# Font cmr10

Design size: 10.0 Encoding: TeX text Family: CMR

Face: O 352

### Font parameters

$\sigma_1$	slant per pt	0.0
$\sigma_2$	interword space	$3.33333  \mathrm{pt}$
$\sigma_3$	interword stretch	$1.66666\mathrm{pt}$
$\sigma_4$	interword shrink	$1.11111  \mathrm{pt}$
$\sigma_5$	x-height	$4.30554  \mathrm{pt}$
$\sigma_6$	quad width	$10.00002  \mathrm{pt}$
$\sigma_7$	extra space	$1.11111  \mathrm{pt}$

Generated by tfm2tex version 1.8.1 on Mon Sep 23 10:42:19 EDT 2024.

Glyphs are shown at 60 pt. The character box is shown in black. The x-height is shown by the bottom edge of a blue rule and, when the character has a non-zero depth, the baseline is shown by the top edge of a red rule.

# Table of Contents

	0	1	'2	<b>'</b> 3	4	<b>'</b> 5	6	7	
'00x	Γ	Δ	Θ	Λ	Ξ	П	Σ	Υ	″0x
'01x	Φ	Ψ	Ω	ff	fi	fl	ffi	ffl	
'02x	1	J	`	,	~	V	-	۰	″1x
'03x	د	В	æ	œ	ø	Æ	Œ	Ø	
'04x	-	!	"	#	\$	%	&	,	″2x
'05x	(	)	*	+	,	-		/	
'06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	i	=	į	?	
′10x	@	A	В	C	D	Е	F	G	″4x
′11x	Н	I	J	K	L	M	N	0	
′12x	Р	Q	R	S	Т	U	V	W	″5x
′13x	X	Y	Z	[	"	]	^	•	5x
′14x	(	a	b	с	d	е	f	g	″6x
′15x	h	i	j	k	1	m	n	О	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	X	у	Z	-		"	~		1.3
	″8	″9	"A	"B	"C	″D	"E	"F	

### Characters

Char code: 0, '000, "00



 $\begin{array}{ll} wd: & 6.25002\,\mathrm{pt} \\ ht: & 6.83331\,\mathrm{pt} \end{array}$ 

Char code: 1, '001, "01



 $\begin{array}{ll} \mathrm{wd} \colon & 8.33336\,\mathrm{pt} \\ \mathrm{ht} \colon & 6.83331\,\mathrm{pt} \end{array}$ 

Char code: 2, '002, "02



 $\begin{array}{ll} \mathrm{wd} \colon & 7.7778\,\mathrm{pt} \\ \mathrm{ht} \colon & 6.83331\,\mathrm{pt} \end{array}$ 

Char code: 3, '003, "03



wd: 6.94444 pt ht: 6.83331 pt

Char code: 4, '004, "04



wd: 6.66669 pt ht: 6.83331 pt

Char code: 5, '005, "05



wd: 7.50002 pt ht: 6.83331 pt

Char code: 6, '006, "06



 $\begin{array}{ll} \mathrm{wd} \colon & 7.22223\,\mathrm{pt} \\ \mathrm{ht} \colon & 6.83331\,\mathrm{pt} \end{array}$ 

Char code: 7, '007, "07



wd:  $7.7778 \, \mathrm{pt}$ ht:  $6.83331\,\mathrm{pt}$ 

Char code: 8, '010, "08



wd:  $7.22223 \, \mathrm{pt}$ ht:  $6.83331\,\mathrm{pt}$ 

Char code: 9, '011, "09



wd:  $7.7778\,\mathrm{pt}$ ht:  $6.83331\,\mathrm{pt}$ 

Char code: 10, '012, "0A



wd:  $7.22223 \, \mathrm{pt}$ ht:  $6.83331\,\mathrm{pt}$ 

Char code: 11, '013, "0B



 $5.83336 \, \mathrm{pt}$ wd: ht:  $6.94444\,\mathrm{pt}$ ic:  $0.77779\,\mathrm{pt}$ 

Ligatures

ff("OB) + i("69) = ffi("OE) ff("OB) + i("6C) = ffi("OF)

Char code: 12, '014, "00



wd:  $5.55557 \, \mathrm{pt}$ ht:  $6.94444 \, \mathrm{pt}$ 

Char code: 13, '015, "0D



 $wd: \quad 5.55557\,pt$  $6.94444\,\mathrm{pt}$ ht:

