

A Type 1 face, embedded whole

Every line on this page is set in a face that was embedded from a Type 1 program. None of it is a standard font, and the document is PDF/A-3u - which requires every face to be embedded.

The three pieces

Read out of the files themselves, not written down here: the clear header, the encrypted body, the closing zeros. They become Length1, Length2 and Length3 of the embedded stream.

File	PostScript name	Length1	Length2	Length3	File size
OCRB.pfb	OCRB	2751	28056	533	31360
NimbusSans-Regular.t1	NimbusSans-Regular	896	102573	532	104001
NimbusRoman-Regular.t1	NimbusRoman-Regular	908	132087	532	133527

The three lengths of a .pfb add up to the file size less 20 bytes - six per segment marker and two for the end marker. In a .t1 there are no markers and they add up exactly.

The same face, measured on both roads

The widths of a Type 1 face come from its AFM, by glyph name; the widths of a TrueType face come from hmtx, by glyph number. Nimbus Sans is here in both forms, so the two can be asked the same question - and a name chosen wrongly would show up as nothing else.

Rechnung	Type 1: 16.0796 mm	TrueType: 16.0834 mm	difference: 0.0038 mm
Hamburgefonstiv	Type 1: 26.6629 mm	TrueType: 26.6668 mm	difference: 0.0038 mm
AVATAR 12,34 EUR	Type 1: 32.3497 mm	TrueType: 32.3512 mm	difference: 0.0014 mm

The faces themselves

Nimbus Roman, from NimbusRoman-Regular.t1

Nimbus Sans, from NimbusSans-Regular.t1

OCR-B 0123456789, from OCRB.pfb

OCR-B is the face a barcode caption asks for - see 03.05-svg-text, where it arrives through an SVG. There it is embedded as TrueType; here it is the same design as a Type 1 program.