGATURE LONG S T |
| St |  | \&stlig; | FB06 | LATIN SMALL LIGATURE ST |

## 31: Ancient Symbols

In the Unicode Standard v. 8.0, this range contains 13 characters, of which 11 have been selected here. These eleven characters were part of the Private Use Area of MUFI in v. 2.0, but have now been moved to new code points. The range Ancient Symbols was successfully proposed for inclusion in the Unicode Standard by David J. Perry. Note that this range is not part of the Basic Multilingual plane.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
|  |  | \&sextans; | 10190 | ROMAN SEXTANS SIGN |
|  | \&romunc; | 10191 | ROMAN UNCIA SIGN |  |


| $\mathcal{L}$ |  | \&romsemunc; | 10192 | ROMAN SEMIUNCIA SIGN |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{Z}$ |  | \&romsext; | 10193 | ROMAN SEXTULA SIGN |
| $\boldsymbol{Z}$ |  | \&romdimsext; | 10194 | ROMAN DIMIDIA SEXTULA SIGN |
| ) |  | \&romsiliq; | 10195 | ROMAN SILIQUA SIGN |
| $\boldsymbol{Z}$ |  | \&romXbar; | 10196 | ROMAN DENARIUS SIGN |
| $\boldsymbol{\forall}$ |  | \&romquin; | 10197 | ROMAN QUINARIUS SIGN |
| $\boldsymbol{H}$ |  | \&sestert; | 10198 | ROMAN SESTERTIUS SIGN |
| $\boldsymbol{H}$ |  | \&romdupond; | 10199 | ROMAN DUPONDIUS SIGN |
| $\boldsymbol{\not}$ |  | \&romas; | 1019 A | ROMAN AS SIGN |

## A note on Gothic script

Although not part of this recommendation for the Latin alphabet, it should be noted that 27 characters of the Gothic script now have been added to the Unicode Standard at 10330-1034F. Like the whole Runic alphabet, they would be a fine addition to any MUFI compatible font.

## B: Characters in the Private Use Area of the Unicode Standard

Important note: Characters in the Private Use Area (PUA) should be used with great caution. Before using any characters in this area, please read section 4 in the introduction, p. 11 above.

When the first version of the MUFI character recommendation was published, there were 39 code-point conflicts with the Junicode font. All of these have now been resolved, since the alternative MUFI code points have been added to Junicode (meaning that there will be duplicate code points in this font). Since earlier versions of Junicode and various MUFI compatible fonts still will be around, a number of historical code-point conflicts remain. They are documented in the LINCUA report referred to on p. 11 above.

## Category I: Base characters

Base characters are base-line characters or combining characters making up part of a composite character. The allocation of code points has been co-ordinated with characters in the TITUS Cyberbit, Junicode and Alphabetum fonts. Subranges 1, 2, 3, 5, 7 and 13 have been placed in the TITUS section, E000-F0FF; subranges $4,6,8,9$ and 11 in the F100-F1FF section (wherever possible, using already existing Junicode code points), subrange 10 in the F700-F71F section (using already existing Alphabetum code points), and subrange 12 in the F2D0-F2FF section.

One subrange, 14 , have been reserved for future additions.

## Subrange I: Ligatures

Ligatures are two base-line characters that are joined so that they form a new, composite base-line character. Some consist of two identical characters, e.g. ' $a+a$ ', others of different characters, e.g. ' $a+v$ '. In a few cases, more than two characters are joined in a ligature, e.g. ' $f+f+i$ '.

Structural and non-structural ligatures should be kept carefully apart. Structural ligatures usually have a separate phonological value, while non-structural ligatures are two separate characters that happen to be joined for practical or aesthetical reasons. For example, the structural ligature ' $\mathfrak{x}$ ' in the Nordic languages
reflect a separate sound and can not be split into ' $a$ ' + ' $e$ '. In most cases, words written with 'ae' rather than ' $æ$ ' are understandable, but the two are not identical. The Norwegian word 'villaer' (villas) can under no circumstance be rendered as 'villær', and, the other way round, 'tær' (toes) can not be written 'taer'.

In Medieval Nordic manuscripts, structural ligatures may be used to denote length, ' $a+a$ ', a diphthong, ' $a+v$ ', or a distinct vowel quality, often mutation (Umlaut), ' $a+v$ '. As a rule of thumb, non-structural ligatures can be split without loss or change of meaning, while structural ligatures must not be split. The ligatures in Alphabetic Presentation Forms (pp. 85-86 above) are prime examples of non-structural ligatures.

## (a) Structural ligatures

In v. 8.0 of the Unicode Standard, 16 structural ligatures are assigned to the range Latin Extended-D, i.e.A732-A73D and A74C-A74F. They were included in earlier versions of the MUFI character recommendation, but have now been decommissioned from the Private Use Area of MUFI and are no longer listed in this recommendation.

Only 7 structural ligatures remain in the present subrange. They are basically variant forms of ligatures in Latin Extended-D.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{q}$ | \&aacloselig; | EFA0 | LATIN SMALL LIGATURE AA CLOSED FORM |
| This is a variant form of the 'aa' ligature. |  |  |  |
| $\boldsymbol{\mathcal { A }}$ | \&aeligred; | F204 | LATIN SMALL LETTER AE WITH RIGHT UPPER LOOP |
| Cf. Johs. Brøndum-Nielsen, ed., Palceografi: Danmark og Sverige (Nordisk kultur 23:A), Stockholm etc. [1943], p. 102. |  |  |  |
| $\boldsymbol{d E}$ | \&AnecklessElig; | EFAE | LATIN CAPITAL LIGATURE NECKLESS A E |
| $\boldsymbol{\&}$ | \&anecklesselig; | EFA1 | LATIN SMALL LIGATURE NECKLESS AE |


| \& | \&AOligred; | F205 | LATIN CAPITAL LIGATURE AO NECKLESS |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{O}$ | \&aoligred; | F206 | LATIN SMALL LIGATURE AO NECKLESS |
| The two characters above should be analysed as a ligature of 'a+o' without the neck of ' $a$ ', but can be described as the character 'o' with a lower left loop. |  |  |  |
| $\boldsymbol{d}$ | \&anecklessvlig; | EFA2 | LATIN SMALL LIGATURE NECKLESS AV |

## (b) Non-structural ligatures

Non-structural ligatures do not have a separate sound value. Many of the ligatures below are found in Old Icelandic sources, while others (especially those with ' c ', ' f ' and long ' s ') belong to early printed sources.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{f}$ | \&aflig; | EFA3 | LATIN SMALL LIGATURE AF |
| $\not \subset$ | $\&$ afinslig; | EFA4 | LATIN SMALL LIGATURE A INSULAR F |
| a | \&aglig; | EFA5 | LATIN SMALL LIGATURE AG |
| $\boldsymbol{d}$ | \&allig; | EFA6 | LATIN SMALL LIGATURE AL |
| as | \&anlig; | EFA7 | LATIN SMALL LIGATURE AN |
| ay | \&anscaplig; | EFA8 | LATIN SMALL LIGATURE A SMALL CAPITAL N |


| 甲 | \&aplig; | EFA9 | LATIN SMALL LIGATURE AP |
| :---: | :---: | :---: | :---: |
| $x$ | \&arlig; | EFAA | LATIN SMALL LIGATURE AR |
| æ | \&arscaplig; | EFAB | LATIN SMALL LIGATURE A SMALL CAPITAL R |
| ゆ | \&athornlig; | EFAC | LATIN SMALL LIGATURE A THORN |
| bb | \&bblig; | EEC2 | LATIN SMALL LIGATURE BB |
| 9 | \&bglig; | EEC3 | LATIN SMALL LIGATURE BG |
| d) | \&chlig; | F1BB | LATIN SMALL LIGATURE CH |
| dk | \&cklig; | EEC4 | LATIN SMALL LIGATURE CK |
| ct | \&ctlig; | EEC5 | LATIN SMALL LIGATURE CT |
| d | \&drotdrotlig; | EEC6 | LATIN SMALL LIGATURE D ROTUNDA D ROTUNDA |
| ey | \&eylig; | EEC7 | LATIN SMALL LIGATURE EY |
| fä | \&faumllig; | EEC8 | LATIN SMALL LIGATURE F A WITH DIAERESIS |
| f) | \fj | EEC9 | LATIN SMALL LIGATURE FJ |
| fó | \&foumllig; | F1BC | LATIN SMALL LIGATURE F O WITH DIAERESIS |


| fr | \&frlig; | EECA | LATIN SMALL LIGATURE FR |
| :--- | :--- | :--- | :--- |
| ft | \&ftlig; | EECB | LATIN SMALL LIGATURE FT |
| fü | \&fuumllig; | EECC | LATIN SMALL LIGATURE F U WITH DIAERESIS |
| fy | \&fylig; | EECD | LATIN SMALL LIGATURE FY |
| fft | \&fftlig; | EECE | LATIN SMALL LIGATURE FFT |
| $f f y$ | \&ffylig; | EECF | LATIN SMALL LIGATURE FFY |
| fty | \&ftylig; | EED0 | LATIN SMALL LIGATURE FTY |
| $g g$ | \&gglig; | EED1 | LATIN SMALL LIGATURE GG |
| $g$ | \&gdlig; | EED2 | LATIN SMALL LIGATURE GD |
| $g ~$ | \&gdrotlig; | EED3 | LATIN SMALL LIGATURE G D ROTUNDA |
| g | \&gethlig; | EED4 | LATIN SMALL LIGATURE G ETH |
| $g o$ | \&golig; | EEDE | LATIN SMALL LIGATURE GO |
| $g p$ | \&gplig; | EAD2 | LATIN SMALL LIGATURE GP |
| $g ~$ | \&grlig; | EAD0 | LATIN SMALL LIGATURE GR |


| q | \&qvinslig; | EAD1 | LATIN SMALL LIGATURE Q INSULAR V |
| :---: | :---: | :---: | :---: |
| h | \& hrarmlig; | E8C3 | LATIN SMALL LETTER H LIGATED WITH ARM OF LATIN SMALL LETTER R |
| h | \&Hrarmlig; | E8C2 | LATIN CAPITAL LETTER H LIGATED WITH ARM OF LATIN SMALL LETTER R |
| k | \&krarmlig; | E8C5 | LATIN SMALL LETTER K LIGATED WITH ARM OF LATIN SMALL LETTER R |
| 11 | \&1llig; | F4F9 | LATIN SMALL LIGATURE LL |
| 15 | \&nscapslonglig; | EED5 | LATIN SMALL LIGATURE SMALL CAPITAL N LONG S |
| $\propto$ | \&oclig; | EFAD | LATIN SMALL LIGATURE OC |
| 02 | \&orrotlig; | E8DE | LATIN SMALL LIGATURE O R ROTUNDA |
| P | \&PPlig; | EEDD | LATIN CAPITAL LIGATURE PP |
| PP | \&pplig; | EED6 | LATIN SMALL LIGATURE PP |
| sp | \&ppflourlig; | EED7 | LATIN SMALL LIGATURE PP WITH FLOURISH |
| fä | \&slongaumllig; | EBA0 | LATIN SMALL LIGATURE LONG S A WITH DIAERESIS |
| fd) | \&slongchlig; | F4FA | LATIN SMALL LIGATURE LONG S CH |
| fh | \&slonghlig; | EBA1 | LATIN SMALL LIGATURE LONG S H |


| $f 1$ | \&slongilig; | EBA2 | LATIN SMALL LIGATURE LONG S I |
| :---: | :---: | :---: | :---: |
| fj | \&slongjlig; | F4FB | LATIN SMALL LIGATURE LONG S J |
| fk | \&slongklig; | F4FC | LATIN SMALL LIGATURE LONG S K |
| 11 | \&slongllig; | EBA3 | LATIN SMALL LIGATURE LONG S L |
| f | \&slonglbarlig; | E8DF | LATIN SMALL LIGATURE LONG S L WITH STROKE |
| fö | \&slongoumllig; | EBA4 | LATIN SMALL LIGATURE LONG S O WITH DIAERESIS |
| Ap | \&slongplig; | EBA5 | LATIN SMALL LIGATURE LONG S P |
| fs | \&slongsslig; | F4FD | LATIN SMALL LIGATURE LONG S S |
| f1 | \&slongslonglig; | EBA6 | LATIN SMALL LIGATURE LONG S LONG S |
| ffr | \&slongslongilig; | EBA7 | LATIN SMALL LIGATURE LONG S LONG S I |
| f1k | \&slongslongklig; | F4FE | LATIN SMALL LIGATURE LONG S LONG S K |
| fll | \&slongslongllig; | EBA8 | LATIN SMALL LIGATURE LONG S LONG S L |
| fft | \&slongslongtlig; | F4FF | LATIN SMALL LIGATURE LONG S LONG S T |
| fti | \&slongtilig; | EBA9 | LATIN SMALL LIGATURE LONG S TI |


| Str | \&slongtrlig; | EBAA | LATIN SMALL LIGATURE LONG S TR |
| :---: | :---: | :---: | :---: |
| fü | \&slonguumllig; | EBAB | LATIN SMALL LIGATURE LONG S U WITH DIAERESIS |
| 1 | \&slongvinslig; | EBAC | LATIN SMALL LIGATURE LONG S INSULAR V |
| ft | \&slongdestlig; | EADA | LATIN SMALL LIGATURE LONG S DESCENDING T |
| tr | \&trlig; | EED8 | LATIN SMALL LIGATURE TR |
| tt | \&ttlig; | EED9 | LATIN SMALL LIGATURE TT |
| $\pi$ | \&trottrotlig; | EEDA | LATIN SMALL LIGATURE T ROTUNDA T ROTUNDA |
| ty | \&tylig; | EEDB | LATIN SMALL LIGATURE TY |
| 5 | \&tzlig; | EEDC | LATIN SMALL LIGATURE TZ |
| UE | \& UElig; | E8C8 | LATIN CAPITAL LIGATURE UE |
| ue | \&uelig; | E8C9 | LATIN SMALL LIGATURE UE |
| See 1D6B LATIN SMALL LETTER UE in Phonetic Extensions for a similar glyph, although not described and recognised as a ligature. |  |  |  |
| U | \&UUlig; | E8C6 | LATIN CAPITAL LIGATURE UU |

[^0]| ul | \&uulig; | E8C7 | LATIN SMALL LIGATURE UU |
| :--- | :--- | :--- | :--- |
| See 026F LATIN SMALL LETTER TURNED M in IPA Extensions for a similar glyph, although not described and recognised as a ligature. |  |  |  |
| $\mathbf{~} \mathbf{~}$ | \&thornrarmlig; | E8C1 | LATIN SMALL LETTER THORN LIGATED WITH ARM OF LATIN SMALL LETTER R |

## Subrange 2: Small capitals

Small capitals have the same form as majuscules (capital letters), but are usually drawn with the same height as a minuscule (small) letter such as ' $x$ '. In Medieval Nordic manuscripts, small capitals were used to denote geminates, i.e. long consonants, or they were used ornamentally. The letters 'B', 'D', 'G', ' $\mathrm{M}^{\prime}$, ' $N$ ', ' $R$ ', ' $S$ ' and ' $T$ ' were most frequently used as geminates, while these and other letters might also be used as ornaments in the whole or in parts of highlighted words. Some of the small capitals, e.g. ' O ' and ' C ', are difficult to distinguish from minuscule letters.

In v. 8.0 of the Unicode Standard, nine small capitals are assigned to the range IPA Extensions, i.e. 'B', 'G', 'H', 'I', 'L', 'N', ‘E', 'R' and ' Y ' (cf. pp. 37-39 above), another 15 small capitals in the Uralic Phonetic Alphabet to the range Phonetic Extensions, ' A , ' $\mathbb{E}^{\prime}$, ' C ', ' D ', ' P ', ' E , ' J , ' K ', ' M ', ' O ', ' P ', ' T ', 'U', 'V', 'W' and 'Z' (cf. pp. 45-46 above), and finally two, 'F' and 'S', to the range Latin Extended-D (cf. p. 74 above). Thus, only a handful of small capitals remain unrepresented, i.e. 'Q', 'P' and 'X'. In Medieval Nordic sources, these only appear in ornamental usage.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\mathbf{Q}$ | \&qscap; | EF0C | LATIN LETTER SMALL CAPITAL Q |
| $\mathbf{X}$ | \&xscap; | EF11 | LATIN LETTER SMALL CAPITAL X |
| $\mathbf{P}$ | \&thornscap; | EF15 | LATIN LETTER SMALL CAPITAL THORN |

## Subrange 3: Enlarged minuscules

Enlarged minuscules are recognised as separate characters by some scholars, cf. e.g. Andrea de Leeuw van Weenen (A Grammar of Möðruvallabók, CNWS 85 , Leiden 2000). The traditional view has been to interpret these characters as variants of majuscules and encode them as such. It can be argued that this is a functional rather than a graphemic point of view and that it obscures the obvious distinction between e.g. ' $A$ ' (the majuscule) and ' $\alpha$ ' (the enlarged minuscule).

The Unicode Standard v. 8.0 does not recognise enlarged minuscules.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $a$ | \&aenl; | EEE0 | LATIN ENLARGED LETTER SMALLA |
| á | \&aenlacute; | EAF0 | LATIN ENLARGED LETTER SMALL A WITH ACUTE |
| $2 \lambda$ | \&aaligenl; | EFDF | LATIN ENLARGED LETTER SMALL LIGATURE AA |
| æ | \&aeligenl; | EAFI | LATIN ENLARGED LETTER SMALL LIGATURE AE |
| 20 | \&aoligenl; | EFDE | LATIN ENLARGED LETTER SMALL LIGATURE AO |
| 20 | \&aenlosmalllig; | EAF2 | LATIN LIGATURE ENLARGED LETTER SMALL A AND LATIN SMALL LETTER O |
| b | \& benl; | EEE1 | LATIN ENLARGED LETTER SMALL B |
| C | \&cenl; | EEE2 | LATIN ENLARGED LETTER SMALL C |
| d | \&denl; | EEE3 | LATIN ENLARGED LETTER SMALL D |


| O | \&drotenl; | EEE4 | LATIN ENLARGED LETTER D ROTUNDA |
| :--- | :--- | :--- | :--- |
| Ø | \&ethenl; | EEE5 | LATIN ENLARGED LETTER SMALL ETH |
| e | \&eenl; | EEE6 | LATIN ENLARGED LETTER SMALL E |
| e | \&eogonenl; | EAF3 | LATIN ENLARGED LETTER SMALL E WITH OGONEK |
| f | \&fenl; | EEE7 | LATIN ENLARGED LETTER SMALLF |
| $\mathbf{f}$ | \&finsenl; | EEFF | LATIN ENLARGED LETTER SMALL INSULAR F |
| g | \&genl; | EEE8 | LATIN ENLARGED LETTER SMALL G |
| h | \&henl; | EEE9 | LATIN ENLARGED LETTER SMALL H |
| i | \&ienl; | EEEA | LATIN ENLARGED LETTER SMALL I |
| $\mathbf{l}$ | \&inodotenl; | EEFD | LATIN ENLARGED LETTER SMALL DOTLESS I |
| j | \&jenl; | EEEB | LATIN ENLARGED LETTER SMALL J |
| J | \&jnodotenl; | EEFE | LATIN ENLARGED LETTER SMALL DOTLESS J |
| K | \&kenl; | EEEC | LATIN ENLARGED LETTER SMALL K |
| $\mathbf{l}$ | \&lenl; | EEED | LATIN ENLARGED LETTER SMALLL |


| m | \&menl; | EEEE | LATIN ENLARGED LETTER SMALL M |
| :---: | :---: | :---: | :---: |
| n | \&nenl; | EEEF | LATIN ENLARGED LETTER SMALL N |
| O | \&oenl; | EEF0 | LATIN ENLARGED LETTER SMALL O |
| Ø | \&oeligenl; | EFDD | LATIN ENLARGED LETTER SMALL LIGATURE OE |
| P | \&penl; | EEF1 | LATIN ENLARGED LETTER SMALL P |
| q | \&qenl; | EEF2 | LATIN ENLARGED LETTER SMALLQ |
| r | \&renl; | EEF3 | LATIN ENLARGED LETTER SMALL R |
| S | \&senl; | EEF4 | LATIN ENLARGED LETTER SMALL S |
| $\uparrow$ | \&slongenl; | EEDF | LATIN ENLARGED LETTER SMALL LONG S |
| $t$ | \&tenl; | EEF5 | LATIN ENLARGED LETTER SMALL T |
| U | \&uenl; | EEF7 | LATIN ENLARGED LETTER SMALL U |
| V | \&venl; | EEF8 | LATIN ENLARGED LETTER SMALLV |
| W | \&wenl; | EEF9 | LATIN ENLARGED LETTER SMALL W |
| X | \&xenl; | EEFA | LATIN ENLARGED LETTER SMALL X |


| Y | \&yenl; | EEFB | LATIN ENLARGED LETTER SMALL Y |
| :--- | :--- | :--- | :--- |
| Z | \&zenl; | EEFC | LATIN ENLARGED LETTER SMALL Z |
| P | \&thornenl; | EEF6 | LATIN ENLARGED LETTER SMALL THORN |

## Subrange 4: Base-line abbreviation characters

This range includes those abbreviation signs which typically occupy a position on the base line. Several base-line abbreviation characters can be identified with existing characters in the Standard:

- Basic Latin: The ampersand, 0026, for 'et' (= the conjunction 'and') (p. 12).
- Spacing Modifier Letters: The apostrophe, 02BC, for 'i' or 'e' (p. 39).
- Runic: The runic ' f ', 16A0, for 'fé' and the runic ' m ', 16D8, for 'maðr', both frequently used in Old Norse manuscripts (p. 45).
- General Punctuation: the Tironian sign for 'et', 204A (p. 61).
- Number forms: The reversed 'C', 2183 and 2184, for 'con' (p. 65-66).
- Mathematical Operators: The homothetic sign, 223B, for 'est' (p. 68).
- Dingbats: The Latin cross, 271D, for 'kross' (p. 70).

In v. 8.0 of the Unicode Standard, 12 abbreviation characters have been included in Latin Extended-D (pp. 74-81), i.e. A73E, A73F, A75C, A75D, A76A, A76B, A76C, A76D, A76E, A76F, A770 and A778. They were listed in earlier versions of this recommendation, but have now been decommissioned from the Private Use Area.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| C | \&USbase; | F1A5 | LATIN ABBREVIATION SIGN SPACING BASE-LINE CAPITAL US |

This character is positioned on the base line and has capital form (full height).

| 9 | \&usbase; | F1A6 | LATIN ABBREVIATION SIGN SPACING BASE-LINE SMALL US |
| :--- | :--- | :--- | :--- |

This is a spacing character positioned on the base line, but not with full height. Evidence from Old Icelandic, e.g. Copenhagen, Arnamagnæan Collection, AM 519 a $4^{\circ}, 23$ r. 27 , 'Alexanders saga'.

| 7 | $\& E T ;$ | F142 | LATIN ABBREVIATION SIGN CAPITAL ET |
| :--- | :--- | :--- | :--- |

The small form of the above character is 204A TIRONIAN SIGN ET in General Punctuation (p. 61).

| 7 | \&ETslash; | F1A7 | LATIN ABBREVIATION SIGN CAPITAL ET WITH STROKE |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{\gamma}$ | \&etslash; | F158 | LATIN ABBREVIATION SIGN SMALLET WITH STROKE |
| $ð$ | $\& d e ;$ | F159 | LATIN ABBREVIATION SIGN SMALL DE |

This character looks similar to 00F0 LATIN SMALL LETTER ETH in Latin-1 Supplement (p.26), but as it is an abbreviation character, typically for 'de', it should be kept separate.

| $\mathbf{b}$ | \&autem; | E8A3 | LATIN ABBREVIATION SIGN AUTEM |
| :--- | :--- | :--- | :--- |
| $;$ | $\& s e m ;$ | F1AC | LATIN ABBREVIATION SIGN SEMICOLON |

The character 003B SEMICOLON can be used for the frequent abbreviation sign of similar shape. However, some encoders might want to have a separate character, in which case we recommend using F1AC LATIN ABBREVIATION SIGN SEMICOLON. Neither character should be unified with F1EA PUNCTUS VERSUS, which is a punctuation mark (see p. 105 below).

## Subrange 5: Modified base-line abbreviation characters

This range includes a number of abbreviation characters, typically a base-line character with a stroke across the ascender. The ligatures in this subrange have been included here rather than in subrange 1 , because they have some type of modification, typically a stroke across part of the character.

In v. 8.0 of the Unicode Standard, 30 of these characters have been included in Latin Extended-D (pp. 74-81), i.e. A740, A741, A742, A743, A744, A745, A74A, A74B, A750, A751, A752, A753, A754, A755, A756, A757, A758, A759, A75F, A764, A765, A766, A767, A771, A772, A773, A774, A775, A776, A777, and 2 in Latin Extended Additional (p. 54), i.e. 1E9C and 1E9D. They were listed in earlier versions of this recommendation, but have now been decommissioned from the Private Use Area.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| h | \&hslonglig; | EBAD | LATIN SMALL LIGATURE H AND LONG S |

The MUFI character recommendation v. 1.0 recommended using 0266 LATIN SMALL LETTER H WITH HOOK for this character, but we now believe that it should be analysed as a separate character, because it is in fact a ligature of ' $h$ ' and long ' $s$ ' and thus should be designed with the hackle of long ' $s$ '.

| 自 | \&hslongligbar; | E7C7 | LATIN SMALL LIGATURE H AND LONG S WITH STROKE |
| :--- | :--- | :--- | :--- |
| $\dot{\text { i }}$ | \&idblstrok; | E8A1 | LATIN SMALL LETTER I WITH TWO STROKES |
| $\dot{\boldsymbol{j}}$ | \&jdblstrok; | E8A2 | LATIN SMALL LETTER J WITH TWO STROKES |
| $\boldsymbol{k}$ | \&kslonglig; | EBAE | LATIN SMALL LIGATURE K AND LONG S |

The MUFI character recommendation v. 1.0 recommended using 0199 LATIN SMALL LETTER K WITH HOOK for this character, but we now believe that it should be analysed as a separate character, because it is in fact a ligature of ' $k$ ', and long ' $s$ ' and thus should be designed with the hackle of long ' $s$ '.

| 令 | \&kslongligbar; | E7C8 | LATIN SMALL LIGATURE K AND LONG S WITH STROKE |
| :---: | :---: | :---: | :---: |
| qR | \&q2app; | E8B3 | LATIN SMALL LETTER Q LIGATED WITH R ROTUNDA |
| Q3 | \&q3app; | E8BF | LATIN SMALL LETTER Q LIGATED WITH FINALET |
| $\varnothing$ | \&qcentrslstrok; | E8B4 | LATIN SMALL LETTER Q WITH CENTRAL SLANTED STROKE |
| This is an unusual sign attested in early Icelandic script for/ng/. Cf. Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, p. 53. |  |  |  |
| 1 | \&rdesstrok; | E7E4 | LATIN SMALL LETTER R WITH LONG LEG AND STROKE THROUGH DESCENDER |
| Cf. LATIN SMALL LETTER R WITH LONG LEG at code point 027C in IPA Extensions, p. 48 above. |  |  |  |
| ¢ | \&slongflour; | E8B7 | LATIN SMALL LETTER LONG S WITH FLOURISH |
| \% | \&slongslstrok; | E8B8 | LATIN SMALL LETTER LONG S WITH SLANTED DESCENDING STROKE |
| W | \&vslash; | E8BA | LATIN SMALL LETTER V WITH SHORT SLASH |
| This character has a short diagonal stroke across the left branch and is typically used as a Roman numeral for four and a half (41/2). |  |  |  |
| $V$ | \&vslashura; | E8BB | LATIN SMALL LETTER V WITH SHORT SLASH ABOVE RIGHT |
| $\neq$ | \&vslashuradbl; | E8BC | LATIN SMALL LETTER V WITH TWO SHORT SLASHES ABOVE RIGHT |
| X | \&xslashula; | E8BD | LATIN SMALL LETTER X WITH SHORT SLASH ABOVE LEFT |


| X | \&xslashlra; | E8BE | LATIN SMALL LETTER X WITH SHORT SLASH BELOW RIGHT |
| :---: | :---: | :---: | :---: |
| The two characters above are typically used as a Roman numeral for nine and a half ( $9^{1 / 2}$ ). |  |  |  |
| X | \&xslashlradbl; | E8CE | LATIN SMALL LETTER X WITH TWO SHORT SLASHES BELOW RIGHT |
| ¢ | \&THORNbarslash; | E337 | LATIN CAPITAL LETTER THORN WITH DIAGONAL STROKE |
| わ | \& thornbarslash; | F149 | LATIN SMALL LETTER THORN WITH DIAGONAL STROKE |
| ¢ | \& thornslonglig; | E734 | LATIN SMALL LIGATURE THORN AND LONG S |
| $\overline{\mathrm{O}}$ | \&thornslongligbar; | E735 | LATIN SMALL LIGATURE THORN AND LONG S WITH STROKE |

## Subrange 6: Combining marks

This range includes those abbreviation signs that typically occupy a position above, through or below another base-line character. Combining diacritical marks are also included in this range.