Char code: 14, '016, "0E



wd: 8.33336 pt ht: 6.94444 pt

Char code: 15, '017, "0F



wd: 8.33336 pt ht: 6.94444 pt

Char code: 16, '020, "10



wd: 2.77779 pt ht: 4.30554 pt

Char code: 17, '021, "11



wd: 3.05557 pt ht: 4.30554 pt dp: 1.94444 pt

Char code: 18, '022, "12



wd: 5.00002 pt ht: 6.94444 pt

Char code: 19, '023, "13



wd: 5.00002 pt ht: 6.94444 pt

Char code: 20, '024, "14



wd: 5.00002 pt ht: 6.28473 pt

Char code: 21, '025, "15

wd: 5.00002 pt ht: 6.94444 pt

Char code: 22, '026, "16

wd: 5.00002 pt ht: 5.67776 pt

Char code: 23, '027, "17

wd: 7.50002 pt ht: 6.94444 pt

Char code: 24, '030, "18

wd: 4.44444 pt ht: 0.0 pt dp: 1.70137 pt

Char code: 25, '031, "19

wd: 5.00002 pt ht: 6.94444 pt

Char code: 26, '032, "1A

wd: 7.22223 pt ht: 4.30554 pt

Char code: 27, '033, "1B

wd: 7.7778 pt ht: 4.30554 pt

Char code: 28, '034, "10

wd: 5.00002 pt ht: 5.27779 pt dp: 0.97223 pt

Char code: 29, '035, "1D



wd: 9.0278 pt ht: 6.83331 pt

Char code: 30, '036, "1E



wd: 10.1389 pt ht: 6.83331 pt

Char code: 31, '037, "1F



wd: 7.7778 pt ht: 7.31943 pt dp: 0.48611 pt

Char code: **32**, '040, "20



wd: 2.77779 pt ht: 4.30554 pt

Char code: 33, '041, "21



wd: 2.77779 pt ht: 6.94444 pt

#### Ligatures

! 
$$("21) + ("60) = ; ("30)$$

Char code: 34, '042, "22



wd: 5.00002 pt ht: 6.94444 pt

Char code: 35, '043, "23



wd: 8.33336 ptht: 6.94444 ptdp: 1.94443 pt

Char code: 36, '044, "24



wd: 5.00002 pt ht: 7.5 pt dp: 0.55554 pt

Char code: 37, '045, "25



 $\begin{array}{ll} {\rm wd:} & 8.33336\,{\rm pt} \\ {\rm ht:} & 7.5\,{\rm pt} \\ {\rm dp:} & 0.55554\,{\rm pt} \end{array}$ 

Char code: 38, '046, "26



wd: 7.7778 pt ht: 6.94444 pt

Char code: 39, '047, "27



wd: 2.77779 pt ht: 6.94444 pt

Ligatures

$$'("27) + '("27) = "("22)$$

Char code: 40, '050, "28



wd: 3.8889 pt ht: 7.5 pt dp: 2.5 pt

Char code: 41, '051, "29



wd: 3.8889 ptht: 7.5 ptdp: 2.5 pt

Char code: 42, '052, "2A



wd: 5.00002 pt ht: 7.5 pt

Char code: 43, '053, "2B



wd: 7.7778 pt ht: 5.83333 pt dp: 0.83333 pt

Char code: 44, '054, "20



wd: 2.77779 pt ht: 1.05554 pt dp: 1.94444 pt

Char code: 45, '055, "2D



wd: 3.33333 pt ht: 4.30554 pt

Ligatures

$$-("2D) + -("2D) = -("7B)$$

Char code: 46, '056, "2E



wd: 2.77779 pt ht: 1.05554 pt

Char code: 47, '057, "2F



wd: 5.00002 ptht: 7.5 ptdp: 2.5 pt

Char code: 48, '060, "30



wd: 5.00002 pt ht: 6.44444 pt

Char code: 49, '061, "31



 $\begin{array}{ll} \text{wd:} & 5.00002\,\text{pt} \\ \text{ht:} & 6.44444\,\text{pt} \end{array}$ 

