

# SynthSlant Calibration Sheet

for synthslant version 0.2 as of 2025/10/27

Selected slant engine: PDF. Font name: ec-mlmr10.

Shape	Code Seq.	L.case	Mixed Case	Uppercase
Normal	<code>\normalfont</code>	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
Italic	<code>\itshape</code>	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>

## 1 Slanted Samples

Slant	L.case	Mixed Case	Uppercase
.05	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.06	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.07	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.08	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.09	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.10	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.11	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.12	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.13	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.14	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.15	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.16	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.17	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.18	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.19	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.20	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.21	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.22	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.23	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.24	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.25	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.26	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.27	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.28	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.29	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.30	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.31	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.32	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.33	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.34	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.35	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.36	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.37	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.38	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ
.39	<i>aefgiv</i>	White Handgloves	HÅMBÜRGÉFØÑŠ

## 2 Upright Italic Samples

Slant	L.case	Mixed Case	Uppercase
-.05	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.06	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.07	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.08	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.09	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.10	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.11	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.12	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.13	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.14	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.15	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.16	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.17	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.18	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.19	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.20	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.21	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.22	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.23	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.24	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.25	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.26	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.27	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.28	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.29	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.30	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.31	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.32	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.33	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.34	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.35	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.36	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.37	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.38	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>
-.39	<i>aefgiv</i>	<i>White Handgloves</i>	<i>HÅMBÜRGÉFØÑŠ</i>

## 3 Examples

The current slant values are `\synthslant = .23` and `\synthnegslant = -.21`.

### 3.1 Copy

We mix different shapes to gauge the homogeneity of slant angles and overall gray values. Some overfull horizontal boxes are possible even with package `microtype` being active.

#### Roman/Italic.

*Grumpy wizards make toxic brew for the evil Queen and Jack. One morning, when Gregor Samsa woke from troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment. His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked.*

#### Roman/Slanted Roman.

*Grumpy wizards make toxic brew for the evil Queen and Jack. One morning, when Gregor Samsa woke from troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment. His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked.*

#### Italic/Slanted Roman.

*Grumpy wizards make toxic brew for the evil Queen and Jack. One morning, when Gregor Samsa woke from troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he*

*could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment. His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked.*

#### Roman/Italic/Slanted Roman.

*Grumpy wizards make toxic brew for the evil Queen and Jack. One morning, when Gregor Samsa woke from troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment. His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked.*

#### Roman/Upright Italic.

*Grumpy wizards make toxic brew for the evil Queen and Jack. One morning, when Gregor Samsa woke from troubled dreams, he found himself transformed in his bed into a horrible vermin. He lay on his armour-like back, and if he lifted his head a little he could see his brown belly, slightly domed and divided by arches into stiff sections. The bedding was hardly able to cover it and seemed ready to slide off any moment. His many legs, pitifully thin compared with the size of the rest of him, waved about helplessly as he looked.*

## 3.2 Bounding Box

Thin lines indicate the baseline. All bounding boxes should be very tight. A little piercing into the box in the direction of the slant operation is acceptable.

<code>\textrm</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-
<code>\textit</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-
<code>\synthslantbox{.23}</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-
<code>\synthslantbox{-.21}</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-
<code>\textsynthslant</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-
<code>\textsynthuprightitalic</code>	-	<code>\ae{f}g{iv}</code>	-	<code>\HAMBÜRGÉFØÑŠ</code>	-

## 3.3 Width Change with `\synthslantbox`?

Widths of the alphabet in uppercase and lowercase letter plus the digits. The “hyp” version contains discretionary hyphens (`\-`) between each of the letters or digits. The absolute value of all deltas should be much less than 3pt.

<code>\upshape</code>	Slant	Width pt	Delta pt	<code>\itshape</code>	Slant	Width pt	Delta pt
ABC	—	363.8	—	ABC	—	355	—
ABC hyp	—	363.5	—	ABC hyp	—	356.8	—
ABC	0	363.8	0	ABC	0	355	0
ABC hyp	0	363.5	0	ABC hyp	0	356.8	0
ABC	.1	363.8	0	ABC	-.1	355	0
ABC hyp	.1	363.5	0	ABC hyp	-.1	356.8	0
ABC	.2	363.8	0	ABC	-.2	355	0
ABC hyp	.2	363.5	0	ABC hyp	-.2	356.8	0
ABC	.3	363.8	0	ABC	-.3	355	0
ABC hyp	.3	363.5	0	ABC hyp	-.3	356.8	0

## 3.4 Line Breaking

Left: plain text,

right: `\textsynthslant{Show line break\-\ing with a sen\-\tence.}`

Show	<i>Show</i>
line	<i>line</i>
break-	<i>break-</i>
ing	<i>ing</i>
with	<i>with</i>
a	<i>a</i>
sen-	<i>sen-</i>
tence.	<i>tence.</i>

Left: `Schi\discretionary{ff-}{f}{ff}ahrt`,

right: `\textsynthslant{Schi\discretionary{ff-}{f}{ff}ahrt}`

Schiff-	<i>Schiff-</i>
fahrt	<i>fahrt</i>

### 3.5 Microtype Enhancements

Package `microtype` loaded.

Test different trackings in the `synthnegslant` context.

---

Tracking $\frac{1}{1000}$ em	Spacing $\frac{\text{dim}}{1000}$	Sample	Example sentence
0	0	æfgi	The quick brown fox jumps over the lazy dog.
20	150	æfgi	The quick brown fox jumps over the lazy dog.
250	300	æ f g i	T h e q u i c k b r o w n f o x j u m p s o v e r t h e l a z y d o g .

---

All samples are tightly bracketed by thin horizontal rules to reveal possible outer spacing problems.