In v. 8.0 of the Unicode Standard, two combining characters are assigned to Combining Diacritical Marks, i.e. 035B and 035C (p. 42 above), and seven to Combining Diacritical Marks Supplement, i.e. 1DCD, 1DCE, 1DCF, 1DD0, 1DD1, 1DD2 and 1DD3 (p. 47). They were listed in earlier versions of this recommendation, but have now been decommisioned from the Private Use Area.

| Glyph | MUFI entity | MUFI code | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\cdots$ | \&arbar; | F1C0 | COMBINING ABBREVIATION MARK BAR ABOVE WITH DOT |


| 7 | \&erang; | F1C7 | COMBINING ABBREVIATION MARK ZIGZAG ABOVE ANGLE FORM |
| :---: | :---: | :---: | :---: |
| \% | \&ercurl; | F1C8 | COMBINING ABBREVIATION MARK ZIGZAG ABOVE CURLY FORM |
| - | \&rabar; | F1C1 | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM WITH BAR ABOVE |
| $\stackrel{2}{2}$ | \&urrot; | F153 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR ROUND R FORM |
| \% | \&urlemn; | F1C2 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR LEMNISKATE FORM |
| ? | \&combcurlhigh; | F1C5 | COMBINING CURL HIGH POSITION |

The COMBINING CURL HIGH POSITION is an intermediate solution for the positioning of a curl above tall letters. It should be deprecated when smart font software allows correct positioning of 1DCE COMBINING OGONEK ABOVE above all letters, irrespective of height or width.

| $\dot{-}$ | $\& c o m b d o t h i g h ;$ | F1CA | COMBINING DOT ABOVE HIGH POSITION |
| :--- | :--- | :--- | :--- |

The COMBINING DOT ABOVE HIGH POSITION is an intermediate solution for the positioning of a dot above tall letters. It should be deprecated when smart font software allows correct positioning of 0307 COMBINING DOT ABOVE above all letters, irrespective of height or width.

| $* *$ | $\&$ combcurlbar; | F1CC | COMBINING CURLY BAR ABOVE |
| :--- | :--- | :--- | :--- |

Frequently used in handwriting to distinguish the character ' u ' from other minims ( $\mathrm{m}, \mathrm{n}, \mathrm{l}$ ) and thus functionally similar to the dot above the character ' 1 '. For semantic reasons, it should not be unified with the similar-looking characters 0303 COMBINING TILDE (Latin script), 0342 COMBINING GREEK PERISPOMENI (Greek script) or ODC3 COMBINING SUSPENSION MARK (Glagolitic script). The precomposed character LATIN SMALL LETTER U WITH CURLY BAR ABOVE is listed in subrange 29 below (p. 151).

| ↔. | $\&$ combtripbrevebl; | F1FC | COMBINING TRIPLE BREVE BELOW |
| :--- | :--- | :--- | :--- |

Used below character sequences like 'sch' in the "Rheinische Dokumenta", a semi-official phonetic notation of Low German dialects.

## Subrange 7: Combining superscript characters

This range includes superscript characters, typically placed above another base-line character. They are found in many early German printed texts, and in a large number of Medieval manuscripts. The position immediately above a base-line character distinguishes them from raised interlinear characters typically occupying a position immediately after another base-line character. This latter type includes a handful of phonetic modifiers such as a raised ' $w$ ' indicating rounding, a raised ' $h$ ' indicating aspiration etc. The majority of characters in the list below have been documented in Andrea de Leeuw van Weenen, A Grammar of Möðrruvallabók (CNWS 85), Leiden 2000.

Inv. 8.0 of the Unicode Standard, 13 superscript characters are assigned to the range Combining diacritical marks, i.e. 'a', 'e', 'i', 'o', 'u', 'c', 'd', 'h', 'm', ' $r$ ', ' $t$ ', ' $v$ ' and ' $x$ ', 0363-036F (p. 43 above), and 19 superscript characters to Combining Diacritical Marks Supplement, 1DD4-1DE6 (pp. 48-49). They were listed in earlier versions of this recommendation, but have now been decommissioned from the Private Use Area.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| m | \&anligsup; | F036 | COMBINING LATIN SMALL LIGATURE AN |
| a | \&anscapligsup; | F03A | COMBINING LATIN SMALL LIGATURE A SMALL CAPITAL N |
| a | \&arligsup; | F038 | COMBINING LATIN SMALL LIGATURE AR |
| m | \&arscapligsup; | F130 | COMBINING LATIN SMALL LIGATURE A SMALL CAPITAL R |
| b | \&bsup; | F012 | COMBINING LATIN SMALL LETTER B |


| $\stackrel{\text { B }}{ }$ | \& bscapsup; | F013 | COMBINING LATIN LETTER SMALL CAPITAL B |
| :---: | :---: | :---: | :---: |
| - | \&dscapsup; | F016 | COMBINING LATIN LETTER SMALL CAPITAL D |
| e | \&eogonsup; | F135 | COMBINING LATIN SMALL LETTER E WITH OGONEK |
| $\stackrel{\bar{e}}{ }$ | \&emacrsup; | F136 | COMBINING LATIN SMALL LETTER E WITH MACRON |
| f | \&fsup; | F017 | COMBINING LATIN SMALL LETTER F |
| $\stackrel{1}{ }$ | \&inodotsup; | F02F | COMBINING LATIN SMALL LETTER DOTLESS I |
| ; | \&jsup; | F030 | COMBINING LATIN SMALL LETTER J |
| \% | \&jnodotsup; | F031 | COMBINING LATIN SMALL LETTER DOTLESS J |
| \% | \&kscapsup; | F01C | COMBINING LATIN LETTER SMALL CAPITAL K |
| 9 | \&oogonsup; | F13E | COMBINING LATIN SMALL LETTER O WITH OGONEK |
| $\stackrel{ }{8}$ | \& oslashsup; | F032 | COMBINING LATIN SMALL LETTER O WITH STROKE |
| $\stackrel{\overline{-}}{\square}$ | \&omacrsup; | F13F | COMBINING LATIN SMALL LETTER O WITH MACRON |
| $\stackrel{\square}{8}$ | \&orrotsup; | F03E | COMBINING LATIN SMALL LETTER O R ROTUNDA |
| \% | \&orumsup; | F03F | COMBINING LATIN SMALL LETTER O RUM |


| $\stackrel{\mathrm{p}}{ }$ | \&psup; | F025 | COMBINING LATIN SMALL LETTER P |
| :---: | :---: | :---: | :---: |
| q | \&qsup; | F033 | COMBINING LATIN SMALL LETTER Q |
| 4 | \&rumsup; | F040 | COMBINING LATIN SMALL LETTER RUM |
| $\stackrel{\mathrm{T}}{ }$ | \&tscapsup; | F02A | COMBINING LATIN LETTER SMALL CAPITAL T |
| $\stackrel{\square}{\square}$ | \&trotsup; | F03B | COMBINING LATIN LETTER T ROTUNDA |
| $\stackrel{\mathrm{w}}{ }$ | \&wsup; | F03C | COMBINING LATIN SMALL LETTER W |
| ${ }^{\text {y }}$ | \&ysup; | F02B | COMBINING LATIN SMALL LETTER Y |
| $\stackrel{\mathrm{b}}{ }$ | \&thornsup; | F03D | COMBINING LATIN SMALL LETTER THORN |

## Subrange 8: Punctuation marks

This range includes punctuation marks that are not included in the Unicode Standard v. 8.0. The common marks, such as full stop, comma, colon, semicolon, question mark, hyphen and solidus, are all found in the range Basic Latin (pp. 12-19 above). Some are also located in the range General Punctuation (pp. 57-61). Finally, a few punctuation marks can be identified with characters in other ranges:
-Latin-1 Supplement: middle dot, 00B7 (p. 22)

- Georgian: right-pointing triangular dots, 10FB (p. 44)
- Mathematical Operators: 2234, 2235, and 2237 (p. 67)
- Supplemental Punctuation: 2E2A, 2E3B, 2E2C, and 2E2E (p. 74)

A proposal for new punctuation marks is now under its way to Unicode, so several of the characters below may be accepted in a later version of the Standard.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| • | \&hidot; | F1F8 | DISTINCTIO |

Described by the grammarian Donatus, who distinguishes between three positions of the dot: on the baseline (to be unified with 002E FULL STOP), middle height (to be unified with 00B7 MIDDLE DOT) and the high dot, shown here. See also Isidore of Sevilla, Etymologiae I 20. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 13, says that the distinctio was used to indicate "a final pause, after a periodus, or where the sententia is completed".


The positura is similar to COMMA 002C, but should be kept apart from this punctuation mark due to a different and more specialised usage. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306.

| 7 | \&ductsimpl; | F1E3 | HIGH COMMA POSITURA (SIMPLEX DUCTUS) |
| :---: | :---: | :---: | :---: |
| Similar form as the positura, but positioned above the 'x' height. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 307. |  |  |  |
| ; | \&punctvers; | F1EA | PUNCTUS VERSUS |
| Similar in shape to the semicolon (003B), but should be kept apart from this mark. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. $301,306$. |  |  |  |
| $\cdot 9$ | \&punctposit; | F1E4 | PUNCTUS WITH COMMA POSITURA |
| Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306. |  |  |  |
| : 7 | \&colmidcomposit; | F1E5 | COLON WITH MIDDLE COMMA POSITURA |
| Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306. |  |  |  |
| $\because$ | \& bidotscomposit; | F1F2 | TWO DOTS OVER COMMA POSITURA |

Attested in Old Icelandic, e.g. in Stockholm, Royal Library, Holm perg 15 b $4^{\circ}$ (see Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, pl. 8:14) and in Reykjavík, Arnamagnæan Collection, GKS $23654^{\circ}$ (Codex Regius of the Eddic poems).

| $\because$ | \&tridotscomposit; | F1E6 | THREE DOTS WITH COMMA POSITURA |
| :--- | :--- | :--- | :--- |

This punctuation mark looks like an upwards-pointing triangle of dots with a comma between (and below) the two lower dots. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 307. See also 2234 above in Mathematical Operators (p. 67).

| $\approx$ | \&punctelev; | F161 | PUNCTUS ELEVATUS |
| :--- | :--- | :--- | :--- |

This form of the punctus elevatus is typically found in English manuscripts and is sometimes seen as the default form. Sometimes called 'tick and point', e.g. by N.R. Ker, English Manuscripts in the Century after the Norman Conquest, Oxford, 1960, p. 46.

| .$〔$ | \&punctelevdiag; | F1F0 | PUNCTUS ELEVATUS DIAGONAL STROKE |
| :--- | :--- | :--- | :--- |

Variant form of the punctus elevatus.

| ! | \&punctelevhiback; | F1FA | PUNCTUS ELEVATUS WITH HIGH BACK |
| :--- | :--- | :--- | :--- |

Variant form of the punctus elevatus found in manuscripts in the Low countries, eastern France and the Rhineland.

| • | \&punctelevhack; | F1FB | PUNCTUS ELEVATUS WITH HACKLE |
| :--- | :--- | :--- | :--- |

Variant form of the punctus elevatus found in manuscripts from southern Germany.

| ? | \&punctflex; | F1F5 | PUNCTUS FLEXUS |
| :--- | :--- | :--- | :--- |

Looks like the digit 7 with a dot below, sometimes referred to as 'seven and point' (e.g. by N.R. Ker, English Manuscripts in the Century after the Norman Conquest, Oxford, 1960, p. 47). Also called PUNCTUS CIRCUMFLEXUS. Used to mark sentence-medial pauses, especially in liturgical texts where the pitch of the voice drops. Cf. also Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301, 306. Note that the shape in Parkes' book looks more like an open 'a' than ' 7 ', but this is basically a question of variance.

| $!$ | \&punctexclam; | F1E7 | PUNCTUS EXCLAMATIVUS |
| :--- | :--- | :--- | :--- |

Early form with two dots below each other and a diagonal stroke on top of them. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301.

| $\mathfrak{\zeta}$ | \&punctinter; | F160 | PUNCTUS INTERROGATIVUS |
| :--- | :--- | :--- | :--- |
| $\sim$ | \&punctintertilde; | F1E8 | PUNCTUS INTERROGATIVUS HORIZONTAL TILDE |

This is a variant of the question mark where the swash (tilde) is horizontal. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301.


Attested in Old Icelandic, but very marginal. For examples, see Stockholm, Royal Library, Holm perg $15 \mathrm{~b} 4^{\circ}$ (cf. Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, pl. 8:13 and 8:19).

| $\sim$ | \&wavylin; | F1F9 | WAVY LINE |
| :--- | :--- | :--- | :--- |

Frequently used in English manuscripts in the 12th century in the form of a wavy line or sometimes a straight line. Placed slightly above the base line.

| $:$ | \&medcom; | F1E0 | MEDIEVAL COMMA |
| :--- | :--- | :--- | :--- |

Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301. According to Parkes, this mark "appears most frequently in the work of fourteenthcentury Italian scribes" (p. 303).

| $\boldsymbol{P}$ | \&parag; | F1E1 | PARAGRAPHUS |
| :--- | :--- | :--- | :--- |

Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 12, 43, 305.

| $\because$ | \&renvoi; | F1EC | SIGNE DE RENVOI |
| :--- | :--- | :--- | :--- |

Looks like two dots over a single dot. Used to connect a marginal note to a place in the text. Looks similar to TWO DOTS OVER ONE DOT PUNCTUATION below, but has a different usage and the dots are more widely spaced.

| $\boldsymbol{\ell}$ | \&virgsusp; | F1F4 | VIRGULA SUSPENSIVA |
| :--- | :--- | :--- | :--- |

Looks like a solidus with a dot in the middle. Used to mark a very brief pause or hesitation in the text. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 307.

| $/$ | \&virgmin; | F1F7 | SHORT VIRGULA |
| :--- | :--- | :--- | :--- |

Looks like a virgule, but confined within the ' $x$ ' height (like a half-height slash), e.g. ' $x / x$ '. Attested in late paper manuscripts of Medieval Nordic verse and not to be unified with the ordinary comma.

| $\ddagger$ | \&tridagger; | F1D2 | TRIPLE DAGGER |
| :--- | :--- | :--- | :--- |

## Subrange 9: Critical and epigraphical signs

Critical signs are used in printed editions, indicating corruptions, deletions, additions etc. Many of these signs are already in the Unicode Standard:

- Basic Latin: asterisk, 002A (p. 13), square brackets, 005B and 005D (p. 17), curly brackets, 007B and 007D (p. 19), single vertical line, 007C (cf. p. 19).
- General Punctuation: double vertical line, 2016 (p. 58).
- Miscellaneous Mathematical Symbols-A: double square brackets, 27E6 and 27E7, and angle brackets, 27E8 and 27E9 (pp. 70-71).

In v. 8.0 of the Unicode Standard, 14 characters in this subrange are assigned to the range Supplemental Punctuation, and have therefore been decommissioned from the Private Use Area in this recommendation. Only a single character remains in the present subrange.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\circ$ | \&midring; | F1DA | MIDDLE RING |

## Subrange 10: Metrical symbols

This is the type of symbol used by Eduard Sievers in his Altgermanische Metrik (Halle: Max Niemeyer, 1893). They are still frequently used in text books, monographs and articles on Medieval Nordic metrics.

Thesaurus Linguae Grecae (TLG) has proposed a set of metrical symbols for Greek. This proposal was approved by Unicode and made part of v. 4.1 of the Unicode Standard. The TLG proposal includes symbols for the short syllable (breve), for the combination of a short and long syllable (metrical short over long, or metrical long over short) and for a combination of a long and two short syllables. These characters have been added to Miscellaneous Technical (see pp. 68-69 above). The default character (anceps) is identified with MULTIPLICATION SIGN (00D7) in Latin-1 Supplement (p. 24), and the symbol for long syllable (longum) is identified with FIGURE DASH (2012) or EN DASH (2013) in General Punctuation (p. 58). Combinations of anceps, breve or longum with acute accent, grave accent or double acute accent can be achieved by using COMBINING ACUTE ACCENT (0301), COMBINING GRAVE ACCENT (0300) or COMBINING DOUBLE ACUTE ACCENT (030B) in Combining Diacritical Marks (pp. 40-41). However, this does not work well in all applications, so for the time being precomposed characters will be useful.

Junicode and Alphabetum have metrical symbols in different locations of the Private Use Area, so a code-point conflict was inevitable for this range. Since Alphabetum has the largest selection, code points in this font have been chosen, metrical symbols being placed in the F700-F71F section. These code points have now been added to Junicode, so the earlier code-point conflict is resolved.

Alphabetum contains a number of additional metrical symbols, possibly also of interest for Medieval usage. See the F700-F76F section of this font.
Note that combining single and double vertical bars are located in Combining Diacritical Marks, code points 030D and 030 E (p. 41 above). They are used to indicate stress (single bar) and stress + alliteration (double bar).

| Glyph | MuFl entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| x | \＆metrancacute； | F70B | METRICAL SYMBOL ANCEPS WITH ACUTE （PRIMARY STRESS） |
| ＂ | \＆metrancdblac； | F719 | METRICAL SYMBOL ANCEPS WITH DOUBLE ACUTE （PRIMARY STRESS AND ALLITERATION） |
| $\dot{\text { x }}$ | \＆metrancgrave； | F70C | METRICAL SYMBOL ANCEPS WITH GRAVE （SECONDARY STRESS） |
| Х̈ | \＆metrancdblgrave； | F71A | METRICAL SYMBOL ANCEPS WITH DOUBLE GRAVE （SECONDARY STRESS AND ALLITERATION） |
| $\smile$ | \＆metrbreveacute； | F706 | METRICAL SYMBOL BREVE WITH ACUTE （PRIMARY STRESS） |
| $\because$ | \＆metrbrevedblac； | F717 | METRICAL SYMBOL BREVE WITH DOUBLE ACUTE （PRIMARY STRESS AND ALLITERATION） |
| こ | \＆metrbrevegrave； | F707 | METRICAL SYMBOL BREVE WITH GRAVE （SECONDARY STRESS） |
| ご | \＆metrbrevedblgrave； | F718 | METRICAL SYMBOL BREVE WITH DOUBLE GRAVE （SECONDARY STRESS AND ALLITERATION） |
| － | \＆metrmacracute； | F704 | METRICAL SYMBOL LONGUM WITH ACUTE（PRIMARY STRESS） |
| \＃ | \＆metrmacrdblac； | F715 | METRICAL SYMBOL LONGUM WITH DOUBLE ACUTE （SECONDARY STRESS） |


| - | \&metrmacrgrave; | F705 | METRICAL SYMBOL LONGUM WITH GRAVE (SECONDARY STRESS) |
| :---: | :---: | :---: | :---: |
| 프 | \&metrmacrdblgrave; | F716 | METRICAL SYMBOL LONGUM WITH DOUBLE GRAVE (SECONDARY STRESS AND ALLITERATION) |
| - | \&metrmacrbreveacute; | F708 | METRICAL SYMBOL BREVE ABOVE LONGUM WITH ACUTE (SHORT OR LONG SYLLABLE WITH PRIMARY STRESS) |
| シ | \&metrmacrbrevegrave; | F709 | METRICAL SYMBOL BREVE ABOVE LONGUM WITH GRAVE (SHORT OR LONG SYLLABLE WITH SECONDARY STRESS) |
| - | \&metrdblbrevemacracute; | F71B | METRICAL SYMBOL RESOLVED LIFT WITH ACUTE (PRIMARY STRESS) |
| " | \&metrdblbrevemacrdblac; | F71C | METRICAL SYMBOL RESOLVED LIFT WITH DOUBLE ACUTE (PRIMARY STRESS AND ALLITERATION) |

## Subrange I I: Additional number forms

Numbers are well covered in the Unicode Standard. The originally Arabic numbers 0-9 are part of the range Basic Latin (p. 14 above), and superscript and subscript numbers are located in the range Superscripts and subscripts (pp. 62-63 above), while Roman numerals are found in the range Number forms (pp. 65-66 above). The present subrange contains a small zero sign used for illegible characters and the three superscript Roman numerals I, V and X.

The characters ' j ', ' v ' and ' x ' with a bar across were often used as numerals for $1 / 2,41 / 2$ and $91 / 2$ respectively. In v. 5.0 of the Unicode Standard, a dotless ' j ' with a bar across was added to Latin Extended-B (p. 37 above). The ' $v$ ' and ' $x$ ' with bar across are not in the Standard and have been listed in subrange 5 (p. 99-100 above). Finally, Roman numerals are often supplied with a raised ' $o$ ' as a morphological complement, e.g. ' $m$ ' for millesimo or ' $\mathrm{c}^{\mathrm{o}}$ ' for centissimo. When the small ' $o$ ' appears in a raised position immediately after the numeral, we recommend using 00BA MASCULINE ORDINAL INDICATOR in Latin-l Supplement (p. 22), because this is a spacing character. When the ' $o$ ' appears in superscript position, e.g. $\stackrel{\circ}{\mathrm{m}}$ or $\stackrel{\circ}{\mathrm{c}, ~} 0366$ COMBINING LATIN SMALL LETTER O in Combining Diacritical Marks (p. 43) should be used.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| 0 | \&smallzero; | F1BD | SMALL BASE LINE ZERO SIGN |

This sign is commonly used in editions to indicate illegible characters (and could thus have been listed in subrange 9 ). It has the same shape as the digit 0 , but is only of $x$ height: ' x 000 x '.

| $\mathbf{X}$ | $\& X \bmod ;$ | F1BF | MODIFIER CAPITAL LETTER X |
| :--- | :--- | :--- | :--- |

The three raised Roman numerals I, V and X are used by Ordbog over det norrøne prosasprog in rendering manuscript signatures. The first of these can be encoded with 1D35 MODIFIER CAPITAL LETTER I in Phonetic Extensions (see p. 46 above), the second with 2C7D MODIFIER LETTER CAPITAL V in Latin Extended-C (see p. 72 above), while the last one has been added here.

| $\not \subset$ | $\&$ Cnumbar; | F2FE | ROMAN NUMERAL CAPITAL C WITH TWO BARS |
| :--- | :--- | :--- | :--- |
| $\mathcal{C}^{*}$ | $\&$ cnumbar; | F2FF | ROMAN NUMERAL SMALL C WITH TWO BARS |

## Subrange 12: Weight, currency and measurement

Characters for weight, currency and measurement are covered in several Unicode charts. The most frequent ones, such as the dollar and pound signs, are found in Basic Latin and Latin-1 Supplement, while e.g. the prime, "", (for minutes or feet) and the double prime, '"', (for seconds or inches) are found in General Punctuation (2000-206F). There is also a separate chart for monetary characters, Currency Symbols (20A0-20CF), and several signs can be found in Letterlike Symbols (2100-214F). One character, 20B0 GERMAN PENNY SIGN, has been selected from Currency symbols (p. 63 above).

The present subrange contains additional Medieval characters for these categories. It is worth noting that what was originally a measure of weight, such as the pound (libra), can also be understood as a currency, since these weights, typically in a precious metal like silver, became monetary symbols in their own right. Some symbols can be analysed as modified base-line characters and placed in subrange 5. That applies to the long 's' with flourish used in Medieval Nordic for abbreviations of words like 'ser' and 'son', and also as an abbreviation of 'sælda' (of sáld) in the Middle Norwegian measurement halfsalda, ' $41 / 2$ pails of butter", "hæf $\S$ ". See E8B7 LATIN SMALL LETTER LONG S WITH FLOURISH (p. 99 above).

The journal Signa: Beiträge zur Signographie vol. 3 (2002), "Die Zeichen des Geldes", has an extensive discussion of monetary symbols and contains further documentation of most of the characters listed below.

In v. 8.0 of the Unicode Standard, 11 characters in this subrange are assigned to Ancient Symbols (pp. 82-83), and have therefore been decommissioned from the Private Use Area of this recommendation. Even so, 28 characters remain in the present subrange.

| Glyph | MuFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\Pi$ | \&romaslibr; | F2E0 | ROMAN AS LIBRALIS SIGN |

Roman monetary unit, cf. Hans Biedermann and Inge Schwarz-Winklhofer, Das Buch der Zeichen und Symbole, Graz 1980.

| $\mathbb{Z}$ | \&romscapxbar; | F2E2 | LATIN SMALL CAPITAL LETTER X WITH BAR (DENARIUS SIGN) |
| :--- | :--- | :--- | :--- |
| $\Psi$ | \&romscapybar; | F2E3 | LATIN SMALL CAPITAL LETTER Y WITH BAR |
| $\not \square$ | \&romscapdslash; | F2E4 | LATIN SMALL CAPITAL LETTER D WITH SLASH |

The four characters above are Roman monetary units and are attested in Diokletians Preisedikt, ed. Siegfried Lauffer, Berlin 1971.

| 3 | \&dram; | F2E6 | PHARMACEUTICAL DRAM SIGN |
| :--- | :--- | :--- | :--- |

Officinal drachme sign.

| $\ddot{\mathrm{V}}$ | \&ecu; | F2E7 | ECU SIGN |
| :--- | :--- | :--- | :--- |

Attested in Cristoph Pflugbeil, Anfangsgründe der kaufmännischen Rechenkunst, Leipzig 1773.

| $f$ | \&florloop; | F2E8 | FLOREN SIGN WITH LOOP |
| :---: | :---: | :---: | :---: |
| Monetary sign for Floren, Gulden. |  |  |  |
| ge | \&grosch; | F2E9 | GROSCHEN SIGN |
| Monetary sign for Grossus, Gros, Groschen. |  |  |  |
| $\phi$ | \&helbing; | F2FB | HELBING SIGN |
| 古 | \&krone; | F2FA | KRONE SIGN |
| E | \&libradut; | F2EA | DUTCH LIBRA SIGN |
| General Dutch sign for libra. A similar shape is also attested in a number of Medieval Nordic sources for the (skål)pund (lb.); cf. Mål og vekt (Nordisk Kultur vol. 30), Oslo-Stockholm-København 1933, p. 283. |  |  |  |
| H | \&librafren; | F2EB | FRENCH LIBRA SIGN |
| This is a simplified variant of 2114 L B BAR SYMBOL in Letterlike Symbols (p. 64), but with a specific usage compared with this character and also sufficiently different from the Dutch shape shown above. |  |  |  |
| 2 | \&libraital; | F2EC | ITALIAN LIBRA SIGN |
| Italian monetary sign for libra. |  |  |  |
| d | \&libraflem; | F2ED | FLEMISH LIBRA SIGN |
| Monetary sign for the Flemish pound. |  |  |  |




## Subrange 13: Modified base-line characters

This range includes three base-line characters with a horizontal stroke. The characters ' 1 ', ' $u$ ', ' $n$ ', ' $v$ ' and ' $y$ ' with a horizontal stroke are used in many Medieval Danish documents, cf. Peter Skautrup, Det danske sprogs historie, vol. 1 (København: Gyldendal, 1944), pp. 217 and 223. The two first of these characters are already in the Unicode Standard, viz. 019A in Latin Extended-B and 0289 in IPA Extensions (p. 33 and p. 38 above) The three remaining characters are included in the present subrange.

| Glyph | MuFl entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\mathbf{f}$ | \&nbar; | E7B2 | LATIN SMALL LETTER N WITH BAR |
| $\forall$ | \&vbar; | E74E | LATIN SMALL LETTER V WITH BAR |
| $¥$ | \&ybar; | E77B | LATIN SMALL LETTER Y WITH BAR |

## Subrange I4:

Reserved for future additions.