Char code: 50, '062, "32



wd: 5.00002 pt ht: 6.44444 pt

Char code: 51, '063, "33



wd: 5.00002 pt ht: 6.44444 pt

Char code: 52, '064, "34



wd: 5.00002 pt ht: 6.44444 pt

Char code: **53**, '065, "35



wd: 5.00002 pt ht: 6.44444 pt

Char code: 54, '066, "36



wd: 5.00002 pt ht: 6.44444 pt

Char code: 55, '067, "37



wd: 5.00002 pt ht: 6.44444 pt

Char code: 56, '070, "38



wd: 5.00002 pt ht: 6.44444 pt

Char code: 57, '071, "39



wd: 5.00002 pt ht: 6.44444 pt

Char code: 58, '072, "3A



wd: 2.77779 pt ht: 4.30554 pt

Char code: **59**, '073, "3B



wd: 2.77779 ptht: 4.30554 ptdp: 1.94444 pt

Char code: 60, '074, "30



wd: 2.77779 pt ht: 5.0 pt dp: 1.94444 pt

Char code: 61, '075, "3D



wd: 7.7778 pt ht: 3.66875 pt dp: -1.33125 pt

Char code: 62, '076, "3E



 $\begin{array}{ll} \text{wd:} & 4.72223\,\text{pt} \\ \text{ht:} & 5.0\,\text{pt} \\ \text{dp:} & 1.94444\,\text{pt} \end{array}$ 

Char code: 63, '077, "3F



wd: 4.72223 pt ht: 6.94444 pt

Ligatures

?  $("3F) + `("60) = \vdots ("3E)$ 

Char code: 64, '100, "40



wd: 7.7778 pt ht: 6.94444 pt

Char code: 65, '101, "41



wd: 7.50002 pt ht: 6.83331 pt

Char code: 66, '102, "42



wd: 7.08336 pt ht: 6.83331 pt

Char code: 67, '103, "43



wd: 7.22223 pt ht: 6.83331 pt

Char code: 68, '104, "44



wd: 7.6389 pt ht: 6.83331 pt

Char code: 69, '105, "45



wd: 6.80557 pt ht: 6.83331 pt

Char code: 70, '106, "46



wd: 6.5278 pt ht: 6.83331 pt

Char code: 71, '107, "47



wd: 7.84723 pt ht: 6.83331 pt

Char code: 72, '110, "48



wd: 7.50002 pt ht: 6.83331 pt

Char code: 73, '111, "49



wd: 3.61111 pt ht: 6.83331 pt

Char code: 74, '112, "4A



wd: 5.1389 pt ht: 6.83331 pt

Char code: 75, '113, "4B



wd: 7.7778 pt ht: 6.83331 pt

Char code: 76, '114, "40



 $\begin{array}{ll} {\rm wd:} & 6.25002\,{\rm pt} \\ {\rm ht:} & 6.83331\,{\rm pt} \end{array}$ 

Char code: 77, '115, "4D



wd: 9.16669 pt ht: 6.83331 pt

Char code: 78, '116, "4E



wd: 7.50002 pt ht: 6.83331 pt

Char code: 79, '117, "4F



wd: 7.7778 pt ht: 6.83331 pt

Char code: 80, '120, "50



wd: 6.80557 pt ht: 6.83331 pt

Char code: 81, '121, "51



wd: 7.7778 pt ht: 6.83331 pt dp: 1.94444 pt

Char code: 82, '122, "52



 $\begin{array}{ll} {\rm wd:} & 7.36111\,{\rm pt} \\ {\rm ht:} & 6.83331\,{\rm pt} \end{array}$ 

Char code: 83, '123, "53



wd: 5.55557 pt ht: 6.83331 pt

Char code: 84, '124, "54



wd: 7.22223 pt ht: 6.83331 pt

Char code: 85, '125, "55



wd: 7.50002 pt ht: 6.83331 pt

Char code: 86, '126, "56



wd: 7.50002 pt ht: 6.83331 pt ic: 0.13887 pt

Char code: 87, '127, "57



wd: 10.2778 pt ht: 6.83331 pt ic: 0.13887 pt

Char code: 88, '130, "58



wd: 7.50002 pt ht: 6.83331 pt

Char code: 89, '131, "59



wd: 7.50002 pt ht: 6.83331 pt ic: 0.24998 pt

Char code: 90, '132, "5A



 $\begin{array}{ll} wd: & 6.11111\,\mathrm{pt} \\ \mathrm{ht:} & 6.83331\,\mathrm{pt} \end{array}$ 