## Category 2: Precomposed characters

Precomposed characters are base-line characters with one or more diacritical marks. They have been co-ordinated with characters in the TITUS project and are allocated code points in the E000-F0FF section of the Private Use Area. Precomposed characters should be decommissioned as soon as mature smart font technology is widely available, but code points should be kept for backwards compatibility

## Subrange 15: Characters with macron or overline

The overline (bar above) is probably the most used and also the most ambiguous of all abbreviation marks. There are two typical positions of the overline: above the full height of the majuscules and above the $x$-height of the minuscules. In the latter position it usually crosses the ascender of characters like ' $b$ ', ' $d$ ', ' $h$ ', ' $k$ ', ' $l$ ', ' $b$ ' and the long ' $s$ ', ' $f$ '. If the word has a mixture of characters with and without ascenders, the bar are sometimes kept in the upper position over all characters.

There are two typical lengths of the overline: less than the width of a character, like the macron, or the full width of the character, so that it can extend as a continuous line over several characters.

With present font technology, the overline is particularly difficult. In some fonts and operating systems it will change its vertical position depending on the height of each character. Thus, in an abbreviation such as 'ihc' for 'Iesus', the overline may have one position over ' $c$ ', a slightly higher position over ' $i$ ', and an even higher position over ' $h$ '.

This range is intended as a work-around until mature smart font technology is widely available. It has separate code points for all characters where the overline crosses the ascender, either as a single stroke (macron-length) or as a continuous stroke (overline).

Note that several characters in this range were used as Roman numerals: ' C ' with overline, F7B5, reversed ' C ' with overline, F23F, 'D' with overline, F7B6, 'I' with overline, E58C, 'L' with overline, F7B4, 'M' with overline, E1D2, 'V' with overline, F7B2, and ' X ' with overline, F7B3.

The Unicode Standard v. 8.0 has macron over the vowels ' $A$ ', ' ${ }^{\prime}$ ', ' $E$ ', ' $e$ ', ' $I$ ', ' $i$ ', ' $O$ ', ' $o$ ', ' $U$ ' and ' $u$ ', and stroke across the ascenders of the consonants ' $d$ ' and ' $h$ ' in Latin Extended- $A$ (pp.27-32), macron over the vowels ' $Y$ ', ' $y$ ', 'Æ', 'æ', ' Q ' and ' $q$ ', and stroke across the ascender of the consonant 'b' in Latin Extended-B (pp. 33-35), and stroke across the upper part of the long ' $f$ ', 1E9D, in Latin Extended Additional (p. 54). Finally, Latin Extended-D has stroke across the ascenders of ' $k$ ', ' 1 ' and ' p ' (pp. 75-78). The latter three characters were added in v. 5.1 of the Standard.

A few others have been included in the Private Use Area above, subrange 5:

- Modified base-line abbreviation characters: ' $\AA$ ' with stroke, E7C7 (p. 98), ' $\kappa$ ' with stroke, E7C8 (p. 99), and ' $\beta$ ' with stroke, E735 (p. 100).

Font designers should take care to align the overlines on all characters, i.e. those already in the Unicode Standard and those listed here.
Finally, note that this range has a combining macron and a combining overline, each in two positions: one for minuscules (in the same height as the dot over ' $i$ ') and one for majuscules (in the same height as the accents). These combining characters have 'hard' positions, so that they will have the same height regardless of the characters below. In this respect, they differ from 0304 COMBINING MACRON and 0305 COMBINING OVERLINE, which may be displayed with variable height.

In v. 8.0 of the Unicode Standard, a couple of characters have been included in Latin Extended-D, viz. A748 and A749 (p. 76), and have been decommissioned from the Private Use Area.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $-\overline{\text { - }}$ | \&macrhigh; | F00A | COMBINING HIGH MACRON WITH FIXED HEIGHT (PART-WIDTH) |
| $\overline{\text { - }}$ | \&macrmed; | F00B | COMBINING MEDIUM-HIGH MACRON WITH FIXED HEIGHT (PART-WIDTH) |
| $\overline{\text { b }}$ | \&ovlhigh; | F00C | COMBINING HIGH OVERLINE WITH FIXED HEIGHT (FULL-WIDTH) |
| \&bovlmed; | E44D | COMBINING MEDIUM-HIGH OVERLINE WITH FIXED HEIGHT (FULL-WIDTH) |  |


| $\bar{\bigcirc}$ | \&romnumCrevovl; <br> $=\&$ CONbase; <br> + \&bar; | $\begin{aligned} & \text { F23F } \\ & =2183 \\ & +0305 \end{aligned}$ | ROMAN NUMERAL REVERSED ONE HUNDRED WITH OVERLINE <br> = ROMAN NUMERAL REVERSED ONE HUNDRED <br> + COMBINING OVERLINE |
| :---: | :---: | :---: | :---: |
| $\overline{\mathrm{D}}$ | \&Dovlhigh; $=\mathrm{D}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { F7B6 } \\ & =0044+0305 \end{aligned}$ | LATIN CAPITAL LETTER D WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER D + COMBINING OVERLINE |
| d | \&dovlmed; | E491 | LATIN SMALL LETTER D WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{E}}$ | \&Eogonmacr; <br> = \Ę <br> + \& combmacr; | $\begin{aligned} & \text { E0BC } \\ & =0118 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND MACRON <br> = LATIN CAPITAL LETTER E WITH OGONEK <br> + COMBINING MACRON |
| ę | \&eogonmacr; <br> = \ę <br> + \& combmacr; | $\begin{aligned} & \text { E4BC } \\ & =0119 \\ & +0304 \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND MACRON <br> = LATIN SMALL LETTER E WITH OGONEK <br> + COMBINING MACRON |
| 万 | \&hovlmed; | E517 | LATIN SMALL LETTER H WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{I}}$ | $\begin{aligned} & \text { \& Iovlhigh; } \\ & =\text { I + \&bar; } \end{aligned}$ | $\begin{aligned} & \text { E150 } \\ & =0049+0305 \end{aligned}$ | LATIN CAPITAL LETTER I WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER I + COMBINING OVERLINE |
| $\overline{1}$ | \&iovlmed; = i + \&bar; | $\begin{aligned} & \text { E550 } \\ & =0069+0305 \end{aligned}$ | LATIN SMALL LETTER I WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER I WITH + COMBINING OVERLINE |
| $\overline{\mathrm{J}}$ | \&Jmacrhigh; = J + \&combmacr; | $\begin{aligned} & \text { E154 } \\ & =004 \mathrm{~A}+0304 \end{aligned}$ | LATIN CAPITAL LETTER J WITH HIGH MACRON (ABOVE CHARACTER) <br> = LATIN CAPITAL LETTER J + COMBINING MACRON |
| $\overline{\mathrm{J}}$ | \&Jovlhigh; = J + \&bar; | $\begin{aligned} & \text { E152 } \\ & =004 \mathrm{~A}+0305 \end{aligned}$ | LATIN CAPITAL LETTER J WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER J + COMBINING OVERLINE |


| $\overline{\mathrm{J}}$ | \&jmacrmed; $=\mathrm{j}+$ \& combmacr; | $\begin{aligned} & \text { E554 } \\ & =006 \mathrm{~A}+0304 \end{aligned}$ | LATIN SMALL LETTER J WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER J + COMBINING MACRON |
| :---: | :---: | :---: | :---: |
| $\overline{\mathrm{J}}$ | \&jovlmed; $=\mathrm{j}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { E552 } \\ & =006 \mathrm{~A}+0305 \end{aligned}$ | LATIN SMALL LETTER J WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER J + COMBINING OVERLINE |
| k | \&kovlmed; | E7C3 | LATIN SMALL LETTER K WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| 1 | \&lovlmed; | E5B1 | LATIN SMALL LETTER L WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| The overline in E5B1 has full width, thus connecting with any strokes on the previous or following character such as the ' h ' in E517 and the ' k ' in E7C3. |  |  |  |
| $\bar{L}$ | \&Lovlhigh; $=\mathrm{L}+$ \&bar; | $\begin{aligned} & \text { F7B4 } \\ & =004 \mathrm{C}+0305 \end{aligned}$ | LATIN CAPITAL LETTER L WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER L + COMBINING OVERLINE |
| $\overline{1}$ | \&lmacrhigh; = $1+\&$ combmacr; | $\begin{aligned} & \text { E596 } \\ & =006 \mathrm{C}+0304 \end{aligned}$ | LATIN SMALL LETTER L WITH HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER L + COMBINING MACRON |
| $\overline{1}$ | \&lovlhigh; = $1+$ \&bar; | $\begin{aligned} & \text { E58C } \\ & =006 \mathrm{C}+0305 \end{aligned}$ | LATIN SMALL LETTER L WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER L + COMBINING OVERLINE |
| $\bar{M}$ | \&Mmacrhigh; $=\mathrm{M}+\&$ combmacr; | $\begin{aligned} & \text { E1B8 } \\ & =004 \mathrm{D}+0304 \end{aligned}$ | LATIN CAPITAL LETTER M WITH HIGH MACRON (ABOVE CHARACTER) = LATIN CAPITAL LETTER M + COMBINING MACRON |
| $\overline{\mathrm{M}}$ | \&Movlhigh; = M + \&bar; | $\begin{aligned} & \text { E1D2 } \\ & =004 \mathrm{D}+0305 \end{aligned}$ | LATIN CAPITAL LETTER M WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER M + COMBINING OVERLINE |
| $\overline{\mathrm{m}}$ | \&mmacrmed; = m + \&combmacr; | $\begin{aligned} & \text { E5B8 } \\ & =006 \mathrm{D}+0304 \end{aligned}$ | LATIN SMALL LETTER M WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER M + COMBINING MACRON |


| $\overline{\mathrm{m}}$ | \&movlmed; $=\mathrm{M}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { E5D2 } \\ & =006 \mathrm{D}+0305 \end{aligned}$ | LATIN SMALL LETTER M WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER M + COMBINING OVERLINE |
| :---: | :---: | :---: | :---: |
| $\overline{\mathrm{N}}$ | \&Nmacrhigh; $=\mathrm{N}+\& \mathrm{combmacr} ;$ | $\begin{aligned} & \text { E1DC } \\ & =004 \mathrm{E}+0304 \end{aligned}$ | LATIN CAPITAL LETTER N WITH HIGH MACRON (ABOVE CHARACTER) <br> $=$ LATIN CAPITAL LETTER $\mathrm{N}+$ COMBINING MACRON |
| $\overline{\mathrm{n}}$ | \&nmacrmed; <br> = $\mathrm{n}+\& \mathrm{combmacr} ;$ | $\begin{aligned} & \text { E5DC } \\ & =006 \mathrm{E}+0304 \end{aligned}$ | LATIN SMALL LETTER N WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) <br> = LATIN SMALL LETTER $\mathrm{N}+$ COMBINING MACRON |
| $\bar{\varnothing}$ | \&Oslashmacr; <br> = \Ø + <br> \&combmacr; | $\begin{aligned} & \text { E252 } \\ & =00 \mathrm{D} 8 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND MACRON <br> = LATIN CAPITAL LETTER O WITH STROKE <br> + COMBINING MACRON |
| $\bar{\emptyset}$ | \& oslashmacr; = \ø + \& combmacr; | $\begin{aligned} & \text { E652 } \\ & =00 \mathrm{~F} 8 \\ & +0304 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND MACRON <br> = LATIN SMALL LETTER O WITH STROKE <br> + COMBINING MACRON |
| $\overline{\mathrm{C}}$ | \&OEligmacr; <br> = \Œ <br> + \&combmacr; | $\begin{aligned} & \text { E25D } \\ & =0152 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH MACRON <br> = LATIN CAPITAL LIGATURE OE <br> + COMBINING MACRON |
| $\overline{\text { ® }}$ | \&oeligmacr; <br> = \œ <br> + \&combmacr; | $\begin{aligned} & \text { E65D } \\ & =0153 \\ & +0304 \end{aligned}$ | LATIN SMALL LIGATURE OE WITH MACRON <br> = LATIN SMALL LIGATURE OE <br> + COMBINING MACRON |
| $\bar{\square}$ | \&oopenmacr; | E7CC | LATIN SMALL LETTER OPEN O WITH MACRON |
| $\overline{\mathrm{p}}$ | $\begin{aligned} & \text { \&pmacr; } \\ & =\mathrm{p}+\text { \&combmacr; } \end{aligned}$ | $\begin{aligned} & \text { E665 } \\ & =0070+0304 \end{aligned}$ | LATIN SMALL LETTER P WITH MACRON <br> = LATIN SMALL LETTER P + COMBINING MACRON |


| $\bar{q}$ | \&qmacr; $=\mathrm{q}+\&$ combmacr; | $\begin{aligned} & \text { E681 } \\ & =0071+0304 \end{aligned}$ | LATIN SMALL LETTER Q WITH MACRON <br> = LATIN SMALL LETTER Q + COMBINING MACRON |
| :---: | :---: | :---: | :---: |
| f | \&slongovlmed; | E79E | LATIN SMALL LETTER LONG S WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| The above character should be kept apart from LATIN SMALL LETTER LONG S WITH HIGH STROKE (1E9D) in Latin Extended Additional (p. 54), since the latter does not have a connecting overline. |  |  |  |
| $\overline{\mathrm{V}}$ | $\begin{aligned} & \& V \text { macr; } \\ & =\mathrm{V}+\& \mathrm{combmacr} ; \end{aligned}$ | $\begin{aligned} & \text { E34D } \\ & =0056+0304 \end{aligned}$ | LATIN CAPITAL LETTER V WITH MACRON = LATIN CAPITAL LETTER V + COMBINING MACRON |
| $\overline{\mathrm{V}}$ | \&Vovlhigh; $=\mathrm{V}+\& \mathrm{bar}$; | $\begin{aligned} & \text { F7B2 } \\ & =0056+0305 \end{aligned}$ | LATIN CAPITAL LETTER V WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER V + COMBINING OVERLINE |
| $\overline{\mathrm{V}}$ | \&vmacr; = v + \& combmacr; | $\begin{aligned} & \text { E74D } \\ & =0076+0304 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER V WITH MACRON } \\ & \text { = LATIN SMALL LETTER V + COMBINING MACRON } \end{aligned}$ |
| $\bar{W}$ | $\begin{aligned} & \text { \&Wmacr; } \\ & =\mathrm{W}+\text { \&combmacr; } \end{aligned}$ | $\begin{aligned} & \text { E357 } \\ & =0057+0304 \end{aligned}$ | LATIN CAPITAL LETTER W WITH MACRON = LATIN CAPITAL LETTER W + COMBINING MACRON |
| $\bar{W}$ | \&wmacr; $=\mathrm{w}+\&$ combmacr; | $\begin{aligned} & \text { E757 } \\ & =0077+0304 \end{aligned}$ | LATIN SMALL LETTER W WITH MACRON = LATIN SMALL LETTER W + COMBINING MACRON |
| $\bar{X}$ | \& Xovlhigh; $=\mathrm{X}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { F7B3 } \\ & =0058+0305 \end{aligned}$ | LATIN CAPITAL LETTER X WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER X |
| ¢ | \&thornovlmed; | E7A2 | LATIN SMALL LETTER THORN WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |

## Subrange 16: Characters with acute accent

 ' $¥$ ', ' $\varnothing$ ' and ' $\varnothing$ ' in Latin Extended- $B$. Many consonants also appear with acute accent, such as ' C ', ' $\mathrm{c}^{\prime}$, ' L , ' 1 ', ' $N$ ', ' n , ' $R$ ', ' $r$ ', ' S ', ' s ', ' $Z$ ' and ' z ' in Latin Extended- $A$, ' $\mathrm{G}^{\prime}$ and ' g ' in Latin Extended-B, and ' K ', ' k ', ' M ', ' m ', ' P ', ' p ', ' W ' and ' w ' in Latin Extended Additional.

This subrange contains additional characters with acute accent. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for each character below.

Combinations of consonants and the acute accent are rare in Medieval sources, but attested examples have been included in the present recommendation.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| ÁA | \&AAligacute; <br> $=\& A A l i g ;+\&$ combacute; | $\begin{aligned} & \text { EFE0 } \\ & =\text { EF90 + } 0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AA WITH ACUTE <br> = LATIN CAPITAL LIGATURE AA + COMBINING ACUTE ACCENT |
| á | \&aaligacute; <br> = \&aalig; + \&combacute; | $\begin{aligned} & \text { EFE1 } \\ & =\text { EF91 + } 0301 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH ACUTE <br> = LATIN SMALL LIGATURE AA + COMBINING ACUTE ACCENT |
| AO | \&AOligacute; <br> = \&AOlig; + \&combacute; | $\begin{aligned} & \text { EFE2 } \\ & =\text { EF92 }+0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AO WITH ACUTE <br> = LATIN CAPITAL LIGATURE AO + COMBINING ACUTE ACCENT |
| ว́ | \&aoligacute; = \&aolig; + \&combacute; | $\begin{aligned} & \text { EFE3 } \\ & =\text { EF93 + } 0301 \end{aligned}$ | LATIN SMALL LIGATURE AO WITH ACUTE = LATIN SMALL LIGATURE AO + COMBINING ACUTE ACCENT |
| $A^{\prime}$ | \&AUligacute; <br> = \&AUlig; + \&combacute; | $\begin{aligned} & \text { EFE4 } \\ & =\text { EF94 + } 0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LIGATURE AU WITH ACUTE } \\ & \text { = LATIN CAPITAL LIGATURE AU + COMBINING ACUTE ACCENT } \end{aligned}$ |
| á | \&auligacute; <br> = \&aulig; + \&combacute; | $\begin{aligned} & \text { EFE5 } \\ & =\text { EF95 + } 0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE AU WITH ACUTE } \\ & \text { = LATIN SMALL LIGATURE AU + COMBINING ACUTE ACCENT } \end{aligned}$ |


| Á | \&AVligacute; <br> $=\& A V$ lig $;+\&$ combacute; | $\begin{aligned} & \text { EFE6 } \\ & =\text { EF96 + } 0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH ACUTE <br> = LATIN CAPITAL LIGATURE AV + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| á | \&avligacute; <br> = \&avlig; + \&combacute; | $\begin{aligned} & \text { EFE7 } \\ & =\text { EF97 }+0301 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH ACUTE <br> = LATIN SMALL LIGATURE AV + COMBINING ACUTE ACCENT |
| Á | \&AVligslashacute; <br> = \&AVligslash; <br> + \&combacute; | $\begin{aligned} & \text { EBB0 } \\ & =\text { EF98 } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH STROKE AND ACUTE <br> = LATIN CAPITAL LIGATURE AV WITH STROKE <br> + COMBINING ACUTE ACCENT |
| á | \& avligslashacute; <br> = \&avligslash; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBB1 } \\ & =\text { EF99 } \\ & +0301 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH STROKE AND ACUTE <br> = LATIN SMALL LIGATURE AV WITH STROKE <br> + COMBINING ACUTE ACCENT |
| B | \&Bacute; <br> = B + \&combacute; | $\begin{aligned} & \text { E044 } \\ & =0042+0301 \end{aligned}$ | LATIN CAPITAL LETTER B WITH ACUTE <br> = LATIN CAPITAL LETTER B + COMBINING ACUTE ACCENT |
| $b^{\prime}$ | \&bacute; <br> = b + \&combacute; | $\begin{aligned} & \text { E444 } \\ & =0062+0301 \end{aligned}$ | LATIN SMALL LETTER B WITH ACUTE <br> = LATIN SMALL LETTER B + COMBINING ACUTE ACCENT |
| D | \&Dacute; = D + \&combacute; | $\begin{aligned} & \text { E077 } \\ & =0044+0301 \end{aligned}$ | LATIN CAPITAL LETTER D WITH ACUTE <br> = LATIN CAPITAL LETTER D + COMBINING ACUTE ACCENT |
| d | \&dacute; <br> = d + \&combacute; | $\begin{aligned} & \text { E477 } \\ & =0064+0301 \end{aligned}$ | LATIN SMALL LETTER D WITH ACUTE <br> = LATIN SMALL LETTER D + COMBINING ACUTE ACCENT |
| д́ | \&drotacute; <br> = \&drot; + \&combacute; | $\begin{aligned} & \text { EBB2 } \\ & =\text { F109 + } 0301 \end{aligned}$ | LATIN SMALL LETTER D ROTUNDA WITH ACUTE <br> = LATIN SMALL LETTER D ROTUNDA + COMBINING ACUTE ACCENT |
| F́ | \&Facute; <br> = F + \& combacute; | $\begin{aligned} & \text { E0F0 } \\ & =0046+0301 \end{aligned}$ | LATIN CAPITAL LETTER F WITH ACUTE <br> = LATIN CAPITAL LETTER F + COMBINING ACUTE ACCENT |


| f | \&facute; <br> = f + \& combacute; | $\begin{aligned} & \text { E4F0 } \\ & =0066+0301 \end{aligned}$ | LATIN SMALL LETTER F WITH ACUTE <br> = LATIN SMALL LETTER F + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| F́ | \&Finsacute; <br> $=\&$ Fins; $+\&$ combacute; | $\begin{aligned} & \text { EBB3 } \\ & =\text { F10C }+0301 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR F WITH ACUTE <br> = LATIN CAPITAL LETTER INSULAR F + COMBINING ACUTE ACCENT |
| F́ | $\begin{aligned} & \text { \&finsacute; } \\ & =\text { \&fins; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBB4 } \\ & =\text { F10D }+0301 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH ACUTE <br> = LATIN SMALL LETTER INSULAR F + COMBINING ACUTE ACCENT |
| H' | \&Hacute; <br> = H + \&combacute; | $\begin{aligned} & \text { E116 } \\ & =0048+0301 \end{aligned}$ | LATIN CAPITAL LETTER H WITH ACUTE <br> = LATIN CAPITAL LETTER H + COMBINING ACUTE ACCENT |
| h' | \&hacute; <br> = h + \&combacute; | $\begin{aligned} & \text { E516 } \\ & =0068+0301 \end{aligned}$ | LATIN SMALL LETTER H WITH ACUTE <br> = LATIN SMALL LETTER H + COMBINING ACUTE ACCENT |
| J́ | \& Jacute; <br> = J + \&combacute; | $\begin{aligned} & \text { E153 } \\ & =004 \mathrm{~A}+0301 \end{aligned}$ | LATIN CAPITAL LETTER J WITH ACUTE <br> = LATIN CAPITAL LETTER J + COMBINING ACUTE ACCENT |
| ) | \&jacute; = j + \&combacute; | $\begin{aligned} & \text { E553 } \\ & =006 \mathrm{~A}+0301 \end{aligned}$ | LATIN SMALL LETTER J WITH ACUTE <br> = LATIN SMALL LETTER J + COMBINING ACUTE ACCENT |
| @́ | \&Muncacute; <br> $=\& M u n c ;$ <br> + \& combacute; | $\begin{aligned} & \text { EBB5 } \\ & =\text { F11A } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER M UNCIAL FORM WITH ACUTE <br> = LATIN CAPITAL LETTER M UNCIAL FORM <br> + COMBINING ACUTE ACCENT |
| @́ | \&mmeduncacute; <br> = \&mmedunc; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBB6 } \\ & =\text { F225 } \\ & +0301 \end{aligned}$ | LATIN MEDIUSCULE LETTER M UNCIAL FORM WITH ACUTE <br> = LATIN MEDIUSCULE LETTER M UNCIAL FORM <br> + COMBINING ACUTE ACCENT |
| ḿ | \&muncacute; <br> = \&munc; <br> + \& combacute; | $\begin{aligned} & \text { F23E } \\ & =\text { F23C } \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER M UNCIAL FORM WITH ACUTE <br> = LATIN SMALL LETTER M UNCIAL FORM <br> + COMBINING ACUTE ACCENT |


| ĆE | \&OEligacute; <br> = \Œ + \&combacute; | $\begin{aligned} & \text { E259 } \\ & =0152+0301 \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH ACUTE <br> = LATIN CAPITAL LIGATURE OE + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| @́ | \&oeligacute; <br> = \œ + \&combacute; | $\begin{aligned} & \text { E659 } \\ & =0153+0301 \end{aligned}$ | LATIN SMALL LIGATURE OE WITH ACUTE <br> = LATIN SMALL LIGATURE OE + COMBINING ACUTE ACCENT |
| ÓO | \&OOligacute; <br> = \&OOlig; + \&combacute; | $\begin{aligned} & \text { EFE8 } \\ & =\text { F20A }+0301 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH ACUTE <br> = LATIN CAPITAL LIGATURE OO + COMBINING ACUTE ACCENT |
| Ó | \&ooligacute; <br> = \&oolig; + \&combacute; | $\begin{aligned} & \text { EFE9 } \\ & =\text { F20B }+0301 \end{aligned}$ | LATIN SMALL LIGATURE OO WITH ACUTE <br> = LATIN SMALL LIGATURE OO + COMBINING ACUTE ACCENT |
| 2́ | \&rrotacute; <br> = \&rrot; + \&combacute; | $\begin{aligned} & \text { EBB9 } \\ & =\text { F20E }+0301 \end{aligned}$ | LATIN SMALL LETTER R ROTUNDA WITH ACUTE <br> = LATIN SMALL LETTER R ROTUNDA + COMBINING ACUTE ACCENT |
| ¢ | \&slongacute; <br> = \&slong; + \&combacute; | $\begin{aligned} & \text { EBAF } \\ & =017 \mathrm{~F}+0301 \end{aligned}$ | LATIN SMALL LETTER LONG S WITH ACUTE <br> = LATIN SMALL LETTER LONG S + COMBINING ACUTE ACCENT |
| ' | \& Tacute; <br> = T + \& combacute; | $\begin{aligned} & \text { E2E2 } \\ & =0054+0301 \end{aligned}$ | LATIN CAPITAL LETTER T WITH ACUTE <br> = LATIN CAPITAL LETTER T + COMBINING ACUTE ACCENT |
| $\mathrm{t}^{\prime}$ | \&tacute; $=\mathrm{t}+$ \& combacute; | $\begin{aligned} & \text { E6E2 } \\ & =0074+0301 \end{aligned}$ | LATIN SMALL LETTER T WITH ACUTE <br> = LATIN SMALL LETTER T + COMBINING ACUTE ACCENT |
| V' | \& Vacute; <br> $=\mathrm{V}+$ \&combacute; | $\begin{aligned} & \text { E33A } \\ & =0056+0301 \end{aligned}$ | LATIN CAPITAL LETTER V WITH ACUTE <br> = LATIN CAPITAL LETTER V + COMBINING ACUTE ACCENT |
| V' | \& vacute; $=\mathrm{v}+\&$ combacute; | $\begin{aligned} & \text { E73A } \\ & =0076+0301 \end{aligned}$ | LATIN SMALL LETTER V WITH ACUTE <br> = LATIN SMALL LETTER V + COMBINING ACUTE ACCENT |


| 1' | \&Vinsacute; <br> $=$ \&Vins; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBBA } \\ & =\text { F210 } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR V (VEND) WITH ACUTE <br> = LATIN CAPITAL LETTER INSULAR V (VEND) <br> + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| ${ }^{\prime}$ | \&vinsacute; <br> = \&vins; <br> + \&combacute; | $\begin{aligned} & \text { EBBB } \\ & =\text { F211 } \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER INSULAR V (VEND) WITH ACUTE <br> = LATIN SMALL LETTER INSULAR V (VEND) <br> + COMBINING ACUTE ACCENT |
| ' ${ }^{\prime}$ | \&thornacute; <br> = \þ + \&combacute; | $\begin{aligned} & \text { E737 } \\ & =00 \mathrm{FE}+0301 \end{aligned}$ | LATIN SMALL LETTER THORN WITH ACUTE <br> = LATIN SMALL LETTER THORN + COMBINING ACUTE ACCENT |