Char code: 91, '133, "5B



wd: 2.77779 pt ht: 7.5 pt dp: 2.5 pt

Char code: 92, '134, "5C



 $\begin{array}{ll} wd: & 5.00002\,\mathrm{pt} \\ ht: & 6.94444\,\mathrm{pt} \end{array}$ 

Char code: 93, '135, "5D



wd: 2.77779 pt ht: 7.5 pt dp: 2.5 pt

Char code: 94, '136, "5E



wd: 5.00002 pt ht: 6.94444 pt

Char code: 95, '137, "5F



wd: 2.77779 pt ht: 6.67859 pt

Char code: 96, '140, "60



wd: 2.77779 pt ht: 6.94444 pt

#### Ligatures

'("60) + '("60) = "("5C)

Char code: 97, '141, "61



wd: 5.00002 pt ht:  $4.30554\,\mathrm{pt}$ 

Char code: 98, '142, "62



wd: 5.55557 pt  $6.94444\,\mathrm{pt}$ 

Char code: 99, '143, "63



wd:  $4.44444 \, \mathrm{pt}$ ht:  $4.30554\,\mathrm{pt}$ 

Char code: 100, '144, "64



wd:  $5.55557 \, \mathrm{pt}$ ht:  $6.94444\,\mathrm{pt}$ 

Char code: 101, '145, "65



wd:  $4.44444 \, \mathrm{pt}$  $4.30554\,\mathrm{pt}$ ht:

Char code: 102, '146, "66



wd:  $3.05557 \, \mathrm{pt}$ ht:  $6.94444\,\mathrm{pt}$  $0.77779\,\mathrm{pt}$ 

## Ligatures

$$f("66) + i("69) = fi("0C)$$

$$f("66) + f("66) = ff("0B)$$
  $f("66) + l("6C) = fl("0D)$ 

$$f("66) + 1("6C) = fl("0D)$$

Char code: 103, '147, "67

wd: 5.00002 pt ht: 4.30554 pt dp: 1.94444 pt ic: 0.13887 pt

Char code: 104, '150, "68

wd: 5.55557 pt ht: 6.94444 pt

Char code: 105, '151, "69

wd: 2.77779 pt ht: 6.67859 pt

Char code: 106, '152, "6A

wd: 3.05557 pt ht: 6.67859 pt dp: 1.94444 pt

Char code: 107, '153, "6B

wd: 5.2778 pt ht: 6.94444 pt

Char code: 108, '154, "6C

wd: 2.77779 pt ht: 6.94444 pt

Char code: 109, '155, "6D

wd: 8.33336 pt ht: 4.30554 pt

Char code: 110, '156, "6E

wd: 5.55557 pt ht: 4.30554 pt

Char code: 111, '157, "6F

wd: 5.00002 pt ht: 4.30554 pt

Char code: 112, '160, "70

wd: 5.55557 pt ht: 4.30554 pt dp: 1.94444 pt

Char code: 113, '161, "71

wd: 5.27779 pt ht: 4.30554 pt dp: 1.94444 pt

Char code: 114, '162, "72

wd: 3.91667 pt ht: 4.30554 pt

Char code: 115, '163, "73

wd: 3.94444 pt ht: 4.30554 pt

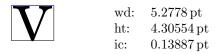
Char code: 116, '164, "74

wd: 3.8889 pt ht: 6.15079 pt

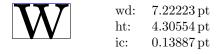
Char code: 117, '165, "75

wd: 5.55557 pt ht: 4.30554 pt

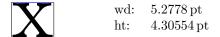
Char code: 118, '166, "76



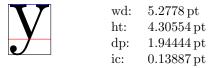
Char code: 119, '167, "77



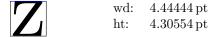
Char code: 120, '170, "78



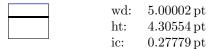
Char code: 121, '171, "79



Char code: 122, '172, "7A



Char code: 123, '173, "7B



#### Ligatures

$$-("7B) + -("2D) = --("7C)$$

Char code: 124, '174, "7C

Char code: 125, '175, "7D

//

 $\begin{array}{ll} {\rm wd:} & 5.00002\,{\rm pt} \\ {\rm ht:} & 6.94444\,{\rm pt} \end{array}$ 