## Subrange 17: Characters with double acute accent

The Unicode Standard v. 8.0 has double acute accent over ' O ', ' o ', ' U ' and ' u ' in Latin Extended-A. This subrange contains additional characters with double acute accent. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DOUBLE ACUTE ACCENT (030B), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| A̋ | \&Adblac; = A + \&combdblac; | $\begin{aligned} & \text { E025 } \\ & =0041+030 B \end{aligned}$ | LATIN CAPITAL LETTER A WITH DOUBLE ACUTE = LATIN CAPITAL LETTER A + COMBINING DOUBLE ACUTE ACCENT |
| á | \&adblac; = a + \& combdblac; | $\begin{aligned} & \text { E425 } \\ & =0061+030 B \end{aligned}$ | LATIN SMALL LETTER A WITH DOUBLE ACUTE = LATIN SMALL LETTER A + COMBINING DOUBLE ACUTE ACCENT |
| ÁA | \&AAligdblac; <br> $=\& A A l i g ;+\& c o m b d b l a c ;$ | EFEA = EF90 + 030B | LATIN CAPITAL LIGATURE AA WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE AA + COMBINING DOUBLE ACUTE ACCENT |
| áa | \&aaligdblac; <br> = \&aalig; + \&combdblac; | $\begin{aligned} & \text { EFEB } \\ & =\text { EF91 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DOUBLE ACUTE <br> = LATIN SMALL LIGATURE AA + COMBINING DOUBLE ACUTE ACCENT |


| Á | \&AEligdblac; <br> = \Æ + \&combdblac; | $\begin{aligned} & \text { E041 } \\ & =00 \mathrm{C} 6+030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DOUBLE ACUTE = LATIN CAPITAL LETTER AE + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| æ̋ | \&aeligdblac; <br> = \æ + \&combdblac; | $\begin{aligned} & \mathrm{E} 441 \\ & =00 \mathrm{E} 6+030 \mathrm{~B} \end{aligned}$ | LATIN SMALL LETTER AE WITH DOUBLE ACUTE = LATIN SMALL LETTER AE + COMBINING DOUBLE ACUTE ACCENT |
| $A^{\prime \prime}$ | \&AOligdblac; <br> = \&AOlig; + \&combdblac; | $\begin{aligned} & \text { EBC0 } \\ & =\text { EF92 + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE AO WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE AO + COMBINING DOUBLE ACUTE ACCENT |
| áO | \&aoligdblac; <br> = \&aolig; + \&combdblac; | $\begin{aligned} & \text { EBC1 } \\ & =\text { EF93 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AO WITH DOUBLE ACUTE = LATIN SMALL LIGATURE AO + COMBINING DOUBLE ACUTE ACCENT |
| A'V | \&AVligdblac; <br> = \&AVlig; + \&combdblac; | $\begin{aligned} & \text { EBC2 } \\ & =\text { EF96 + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE AV + COMBINING DOUBLE ACUTE ACCENT |
| á | \&avligdblac; <br> = \&avlig; + \&combdblac; | $\begin{aligned} & \text { EBC3 } \\ & =\text { EF97 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AV WITH DOUBLE ACUTE = LATIN SMALL LIGATURE AV + COMBINING DOUBLE ACUTE ACCENT |
| E | \&Edblac; $=\mathrm{E}+\&$ combdblac; | $\begin{aligned} & \text { E0D1 } \\ & =0045+030 B \end{aligned}$ | LATIN CAPITAL LETTER E WITH DOUBLE ACUTE = LATIN CAPITAL LETTER E + COMBINING DOUBLE ACUTE ACCENT |
| é | \&edblac; = e + \& combdblac; | $\begin{aligned} & \text { E4D1 } \\ & =0065+030 B \end{aligned}$ | LATIN SMALL LETTER E WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER E + COMBINING DOUBLE ACUTE ACCENT |
| 'I' | \&Idblac; = I + \&combdblac; | $\begin{aligned} & \text { E143 } \\ & =0049+030 B \end{aligned}$ | LATIN CAPITAL LETTER I WITH DOUBLE ACUTE = LATIN CAPITAL LETTER I + COMBINING DOUBLE ACUTE ACCENT |
| 亿1 | \&idblac; = i + \&combdblac; | $\begin{aligned} & \text { E543 } \\ & =0069+030 B \end{aligned}$ | LATIN SMALL LETTER I WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER I + COMBINING DOUBLE ACUTE ACCENT |
| ' | \&Jdblac; = J + \& combdblac; | $\begin{aligned} & \text { E162 } \\ & =004 A+030 B \end{aligned}$ | LATIN CAPITAL LETTER J WITH DOUBLE ACUTE = LATIN CAPITAL LETTER J + COMBINING DOUBLE ACUTE ACCENT |


| ' ${ }^{\prime}$ | \&jdblac; = $\mathrm{j}+$ \&combdblac; | $\begin{aligned} & \text { E562 } \\ & =006 \mathrm{~A}+030 \mathrm{~B} \end{aligned}$ | LATIN SMALL LETTER J WITH DOUBLE ACUTE = LATIN SMALL LETTER J + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| ø | $\begin{aligned} & \& \text { Oslashdblac; } \\ & =\text { \&Oslash; } \\ & \text { + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBC6 } \\ & =00 \mathrm{D} 8 \\ & \text { + 030B } \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH STROKE AND DOUBLE ACUTE } \\ & \text { = LATIN CAPITAL LETTER O WITH STROKE } \\ & \text { + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |
| Ø | \& oslashdblac; <br> = \ø <br> + \&combdblac; | $\begin{aligned} & \text { EBC7 } \\ & =00 \mathrm{~F} 8 \\ & +030 \mathrm{~B} \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOUBLE ACUTE = LATIN SMALL LETTER O WITH STROKE <br> + COMBINING DOUBLE ACUTE ACCENT |
| ĆE | \&OEligdblac; <br> = \Œ + \&combdblac; | $\begin{aligned} & \text { EBC8 } \\ & =0152+030 B \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE OE + COMBINING DOUBLE ACUTE ACCENT |
| Óe | \&oeligdblac; <br> = \œ + \&combdblac; | $\begin{aligned} & \text { EBC9 } \\ & =0153+030 B \end{aligned}$ | LATIN SMALL LIGATURE OE WITH DOUBLE ACUTE = LATIN SMALL LIGATURE OE + COMBINING DOUBLE ACUTE ACCENT |
| O〇 | \&OOligdblac; <br> = \&OOlig; + \& combdblac; | $\begin{aligned} & \text { EFEC } \\ & =\text { F20A + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE OO + COMBINING DOUBLE ACUTE ACCENT |
| ÓO | \&ooligdblac; <br> = \&oolig; + \&combdblac; | $\begin{aligned} & \text { EFED } \\ & =\text { F20B }+030 \mathrm{~B} \end{aligned}$ | LATIN SMALL LIGATURE OO WITH DOUBLE ACUTE = LATIN SMALL LIGATURE OO + COMBINING DOUBLE ACUTE ACCENT |
| P' | \&Pdblac; <br> $=\mathrm{P}+\&$ combdblac; | $\begin{aligned} & \mathrm{E} 268 \\ & =0050+030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER P WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER P + COMBINING DOUBLE ACUTE ACCENT |
| p | \&pdblac; $=\mathrm{p}+\&$ combdblac; | E668 $=0070+030 \mathrm{~B}$ | LATIN SMALL LETTER P WITH DOUBLE ACUTE = LATIN SMALL LETTER P + COMBINING DOUBLE ACUTE ACCENT |
| Ü | \&UUligdblac; <br> = \&UUlig; + \&combdblac; | $\begin{aligned} & \text { EFD9 } \\ & =\text { E8C6 + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE UU WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE UU + COMBINING DOUBLE ACUTE ACCENT |


| úu | \&uuligdblac; <br> $=$ \&uulig; + \&combdblac; | EFD8 <br> $=$ E8C7 + 030B | LATIN SMALL LIGATURE UU WITH DOUBLE ACUTE <br> $=$ LATIN SMALL LIGATURE UU + COMBINING DOUBLE ACUTE ACCENT |
| :--- | :--- | :--- | :--- |

The unaccented variants of the two ligatures above are located at E8C6 and E8C7 in subrange 1 of the Private Use Area, pp. 91-92.

| V' | \&Vdblac; $=\mathrm{V}+\&$ combdblac; | $\begin{aligned} & \text { E34B } \\ & =0056+030 B \end{aligned}$ | LATIN CAPITAL LETTER V WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER V + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| V | \&vdblac; $=\mathrm{v}+\&$ combdblac; | E74B $=0076+030 \mathrm{~B}$ | LATIN SMALL LETTER V WITH DOUBLE ACUTE = LATIN SMALL LETTER V + COMBINING DOUBLE ACUTE ACCENT |
| W" | \&Wdblac; $=\mathrm{W}+\& \mathrm{combdblac} ;$ | $\begin{aligned} & \text { E350 } \\ & =0057+030 B \end{aligned}$ | LATIN CAPITAL LETTER W WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER W + COMBINING DOUBLE ACUTE ACCENT |
| W | \&wdblac; = w + \&combdblac; | $\begin{aligned} & \text { E750 } \\ & =0077+030 B \end{aligned}$ | LATIN SMALL LETTER W WITH DOUBLE ACUTE = LATIN SMALL LETTER W + COMBINING DOUBLE ACUTE ACCENT |
| Y' | \&Ydblac; $=\mathrm{Y}+\&$ combdblac; | $\begin{aligned} & \text { E37C } \\ & =0059+030 B \end{aligned}$ | LATIN CAPITAL LETTER Y WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER Y + COMBINING DOUBLE ACUTE ACCENT |
| y | \&ydblac; = y + \&combdblac; | $\begin{aligned} & \text { E77C } \\ & =0079+030 B \end{aligned}$ | LATIN SMALL LETTER Y WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER Y + COMBINING DOUBLE ACUTE ACCENT |
| W' | $\begin{aligned} & \& Y Y l i g d b l a c ; \\ & \text { = \&YYlig; + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBCA } \\ & =\text { F212 }+030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LIGATURE YY WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE YY + COMBINING DOUBLE ACUTE ACCENT |
| W' | $\begin{aligned} & \text { \&yyligdblac; } \\ & =\text { \&yylig; + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBCB } \\ & =\text { F } 213+030 B \end{aligned}$ | LATIN SMALL LIGATURE YY WITH DOUBLE ACUTE <br> = LATIN SMALL LIGATURE YY + COMBINING DOUBLE ACUTE ACCENT |

## Subrange 18: Characters with dot above

The Unicode Standard v. 8.0 has 40 characters with a dot above in three ranges: ‘ C ', ' c ', ' E ', ' e ', ‘ G ', ' g ', ' I ' (' i ' is already in Basic Latin), 'Z' and ' z ' in Latin Extended- $A$, 'A', 'a', ' O ' and 'o', in Latin Extended- $B$, and 'B', 'b', 'D', 'd', 'F', 'f', 'H', 'h', 'M', 'm', 'N', 'n', 'P', 'p', 'R', 'r', 'S', 's', 'T', 't', 'W', 'w', ' X ', 'x', 'Y', 'y' and long 's' (no capital version) in Latin Extended Additional.

This subrange contains additional characters with dot above. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DOT ABOVE (0307), and this way of encoding has been given as an alternative for each character below.

Many of these combinations are presumably rare in Medieval sources and therefore only a limited number of characters have been included in the present recommendation. The two characters LATIN CAPITAL LETTER H WITH DOT ABOVE and LATIN SMALL LETTER H WITH DOT ABOVE have been assigned the code points EBD8 and EBD9 respectively by the TITUS project, but they are already in the Unicode Standard at code points 1E22 and 1E23 in Latin Extended Additional and have therefore been listed in that range.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\dot{A}$ | \&AAligdot; $=\& A A l i g ;+\& c o m b d o t ;$ | EFEE $\text { = EF90 + } 0307$ | LATIN CAPITAL LIGATURE AA WITH DOT ABOVE = LATIN CAPITAL LIGATURE AA + COMBINING DOT ABOVE |
| $\dot{\mathfrak{a}}$ | \&aaligdot; <br> = \&aalig; + \&combdot; | $\begin{aligned} & \text { EFEF } \\ & =\text { EF91 + } 0307 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DOT ABOVE = LATIN SMALL LIGATURE AA + COMBINING DOT ABOVE |
| $\dot{\text { E }}$ | ```&AEligdot; = &AElig; + &combdot;``` | $\begin{aligned} & \text { E043 } \\ & =00 \mathrm{C} 6+0307 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DOT ABOVE <br> = LATIN CAPITAL LETTER AE + COMBINING DOT ABOVE |
| $\dot{\mathfrak{X}}$ | \&aeligdot; <br> = \æ + \&combdot; | $\begin{aligned} & \text { E443 } \\ & =00 \mathrm{E} 6+0307 \end{aligned}$ | LATIN SMALL LETTER AE WITH DOT ABOVE <br> = LATIN SMALL LETTER AE + COMBINING DOT ABOVE |
| $\dot{A}$ | ```&AYligdot; = &AYlig; + &combdot;``` | $\begin{aligned} & \text { EFF0 } \\ & =\text { EF9A + } 0307 \end{aligned}$ | LATIN CAPITAL LIGATURE AY WITH DOT ABOVE <br> = LATIN CAPITAL LIGATURE AY + COMBINING DOT ABOVE |


| $\dot{y}$ | \&ayligdot; <br> = \&aylig; + \&combdot; | $\begin{aligned} & \text { EFF1 } \\ & =\text { EF9B + } 0307 \end{aligned}$ | LATIN SMALL LIGATURE AY WITH DOT ABOVE <br> = LATIN SMALL LIGATURE AY + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{\mathrm{B}}$ | \&bscapdot; <br> = \&bscap; + \&combdot; | $\begin{aligned} & \text { EBD0 } \\ & =0299+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL B WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL B + COMBINING DOT ABOVE |
| $\partial$ | \&drotdot; <br> $=\& d r o t ;+\& c o m b d o t ;$ | $\begin{aligned} & \text { EBD1 } \\ & =\text { F109 + } 0307 \end{aligned}$ | LATIN SMALL LETTER D ROTUNDA WITH DOT ABOVE <br> = LATIN SMALL LETTER D ROTUNDA + COMBINING DOT ABOVE |
| $\dot{\mathrm{D}}$ | \&dscapdot; <br> = \&dscap; + \&combdot; | $\begin{aligned} & \text { EBD2 } \\ & =1 \text { D05 + } 0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL D WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL D + COMBINING DOT ABOVE |
| $\dot{F}$ | $\begin{aligned} & \& \text { Finsdot; } \\ & =\& \text { Fins } ;+\& \text { combdot } \end{aligned}$ | $\begin{aligned} & \text { EBD3 } \\ & =\text { F10C }+0307 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR F WITH DOT ABOVE <br> = LATIN CAPITAL LETTER INSULAR F + COMBINING DOT ABOVE |
| $\dot{\mathrm{F}}$ | \&finsdot; <br> = \& fins; + \&combdot; | $\begin{aligned} & \text { EBD4 } \\ & =\text { F10D + } 0307 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH DOT ABOVE = LATIN SMALL LETTER INSULAR F + COMBINING DOT ABOVE |
| $\dot{p}$ | $\begin{aligned} & \text { \&finssemiclosedot; } \\ & =\& \text { finssemiclose; + } \\ & \text { \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { EBD5 } \\ & =\text { F21B } \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER SEMI-CLOSED INSULAR F WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER SEMI-CLOSED INSULAR F } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{B}$ | \&finsclosedot; <br> = \&finsclose; <br> + \&combdot; | $\begin{aligned} & \text { EBD6 } \\ & =\text { F207 } \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER CLOSED INSULAR F WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER CLOSED INSULAR F } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{F}}$ | \&fscapdot; <br> = \&fscap; + \&combdot; | $\begin{aligned} & \text { EBD7 } \\ & =\text { EF05 + } 0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL F WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL F + COMBINING DOT ABOVE |
| $\dot{G}$ | \&gscapdot; <br> = \& gscap; + \&combdot; | $\begin{aligned} & \text { EF20 } \\ & =0262+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL G WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL G + COMBINING DOT ABOVE |


| $\dot{\mathrm{H}}$ | \&hscapdot; = \&hscap; + \&combdot; | $\begin{aligned} & \text { EBDA } \\ & =029 \mathrm{C}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL H WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL H + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{J}$ | \&Jdot; <br> $=\mathrm{J}+\&$ combdot; | $\begin{aligned} & \text { E15C } \\ & =004 A+0307 \end{aligned}$ | LATIN CAPITAL LETTER J WITH DOT ABOVE <br> = LATIN CAPITAL LETTER J + COMBINING DOT ABOVE |
| $\dot{\mathrm{K}}$ | \&Kdot; <br> = K + \& combdot; | E168 $=004 \mathrm{~B}+0307$ | LATIN CAPITAL LETTER K WITH DOT ABOVE <br> = LATIN CAPITAL LETTER K + COMBINING DOT ABOVE |
| ${ }^{\circ}$ | \&kdot; $=\mathrm{k}+\& \operatorname{combdot} ;$ | $\begin{aligned} & \text { E568 } \\ & =006 \mathrm{~B}+0307 \end{aligned}$ | LATIN SMALL LETTER K WITH DOT ABOVE <br> = LATIN SMALL LETTER K + COMBINING DOT ABOVE |
| $\dot{\mathrm{K}}$ | \&kscapdot; <br> = \&kscap; + \&combdot; | $\begin{aligned} & \text { EBDB } \\ & =1 \mathrm{D} 0 \mathrm{~B}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL K WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL K + COMBINING DOT ABOVE |
| $\dot{\mathrm{L}}$ | \&Ldot; <br> $=\mathrm{L}+\&$ combdot; | E19E $=004 \mathrm{C}+0307$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER L WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER L + COMBINING DOT ABOVE } \end{aligned}$ |
| j | \&ldot; <br> $=1+\&$ combdot; | $\begin{aligned} & \text { E59E } \\ & =006 \mathrm{C}+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER L WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER L + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{L}$ | \&lscapdot; <br> = \&lscap; + \&combdot; | $\begin{aligned} & \text { EBDC } \\ & =029 \mathrm{~F}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL L WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL L + COMBINING DOT ABOVE |
| $\dot{\mathbf{M}}$ | \&mscapdot; <br> = \&mscap; + \& combdot; | $\begin{aligned} & \text { EBDD } \\ & =1 D 0 D+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL M WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL M + COMBINING DOT ABOVE |
| $\dot{\mathbf{N}}$ | \&nscapdot; = \&nscap; + \&combdot; | $\begin{aligned} & \text { EF21 } \\ & =0274+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL N WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL N + COMBINING DOT ABOVE |
| $\ddot{\varnothing}$ | \&Oslashdot; <br> $=\&$ Oslash $;+\&$ combdot; | $\begin{aligned} & \text { EBCD } \\ & =00 D 8+0307 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING DOT ABOVE |


| $\dot{\varnothing}$ | \& oslashdot; <br> = \& oslash; + \& combdot; | $\begin{aligned} & \text { EBCE } \\ & =00 \mathrm{~F} 8+0307 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{\mathrm{P}}$ | \&pscapdot; = \&pscap; + \&combdot; | $\begin{aligned} & \text { EBCF } \\ & =1 \text { D } 18+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL P WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL P + COMBINING DOT ABOVE |
| Q | $\begin{aligned} & \& \text { Qdot; } \\ & =\text { Q + \&combdot; } \end{aligned}$ | $\begin{aligned} & \mathrm{E} 282 \\ & =0051+0307 \end{aligned}$ | LATIN CAPITAL LETTER Q WITH DOT ABOVE = LATIN CAPITAL LETTER Q + COMBINING DOT ABOVE |
| $\dot{q}$ | $\begin{aligned} & \& q d o t ; \\ & =\text { q + \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { E682 } \\ & =0071+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER Q WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER Q + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{R}}$ | \&rscapdot; <br> = \&rscap; + \&combdot; | $\begin{aligned} & \text { EF22 } \\ & =0280+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL R WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL R + COMBINING DOT ABOVE |
| $\dot{\text { S }}$ | \&sscapdot; <br> = \&sscap; + \&combdot; | $\begin{aligned} & \mathrm{EF} 23 \\ & =\mathrm{EF} 0 \mathrm{E}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL S WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL S + COMBINING DOT ABOVE |
| $\dot{\mathrm{T}}$ | \&tscapdot; <br> = \&tscap; + \& combdot; | $\begin{aligned} & \text { EF24 } \\ & =1 \mathrm{D} 1 \mathrm{~B}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL T WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL T + COMBINING DOT ABOVE |
| $\dot{\text { U }}$ | $\begin{aligned} & \& U d o t ; \\ & =\mathrm{U}+\& \mathrm{combdot} ; \end{aligned}$ | $\begin{aligned} & \text { E315 } \\ & =0055+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER U WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER U + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{u}}$ | \&udot; $=u+\&$ combdot; | $\begin{aligned} & \text { E715 } \\ & =0075+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER U WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER U + COMBINING DOT ABOVE } \end{aligned}$ |
| $\stackrel{\bullet}{V}$ | \&Vdot; <br> $=\mathrm{V}+$ \&combdot; | $\begin{aligned} & \text { E34C } \\ & =0056+0307 \end{aligned}$ | LATIN CAPITAL LETTER V WITH DOT ABOVE <br> = LATIN CAPITAL LETTER V + COMBINING DOT ABOVE |
| $\dot{\mathrm{V}}$ | \& vdot; $=\mathrm{v}+\& \operatorname{combdot} ;$ | $\begin{aligned} & \text { E74C } \\ & =0076+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER V WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER V + COMBINING DOT ABOVE } \end{aligned}$ |


| 1 | $\begin{aligned} & \& V i n s d o t ; \\ & =\& V i n s ;+\& c o m b d o t ; \end{aligned}$ | $\begin{aligned} & \text { E3E7 } \\ & =\text { F210 }+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER INSULAR V (VEND) WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER INSULAR V (VEND) + COMBINING DOT ABOVE } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| $\dot{\nu}$ | \& vinsdot; <br> = \&vins; + \&combdot; | $\begin{aligned} & \text { E7E7 } \\ & =\text { F211 }+0307 \end{aligned}$ | LATIN SMALL LETTER INSULAR V (VEND) WITH DOT ABOVE <br> = LATIN SMALL LETTER INSULAR V (VEND) + COMBINING DOT ABOVE |

## Subrange 19: Characters with dot below

The Unicode Standard v. 8.0 has no fewer than 38 characters with a dot below, i.e. essentially the whole alphabet, 'A-Z' and 'a-z', in Latin Extended Additional. This subrange contains additional characters with dot below. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DOT BELOW (0323), and this way of encoding has been given as an alternative for each character below.

Note that the position of the dot below raises problems for the font designer, especially in connection with characters that have descenders or diacritics such as the ogonek. Individually designed glyphs may thus be useful even with a smart font solution.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $A$ | \&AAligdotbl; <br> = \&AAlig; + \&combdotbl; | $\begin{aligned} & \text { EFF2 } \\ & =\text { EF90 + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AA WITH DOT BELOW = LATIN CAPITAL LIGATURE AA + COMBINING DOT BELOW |
| ą | \&aaligdotbl; <br> = \&aalig; + \&combdotbl; | $\begin{aligned} & \text { EFF3 } \\ & =\text { EF91 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DOT BELOW <br> = LATIN SMALL LIGATURE AA + COMBINING DOT BELOW |
| A | \&AEligdotbl; <br> = \Æ + \&combdotbl; | $\begin{aligned} & \text { E036 } \\ & =00 \mathrm{C} 6+0323 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DOT BELOW = LATIN CAPITAL LETTER AE + COMBINING DOT BELOW |
| æ | \&aeligdotbl; <br> = \æ + \&combdotbl; | $\begin{aligned} & \mathrm{E} 436 \\ & =00 \mathrm{E} 6+0323 \end{aligned}$ | LATIN SMALL LETTER AE WITH DOT BELOW <br> = LATIN SMALL LETTER AE + COMBINING DOT BELOW |


| $A$ | \&AOligdotbl; <br> = \&AOlig; + \&combdotbl; | EFF4 $=\mathrm{EF} 92+0323$ | LATIN CAPITAL LIGATURE AO WITH DOT BELOW = LATIN CAPITAL LIGATURE AO + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| O. | \&aoligdotbl; <br> = \&aolig; + \&combdotbl; | $\begin{aligned} & \text { EFF5 } \\ & =\text { EF93 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AO WITH DOT BELOW = LATIN SMALL LIGATURE AO + COMBINING DOT BELOW |
| $A$ | \&AUligdotbl; <br> = \&AUlig; + \&combdotbl; | $\begin{aligned} & \text { EFF6 } \\ & =\text { EF94 + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AU WITH DOT BELOW = LATIN CAPITAL LIGATURE AU + COMBINING DOT BELOW |
| ạ | \&auligdotbl; <br> = \&aulig; + \&combdotbl; | $\begin{aligned} & \text { EFF7 } \\ & =\text { EF95 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AU WITH DOT BELOW = LATIN SMALL LIGATURE AU + COMBINING DOT BELOW |
| A | \&AVligdotbl; <br> = \&AVlig; + \&combdotbl; | $\begin{aligned} & \text { EFF8 } \\ & =\text { EF96 + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH DOT BELOW = LATIN CAPITAL LIGATURE AV + COMBINING DOT BELOW |
| a | \&avligdotbl; <br> = \&avlig; + \&combdotbl; | $\begin{aligned} & \text { EFF9 } \\ & =\text { EF97 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH DOT BELOW = LATIN SMALL LIGATURE AV + COMBINING DOT BELOW |
| A | $\begin{aligned} & \& A Y l i g d o t b l ; \\ & =\& A Y l i g ; ~+~ \& c o m b d o t b l ; \end{aligned}$ | $\begin{aligned} & \text { EFFA } \\ & =\text { EF9A + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AY WITH DOT BELOW = LATIN CAPITAL LIGATURE AY + COMBINING DOT BELOW |
| dy | \&ayligdotbl; <br> = \&aylig; + \&combdotbl; | $\begin{aligned} & \text { EFFB } \\ & =\text { EF9B }+0323 \end{aligned}$ | LATIN SMALL LIGATURE AY WITH DOT BELOW = LATIN SMALL LIGATURE AY + COMBINING DOT BELOW |
| B | \&bscapdotbl; <br> = \&bscap; + \&combdotbl; | $\begin{aligned} & \text { EF25 } \\ & =0299+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL B WITH DOT BELOW = LATIN LETTER SMALL CAPITAL B + COMBINING DOT BELOW |
| C | $\begin{aligned} & \& \text { Cdotbl; } \\ & =\mathrm{C}+\& \operatorname{combdotbl} ; \end{aligned}$ | $\begin{aligned} & \text { E066 } \\ & =0043+0323 \end{aligned}$ | LATIN CAPITAL LETTER C WITH DOT BELOW = LATIN CAPITAL LETTER C + COMBINING DOT BELOW |
| C | \&cdotbl; $=\mathrm{c}+\&$ combdotbl; | $\begin{aligned} & \text { E466 } \\ & =0063+0323 \end{aligned}$ | LATIN SMALL LETTER C WITH DOT BELOW <br> = LATIN SMALL LETTER C + COMBINING DOT BELOW |


| D | \& dscapdotbl; <br> = \&dscap; + \&combdotbl; | $\begin{aligned} & \text { EF26 } \\ & =1 \text { D05 + } 0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL D WITH DOT BELOW = LATIN LETTER SMALL CAPITAL D + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| D | \&ETHdotbl; <br> $=\& E T H ;+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { E08F } \\ & =00 \mathrm{D} 0+0323 \end{aligned}$ | LATIN CAPITAL LETTER ETH WITH DOT BELOW = LATIN CAPITAL LETTER ETH + COMBINING DOT BELOW |
| ¢ | \&ethdotbl; <br> = \ð + \&combdotbl; | $\begin{aligned} & \mathrm{E} 48 \mathrm{~F} \\ & =00 \mathrm{~F} 0+0323 \end{aligned}$ | LATIN SMALL LETTER ETH WITH DOT BELOW = LATIN SMALL LETTER ETH + COMBINING DOT BELOW |
| $F$ | \&Fdotbl; $=\mathrm{F}+\& \text { combdotbl } ;$ | $\begin{aligned} & \text { E0EE } \\ & =0046+0323 \end{aligned}$ | LATIN CAPITAL LETTER F WITH DOT BELOW = LATIN CAPITAL LETTER F + COMBINING DOT BELOW |
| $f$ | \&fdotbl; $=\mathrm{f}+\&$ combdotbl; | $\begin{aligned} & \text { E4EE } \\ & =0066+0323 \end{aligned}$ | LATIN SMALL LETTER F WITH DOT BELOW = LATIN SMALL LETTER F + COMBINING DOT BELOW |
| F | \&Finsdotbl; <br> $=\&$ Fins $;+\&$ combdotbl; | E3E5 $=\mathrm{F} 10 \mathrm{C}+0323$ | LATIN CAPITAL LETTER INSULAR F WITH DOT BELOW = LATIN CAPITAL LETTER INSULAR F + COMBINING DOT BELOW |
| F. | $\begin{aligned} & \text { \&finsdotbl; } \\ & =\& \text { fins } ;+\& c o m b d o t b l ; \end{aligned}$ | $\begin{aligned} & \text { E7E5 } \\ & =\text { F10D }+0323 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH DOT BELOW <br> = LATIN SMALL LETTER INSULAR F + COMBINING DOT BELOW |
| G | \&Gdotbl; $=\mathrm{G}+\&$ combdotbl; | $\begin{aligned} & \text { E101 } \\ & =0047+0323 \end{aligned}$ | LATIN CAPITAL LETTER G WITH DOT BELOW = LATIN CAPITAL LETTER G + COMBINING DOT BELOW |
| g | \&gdotbl; <br> = g + \&combdotbl; | $\begin{aligned} & \text { E501 } \\ & =0067+0323 \end{aligned}$ | LATIN SMALL LETTER G WITH DOT BELOW = LATIN SMALL LETTER G + COMBINING DOT BELOW |
| G | $\begin{aligned} & \text { \& gscapdotbl; } \\ & =\text { \&gscap } ;+\& \text { combdotbl } ; \end{aligned}$ | $\begin{aligned} & \text { EF27 } \\ & =0262+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL G WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL G + COMBINING DOT BELOW |
| J. | \& Jdotbl; = J + \&combdotbl; | $\begin{aligned} & \text { E151 } \\ & =004 A+0323 \end{aligned}$ | LATIN CAPITAL LETTER J WITH DOT BELOW = LATIN CAPITAL LETTER J + COMBINING DOT BELOW |


| ). | \&jdotbl; <br> $=\mathrm{j}+\&$ combdotbl; | $\begin{aligned} & \text { E551 } \\ & =006 \mathrm{~A}+0323 \end{aligned}$ | LATIN SMALL LETTER J WITH DOT BELOW <br> = LATIN SMALL LETTER J + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| L | \&lscapdotbl; <br> = \&lscap; + \&combdotbl; | $\begin{aligned} & \text { EF28 } \\ & =029 \mathrm{~F}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL L WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL L + COMBINING DOT BELOW |
| M | \&mscapdotbl; <br> = \&mscap; + \&combdotbl; | $\begin{aligned} & \text { EF29 } \\ & =1 \mathrm{D} 0 \mathrm{D}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL M WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL M + COMBINING DOT BELOW |
| N | \&nscapdotbl; <br> = \&nscap; + \&combdotbl; | EF2A $=0274+0323$ | LATIN LETTER SMALL CAPITAL N WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL $\mathrm{N}+$ COMBINING DOT BELOW |
| $\emptyset$ | \&Oslashdotbl; <br> = \Ø + \& combdotbl; | $\begin{aligned} & \text { EBE0 } \\ & =00 \mathrm{D} 8+0323 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOT BELOW <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING DOT BELOW |
| $\emptyset$ | \&oslashdotbl; <br> = \ø + \&combdotbl; | $\begin{aligned} & \text { EBE1 } \\ & =00 \mathrm{~F} 8+0323 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT BELOW <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING DOT BELOW |
| OO | \&OOligdotbl; <br> = \&OOlig; + \&combdotbl; | $\begin{aligned} & \text { EFFC } \\ & =\text { F20A }+0323 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE OO + COMBINING DOT BELOW |
| 00 | \&ooligdotbl; <br> = \&oolig; + \&combdotbl; | $\begin{aligned} & \text { EFFD } \\ & =\text { F20B }+0323 \end{aligned}$ | LATIN SMALL LIGATURE OO WITH DOT BELOW <br> = LATIN SMALL LIGATURE OO + COMBINING DOT BELOW |
| P | \&Pdotbl; <br> = P + \&combdotbl; | $\begin{aligned} & \text { E26D } \\ & =0050+0323 \end{aligned}$ | LATIN CAPITAL LETTER P WITH DOT BELOW <br> = LATIN CAPITAL LETTER P + COMBINING DOT BELOW |
| p. | \&pdotbl; <br> = p + \&combdotbl; | $\begin{aligned} & \text { E66D } \\ & =0070+0323 \end{aligned}$ | LATIN SMALL LETTER P WITH DOT BELOW <br> $=$ LATIN SMALL LETTER P + COMBINING DOT BELOW |
| Q | \& Qdotbl; <br> $=\mathrm{Q}+$ \&combdotbl; | $\begin{aligned} & \text { E288 } \\ & =0051+0323 \end{aligned}$ | LATIN CAPITAL LETTER Q WITH DOT BELOW <br> = LATIN CAPITAL LETTER Q + COMBINING DOT BELOW |


| 9 | \&qdotbl; $=\mathrm{q}+\&$ combdotbl; | $\begin{aligned} & \text { E688 } \\ & =0071+0323 \end{aligned}$ | LATIN SMALL LETTER Q WITH DOT BELOW = LATIN SMALL LETTER Q + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| R | \&rscapdotbl; <br> = \&rscap; + \&combdotbl; | $\begin{aligned} & \text { EF2B } \\ & =0280+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL R WITH DOT BELOW = LATIN LETTER SMALL CAPITAL R + COMBINING DOT BELOW |
| $?$ | \&rrotdotbl; <br> = \&rrot; + \&combdotbl; | $\begin{aligned} & \mathrm{E} 7 \mathrm{C} 1 \\ & =\mathrm{F} 20 \mathrm{E}+0323 \end{aligned}$ | LATIN SMALL LETTER R ROTUNDA WITH DOT BELOW = LATIN SMALL LETTER R ROTUNDA + COMBINING DOT BELOW |
| S | \&sscapdotbl; <br> = \&sscap; + \&combdotbl; | $\begin{aligned} & \mathrm{EF} 2 \mathrm{C} \\ & =\mathrm{EF} 0 \mathrm{E}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL S WITH DOT BELOW = LATIN LETTER SMALL CAPITAL S + COMBINING DOT BELOW |
| 1 | \&slongdotbl; <br> = \&slong; + \&combdotbl; | $\begin{aligned} & \mathrm{E} 7 \mathrm{C} 2 \\ & =017 \mathrm{~F}+0323 \end{aligned}$ | LATIN SMALL LETTER LONG S WITH DOT BELOW = LATIN SMALL LETTER LONG S + COMBINING DOT BELOW |
| T | \&tscapdotbl; <br> = \&tscap; + \&combdotbl; | $\begin{aligned} & \text { EF2D } \\ & =1 D 1 B+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL T WITH DOT BELOW = LATIN LETTER SMALL CAPITAL T + COMBINING DOT BELOW |
| 1 | $\begin{aligned} & \& \text { Vinsdotbl; } \\ & =\& \text { Vins; }+\& \text { combdotbl; } \end{aligned}$ | $\begin{aligned} & \text { E3E6 } \\ & =\text { F210 }+0323 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR V (VEND) WITH DOT BELOW <br> = LATIN CAPITAL LETTER INSULAR V (VEND) + COMBINING DOT BELOW |
| 1 | \&vinsdotbl; = \&vins; + \& combdotbl; | $\begin{aligned} & \text { E7E6 } \\ & =\text { F211 + } 0323 \end{aligned}$ | LATIN SMALL LETTER INSULAR V (VEND) WITH DOT BELOW = LATIN SMALL LETTER INSULAR V (VEND) + COMBINING DOT BELOW |
| P | \&THORNdotbl; <br> $=\& T H O R N ;+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { E39F } \\ & =00 \mathrm{DE}+0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER THORN WITH DOT BELOW } \\ & \text { = LATIN CAPITAL LETTER THORN + COMBINING DOT BELOW } \end{aligned}$ |
| p | \&thorndotbl; <br> $=$ \þ + \&combdotbl; | $\begin{aligned} & \mathrm{E} 79 \mathrm{~F} \\ & =00 \mathrm{FE}+0323 \end{aligned}$ | LATIN SMALL LETTER THORN WITH DOT BELOW <br> = LATIN SMALL LETTER THORN + COMBINING DOT BELOW |

## Subrange 20: Characters with diaeresis

The Unicode Standard v. 8.0 has double dot (diaeresis) over the vowels 'A', 'a', ' E ', 'e', ' I , ' i ', ' O ', ' o ', ' U ', ' u ', and ' y ' in Latin-1 Supplement, and over ' Y ' in Latin Extended-A, as well as over the consonants 'W' and 'w' in Latin Extended Additional. This subrange contains additional characters with diaeresis. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DIAERESIS (0308), and this way of encoding has been given as an alternative for each character below.

Combinations with consonants and diaeresis are presumably rare in Medieval sources and therefore have not been included in the present recommendation. The list below contains additional vowels that do appear with diaeresis, including the semi-vowels ' j ' and ' v ' (and also, unusually, the ligature 'pp'). Two examples of diagonal diaeresis have been included at the end of the subrange; they belong to Medieval German usage.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\ddot{\mathrm{A}}$ | \&AAliguml; <br> $=\& A A l i g ;+\&$ combuml; | $\begin{aligned} & \text { EFFE } \\ & =\text { EF90 + } 0308 \end{aligned}$ | LATIN CAPITAL LIGATURE AA WITH DIAERESIS = LATIN CAPITAL LIGATURE AA + COMBINING DIAERESIS |
| $\ddot{a}$ | \&aaliguml; <br> = \&aalig; + \&combuml; | $\begin{aligned} & \text { EFFF } \\ & =\text { EF91 + } 0308 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DIAERESIS <br> = LATIN SMALL LIGATURE AA + COMBINING DIAERESIS |
| $\ddot{\text { A }}$ | \&AEliguml; <br> = \Æ + \&combuml; | $\begin{aligned} & \text { E042 } \\ & =00 \mathrm{C} 6+0308 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DIAERESIS <br> = LATIN CAPITAL LETTER AE + COMBINING DIAERESIS |
| $\ddot{æ}$ | \&aeliguml; <br> = \æ + \&combuml; | $\begin{aligned} & \text { E442 } \\ & =00 \mathrm{E} 6+0308 \end{aligned}$ | LATIN SMALL LETTER AE WITH DIAERESIS <br> = LATIN CAPITAL LETTER AE + COMBINING DIAERESIS |
| J | \& Juml; <br> = J + \&combuml; | $\begin{aligned} & \text { EBE2 } \\ & =004 \mathrm{~A}+0308 \end{aligned}$ | LATIN CAPITAL LETTER J WITH DIAERESIS <br> = LATIN CAPITAL LETTER J + COMBINING DIAERESIS |
| ¢ | $\begin{aligned} & \& j u m l \\ & =\mathrm{j}+\& \mathrm{combuml} ; \end{aligned}$ | $\begin{aligned} & \text { EBE3 } \\ & =006 \mathrm{~A}+0308 \end{aligned}$ | LATIN SMALL LETTER J WITH DIAERESIS = LATIN SMALL LETTER J + COMBINING DIAERESIS |


| 0 O | $\begin{aligned} & \text { \&OOliguml; } \\ & \text { = \&OOlig; + \&combuml; } \end{aligned}$ | $\begin{aligned} & \text { EBE4 } \\ & =\text { F20A }+0308 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE OO + COMBINING DIAERESIS |
| :---: | :---: | :---: | :---: |
| 000 | \&ooliguml; <br> = \&oolig; + \& combuml; | $\begin{aligned} & \text { EBE5 } \\ & =\text { F20B }+0308 \end{aligned}$ | LATIN SMALL LIGATURE OO WITH DIAERESIS <br> = LATIN SMALL LIGATURE OO + COMBINING DIAERESIS |
| $\ddot{\mathrm{P}}$ | \&PPliguml; <br> = \&PPlig; + \&combuml; | $\begin{aligned} & \text { EBE6 } \\ & =\text { EEDD + } 0308 \end{aligned}$ | LATIN CAPITAL LIGATURE PP WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE PP + COMBINING DIAERESIS |
| $\ddot{\mathrm{P}}$ | \&ppliguml; <br> = \&pplig; + \&combuml; | $\begin{aligned} & \text { EBE7 } \\ & =\text { EED6 + } 0308 \end{aligned}$ | LATIN SMALL LIGATURE PP WITH DIAERESIS <br> = LATIN SMALL LIGATURE PP + COMBINING DIAERESIS |
| $\ddot{\mathrm{V}}$ | $\begin{aligned} & \& V u m l ; \\ & =\mathrm{V}+\& \mathrm{combuml} ; \end{aligned}$ | $\begin{aligned} & \text { E342 } \\ & =0056+0308 \end{aligned}$ | LATIN CAPITAL LETTER V WITH DIAERESIS <br> = LATIN CAPITAL LETTER V + COMBINING DIAERESIS |
| $\ddot{\mathrm{V}}$ | $\begin{aligned} & \text { \& vuml; } \\ & =\text { v + \&combuml; } \end{aligned}$ | $\begin{aligned} & \text { E742 } \\ & =0076+0308 \end{aligned}$ | LATIN SMALL LETTER V WITH DIAERESIS <br> = LATIN SMALL LETTER V + COMBINING DIAERESIS |
| WI | \&YYliguml; <br> = \&YYlig; + \&combuml; | $\begin{aligned} & \text { EBE8 } \\ & =\text { F212 }+0308 \end{aligned}$ | LATIN CAPITAL LIGATURE YY WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE YY + COMBINING DIAERESIS |
| $\ddot{\text { W }}$ | \&yyliguml; <br> = \&yylig; + \&combuml; | $\begin{aligned} & \text { EBE9 } \\ & =\text { F213 }+0308 \end{aligned}$ | LATIN SMALL LIGATURE YY WITH DIAERESIS <br> = LATIN SMALL LIGATURE YY + COMBINING DIAERESIS |
| ä | \&adiaguml; | E8D5 | LATIN SMALL LETTER A WITH DIAGONAL DIAERESIS |
| Ö | \&odiaguml; | E8D7 | LATIN SMALL LETTER O WITH DIAGONAL DIAERESIS |

## Subrange 2 I: Characters with curl above (reversed ogonek)

The Unicode Standard v. 8.0 has a curl above in combination with ' A ', 'a', ' I , ' i ', ' O ', ' o ', ' Y ' and ' y ' in Latin Extended Additional. This curl, which is described as a hook in the Standard, is loose and has a different design from the fixed one used in e.g. Medieval Nordic sources. In fact, the latter form should rather be described as a reversed ogonek. For this reason 'A', 'a', 'I', 'i', ' O ', 'o', ' $\mathrm{Y}^{\prime}$, ' $\mathrm{y}^{\prime}$, and a few other characters have been given separate code points in the list below.

The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK ABOVE (1DCE), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| A | \&Acurl; <br> = A + \&combcurl; | $\begin{aligned} & \text { E033 } \\ & =0041+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER A WITH CURL = LATIN CAPITAL LETTER A + COMBINING OGONEK ABOVE |
| ả | \&acurl; <br> = a + \&combcurl; | $\begin{aligned} & \text { E433 } \\ & =0061+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER A WITH CURL = LATIN SMALL LETTER A + COMBINING OGONEK ABOVE |
| $A^{\prime}$ | \&AEligcurl; <br> = \Æ + \&combcurl; | $\begin{aligned} & \text { EBEA } \\ & =00 \mathrm{C} 6+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER AE WITH CURL <br> = LATIN CAPITAL LETTER AE + COMBINING OGONEK ABOVE |
| æ | \&aeligcurl; <br> = \æ + \&combcurl; | EBEB $=00 \mathrm{E} 6+1 \mathrm{DCE}$ | LATIN SMALL LETTER AE WITH CURL = LATIN CAPITAL LETTER AE + COMBINING OGONEK ABOVE |
| E | $\begin{aligned} & \text { \&Ecurl; } \\ & \text { = E + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E0E9 } \\ & =0045+1 \mathrm{DCE} \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH CURL } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK ABOVE } \end{aligned}$ |
| ė | \&ecurl; <br> = e + \&combcurl; | $\begin{aligned} & \text { E4E9 } \\ & =0065+1 D C E \end{aligned}$ | LATIN SMALL LETTER E WITH CURL <br> = LATIN SMALL LETTER E + COMBINING OGONEK ABOVE |
| ${ }^{2}$ | $\begin{aligned} & \text { \& Icurl; } \\ & \text { = I + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E12A } \\ & =0049+1 D C E \end{aligned}$ | LATIN CAPITAL LETTER I WITH CURL <br> = LATIN CAPITAL LETTER I + COMBINING OGONEK ABOVE |


| 1 | \&icurl; = i + \&combcurl; | $\begin{aligned} & \text { E52A } \\ & =0069+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER I WITH CURL = LATIN SMALL LETTER I + COMBINING OGONEK ABOVE |
| :---: | :---: | :---: | :---: |
| ${ }^{2}$ | \& Jcurl; = J + \& combcurl; | $\begin{aligned} & \text { E163 } \\ & =0049+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER J WITH CURL = LATIN CAPITAL LETTER J + COMBINING OGONEK ABOVE |
| \} | \&jcurl; = j + \&combcurl; | $\begin{aligned} & \text { E563 } \\ & =006 \mathrm{~A}+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER J WITH CURL = LATIN SMALL LETTER J + COMBINING OGONEK ABOVE |
| 0 | $\begin{aligned} & \& \text { Ocurl; } \\ & =\mathrm{O}+\& \operatorname{combcurl} ; \end{aligned}$ | $\begin{aligned} & \text { E3D3 } \\ & =004 \mathrm{~F}+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER O WITH CURL = LATIN CAPITAL LETTER O + COMBINING OGONEK ABOVE |
| $\bigcirc$ | \& ocurl; = o + \&combcurl; | $\begin{aligned} & \text { E7D3 } \\ & =006 \mathrm{~F}+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER O WITH CURL = LATIN SMALL LETTER O + COMBINING OGONEK ABOVE |
| ¢ | $\begin{aligned} & \& \text { Oslashcurl; } \\ & =\& \text { Oslash; + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E3D } 4 \\ & =00 \mathrm{D} 8+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND CURL <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING OGONEK ABOVE |
| Ø | $\begin{aligned} & \text { \&oslashcurl; } \\ & =\text { \&oslash; + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E7D4 } \\ & =00 \mathrm{~F} 8+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND CURL <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING OGONEK ABOVE |
| $U$ | $\begin{aligned} & \text { \&Ucurl; } \\ & =\text { U + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E331 } \\ & =0055+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER U WITH CURL <br> = LATIN CAPITAL LETTER U + COMBINING OGONEK ABOVE |
| ù | $\begin{aligned} & \text { \&ucurl; } \\ & =\text { u + \& combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E731 } \\ & =0075+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER U WITH CURL <br> = LATIN SMALL LETTER U + COMBINING OGONEK ABOVE |
| 2 | $\begin{aligned} & \text { \& Ycurl; } \\ & =\mathrm{Y}+\text { \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E385 } \\ & =0059+1 \mathrm{DCE} \end{aligned}$ | LATIN CAPITAL LETTER Y WITH CURL <br> = LATIN CAPITAL LETTER Y + COMBINING OGONEK ABOVE |
| y | \&ycurl; = y + \&combcurl; | $\begin{aligned} & \text { E785 } \\ & =0079+1 \mathrm{DCE} \end{aligned}$ | LATIN SMALL LETTER Y WITH CURL <br> = LATIN SMALL LETTER Y + COMBINING OGONEK ABOVE |

## Subrange 22: Characters with ogonek

The Unicode Standard v. 8.0 has an ogonek with 'A', 'a', 'E' and 'e' in Latin Extended- $A$, and ' O ' and ' o ' in Latin Extended-B. This subrange contains additional characters with ogonek. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\underset{\text { E }}{ }$ | \&AEligogon; <br> = \Æ + \&combogon; | $\begin{aligned} & \text { E040 } \\ & =00 \mathrm{C} 6+0328 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH OGONEK <br> = LATIN CAPITAL LETTER AE + COMBINING OGONEK |
| æ | \&aeligogon; <br> = \æ + \&combogon; | $\begin{aligned} & \text { E440 } \\ & =00 \mathrm{E} 6+0328 \end{aligned}$ | LATIN SMALL LETTER AE WITH OGONEK = LATIN SMALL LETTER AE + COMBINING OGONEK |
| $A$ | \&AVligogon; <br> = \&AVlig; + \&combogon; | $\begin{aligned} & \text { EBF0 } \\ & =\text { EF96 + } 0328 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH OGONEK = LATIN CAPITAL LIGATURE AV + COMBINING OGONEK |
| a) | \&avligogon; <br> = \&avlig; + \&combogon; | $\begin{aligned} & \text { EBF1 } \\ & =\text { EF97 + } 0328 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH OGONEK = LATIN SMALL LIGATURE AV + COMBINING OGONEK |
| $C$ | \& Cogon; $=\mathrm{C}+\text { \&combogon; }$ | $\begin{aligned} & \text { E076 } \\ & =0043+0328 \end{aligned}$ | LATIN CAPITAL LETTER C WITH OGONEK = LATIN CAPITAL LETTER C + COMBINING OGONEK |
| $\mathcal{C}$ | \& cogon; <br> = c $+\&$ combogon; | $\begin{aligned} & \text { E476 } \\ & =0063+0328 \end{aligned}$ | LATIN SMALL LETTER C WITH OGONEK = LATIN SMALL LETTER C + COMBINING OGONEK |
| $\frac{1}{2}$ | \&inodotogon; <br> = \ı + \&combogon; | $\begin{aligned} & \text { E8DD } \\ & =0131+0328 \end{aligned}$ | LATIN SMALL LETTER DOTLESS I WITH OGONEK = LATIN SMALL LETTER DOTLESS I + COMBINING OGONEK |
| $\varnothing$ | \&Oslashogon; <br> = \Ø + \&combogon; | $\begin{aligned} & \text { E255 } \\ & =00 \mathrm{D} 8+0328 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND OGONEK = LATIN CAPITAL LETTER O WITH STROKE + COMBINING OGONEK |


| $\emptyset$ | \&oslashogon; <br> = \ø + \&combogon; | $\begin{aligned} & \mathrm{E} 655 \\ & =00 \mathrm{~F} 8+0328 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND OGONEK <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING OGONEK |
| :---: | :---: | :---: | :---: |
| C | \&OEligogon; <br> = \Œ + \&combogon; | $\begin{aligned} & \text { E262 } \\ & =0152+0328 \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH OGONEK <br> = LATIN CAPITAL LIGATURE OE + COMBINING OGONEK |
| @ | \&oeligogon; <br> = \œ + \&combogon; | $\begin{aligned} & \text { E662 } \\ & =0153+0328 \end{aligned}$ | LATIN SMALL LIGATURE OE WITH OGONEK = LATIN SMALL LIGATURE OE + COMBINING OGONEK |
| $T$ | \&Togon; <br> $=\mathrm{T}+\&$ combogon; | $\begin{aligned} & \text { E2EE } \\ & =0054+0328 \end{aligned}$ | LATIN CAPITAL LETTER T WITH OGONEK <br> = LATIN CAPITAL LETTER T + COMBINING OGONEK |
| $t$ | \&togon; $=\mathrm{t}+$ \&combogon; | $\begin{aligned} & \text { E6EE } \\ & =0074+0328 \end{aligned}$ | LATIN SMALL LETTER T WITH OGONEK = LATIN SMALL LETTER T + COMBINING OGONEK |

## Subrange 23: Characters with breve

The Unicode Standard v. 8.0 has a breve over the vowels 'A', 'a', 'E', 'e', 'I', 'i', 'O', 'o', 'U' and 'u' in Latin Extended-A. This subrange contains additional characters with breve. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING BREVE (0306), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\breve{\mathrm{AE}}$ | \&AEligbreve; <br> $=\& A E l i g ; ~+~ \& c o m b b r e v e ; ~$ | E03F <br> $=00 \mathrm{C} 6+0306$ | LATIN CAPITAL LETTER AE WITH BREVE <br> = LATIN CAPITAL LETTER AE + COMBINING BREVE |
| $\breve{\npreceq}$ | \&aeligbreve; <br> $=$ \æ $+\& c o m b b r e v e ; ~$ | E43F <br> $=00 E 6+0306$ | LATIN SMALL LETTER AE WITH BREVE <br> = LATIN SMALL LETTER AE + COMBINING BREVE |


| $\breve{\varnothing}$ | \&Oslashbreve; <br> $=$ \Ø + \&combbreve; | EBEE <br> $=00 \mathrm{D} 8+0306$ | LATIN CAPITAL LETTER O WITH STROKE AND BREVE <br> $=$ LATIN CAPITAL LETTER O WITH STROKE + COMBINING BREVE |
| :--- | :--- | :--- | :--- |
| $\breve{\varnothing}$ | \&oslashbreve; <br> $=$ \&oslash: $+\& c o m b b r e v e ; ~$ | EBEF <br> $=00 \mathrm{~F} 8+0306$ | LATIN SMALL LETTER O WITH STROKE AND BREVE <br> $=$ LATIN SMALL LETTER O WITH STROKE + COMBINING BREVE |
| $\breve{\mathrm{Y}}$ | \&Ybreve; <br> $=\mathrm{Y}+\& c o m b b r e v e ; ~$ | E376 <br> $=0054+0306$ | LATIN CAPITAL LETTER Y WITH BREVE <br> $=$ LATIN CAPITAL LETTER Y + COMBINING BREVE |
| $\breve{\mathrm{y}}$ | \&ybreve; <br> $=\mathrm{y}+$ \&combbreve; | E776 <br> $=0079+0306$ | LATIN SMALL LETTER Y WITH BREVE <br> = LATIN SMALL LETTER Y + COMBINING BREVE |

## Subrange 24: Characters with breve below

The Unicode Standard v. 8.0 has no precomposed characters with inverted breve below. This subrange contains two frequently occurring characters in grammars of Medieval Nordic and sometimes also in the transcription of Medieval sources, typically used for the asyllabic (consonantal) sound value of these characters, i.e. [j] and [v]. The Unicode Standard advises encoding characters of this type with the COMBINING INVERTED BREVE BELOW (032F).

| Glyph | MuFl entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\underset{\sim}{\mathrm{i}}$ | \&ibrevinvbl; <br> $=\mathrm{i}+\& c o m b b r e v i n v b l ; ~$ | E548 <br> $=0069+032 \mathrm{~F}$ | LATIN SMALL LETTER I WITH INVERTED BREVE BELOW <br> $=$ LATIN SMALL LETTER I + COMBINING INVERTED BREVE BELOW |
| $\mathbf{u}$ | \&ubrevinvbl; <br> $=\mathrm{u}+\& c o m b b r e v i n v b l ; ~$ | E727 <br> $=0075+032 \mathrm{~F}$ | LATIN SMALL LETTER U WITH INVERTED BREVE BELOW <br> $=$ LATIN SMALL LETTER U + COMBINING INVERTED BREVE BELOW |

## Subrange 25: Characters with circumflex

The Unicode Standard v. 8.0 has 26 precomposed characters with circumflex, viz. over 'A', 'a', 'C', 'c', 'E', 'e', 'G', 'g', 'H', 'h', 'I', 'i', 'J', 'j', 'O', 'o', 'S', ' $s$ ', ' $U$ ', ' $u$ ', ' $W$ ', ' $w$ ', ' $Y$ ', ' $y$ ', ' $Z$ ' and ' $z$ '. This subrange contains additional characters with circumflex. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING CIRCUMFLEX ACCENT (0302), and this way of encoding has been given as an alternative for each character below.