Char code: 126, '176, "7E

~

 $\begin{array}{ll} {\rm wd:} & 5.00002\,{\rm pt} \\ {\rm ht:} & 6.67859\,{\rm pt} \end{array}$ 

Char code: 127, '177, "7F



wd: 5.00002 pt ht: 6.67859 pt

# TFM tables

Widths			$29 - 7.84723 \mathrm{pt}$	(1)	0	$0.0  \mathrm{pt}  (104)$
0	$0.0\mathrm{pt}$	(0)	$30 8.33336  \mathrm{pt}$	(6)		$0.48611 \mathrm{pt}$ (1)
1	2.77779 pt	(15)	$31 - 9.0278 \mathrm{pt}$	(1)	3	$0.55554 \mathrm{pt}$ (2)
2	$3.05557  \mathrm{pt}$	(3)	$32 9.16669  \mathrm{pt}$	(1)	4	$0.83333 \mathrm{pt}$ (1)
3	3.33333 pt	` '	$33\ 10.00002\mathrm{pt}$	(1)	5	$0.97223 \mathrm{pt}$ (1)
	-	(1)	$34 10.1389  \mathrm{pt}$	(1)	6	$1.70137  \mathrm{pt}$ (1)
$\frac{4}{5}$	3.61111 pt 3.8889 pt	(1)	$35 10.2778  \mathrm{pt}$	(1)	7	$1.94443  \mathrm{pt}$ (1)
6	3.91667 pt	(3)			8	$1.94444 \mathrm{pt} \ (11)$
7	3.94444 pt	(1)	Heights		9	$2.5  \mathrm{pt}$ (5)
8	4.44444 pt	(1) (4)	<b>G</b>			
9	4.72223 pt	(2)	$0   0.0  \mathrm{pt}$	(1)	Ker	ns
10	4.72223 pt 5.00002 pt	(29)	1 $1.05554  \mathrm{pt}$	(2)		
11	$5.00002  \mathrm{pt}$ $5.00002  \mathrm{pt}$	(29) $(1)$	$2  3.66875  \mathrm{pt}$	(1)		$3.19444 \mathrm{pt}$ (1)
12	5.1389 pt	(1)	$3 4.30554  \mathrm{pt}$	(27)		2.77779  pt (1)
13	5.27779 pt	(1)	$4   5.0  \mathrm{pt}$	(2)		$1.11111 \mathrm{pt}  (9)$
14	$5.27778  \mathrm{pt}$	(4)	$5  ext{ } 5.27779  \mathrm{pt}$	(1)		$0.83333 \mathrm{pt} \ (38)$
15	5.55557 pt	(9)	$6  ext{ } 5.67776  ext{ pt}$	(1)		$0.55554 \mathrm{pt}$ (2)
16	5.83336 pt	. ,	7 5.83333 pt	(1)		0.27779  pt  (99)
17	6.11111 pt	(1) (1)	8 6.15079 pt	(1)		0.27779  pt  (17)
18	$6.25002  \mathrm{pt}$		9 6.28473 pt	(1)		$0.55554 \mathrm{pt}$ (4)
19	$6.5278  \mathrm{pt}$	(2) (1)	$10 - 6.44444  \mathrm{pt}$	(10)		0.77779  pt  (10)
20	6.66669 pt	(1)	$11 - 6.67859 \mathrm{pt}$	(5)	3	$1.11111  \mathrm{pt}  (2)$
21	6.80557 pt	. ,	$12 - 6.83331 \mathrm{pt}$	(39)		
$\frac{21}{22}$	-	(2)	13 6.94444 pt	(27)	Itali	ic corrections
23	6.94444 pt 7.08336 pt	(1)	$14 - 7.31943 \mathrm{pt}$	(1)		
$\frac{23}{24}$	7.00330 pt 7.22223 pt	(1)	$15   7.5 \mathrm{pt}$	(8)	0	0.0 pt (117)
$\frac{24}{25}$	7.22223 pt 7.36111 pt	(7)				0.13887  pt (6)
26 26	-	(1)	${f Depths}$			0.24998 pt (1)
20 27	7.50002 pt 7.6389 pt	(9)	-	(4)		0.27779  pt (2)
28	7.0369 pt 7.7778 pt	(1)	$1 - 1.33125  \mathrm{pt}$	(1)	4	$0.77779 \mathrm{pt}$ (2)
40	1.1110 pt	(12)				