The character pairs «ea» and <eu» are used with circumflex spanning both characters in Post-Medieval Faroese sources, but, because some of these texts (like many Icelandic ones) are discussed or cited in the context of Medieval sources they have been included here.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\hat{\mathbf{n}}$ | \&ncirc; $=\mathrm{n}+\&$ combcirc; | $\begin{aligned} & \text { E5D7 } \\ & =006 \mathrm{E}+0302 \end{aligned}$ | LATIN SMALL LETTER N WITH CIRCUMFLEX = LATIN SMALL LETTER N + COMBINING CIRCUMFLEX ACCENT |
| $\hat{\mathrm{V}}$ | $\begin{aligned} & \& V c i r c \\ & =\mathrm{V}+\& \mathrm{combcirc} \end{aligned}$ | $\begin{aligned} & \text { E33B } \\ & =0056+0302 \end{aligned}$ | LATIN CAPITAL LETTER V WITH CIRCUMFLEX = LATIN CAPITAL LETTER V + COMBINING CIRCUMFLEX ACCENT |
| $\hat{\mathrm{V}}$ | \& vcirc; $=\mathrm{v}+\& \mathrm{combcirc} ;$ | $\begin{aligned} & \text { E73B } \\ & =0076+0302 \end{aligned}$ | LATIN SMALL LETTER V WITH CIRCUMFLEX = LATIN SMALL LETTER V + COMBINING CIRCUMFLEX ACCENT |
| eat | $\begin{aligned} & \text { \&eacombcirc; } \\ & =\text { e + a } \\ & \text { + \&combcircdbl; } \end{aligned}$ | $\begin{aligned} & \text { EBBD } \\ & =0065+0061 \\ & +1 D C D \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER EA WITH CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER E + LATIN SMALL LETTER A } \\ & \text { + COMBINING DOUBLE CIRCUMFLEX ABOVE } \end{aligned}$ |
| êu | $\begin{aligned} & \text { \&eucombcirc; } \\ & =\text { e + u } \\ & \text { + \&combcircdbl; } \end{aligned}$ | $\begin{aligned} & \text { EBBE } \\ & =0065+0075 \\ & +1 D C D \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER EU WITH CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER E + LATIN SMALL LETTER U } \\ & \text { + COMBINING DOUBLE CIRCUMFLEX ABOVE } \end{aligned}$ |

## Subrange 26: Characters with ring above

The Unicode Standard v. 8.0 has six precomposed characters with ring above, viz. 'A' and 'a' in Latin-1 Supplement (p. 23 and p. 25), 'U' and 'u' in Latin Ex-tended-A (p. 31), and 'w' and 'y' in Latin Extended-B (p. 54). This subrange contains four additional characters with ring above. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING RING ABOVE (030A), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| æ | \&aeligring; <br> = \æ + \&combring; | $\begin{aligned} & \text { E8D1 } \\ & =00 \mathrm{E} 6+030 \mathrm{~A} \end{aligned}$ | LATIN SMALL LETTER AE WITH RING ABOVE <br> = LATIN SMALL LETTER AE + COMBINING RING ABOVE |
| e̊ | \&ering; $=\mathrm{e}+\&$ combring; | $\begin{aligned} & \text { E4CF } \\ & =0065+030 A \end{aligned}$ | LATIN SMALL LETTER E WITH RING ABOVE <br> = LATIN SMALL LETTER E + COMBINING RING ABOVE |
| Oㅇ | \&oring; = o + \&combring; | $\begin{aligned} & \text { E637 } \\ & =006 \mathrm{~F}+030 \mathrm{~A} \end{aligned}$ | LATIN SMALL LETTER O WITH RING ABOVE <br> = LATIN SMALL LETTER O + COMBINING RING ABOVE |
| $\stackrel{\circ}{\mathrm{V}}$ | \& vring; $=\mathrm{v}+\&$ combring; | $\begin{aligned} & \text { E743 } \\ & =0076+030 \mathrm{~A} \end{aligned}$ | LATIN SMALL LETTER V WITH RING ABOVE <br> = LATIN SMALL LETTER V + COMBINING RING ABOVE |

## Subrange 27: Characters with ring below

The Unicode Standard v. 8.0 has two precomposed characters with ring below, 'A' and 'a', code points 1E00 and 1E01 in Latin Extended Additional (not included in this recommendation). This subrange contains four other precomposed character with ring below. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING RING BELOW (0325), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| 1 | \& lringbl; <br> $=1+$ \& combringbl; | $\begin{aligned} & \text { E5A4 } \\ & =006 \mathrm{C}+0325 \end{aligned}$ | LATIN SMALL LETTER L WITH RING BELOW <br> = LATIN SMALL LETTER L + COMBINING RING BELOW |
| m | \&mringbl; <br> $=\mathrm{m}+$ \&combringbl; | $\begin{aligned} & \text { E5C5 } \\ & =006 \mathrm{D}+0325 \end{aligned}$ | LATIN SMALL LETTER M WITH RING BELOW <br> = LATIN SMALL LETTER M + COMBINING RING BELOW |
| n | \&nringbl; <br> $=\mathrm{n}+$ \&combringbl; | $\begin{aligned} & \text { E5EE } \\ & =006 \mathrm{E}+0325 \end{aligned}$ | LATIN SMALL LETTER N WITH RING BELOW <br> $=$ LATIN SMALL LETTER $\mathrm{N}+$ COMBINING RING BELOW |
| r | \&rringbl; <br> = r + \&combringbl; | $\begin{aligned} & \text { E6A3 } \\ & =0072+0325 \end{aligned}$ | LATIN SMALL LETTER R WITH RING BELOW <br> = LATIN SMALL LETTER R + COMBINING RING BELOW |

## Subrange 28: Characters with tilde

The Unicode Standard v. 8.0 has 16 precomposed characters with tilde above, viz. 'A', 'a', ' O ', 'o', ' N ' and ' n ' in Latin-1 Supplement, ' I ', ' i ', ' U ' and ' u ' in Latin Extended-A, and ' E ', ' e ', ' V ', ' v ', ' Y ' and ' y ' in Latin Extended Additional (the latter ten characters are not included in this recommendation). This subrange contains one other precomposed character with tilde. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING TILDE (0303), and this way of encoding has been given as an alternative below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\tilde{\mathrm{q}}$ | \&qbardestilde; <br> =\&qbardes; <br> $+\& c o m b t i l d e ; ~$ | E68B <br> $=$ A757 <br> +0303 | LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER AND TILDE <br> = LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER <br> + COMBINING TILDE |

## Subrange 29: Characters with curly bar above

The Unicode Standard v. 8.0 has no precomposed characters with a curly bar above. The curly bar was frequently used in handwriting to distinguish the character ' $u$ ' from other minims, i.e. ' 1 ', ' $m$ ', and especially ' $n$ '. The curly bar should be kept apart from the tilde, which typically is used for nasalisation. From a functional point of view, the curly bar is similar to the dot above ' $i$ '. The latter character was written without any distinctive mark in a great number of Medieval manuscripts, viz. ' 1 ', but the dot (or an accent) was increasingly used in order to distinguish ' 1 ' from other minims.
$\left.\begin{array}{|l|l|l|l|}\hline \text { Glyph } & \text { MUFI entity } & \text { MUFI code point } & \text { MUFI descriptive name } \\ \hline \tilde{\mathrm{u}} & \begin{array}{l}\text { \&ucurlbar; } \\ \text { i }+ \text { \&combcurlbar; }\end{array} & \begin{array}{l}\text { EBBF } \\ =0075\end{array} & \text { F1CC }\end{array} \quad \begin{array}{l}\text { LATIN SMALL LETTER U WITH CURLY BAR ABOVE } \\ \text { = LATIN SMALL LETTER U + COMBINING CURLY BAR ABOVE }\end{array}\right]$

## Subrange 30: Characters with vertical bar above

The Unicode Standard v. 8.0 has no precomposed characters with a vertical line above. This subrange contains four precomposed characters with this diacritical mark, attested in Middle and Early New High German sources. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING VERTICAL LINE ABOVE (030D), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| U'U $^{\text {GUvertline; }}$\&Uvine; <br> $=$ U + \&combvertlineE324 <br> $=0055+030 \mathrm{D}$ | LATIN CAPITAL LETTER U WITH VERTICAL LINE ABOVE <br> = LATIN CAPITAL LETTER U + COMBINING VERTICAL LINE ABOVE |  |  |
| $\dot{U}$ | \&uvertline; <br> $=u+\& c o m b v e r t l i n e ; ~$ | E724 <br> $=0075+030 \mathrm{D}$ | LATIN SMALL LETTER U WITH VERTICAL LINE ABOVE <br> $=$ LATIN SMALL LETTER U + COMBINING VERTICAL LINE ABOVE |


| $\mathbf{V}$ | \&Vvertline; <br> $=\mathrm{V}+\& c o m b v e r t l i n e ; ~$ | E34E <br> $=0056+030 \mathrm{D}$ | LATIN CAPITAL LETTER V WITH VERTICAL LINE ABOVE <br> $=$ LATIN CAPITAL LETTER V + COMBINING VERTICAL LINE ABOVE |
| :--- | :--- | :--- | :--- |
| $\dot{\mathrm{V}}$ | \&vvertline; <br> $=\mathrm{v}+\& c o m b v e r t l i n e ; ~$ | E74F <br> $=0076+030 \mathrm{D}$ | LATIN SMALL LETTER V WITH VERTICAL LINE ABOVE <br> $=$ <br> LATIN SMALL LETTER V + COMBINING VERTICAL LINE ABOVE |

## Subrange 3 I: Characters with superscript letters

The Unicode Standard v. 8.0 has no precomposed characters with superscript letters. This subrange contains a number of combinations attested in Medieval German sources, e.g. in the grammar by Agathe Lasch, Mittelniederdeutsche Grammatik, Halle 1914. Many combinations have also been attested in the publications of Middle and Early New High German sources from Switzerland (Rechtsquellenstiftung des Schweizerischen Juristenvereins). Some of the combinations below also belong to the font Mediaevum, which is based on many Medieval German sources. This subrange has a total of 44 precomposed characters.

In order to make the combinations in this subrange (and similar combinations), Unicode would advice using a sequence of the baseline character and one of the combining characters in Combining Diacritical Marks (0363-036F) or Combining Diacritical Marks Supplement (1DD4-1DE6).

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| Å | \&Aesup; = A + \&esup; | $\begin{aligned} & \text { E02C } \\ & =0041+0364 \end{aligned}$ | LATIN CAPITAL LETTER A WITH LATIN SMALL LETTER E ABOVE = LATIN CAPITAL LETTER A + COMBINING LATIN SMALL LETTER E |
| à | $\begin{aligned} & \text { \&aesup; } \\ & =\mathrm{a}+\text { \&esup; } \end{aligned}$ | $\begin{aligned} & \text { E42C } \\ & =0061+0364 \end{aligned}$ | LATIN SMALL LETTER A WITH LATIN SMALL LETTER E ABOVE <br> = LATIN SMALL LETTER A + COMBINING LATIN SMALL LETTER E |
| a | $\begin{aligned} & \text { \&aisup; } \\ & =\mathrm{a}+\& \text { isup; } \end{aligned}$ | $\begin{aligned} & \text { E8E0 } \\ & =0061+0365 \end{aligned}$ | LATIN SMALL LETTER A WITH LATIN SMALL LETTER I ABOVE <br> = LATIN SMALL LETTER A + COMBINING LATIN SMALL LETTER I |
| $\stackrel{0}{\text { a }}$ | \&aosup; $=\mathrm{a}+\text { \&osup; }$ | $\begin{aligned} & \text { E42D } \\ & =0061+0366 \end{aligned}$ | LATIN SMALL LETTER A WITH LATIN SMALL LETTER O ABOVE <br> = LATIN SMALL LETTER A + COMBINING LATIN SMALL LETTER O |


| ${ }^{\text {u }}$ | \&ausup; = a + \&usup; | E8E1 $=0061+0367$ | LATIN SMALL LETTER A WITH LATIN SMALL LETTER U ABOVE = LATIN SMALL LETTER A + COMBINING LATIN SMALL LETTER U |
| :---: | :---: | :---: | :---: |
| a | \&avsup; = a + \& vsup; | $\begin{aligned} & \mathrm{E} 42 \mathrm{E} \\ & =0061+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER A WITH LATIN SMALL LETTER V ABOVE = LATIN SMALL LETTER A + COMBINING LATIN SMALL LETTER V |
| $\stackrel{\text { a }}{\text { E }}$ | \&Easup; $=\mathrm{E}+$ \&asup; | $\begin{aligned} & \text { E0E1 } \\ & =0045+0363 \end{aligned}$ | LATIN CAPITAL LETTER E WITH LATIN SMALL LETTER A ABOVE = LATIN CAPITAL LETTER E + COMBINING LATIN SMALL LETTER A |
| $\mathrm{e}^{\text {a }}$ | \&easup; = e + \& asup; | E4E1 $=0065+0363$ | LATIN SMALL LETTER E WITH LATIN SMALL LETTER A ABOVE = LATIN SMALL LETTER E + COMBINING LATIN SMALL LETTER A |
| e | \&eesup; = e + \&esup; | E8E2 $=0065+0364$ | LATIN SMALL LETTER E WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER E + COMBINING LATIN SMALL LETTER E |
| e ${ }^{\text {e }}$ | \&eisup; = e + \&isup; | $\begin{aligned} & \text { E4E2 } \\ & =0065+0365 \end{aligned}$ | LATIN SMALL LETTER E WITH LATIN SMALL LETTER I ABOVE = LATIN SMALL LETTER E + COMBINING LATIN SMALL LETTER I |
| e | \&eosup; = e + \& osup; | E8E3 $=0065+0366$ | LATIN SMALL LETTER E WITH LATIN SMALL LETTER O ABOVE = LATIN SMALL LETTER E + COMBINING LATIN SMALL LETTER O |
| $\mathrm{e}^{\text {v }}$ | \&evsup; = e + \&vsup; | $\begin{aligned} & \text { E4E3 } \\ & =0065+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER E WITH LATIN SMALL LETTER V ABOVE = LATIN SMALL LETTER E + COMBINING LATIN SMALL LETTER V |
| ${ }_{1}^{\mathrm{a}}$ | \&iasup; = i + \& asup; | E8E4 $=0069+0363$ | LATIN SMALL LETTER I WITH LATIN SMALL LETTER A ABOVE = LATIN SMALL LETTER I + COMBINING LATIN SMALL LETTER A |
| e | \&iesup; = i + \&esup; | E54A $=0069+0364$ | LATIN SMALL LETTER I WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER I + COMBINING LATIN SMALL LETTER E |

$\left.\left.\begin{array}{|l|l|l|l|}\hline \begin{array}{l}\text { o } \\ \mathbf{1}\end{array} & \begin{array}{l}\text { \&iosup; } \\ \text { = i + \&osup; }\end{array} & \begin{array}{l}\text { E8E5 } \\ =0069\end{array}+0366\end{array} \right\rvert\, \begin{array}{l}\text { LATIN SMALL LETTER I WITH LATIN SMALL LETTER O ABOVE } \\ \text { = LATIN SMALL LETTER I + COMBINING LATIN SMALL LETTER O }\end{array}\right]$

| $\mathrm{O}_{\mathrm{O}}^{\mathrm{u}}$ | $\begin{aligned} & \& o u s u p ; \\ & =o+\& u s u p ; \end{aligned}$ | $\begin{aligned} & \mathrm{E} 646 \\ & =006 \mathrm{~F}+0367 \end{aligned}$ | LATIN SMALL LETTER O WITH LATIN SMALL LETTER U ABOVE = LATIN SMALL LETTER O + COMBINING LATIN SMALL LETTER U |
| :---: | :---: | :---: | :---: |
| O | $\begin{aligned} & \& \text { ovsup; } \\ & \text { = o + \&vsup; } \end{aligned}$ | $\begin{aligned} & \mathrm{E} 647 \\ & =006 \mathrm{~F}+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER O WITH LATIN SMALL LETTER V ABOVE = LATIN SMALL LETTER O + COMBINING LATIN SMALL LETTER V |
| $\stackrel{\mathrm{e}}{\mathrm{r}}$ | \&resup; = r + \&esup; | $\begin{aligned} & \text { E8EA } \\ & =0072+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER R WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER R + COMBINING LATIN SMALL LETTER E |
| $\stackrel{\text { a }}{\text { u }}$ | \&uasup; = u + \&asup; | $\begin{aligned} & \text { E8EB } \\ & =0075+0363 \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER A ABOVE = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER A |
| $\mathrm{U}^{\mathrm{e}}$ | \&Uesup; $=\mathrm{U}+\text { \&esup }$ | $\begin{aligned} & \text { E32B } \\ & =0055+0364 \end{aligned}$ | LATIN CAPITAL LETTER U WITH LATIN SMALL LETTER E ABOVE = LATIN CAPITAL LETTER U + COMBINING LATIN SMALL LETTER E |
| - ${ }^{\text {u }}$ | \&uesup; = u + \&esup; | $\begin{aligned} & \text { E72B } \\ & =0075+0364 \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER E |
| i | $\begin{aligned} & \text { \&uisup; } \\ & =\mathrm{u}+\text { \&isup; } \end{aligned}$ | $\begin{aligned} & \text { E72C } \\ & =0075+0365 \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER I ABOVE <br> = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER I |
| $\mathrm{U}^{\circ}$ | \&Uosup; $=\mathrm{U}+\text { \&osup }$ | $\begin{aligned} & \text { E32D } \\ & =0055+0366 \end{aligned}$ | LATIN CAPITAL LETTER U WITH LATIN SMALL LETTER O ABOVE = LATIN CAPITAL LETTER U + COMBINING LATIN SMALL LETTER O |
| $\stackrel{\mathrm{o}}{\mathrm{u}}$ | \&uosup; <br> = u + \& osup; | $\begin{aligned} & \text { E72D } \\ & =0075+0366 \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER O ABOVE = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER O |
| $\stackrel{\mathrm{v}}{\mathrm{u}}$ | $\begin{aligned} & \text { \&uvsup; } \\ & =\text { u + \&vsup; } \end{aligned}$ | $\begin{aligned} & \text { E8EC } \\ & =0075+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER V ABOVE = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER V |
| $\stackrel{\mathrm{w}}{\mathrm{u}}$ | $\begin{aligned} & \text { \&uwsup; } \\ & =\text { u + \&wsup; } \end{aligned}$ | $\begin{aligned} & \text { E8ED } \\ & =0075+\text { F03C } \end{aligned}$ | LATIN SMALL LETTER U WITH LATIN SMALL LETTER W ABOVE = LATIN SMALL LETTER U + COMBINING LATIN SMALL LETTER W |


| $\stackrel{\mathrm{e}}{\mathrm{y}}$ | \&yesup; = y + \&esup; | $\begin{aligned} & \text { E781 } \\ & =0079+0364 \end{aligned}$ | LATIN SMALL LETTER Y WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER Y + COMBINING LATIN SMALL LETTER E |
| :---: | :---: | :---: | :---: |
| $\stackrel{\text { a }}{ }$ | \&wasup; = w + \& asup; | $\begin{aligned} & \text { E8F0 } \\ & =0077+0363 \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER A ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER A |
| W | \&Wesup; = W + \&esup; | $\begin{aligned} & \text { E353 } \\ & =0057+0364 \end{aligned}$ | LATIN CAPITAL LETTER W WITH LATIN SMALL LETTER E ABOVE = LATIN CAPITAL LETTER W + COMBINING LATIN SMALL LETTER E |
| $\stackrel{\mathrm{e}}{ }{ }^{\text {a }}$ | \&wesup; = w + \&esup; | $\begin{aligned} & \text { E753 } \\ & =0077+0364 \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER E ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER E |
| $\stackrel{i}{W}$ | \&wisup; = w + \&isup; | $\begin{aligned} & \text { E8F1 } \\ & =0077+0365 \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER I ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER I |
| $\stackrel{\text { W }}{ }$ | \&wosup; $=\mathrm{w}+$ \&osup; | $\begin{aligned} & \text { E754 } \\ & =0077+0366 \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER O ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER O |
| $\stackrel{\text { w }}{ }$ | \&wusup; = w + \&usup; | $\begin{aligned} & \text { E8F2 } \\ & =0077+0367 \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER U ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER U |
| $\stackrel{\mathrm{V}}{\mathbf{W}}$ | \&wvsup; $=\mathrm{w}+\& \mathrm{vsup} ;$ | $\begin{aligned} & \mathrm{E} 8 \mathrm{~F} 3 \\ & =0077+036 \mathrm{E} \end{aligned}$ | LATIN SMALL LETTER W WITH LATIN SMALL LETTER V ABOVE = LATIN SMALL LETTER W + COMBINING LATIN SMALL LETTER V |

## Subrange 32: Characters with acute accent and dot above

The Unicode Standard v. 8.0 has no precomposed characters with acute accent and dot above. This combination is found over vowels in Icelandic manuscripts, and although the two marks could be described as stacking (the dot, then the accent), they should preferably be rendered side by side. Note that in some manuscripts, the acute accent is written before the dot, but there does not seem to be any linguistic difference between the two ways of ordering the marks.

This subrange contains 16 precomposed characters with a combination of acute accent and dot above. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DOT ABOVE (0307) and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| Ä | \&Adotacute; <br> = A + \&combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBF4 } \\ & =0041+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER A WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER A + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ä | $\begin{aligned} & \text { \&adotacute; } \\ & =\text { a + \&combdot; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBF5 } \\ & =0061+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER A WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER A + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| $\ddot{E}$ | $\begin{aligned} & \& \text { AEligdotacute; } \\ & =\text { \&AElig; + \&combdot; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EFDB } \\ & =00 \mathrm{C} 6+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER AE WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER AE + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ə̈ | \&aeligdotacute; <br> = \æ + \&combdot; <br> + \&combacute; | $\begin{aligned} & \text { EFDC } \\ & =00 \mathrm{E} 6+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER AE WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER AE + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| $\ddot{E}$ | \&Edotacute; <br> $=\mathrm{E}+\&$ combdot; <br> + \&combacute; | $\begin{aligned} & \text { E0C8 } \\ & =0045+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| e̋ | \&edotacute; <br> = e + \&combdot; <br> + \&combacute; | $\begin{aligned} & \text { E4C8 } \\ & =0065+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |


| İ | \&Idotacute; <br> = I + \& combdot; <br> + \& combacute; | $\begin{array}{\|l} \text { EBF6 } \\ =0049+0307 \\ +0301 \end{array}$ | LATIN CAPITAL LETTER I WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER I + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| í | \&idotacute; <br> = i + \&combdot; <br> + \&combacute; | $\begin{array}{\|l} \text { EBF7 } \\ =0069+0307 \\ +0301 \end{array}$ | LATIN SMALL LETTER I WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER I + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| Ö | \&Odotacute; <br> = O + \&combdot; <br> + \&combacute; | $\begin{array}{\|l} \text { EBF8 } \\ =004 \mathrm{~F}+0307 \\ +0301 \end{array}$ | LATIN CAPITAL LETTER O WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| Ő | \&odotacute; <br> = o + \& combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBF9 } \\ & =006 \mathrm{~F}+0307 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER O WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| $\ddot{\varnothing}$ | \&Oslashdotacute; <br> = Oslash + \&combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBFC } \\ & =00 \text { D8 + } 0307 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| $\ddot{\varnothing}$ | \& oslashdotacute; <br> = oslash $+\&$ combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBFD } \\ & =00 \mathrm{~F} 8+0307 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| Ü | \&Udotacute; <br> $=\mathrm{U}+\&$ combdot; <br> + \& combacute; | $\begin{aligned} & \text { EBFE } \\ & =0055+0307 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER U WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER U + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| ư | \&udotacute; <br> = u + \&combdot; <br> $+\&$ combacute; | $\begin{array}{\|l} \text { EBFF } \\ =0075+0307 \\ +0301 \end{array}$ | LATIN SMALL LETTER U WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER U + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |


| $\dot{Y}$ | \&Ydotacute; <br> =Y + \& combdot; <br> + \&combacute; | E384 <br> $=0059+0307$ <br> +0301 | LATIN CAPITAL LETTER Y WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER Y + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| :--- | :--- | :--- | :--- |
| $\dot{\mathrm{Y}}$ | \&ydotacute; <br> =y + \&combdot; <br> + \&combacute; | E784 <br> $=0079+0307$ <br> +0301 | LATIN SMALL LETTER Y WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER Y + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |

## Subrange 33: Characters with acute accent and dot below

The Unicode Standard v. 8.0 has no precomposed characters with both acute accent and dot below. The present subrange contains one precomposed character with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DOT BELOW (0323) and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| é | \&edotblacute; <br> = E + \&combdotbl; <br> + \&combacute; | E498 <br> $=0065+0323$ <br> +0301 | LATIN SMALL LETTER E WITH DOT BELOW AND ACUTE <br> = LATIN SMALL LETTER E + COMBINING DOT BELOW <br> + COMBINING ACUTE ACCENT |

## Subrange 34: Characters with acute accent and diaeresis

The Unicode Standard v. 8.0 has no precomposed characters with both acute accent and diaeresis. The present subrange contains one precomposed character with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DIAERESIS (0308) and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\check{O}$ | \&oumlacute; <br> $=$ o + \&combuml; <br> $+\&$ combacute; | E62C <br> $=006 \mathrm{~F}+0308$ <br> +0301 | LATIN SMALL LETTER O WITH DIAERESIS AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING DIAERESIS <br> + COMBINING ACUTE ACCENT |

## Subrange 35: Characters with acute accent and curl above (reversed ogonek)

The Unicode Standard v. 8.0 has no precomposed characters with both acute accent and curl above. The present subrange contains two precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK ABOVE (1DCE) and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for both characters below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| O | \&Ocurlacute; <br> = O + \&combcurl; <br> + \&combacute; | EBB7 <br> $=004 \mathrm{~F}+1$ 1DCE <br> +0301 | LATIN CAPITAL LETTER O WITH CURL AND ACUTE <br> = LATIN CAPITAL LETTER O + COMBINING OGONEK ABOVE <br> + COMBINING ACUTE ACCENT |
| Ó | \&ocurlacute; <br> $=$ o + \&combcurl; <br> + \&combacute; | EBB8 <br> $=006 F$ <br> +0301 | LDCE <br> = LATIN SMALL LETTER O WITH CURL AND ACUTE <br> + COMBINING ACUTE ACCENT |

## Subrange 36: Characters with acute accent and ogonek

The Unicode Standard v. 8.0 has no precomposed characters with both acute accent and ogonek. The present subrange contains nine precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING ACUTE ACCENT (0301), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $A_{\text {c }}$ | \&Aogonacute; = A + \&combogon; <br> + \&combacute; | $\begin{aligned} & \text { E004 } \\ & =0041+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER A WITH OGONEK AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER A + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| á | \&aogonacute; <br> = a + \&combogon; <br> + \&combacute; | $\begin{aligned} & \text { E404 } \\ & =0061+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER A WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER A + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| á | $\begin{aligned} & \text { \&aeligogonacute; } \\ & =\text { \&aelig; + \&combogon; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E8D3 } \\ & =00 \mathrm{E} 6+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER AE WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER AE + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| É | \&Eogonacute; <br> = E + \&combogon; <br> + \&combacute; | $\begin{aligned} & \text { E099 } \\ & =0045+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| é | \&eogonacute; = e + \&combogon; <br> + \&combacute; | $\begin{aligned} & \text { E499 } \\ & =0065+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Q́ | $\begin{aligned} & \text { \&Oogonacute; } \\ & \text { = O + \&combogon; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E20C } \\ & =004 \mathrm{~F}+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Q́ | \&oogonacute; $=0+\&$ combogon; <br> + \&combacute; | $\begin{aligned} & \text { E60C } \\ & =006 \mathrm{~F}+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |


| Ø | \&Oslashogonacute; <br> $=$ \Ø $+\& c o m b o g o n ; ~$ <br> + \&combacute; | E257 <br> $=00 \mathrm{D} 8+0328$ <br> +0301 | LATIN CAPITAL LETTER O WITH STROKE AND OGONEK AND ACUTE <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING OGONEK <br> + COMBINING ACUTE ACCENT |
| :--- | :--- | :--- | :--- |
| Ǿ | \&oslashogonacute; <br> $=$ \ø + \&combogon; <br> + \&combacute; | E657 <br> $=00 \mathrm{~F} 8+0328$ <br> +0301 | LATIN SMALL LETTER O WITH STROKE AND OGONEK AND ACUTE <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING OGONEK <br> + COMBINING ACUTE ACCENT |

## Subrange 37: Characters with double acute accent and ogonek

The Unicode Standard v. 8.0 has no precomposed characters with both double acute accent and ogonek. The present subrange contains four precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING DOUBLE ACUTE ACCENT (030B), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| É | \&Eogondblac; <br> = E + \&combogon; <br> + \&combdblac; | $\begin{aligned} & \text { E0EA } \\ & =0045+0328 \\ & +030 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND DOUBLE ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |
| ę | \&eogondblac; <br> = e + \&combogon; <br> + \&combdblac; | $\begin{aligned} & \text { E4EA } \\ & =0065+0328 \\ & +030 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND DOUBLE ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |
| $\ddot{Q}$ | $\begin{aligned} & \& \text { Oogondblac; } \\ & =\mathrm{O}+\text { \&combogon; } \\ & \text { + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBC4 } \\ & =004 \mathrm{~F}+0328 \\ & +030 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND DOUBLE ACUTE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |


| Ó | \&oogondblac; <br> o o \& \&combogon; <br> $+\& c o m b d b l a c ; ~$ | EBC5 <br> $=006 \mathrm{~F}+328$ <br> +030 B |
| :--- | :--- | :--- | | LATIN SMALL LETTER O WITH OGONEK AND DOUBLE ACUTE |
| :--- |
| = LATIN SMALL LETTER O + COMBINING OGONEK |
| + COMBINING DOUBLE ACUTE ACCENT |

## Subrange 38: Characters with dot above and ogonek

The Unicode Standard v. 8.0 has no precomposed characters with both dot above and ogonek. The present subrange contains four precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING DOT ABOVE (0307), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\underset{\text { E }}{\text { E }}$ | \&Eogondot; <br> $=\mathrm{E}+\&$ combogon; <br> $+\&$ combdot; | $\begin{aligned} & \text { E0EB } \\ & =0045+0328 \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| ę | \&eogondot; = e $+\&$ combogon; <br> $+\&$ combdot; | $\begin{aligned} & \text { E4EB } \\ & =0065+0328 \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{Q}$ | \&Oogondot; <br> = O + \&combogon; <br> + \&combdot; | $\begin{aligned} & \text { EBDE } \\ & =004 \mathrm{~F}+0328 \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{Q}$ | \&oogondot; <br> $=0+\&$ combogon; <br> $+\& c o m b d o t ;$ | $\begin{aligned} & \text { EBDF } \\ & =006 \mathrm{~F}+0328 \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND DOT ABOVE } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |

## Subrange 39: Characters with dot below and ogonek

The Unicode Standard v. 8.0 has no precomposed characters with both dot below and ogonek. The present subrange contains four precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING DOT BELOW (0323), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\underset{\text { E }}{ }$ | \&Eogondotbl; <br> $=\mathrm{E}+\&$ combogon; <br> + \&combdotbl; | $\begin{aligned} & \text { E0E8 } \\ & =0045+0328 \\ & +0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND DOT BELOW } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT BELOW } \end{aligned}$ |
| ę | \&eogondotbl; <br> = e + \&combogon; <br> $+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { E4E8 } \\ & =0065+0328 \\ & +0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND DOT BELOW } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT BELOW } \end{aligned}$ |
| ? | \&Oogondotbl; <br> = $\mathrm{O}+\&$ combogon; <br> $+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { E208 } \\ & =004 \mathrm{~F}+0328 \\ & +0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND DOT BELOW } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT BELOW } \end{aligned}$ |
| ? | \&oogondotbl; <br> $=0+\&$ combogon; <br> + \&combdotbl; | $\begin{aligned} & \text { E608 } \\ & =006 \mathrm{~F}+0328 \\ & +0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND DOT BELOW } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT BELOW } \end{aligned}$ |

## Subrange 40: Characters with diaeresis and macron

The Unicode Standard v. 8.0 has six precomposed characters with both diaeresis and macron, ' A ' , ' a ', ' O ' and ' o ' in Latin Extended- $B$, and ' U ' and ' u ' in Latin Extended Additional. The present subrange contains one more precomposed character with this combination.

The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DIAERESIS (0308) and the COMBINING MACRON (0304), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\overline{\text { é }}$ | \&eumlmacr; <br> $=$ e + \&combuml; <br> $+\& c o m b m a c r ; ~$ | E4CD <br> $=0065+0308$ <br> +0304 | LATIN SMALL LETTER E WITH DIAERESIS AND MACRON <br> = LATIN SMALL LETTER E + COMBINING DIAERESIS <br> + COMBINING MACRON |

## Subrange 41: Characters with diaeresis and circumflex

The Unicode Standard v. 8.0 has no precomposed characters with both diaeresis and circumflex. The present subrange contains five precomposed characters with this combination.

The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DIAERESIS (0308) and the COMBINING CIRCUMFLEX ACCENT (0302), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| 觡 | \&aumlcirc; <br> $=\mathrm{a}+\&$ combuml; <br> + \&combcirc; | $\begin{aligned} & \text { E41A } \\ & =0061+0308 \\ & +0302 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER A WITH DIAERESIS AND CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER A + COMBINING DIAERESIS } \\ & \text { + COMBINING CIRCUMFLEX ACCENT } \end{aligned}$ |
| $\hat{O}$ | $\begin{aligned} & \text { \&Oumlcirc; } \\ & =\mathrm{O}+\text { \&combuml; } \\ & + \text { \&combcirc; } \end{aligned}$ | $\begin{aligned} & \text { E22D } \\ & =004 \mathrm{~F}+0308 \\ & +0302 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH DIAERESIS AND CIRCUMFLEX } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING DIAERESIS } \\ & \text { + COMBINING CIRCUMFLEX ACCENT } \end{aligned}$ |
| Ö | \&oumlcirc; <br> $=\mathrm{o}+\&$ combuml; <br> $+\&$ combcirc; | $\begin{aligned} & \text { E62D } \\ & =006 \mathrm{~F}+0308 \\ & +0302 \end{aligned}$ | LATIN SMALL LETTER O WITH DIAERESIS AND CIRCUMFLEX = LATIN SMALL LETTER O + COMBINING DIAERESIS <br> + COMBINING CIRCUMFLEX ACCENT |
| $\hat{U}$ | $\begin{aligned} & \text { \&Uumlcirc; } \\ & =\mathrm{U}+\text { \&combuml; } \\ & + \text { \&combcirc; } \end{aligned}$ | $\begin{aligned} & \text { E317 } \\ & =0055+0308 \\ & +0302 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER U WITH DIAERESIS AND CIRCUMFLEX } \\ & \text { = LATIN CAPITAL LETTER U + COMBINING DIAERESIS } \\ & \text { + COMBINING CIRCUMFLEX ACCENT } \end{aligned}$ |


| $\hat{\mathrm{u}}$ | \&uumlcirc; <br> $=\mathrm{u}+\& c o m b u m l ;$ <br> $+\& c o m b c i r c ;$ | E717 <br> $=0075+0308$ <br> +0302 | LATIN SMALL LETTER U WITH DIAERESIS AND CIRCUMFLEX <br> = LATIN SMALL LETTER U + COMBINING DIAERESIS <br> + COMBINING CIRCUMFLEX ACCENT |
| :--- | :--- | :--- | :--- |

## Subrange 42: Characters with diaeresis and dot below

The Unicode Standard v. 8.0 has no precomposed characters with both diaeresis and dot below. The present subrange contains one precomposed character with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING DIAERESIS (0308) and the COMBINING DOT BELOW (0323), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| ä | \&adotbluml; <br> = a + \& combuml; <br> + \&combdotbl; | $\begin{aligned} & \text { E41D } \\ & =0061+0308 \\ & +0323 \end{aligned}$ | LATIN SMALL LETTER A WITH DIAERESIS AND DOT BELOW <br> = LATIN SMALL LETTER A + COMBINING DIAERESIS <br> + COMBINING DOT BELOW |

## Subrange 43: Characters with ogonek and curl above (reversed ogonek)

The Unicode Standard v. 8.0 has no precomposed characters with both ogonek and curl above (reversed ogonek). The present subrange contains four precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING OGONEK ABOVE (1DCE), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\dot{C}$ | \&Eogoncurl; <br> E E + \&combogon; <br> $+\& c o m b c u r l ;$ | EBF2 <br> $=0045+0328$ <br> $+1 D C E$ | LATIN CAPITAL LETTER E WITH OGONEK AND CURL <br> = LATIN CAPITAL LETTER E + COMBINING OGONEK <br> + COMBINING OGONEK ABOVE |


| ę | \&eogoncurl; <br> = e + \&combogon; <br> + \&combcurl; | $\begin{aligned} & \text { EBF3 } \\ & =0065+0328 \\ & +1 D C E \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND CURL <br> = LATIN SMALL LETTER E + COMBINING OGONEK <br> + COMBINING OGONEK ABOVE |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | \&Oogoncurl; <br> $=\mathrm{O}+\&$ combogon; <br> + \&combcurl; | $\begin{aligned} & \mathrm{E} 24 \mathrm{~F} \\ & =004 \mathrm{~F}+0328 \\ & +1 \mathrm{DCE} \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND CURL } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING OGONEK ABOVE } \end{aligned}$ |
| Q | \&oogoncurl; <br> $=0+\&$ combogon; <br> + \&combcurl; | $\begin{aligned} & \text { E64F } \\ & =006 \mathrm{~F}+0328 \\ & +1 \mathrm{DCE} \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND CURL } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING OGONEK ABOVE } \end{aligned}$ |

## Subrange 44: Characters with ogonek and circumflex

The Unicode Standard v. 8.0 has no precomposed characters with both ogonek and circumflex. The present subrange contains two precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328) and the COMBINING CIRCUMFLEX ACCENT (0302), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| ê | \&eogoncirc; <br> = e + \&combogon; <br> + \&combcirc; | $\begin{aligned} & \text { E49F } \\ & =0065+0328 \\ & +0302 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING CIRCUMFLEX ACCENT } \end{aligned}$ |
| Q | \&oogoncirc; <br> $=0+\&$ combogon; <br> + \&combcirc; | $\begin{aligned} & \text { E60E } \\ & =006 \mathrm{~F}+0328 \\ & +0302 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING CIRCUMFLEX ACCENT } \end{aligned}$ |

## Subrange 45: Characters with ring above and circumflex

The Unicode Standard v. 8.0 has no precomposed characters with both ring above and circumflex. The present subrange contains one precomposed character with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING RING ABOVE (030A) and the COMBINING CIRCUMFLEX ACCENT (0302), and this way of encoding has been given as an alternative for the character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\hat{\mathrm{a}}$ | \&aringcirc; <br> $=\mathrm{a}+\&$ combring; <br> + \&combcirc; | E41F <br> $=0061+030 \mathrm{~A}$ <br> +0302 | LATIN SMALL LETTER A WITH RING ABOVE AND CIRCUMFLEX <br> = LATIN SMALL LETTER A + COMBINING RING ABOVE <br> + COMBINING CIRCUMFLEX ACCENT |

## Subrange 46: Characters with macron and breve

The Unicode Standard v. 8.0 has no precomposed characters with both macron and breve. The present subrange contains 18 precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING MACRON (0304) and the COMBINING BREVE (0306), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\overline{\bar{A}}$ | \&Amacrbreve; <br> $=\mathrm{a}+\&$ \& combmacr; <br> + \&combbreve; | E010 <br> $=0041+0304$ <br> +0306 | LATIN CAPITAL LETTER A WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER A + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{\overline{\mathrm{a}}}$ | \&amacrbreve; <br> $=\mathrm{a}+\&$ combmacr; <br> $+\& c o m b b r e v e ; ~$ | E410 <br> $=0061+0304$ <br> +0306 | LATIN SMALL LETTER A WITH MACRON AND BREVE <br> = LATIN SMALL LETTER A + COMBINING MACRON <br> + COMBINING BREVE |


| $\check{\text { E }}$ | \&AEligmacrbreve; <br> = \Æ + \&combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E03D } \\ & =00 C 6+0304 \\ & +0306 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER AE + COMBINING MACRON <br> + COMBINING BREVE |
| :---: | :---: | :---: | :---: |
| $\check{\overline{æ 冂}}$ | \&aeligmacrbreve; <br> = \æ + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E43D } \\ & =00 \mathrm{E} 6+0304 \\ & +0306 \end{aligned}$ | LATIN SMALL LETTER AE WITH MACRON AND BREVE <br> = LATIN SMALL LETTER AE + COMBINING MACRON <br> + COMBINING BREVE |
| $\check{\bar{E}}$ | \&Emacrbreve; <br> $=\mathrm{E}+\&$ combmacr; <br> $+\&$ combbreve; | $\begin{aligned} & \text { E0B7 } \\ & =0045+0304 \\ & +0306 \end{aligned}$ | LATIN CAPITAL LETTER E WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER E + COMBINING MACRON <br> + COMBINING BREVE |
| ¢е | \&emacrbreve; <br> = e + \& combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E4B7 } \\ & =0065+0304 \\ & +0306 \end{aligned}$ | LATIN SMALL LETTER E WITH MACRON AND BREVE <br> = LATIN SMALL LETTER E + COMBINING MACRON <br> + COMBINING BREVE |
| $\check{\overline{\mathrm{I}}}$ | \&Imacrbreve; <br> = I + \& combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E137 } \\ & =0049+0304 \\ & +0306 \end{aligned}$ | LATIN CAPITAL LETTER I WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER I + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{1}$ | \&imacrbreve; <br> = i + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E537 } \\ & =0069+0304 \\ & +0306 \end{aligned}$ | LATIN SMALL LETTER I WITH MACRON AND BREVE <br> = LATIN SMALL LETTER I + COMBINING MACRON <br> + COMBINING BREVE |
| $\stackrel{\bigcirc}{\bigcirc}$ | $\begin{aligned} & \text { \& Omacrbreve; } \\ & \text { = O + \&combmacr; } \\ & \text { + \&combbreve; } \end{aligned}$ | $\begin{aligned} & \text { E21B } \\ & =004 \mathrm{~F}+0304 \\ & +0306 \end{aligned}$ | LATIN CAPITAL LETTER O WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER O + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{\mathrm{O}}$ | \&omacrbreve; <br> = o + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E61B } \\ & =006 \mathrm{~F}+0304 \\ & +0306 \end{aligned}$ | LATIN SMALL LETTER O WITH MACRON AND BREVE <br> = LATIN SMALL LETTER O + COMBINING MACRON <br> + COMBINING BREVE |


| $\stackrel{\sim}{C}$ | \&OEligmacrbreve; <br> = \Œ + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E260 } \\ & =0152+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LIGATURE OE WITH MACRON AND BREVE } \\ & \text { = LATIN CAPITAL LETTER OE + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
|  | \&oeligmacrbreve; <br> = \œ + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E660 } \\ & =0153+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE OE WITH MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER OE + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| $\check{\varnothing}$ | $\begin{aligned} & \& \text { Oslashmacrbreve; } \\ & \text { = \&Oslash; + \&combmacr; } \\ & \text { + \&combbreve; } \end{aligned}$ | $\begin{aligned} & \text { E253 } \\ & =00 \mathrm{D} 8+0304 \\ & +0306 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND BREVE = LATIN CAPITAL LETTER O WITH STROKE + COMBINING MACRON + COMBINING BREVE |
| $\breve{\square}$ | ```&oslashmacrbreve; = &oslash; + &combmacr; + &combbreve;``` | $\begin{aligned} & \text { E653 } \\ & =00 \mathrm{~F} 8+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH STROKE AND MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER O WITH STROKE + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| $\stackrel{\square}{\text { U }}$ | ```&Umacrbreve; = U + &combmacr; + &combbreve;``` | $\begin{aligned} & \text { E30B } \\ & =0055+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER U WITH MACRON AND BREVE } \\ & \text { = LATIN CAPITAL LETTER U + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| $\check{\bar{u}}$ | $\begin{aligned} & \text { \&umacrbreve; } \\ & =\text { u + \&combmacr; } \\ & \text { + \&combbreve; } \end{aligned}$ | $\begin{aligned} & \text { E70B } \\ & =0075+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER U WITH MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER U + COMBINING MACRON } \\ & + \text { COMBINING BREVE } \end{aligned}$ |
| $\check{\bar{Y}}$ | ```&Ymacrbreve; = Y + &combmacr; + &combbreve;``` | $\begin{aligned} & \text { E375 } \\ & =0059+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER Y WITH MACRON AND BREVE } \\ & \text { = LATIN CAPITAL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| $\breve{\bar{y}}$ | \&ymacrbreve; <br> = y + \&combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E775 } \\ & =0079+0304 \\ & +0306 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER Y WITH MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |

## Subrange 47: Characters with macron and acute accent

The Unicode Standard v. 8.0 has macron and acute over the vowels ' $E$ ', 'e', ' $O$ ' and ' $o$ ' in Latin Extended Additional (p. 50 and p. 52). The present subrange contains twelve additional character combinations. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING MACRON (0304) and the COMBINING ACUTE (0301), and this way of encoding has been given as an alternative for each character below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| ÁA | \&Amacracute; $=\mathrm{a}+\&$ combmacr; <br> $+\&$ combacute; | $\begin{aligned} & \text { E00A } \\ & =0041+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER A WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER A + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\frac{1}{a}$ | \&amacracute; <br> = a + \&combmacr; <br> $+\&$ combacute; | $\begin{aligned} & \text { E40A } \\ & =0061+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER A WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER A + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\stackrel{\prime}{\AA}$ | \&AEligmacracute; <br> = \Æ + \&combmacr; <br> $+\&$ combacute; | $\begin{aligned} & \text { E03A } \\ & =00 \mathrm{C} 6+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER AE WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER AE + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| 免 | \&aeligmacracute; <br> = \æ + \&combmacr; <br> + \&combacute; | $\begin{aligned} & \text { E43A } \\ & =00 \mathrm{E} 6+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER AE WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER AE + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\stackrel{1}{\text { I }}$ | $\begin{aligned} & \text { \& Imacracute; } \\ & =\text { I + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E135 } \\ & =0049+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER I WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER I + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |


| $\frac{1}{1}$ | \&imacracute; = i + \& combmacr; <br> + \&combacute; | $\begin{aligned} & \text { E535 } \\ & =0069+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER I WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER I + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| も | $\begin{aligned} & \text { \&Oslashmacracute; } \\ & \text { = \&Oslash; + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBEC } \\ & =00 \mathrm{D} 8+0304 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND ACUTE = LATIN CAPITAL LETTER O WITH STROKE + COMBINING MACRON + COMBINING ACUTE |
| ¢ | ```&oslashmacracute; = &oslash; + &combmacr; + &combacute;``` | $\begin{aligned} & \text { EBED } \\ & =00 \mathrm{~F} 8+0304 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND MACRON AND ACUTE = LATIN SMALL LETTER O WITH STROKE + COMBINING MACRON + COMBINING ACUTE |
| $\stackrel{+}{U}$ | $\begin{aligned} & \text { \& Umacracute; } \\ & =\text { U + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E309 } \\ & =0055+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER U WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER U + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\frac{1}{\mathbf{u}}$ | $\begin{aligned} & \text { \&umacracute; } \\ & =\text { u + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E709 } \\ & =0075+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER U WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER U + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\stackrel{\&}{Y}$ | $\begin{aligned} & \text { \&Ymacracute; } \\ & \text { = Y + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E373 } \\ & =0059+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER Y WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\stackrel{1}{\mathrm{y}}$ | \&ymacracute; <br> = y + \&combmacr; <br> $+\&$ combacute; | $\begin{aligned} & \text { E773 } \\ & =0079+0304 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER Y WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |

## Subrange 48: Characters with ogonek, dot above and acute accent

The Unicode Standard v. 8.0 has no precomposed characters with both ogonek, dot above and acute accent. The present subrange contains four precomposed characters with this combination. The Unicode Standard advises encoding characters of this type as a sequence of the baseline character and the COMBINING OGONEK (0328), the COMBINING DOT ABOVE (0307) and the COMBINING ACUTE (0301), and this way of encoding has been given as an alternative for both characters below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\ddot{\text { Ě }}$ | $\begin{aligned} & \text { \&Eogondotacute; } \\ & =\text { E + \&combogon; } \\ & \text { + \&combdot; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E0EC } \\ & =0045+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ę | $\begin{aligned} & \text { \&eogondotacute; } \\ & =\text { e + \&combogon; } \\ & \text { + \&combdot; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E4EC } \\ & =0065+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ő | $\begin{aligned} & \text { \&Oogondotacute; } \\ & =\mathrm{O}+\& \text { combogon; } \\ & \text { + \&combdot; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBFA } \\ & =004 \mathrm{~F}+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Q̋ | $\begin{aligned} & \text { \&oogondotacute; } \\ & \text { = o + \&combogon; } \\ & \text { + \&combdot; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBFB } \\ & =006 \mathrm{~F}+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |

## Subranges 49-50:

Reserved for future additions.

## Category 3: Variant letter forms

Important note: Variant letter forms should only be used when their form is considered to be of importance and the distinction between the "standard" character and the variant form carries paleographical, phonological, semantic or other types of meaning.

This category contains a selection of major variant letter forms in Medieval European writing in the Latin alphabet. In v. 1.0 of the MUFI character recommendation, this category was divided according to national or regional criteria, with one subrange for Nordic characters and one for English characters. However, due to the dissemination of styles across Medieval Europe, many characters belong to more than one range. For this reason, the variant letter forms are listed alphabetically.

Code points for variant letter forms commence with F200. To avoid conflicts with Junicode, code points in this font have been used wherever possible, viz. F106, F10A, F10E, F110, F11A, F126, F127, F13A, F193, F194, F195 and F196.

Latin script is bicameral, having the opposition between capital (majuscule) and small (minuscule) letters. Uncial script was initially unicameral, but a distinction gradually emerged in Semi-Uncial script. The perspective in this recommendation is the bicameral script introduced with the Carolingian minuscule around 800 , so Uncial letter forms have been classified as being either small or capital. The default case is that Uncial letter forms were accommodated within the ' $x$ ' height, meaning that they should be classified as small letters.

Some scholars prefer to view Latin script as tricameral rather than bicameral, making a distinction between majuscules, mediuscules and minuscules. In this model, Uncial letter forms would probably be defined as mediuscules, and should be drawn larger than 'x' height. For a discussion of this tricameral model, see Andreas Stötzner, "Die Andron - Erweiterte typographische Möglichkeiten mit einer neuen Satzschrift", Gutenberg-Jahrbuch 2004, vol. 79, Mainz: Gutenberg-Gesellschaft, pp.11-25, particularly pp. 21-25. In the present recommendation, a tricameral distinction has been made for the Uncial ' m ' types, as can be seen on p. 179 below.

Within each standard character, variant letter forms are listed in roughly chronological order of the style to which they belong or with which they should be associated, viz. Uncial (including Semi-Uncial), Carolingian, Insular, Proto-Gothic (or Late Carolingian) and Gothic. If a variant letter form can be associated with several styles, it is considered a general variant and listed first among the variant letter forms.

In v. 8.0 of the Unicode Standard, 21 characters in this range have been assigned to offical parts of the Standard, particularly Latin Extended-D, but also Latin Extended Additional. They have now been decommissioned from the Private Use Area of this recommendation.

## Subrange 5 I : Alphabetical list of variant letter forms

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\overline{\mathrm{A}}$ | \&Asqu; | F13A | LATIN CAPITAL LETTER A SQUARE FORM |

This particular variant is found in some manuscripts, particularly in Cambridge, Corpus Christi College, Ms. 173, the Parker Chronicle.


This is the very typical Uncial shape, with a diagonal main stroke and a long, but very narrow loop to the left. It is also found in Carolingian minuscules, as a variant to the open u-shaped form (see below).


This is the enlarged variant of 'a', triangular in shape. Cf. D.A. Seip, Palcoografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 27. Within a bicameral script it should probably be classified as a capital rather than as an enlarged minuscule.


This is the single-storey ' $a$ ' of the Insular script, similar in shape to modern italic ' $a$ '. It is also found in later Semi-Uncial script, but can probably be most easily associated with Insular script.


This is the traditional 'open a' from early Carolingian minuscules, similar in shape to 'cc' and easily mistaken for 'u'.

| d | \&aneckless; | F215 | LATIN SMALL LETTER NECKLESS A |
| :---: | :---: | :---: | :---: |
| A variant form of 'a' attested in Old Icelandic script. |  |  |  |
| a | \&aclose; | F203 | LATIN SMALL LETTER CLOSED A GOTHIC FORM |
| This form of 'a' is often referred to as 'two storey' ('to-etasjes'). Cf. D.A. Seip, Palcoografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 70. |  |  |  |
| L | \& Csqu; | F106 | LATIN CAPITAL LETTER C SQUARE FORM |
| Middle English usage. From the font Junicode. |  |  |  |
| Cl | \&ccurl; | F198 | LATIN SMALL LETTER C WITH CURL |
| Middle English usage. |  |  |  |
| $d z$ | \& dcurl; | F193 | LATIN SMALL LETTER D WITH CURL |
| Middle English usage. From the font Junicode, but redrawn here. |  |  |  |
| $E$ | \&Eunc; | F10A | LATIN CAPITAL LETTER E UNCIAL FORM |
| $\theta$ | \& Euncclose; | F217 | LATIN CAPITAL LETTER CLOSED E UNCIAL FORM |
| $\epsilon$ | \&eunc; | F218 | LATIN SMALL LETTER E UNCIAL FORM |
| $e$ | \&eext; | F219 | LATIN SMALL LETTER E EXTENDED BAR FORM |

This is the quite common form of ' $e$ ' where the horizontal bar extends to the right of the loop.

| $e$ | \& etall; | F21A | LATIN SMALL LETTER E TALL FORM |
| :---: | :---: | :---: | :---: |
| This is a form of the ' e ' where the loop is distinctly higher than the ordinary ' x ' height. |  |  |  |
| $P$ | \&finssemiclose; | F21B | LATIN SMALL LETTER SEMI-CLOSED INSULAR F |
| This is an intermediate type between the original Insular letter form and the closed, Gothic type. |  |  |  |
| 10 | \&finsdothook; | F21C | LATIN SMALL LETTER INSULAR F WITH DOTTED HOOKS |
| This is a variant where the two hooks have been reduced to two dots, like a colon. Common in 13th century Medieval Nordic script. |  |  |  |
| $\beta$ | \&finsclose; | F207 | LATIN SMALL LETTER CLOSED INSULAR F |
| This is the closed, Gothic form of the original Insular lettershape, found in Medieval Nordic script. |  |  |  |
| $f$ | \&fcurl; | F194 | LATIN SMALL LETTER F WITH CURL |
| Middle English usage. From the font Junicode, but redrawn here. |  |  |  |
| G | \&Gsqu; | F10E | LATIN CAPITAL LETTER G SQUARE FORM |
| $g$ | \& gcurl; | F196 | LATIN SMALL LETTER G WITH CURL |
| Middle English usage. From the font Junicode, but redrawn here. |  |  |  |
| $g$ | \& gdivloop; | F21D | LATIN SMALL LETTER G WITH SEPARATE LOOPS |


| 8 | \&glglowloop; | F21E | LATIN SMALL LETTER CLOSED G WITH LARGE LOWER LOOP |
| :---: | :---: | :---: | :---: |
| $g$ | \&gsmlowloop; | F21F | LATIN SMALL LETTER CLOSED G WITH SMALL LOWER LOOP |
| h | \&Hunc; | F110 | LATIN CAPITAL LETTER H UNCIAL FORM |
| Classified as Insular in v. 1.0 and reclassified as Uncial in v. 2.0 of the MUFI recommendation. The character is also in Junicode, but has been redrawn here. |  |  |  |
| b | \&hrdes; | F23A | LATIN SMALL LETTER H WITH RIGHT DESCENDER |
| 1 | \&ilong; | F220 | LATIN SMALL LETTER LONG I |
| 1c | \&kunc; | F208 | LATIN SMALL LETTER K UNCIAL FORM |
| This character is discussed by Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, p. 46. |  |  |  |
| k | \&ksemiclose; | F221 | LATIN SMALL LETTER K SEMI-CLOSED FORM |
| This is an intermediate type between the Carolingian letter form and the closed, Gothic type. Cf. the three Insular 'f, variants on p. 177 above. |  |  |  |
| 13 | \&kclose; | F209 | LATIN SMALL LETTER K CLOSED FORM |
| $\xi_{2}$ | \&kcurl; | F195 | LATIN SMALL LETTER K WITH CURL |
| Middle English usage. From the font Junicode, but redrawn here. |  |  |  |
| 1 | \&ldes; | F222 | LATIN SMALL LETTER L DESCENDING |


| Attested in Codex Regius of the Eddic poems. |  |  |  |
| :---: | :---: | :---: | :---: |
| $\Omega$ | \&Munc; | F11A | LATIN CAPITAL LETTER M UNCIAL FORM |
| $\Omega$ | \&Muncdes; | F224 | LATIN CAPITAL LETTER M UNCIAL FORM WITH RIGHT DESCENDER |
| @ | \&mmedunc; | F225 | LATIN MEDIUSCULE LETTER M UNCIAL FORM |
| @) | \&mmeduncdes; | F226 | LATIN MEDIUSCULE LETTER M UNCIAL FORM WITH RIGHT DESCENDER |
| m | \&munc; | F23C | LATIN SMALL LETTER M UNCIAL FORM |
| M) | \&muncdes; | F23D | LATIN SMALL LETTER M UNCIAL FORM WITH RIGHT DESCENDER |
| m | \&mrdes; | F223 | LATIN SMALL LETTER M WITH RIGHT DESCENDER |
| This character is typically used in word-final position. |  |  |  |
| I | \&Nrdes; | F229 | LATIN CAPITAL LETTER N WITH RIGHT DESCENDER |
| $1)$ | \&nrdes; | F228 | LATIN SMALL LETTER N WITH RIGHT DESCENDER |
| This character is typically used in word-final position with the meaning $/ \mathrm{n} /$, and should be kept apart from 014B LATIN SMALL LETTER ENG in Latin Extended-A, cf. p. 30 above. |  |  |  |
| 1 | \&nscaprdes; | F22A | LATIN LETTER SMALL CAPITAL N WITH RIGHT DESCENDER |


| 1 | \&nscapldes; | F22B | LATIN LETTER SMALL CAPITAL N WITH LEFT DESCENDER |
| :---: | :---: | :---: | :---: |
| This is a typical Insular form of the character; basically a small capital ' N ', but with a left descender and a low crossbar, like the two letter forms above. |  |  |  |
| 11 | \&nflour; | F19A | LATIN SMALL LETTER N WITH FLOURISH |
| Middle English usage. |  |  |  |
| 9 | \&Qstem; | F22C | LATIN CAPITAL LETTER Q WITH STEM |
| $\bigcirc$ | \&rflour; | F19B | LATIN SMALL LETTER R WITH FLOURISH |
| Middle English usage. |  |  |  |
| $\delta$ | \&Sclose; | F126 | LATIN CAPITAL LETTER S CLOSED FORM |
| This letter form is possibly a design by the type cutter of the original Junius font. |  |  |  |
| G | \&sclose; | F128 | LATIN SMALL LETTER S CLOSED FORM |
| Small form of LATIN CAPITAL LETTER S CLOSED FORM. |  |  |  |
| 1 | \&slongdes; | F127 | LATIN SMALL LETTER LONG S DESCENDING |
| This character extends below the base line, while the ordinary long 's' is located on the base line. |  |  |  |
| $t$ | \&tcurl; | F199 | LATIN SMALL LETTER T WITH CURL |
| Middle English usage. |  |  |  |


| $y$ | \&yrgmainstrok; | F233 | LATIN SMALL LETTER Y WITH RIGHT MAIN STROKE |
| :--- | :--- | :--- | :--- |
| This is one of several distinct variants of the ' $y$ ' letter. |  |  |  |
| 3 | The long ' $z$ ' should be encoded with the 'ezh' character; cf. 0292 LATIN SMALL LETTER EZH in IPA Extensions (p. 39 above) and 01B7 <br> LATIN CAPITAL LETTER EZH in Latin Extended- $B$ (p. 34 above). |  |  |

Additional characters: From F240 to F2CF and from F300 to F3FF, there are a total of 400 unallocated slots. In addition, there are approximately 100 unallocated slots in the section F100-F1FF. Junicode has English letter forms in this section. This leaves a total of approx. 500 available slots in the F100-F3FF section of the Private Use Area. Alphabetum uses F400 and upwards for a number of other characters, and TITUS occupies the E000-F0FF section.

## C: Stylistic and ornamental variants

This category contains letter shapes that should be regarded as most likely to be stylistic or ornamental variants. The Old English and the Nordic styles of thorn is a particularly apt example. This character is typically drawn quite differently in Old English, ' P ' and ' p ' (shown in Junicode), and in Nordic, ' P ' and ' p ' (shown in Times). Yet, it is the same character. It was in fact borrowed from Old English into Nordic writing in the 11th century and remains to this day in Icelandic.

With modern smart font technology, such as Microsoft's OpenType and Apple's AAT, variant forms may be associated with specific characters in a font. For example, old style numerals ( 0123456789 ) can be given as variants to modern tabular numerals ( 012345689 ), ligatures (e.g. ff, fi and fi) to non-ligated sequences (e.g. ff, fi and fj), and one or more stylistic variants can be given for each character, e.g. for ornamental usage. Even though smart font technology is not fully supported by all computer applications and there still is some competition between the technologies, we believe that smart font technology has now reached sufficient maturity and should be adopted for stylistic and ornamental variants.

In modern smart font technology, it is not necessary to assign separate code points to stylistic variants. Thus, a text which has been encoded with the standard code points for capital and small thorn, 00DE and 00FE, will look different in an Old English style font like Junicode and in most other fonts, but the character encoding will not be affected and there is thus no risk of loss or change of information.

Some variants have been assigned to separate code points in the Private Use Area by Adobe and other companies, notably old style numerals (F730-F739) and small capitals (F761-F77A, F7E0-F7FF). However, it seems that Adobe is changing policy in this matter and would like to avoid using code points in the Private Use Area. Rather, OpenType or similar technologies are advocated by Adobe for variant forms of numerals, small capitals and the like. For this and other reasons, we recommend that a variant should not be assigned to a code point in the Private Use Area, but to the code point of its "mother" character.

Note that, with the variants listed in this section, it is not always obvious what is the "standard" or default form of a character and what is the variant form. For example, in a font like Junicode, the Old English style of the capital thorn, ' P ', is the default form and the Nordic style, ' P ', is the variant form; in most other fonts it will be the other way round. Similarly, in many fonts the modern style numerals, 012345689 , are the default number forms and the old style numerals, oI23456789, are variants, but an increasing number of fonts prefer to have old style numerals as default.

In SGML/XML encoding, variants may be described by use of markup, whether by entities or by elements. However, since we believe that the variants listed in this section should be handled by smart font technology, we give the same code points as for the "standard" characters.

## I: Variant number forms

There are four commonly recognised forms of numerals. The most important distinction is between modern style numerals in which all figures have equal height, 012345689 , and old style numerals in which figures have ascenders or descenders or remain within the ' $x$ ' height, oir23456789. In addition, both types can be proportional, i.e. with varying width (' 0 ' being wider than ' 1 '), or tabular, i.e. with a fixed width so that they will line horizontally as well as vertically in a table. The full set is thus (a) modern style proportional, 012345689 , (b) old style proportional, oI23456789, (c) modern style fixed width and (d) old style fixed width. Although a full set of four types can be useful, we believe that in most cases two sets will be sufficient. Thus a font with old style numerals as default should have modern style numerals as variants, and the other way round. Since modern style numerals have been displayed above on $0030-0039$ ( p .14 ) we give the old style numerals below. Note that 'OI2' are drawn within the ' $x$ ' height, ' 34579 ' are descending and ' 68 ' are ascending.

| Glyph | Code point | MUFI descriptive name |
| :--- | :--- | :--- |
| $\mathbf{O}$ | 0030 | DIGIT ZERO OLD STYLE PROPORTIONAL |
| $\mathbf{1}$ | 0031 | DIGIT ONE OLD STYLE PROPORTIONAL |
| $\mathbf{2}$ | 0032 | DIGIT TWO OLD STYLE PROPORTIONAL |
| $\mathbf{3}$ | 0033 | DIGIT THREE OLD STYLE PROPORTIONAL |
| $\mathbf{4}$ | 0034 | DIGIT FOUR OLD STYLE PROPORTIONAL |
| $\mathbf{5}$ | 0035 | DIGIT FIVE OLD STYLE PROPORTIONAL |
| $\mathbf{6}$ | 0036 | DIGIT SIX OLD STYLE PROPORTIONAL |
| $\mathbf{7}$ | 0037 | DIGIT SEVEN OLD STYLE PROPORTIONAL |


| 8 | 0038 | DIGIT EIGHT OLD STYLE PROPORTIONAL |
| :--- | :--- | :--- |
| $\mathbf{9}$ | 0039 | DIGIT NINE OLD STYLE PROPORTIONAL |

## 2: Typographical small capitals

Small capitals, 'ABCDE', are capitals drawn within the ' $x$ ' height of the font or slightly taller. The Unicode Standard has accepted a number of small capitals used in phonetic notations, e.g. in IPA Extensions and in Phonetic Extensions and also a couple in Latin Extended-D. To these, this recommendations has added three small capitals in subrange 2 (p. 92 above). We shall refer to this type as linguistic small capitals, since they have a separate meaning from their capital counterparts. For example, 0280 LATIN LETTER SMALL CAPITAL $R$, ' r ' is used to denote a uvular r-sound and cannot be represented by 0052 Latin CAPITAL Letter R, 'R'. See e.g. Geoffrey K. Pullum and William A. Ladusaw, Phonetic Symbol Guide, 2nd ed., Chicago: The University of Chicago Press, pp. 167-68. As a rule, linguistic small capitals are drawn wholly within the ' $x$ ' height of the font.

Another type of small capitals are used for emphasis, subtitles or abbreviations, especially in fonts with tall ascenders (which means that sequences of full capitals look more obtrusive than in fonts with shorter ascenders). In many traditions, especially in German typography, small capitals are used for AUTHORS' names. From a functional point of view, this usage is parallel to the usage of italics or bold. We shall refer to this type as typographical small capitals. Typographical small capitals are as a rule drawn slightly taller than the ' $x$ ' height of the font.

Typographical small capitals should be kept strictly apart from linguistic small capitals. While linguistic small capitals have their own code points and thus are separate characters, typographical small capitals should be treated as variants of ordinary capitals. While e.g. 'This book was written by JOHN SMITH' is typographically less elegant than 'This book was written by JOHN SMITH' (or, possibly better, 'John Smith') the distinction between the full capitals and the small capitals does not count as any linguistic distinction. JOHN SMITH is identical to JOHN SMITH or, for that matter, John Smith and John Smith.

Adobe has assigned code points in the Private Usea Area for typographical small capitals in the section F761-F7FF. As with the variant number forms, we recommend that typographical small capitals should not be assigned to code points in the Private Use Area, but to the code point of its "mother" character using smart font technologies.

If a font is extended with typographical small capitals, it should as a minimum have the characters ' $\mathrm{A}-\mathrm{Z}$ ', including frequently used accented characters and some ligatures. The list below contains a suggested minimum but can easily be extended.

| Glyph | Code point | MuFI descriptive name |
| :--- | :--- | :--- |
| A | 0041 | LATIN LETTER SMALL CAPITAL A TYPOGRAPHICAL FORM |
| B | 0042 | LATIN LETTER SMALL CAPITAL B TYPOGRAPHICAL FORM |
| C | 0043 | LATIN LETTER SMALL CAPITAL C TYPOGRAPHICAL FORM |
| D | 0044 | LATIN LETTER SMALL CAPITAL D TYPOGRAPHICAL FORM |
| E | 0045 | LATIN LETTER SMALL CAPITAL E TYPOGRAPHICAL FORM |
| F | 0046 | LATIN LETTER SMALL CAPITAL F TYPOGRAPHICAL FORM |
| G | 0047 | LATIN LETTER SMALL CAPITAL G TYPOGRAPHICAL FORM |
| H | 0048 | LATIN LETTER SMALL CAPITAL H TYPOGRAPHICAL FORM |
| I | 0049 | LATIN LETTER SMALL CAPITAL I TYPOGRAPHICAL FORM |
| J | 004 A | LATIN LETTER SMALL CAPITAL J TYPOGRAPHICAL FORM |
| K | $004 B$ | LATIN LETTER SMALL CAPITAL K TYPOGRAPHICAL FORM |
| L | $004 C$ | LATIN LETTER SMALL CAPITAL L TYPOGRAPHICAL FORM |
| $\mathbf{M}$ | $004 D$ | LATIN LETTER SMALL CAPITAL M TYPOGRAPHICAL FORM |


| $\mathbf{N}$ | 004 E | LATIN LETTER SMALL CAPITAL N TYPOGRAPHICAL FORM |
| :--- | :--- | :--- |
| $\mathbf{O}$ | 004 F | LATIN LETTER SMALL CAPITAL O TYPOGRAPHICAL FORM |
| P | 0050 | LATIN LETTER SMALL CAPITAL P TYPOGRAPHICAL FORM |
| Q | 0051 | LATIN LETTER SMALL CAPITAL Q TYPOGRAPHICAL FORM |
| R | 0052 | LATIN LETTER SMALL CAPITAL R TYPOGRAPHICAL FORM |
| S | 0053 | LATIN LETTER SMALL CAPITAL S TYPOGRAPHICAL FORM |
| T | 0054 | LATIN LETTER SMALL CAPITAL T TYPOGRAPHICAL FORM |
| U | 0055 | LATIN LETTER SMALL CAPITAL U TYPOGRAPHICAL FORM |
| V | 0056 | LATIN LETTER SMALL CAPITAL V TYPOGRAPHICAL FORM |
| W | 0057 | LATIN LETTER SMALL CAPITAL W TYPOGRAPHICAL FORM |
| X | 0058 | LATIN LETTER SMALL CAPITAL X TYPOGRAPHICAL FORM |
| Y | 0059 | LATIN LETTER SMALL CAPITAL Y TYPOGRAPHICAL FORM |
| Z | $005 A$ | LATIN LETTER SMALL CAPITAL Z TYPOGRAPHICAL FORM |
| A | $00 C 0$ | LATIN LETTER SMALL CAPITAL A WITH GRAVE TYPOGRAPHICAL FORM |


| Á | 00 C 1 | LATIN LETTER SMALL CAPITAL A WITH ACUTE TYPOGRAPHICAL FORM |
| :--- | :--- | :--- |
| $\hat{A}$ | $00 C 2$ | LATIN LETTER SMALL CAPITAL A WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| $\tilde{A}$ | $00 C 3$ | LATIN LETTER SMALL CAPITAL A WITH TILDE TYPOGRAPHICAL FORM |
| Ä | $00 C 4$ | LATIN LETTER SMALL CAPITAL A WITH DIAERESIS TYPOGRAPHICAL FORM |
| Å | $00 C 5$ | LATIN LETTER SMALL CAPITAL A WITH RING ABOVE TYPOGRAPHICAL FORM |
| Æ | $00 C 6$ | LATIN LETTER SMALL CAPITAL AE TYPOGRAPHICAL FORM |
| Ç | $00 C 7$ | LATIN LETTER SMALL CAPITAL C WITH CEDILLA TYPOGRAPHICAL FORM |
| È | $00 C 8$ | LATIN LETTER SMALL CAPITAL E WITH GRAVE TYPOGRAPHICAL FORM |
| É | $00 C 9$ | LATIN LETTER SMALL CAPITAL E WITH ACUTE TYPOGRAPHICAL FORM |
| $\hat{E}$ | $00 C A$ | LATIN LETTER SMALL CAPITAL E WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| $\ddot{E}$ | $00 C B$ | LATIN LETTER SMALL CAPITAL E WITH DIAERESIS TYPOGRAPHICAL FORM |
| Ì | $00 C C$ | LATIN LETTER SMALL CAPITAL I WITH GRAVE TYPOGRAPHICAL FORM |
| Í | $00 C D$ | LATIN LETTER SMALL CAPITAL I WITH ACUTE TYPOGRAPHICAL FORM |
| $\hat{\text { Í }}$ | $00 C E$ | LATIN LETTER SMALLCAPITAL I WITH CIRCUMFLEX TYPOGRAPHICAL FORM |


| İ | 00CF | LATIN LETTER SMALL CAPITAL I WITH DIAERESIS TYPOGRAPHICAL FORM |
| :---: | :---: | :---: |
| $\tilde{\mathbf{N}}$ | 00D1 | LATIN LETTER SMALL CAPITAL N WITH TILDE TYPOGRAPHICAL FORM |
| Ò | 00D2 | LATIN LETTER SMALL CAPITAL O WITH GRAVE TYPOGRAPHICAL FORM |
| Ó | 00D3 | LATIN LETTER SMALL CAPITAL O WITH ACUTE TYPOGRAPHICAL FORM |
| Ô | 00D4 | LATIN LETTER SMALL CAPITAL O WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| O | 00D5 | LATIN LETTER SMALL CAPITAL O WITH TILDE TYPOGRAPHICAL FORM |
| Ö | 00D6 | LATIN LETTER SMALL CAPITAL O WITH DIAERESIS TYPOGRAPHICAL FORM |
| OE | 0152 | LATIN LETTER SMALL CAPITAL LIGATURE OE TYPOGRAPHICAL FORM |
| $\emptyset$ | 00D8 | LATIN CAPITAL LETTER O WITH STROKE TYPOGRAPHICAL FORM |
| Ù | 00D9 | LATIN LETTER SMALL CAPITAL U WITH GRAVE TYPOGRAPHICAL FORM |
| Ú | 00DA | LATIN LETTER SMALL CAPITAL U WITH ACUTE TYPOGRAPHICAL FORM |
| $\hat{U}$ | 00DB | LATIN LETTER SMALL CAPITAL U WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| Ü | 00DC | LATIN LETTER SMALL CAPITAL U WITH DIAERESIS TYPOGRAPHICAL FORM |


| $\ddot{Y}$ | 0178 | LATIN LETTER SMALL CAPITAL Y WITH DIAERESIS TYPOGRAPHICAL FORM |
| :--- | :--- | :--- |

## 3: Regional styles

Across Europe, there were a number of regional styles in Medieval writing. The Old English and Nordic style of thorn has already been discussed, and to this can be added two styles of the eth, distinguished by the curvature and angle of the ascender. Since the glyphs in the Unicode Standard have the Nordic style, only the Old English stylistic variants are listed below. However, the default style varies from font to font. In most fonts, the Nordic style is default and an Old English style may be added with smart font technology. In some fonts, like Junicode, the Old English style is default and the Nordic style is a variant form.

The list of characters with regional styles is potentially very long. Presently it is limited to the variants of the thorn and eth, since these characters are so frequent and have such distinct shapes in most Old English and Old Norse texts, especially the capital form of the thorn. We recommend that all MUFI-compatible fonts should include these variants.

Note that different code points have not been assigned to the stylistic variants. They should be encoded with the code points in the Unicode Standard.

| Glyph | Code point | MUFI descriptive name |
| :--- | :--- | :--- |
| $\mathbf{p}$ | 00 FE | LATIN SMALL LETTER THORN OLD ENGLISH STYLE |
| $\boldsymbol{\rho}$ | 00 DE | LATIN CAPITAL LETTER THORN OLD ENGLISH STYLE |
| $\gamma$ | 00 F 0 | LATIN SMALL LETTER ETH OLD ENGLISH STYLE |

## Appendix: New characters in v. 4.0 of the recommendation

This is a complete list of additions and changes from v. 3.0 to v .4 .0 of the MUFI character recommendation.

## Latin Extended-B

| UU | 019C | LATIN CAPITAL LETTER TURNED M | New |
| :--- | :--- | :--- | :--- |

## IPA Extensions

| u | 026 F | LATIN SMALL LETTER TURNED M | New |
| :--- | :--- | :--- | :--- |

## General Punctuation

| $:$ | 2056 | THREE DOT PUNCTUATION | New |
| :--- | :--- | :--- | :--- |

Supplemental Punctuation

| $=$ | 2 E 40 | DOUBLE HYPHEN | New |
| :--- | :--- | :--- | :--- |

Latin Extended-C

| $\mathbf{V}$ | 2C7D | MODIFIER LETTER CAPITAL V | Moved from F1BE to 2C7D |
| :--- | :--- | :--- | :--- |

## Latin Extended-E

| $\boldsymbol{X}$ | AB57 | LATIN LETTER SMALL X WITH LONG LEFT LEG | Moved from F232 to AB57 |
| :--- | :--- | :--- | :--- |

## Subrange I: Ligatures

| U | E8C6 | LATIN CAPITAL LIGATURE UU | New |
| :--- | :--- | :--- | :--- |
| $\mathbf{u}$ | E8C7 | LATIN SMALL LIGATURE UU | New |
| $\mathbf{U E}$ | E8C8 | LATIN CAPITAL LIGATURE UE | New |
| $\mathbf{u}$ | E8C9 | LATIN SMALL LIGATURE UE | New |
| $\mathbf{O}$ | E8DE | LATIN SMALL LIGATURE O R ROTUNDA | New |
| f | E8DF | LATIN SMALL LIGATURE LONG S L WITH STROKE | New |
| d | F1BB | LATIN SMALL LIGATURE CH | New |

## Subrange 4: Base-line abbreviation characters

| $\mathrm{h}^{\prime}$ | E8A3 | LATIN ABBREVIATION SIGN AUTEM | New |
| :--- | :--- | :--- | :--- |

Subrange 5: Modified base-line abbreviation characters

| $\dot{\mathbf{j}}$ | E8A1 | LATIN SMALL LETTER I WITH TWO STROKES | New |
| :--- | :--- | :--- | :--- |
| $\dot{\boldsymbol{j}}$ | E8A2 | LATIN SMALL LETTER J WITH TWO STROKES | New |
| $\boldsymbol{\nabla}$ | E8BB | LATIN SMALL LETTER V WITH SHORT SLASH ABOVE RIGHT | New |
| $\boldsymbol{F}$ | E8BC | LATIN SMALL LETTER V WITH TWO SHORT SLASHES ABOVE RIGHT | New |
| $\mathbf{x}$ | E8CE | LATIN SMALL LETTER X WITH TWO SHORT SLASHES BELOW RIGHT | New |

## Subrange 8: Punctuation marks

| $\ddagger$ | F1D2 | TRIPLE DAGGER SIGN | New |
| :--- | :--- | :--- | :--- |

Subrange I I: Additional number forms

| $\boldsymbol{C}$ | F2FE | ROMAN NUMERAL CAPITAL C WITH TWO BARS | New |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{C}^{\boldsymbol{C}}$ | F2FF | ROMAN NUMERAL SMALL C WITH TWO BARS | New |

Subrange 12: Weight, currency and measurement

| 古 | F2FA | KRONE SIGN | New |
| :--- | :--- | :--- | :--- |


| $\phi$ | F2FB | HELBING SIGN | New |
| :--- | :--- | :--- | :--- |

## Subrange 16: Characters with acute accent

| @́ | F23E | LATIN SMALL LETTER M UNCIAL FORM WITH ACUTE ACCENT | New |
| :--- | :--- | :--- | :--- |

Subrange 17: Characters with double acute accent

| ṕ | E268 | LATIN CAPITAL LETTER P WITH DOUBLE ACUTE | New |
| :--- | :--- | :--- | :--- |
| ṕ | E668 | LATIN SMALL LETTER P WITH DOUBLE ACUTE | New |
| ÚU | EFD9 | LATIN CAPITAL LIGATURE UU WITH DOUBLE ACUTE | New |
| űú | EFD8 | LATIN SMALL LIGATURE UU WITH DOUBLE ACUTE | New |

Subrange 22: Characters with ogonek

| CE | E262 | LATIN CAPITAL LIGATURE OE WITH OGONEK | New |
| :--- | :--- | :--- | :--- |
| œ | E662 | LATIN SMALL LIGATURE OE WITH OGONEK | New |
| $\frac{1}{2}$ | E8DD | LATIN SMALLLETTER DOTLESS I WITH OGONEK | New |

## Subrange 30: Characters with vertical bar above

| $\mathbf{V}^{\prime}$ | E34E | LATIN CAPITAL LETTER V WITH VERTICAL LINE ABOVE | New |
| :--- | :--- | :--- | :--- |
| $\dot{\mathbf{V}}$ | E74F | LATIN SMALL LETTER V WITH VERTICAL LINE ABOVE | New |

Subrange 32: Characters with acute accent and dot above

| $\ddot{\text { Æ゙ }}$ | EFDB | LATIN CAPITAL LETTER AE WITH DOT ABOVE AND ACUTE | New |
| :--- | :--- | :--- | :--- |
| $\ddot{\nless}$ | EFDC | LATIN SMALL LETTER AE WITH DOT ABOVE AND ACUTE | New |

Subrange 5I: Alphabetical list of variant letter forms

| $\mathbf{m}$ | F23C | LATIN SMALL LETTER M UNCIAL FORM | New |
| :--- | :--- | :--- | :--- |
| $\mathbf{m}$ | F23D | LATIN SMALL LETTER M UNCIAL FORM WITH RIGHT DESCENDER | New |




[^0]:    See 019C LATIN CAPITAL LETTER TURNED M in Latin Extended-B for a similar glyph, although not described and recognised as a ligature.

