

ASCII codes

List of ASCII characters used in NC programs and DNC and their numerical equivalents.

Dec is the decimal value, which must be entered in the configuration.

Hex is the hexadecimal value.

Use is the normal use of the character.

Dec	Hex	Use
0	00	NUL-the null character. The blank header and footer on tapes
1	01	SOH-start of header, which indicates the beginning of header information.
2	02	STX-start of text, which indicates the start of the data block. Start of program on Heidenhain controls
3	03	ETX-end of text, which indicates the end of the data block. End of program on Heidenhain controls
4	04	EOT-end of transmission, which terminates the data flow. Used in Fanuc DNC 2 protocol
5	05	ENQ-inquiry, which requests identification from the other system. Used in Fanuc DNC 2 protocol
6	06	ACK-acknowledge, which accepts a packet received from the remote system. Used in Fanuc DNC 2 protocol
7	07	BEL-bell, which beeps the terminal.
8	08	BS-backspace.
9	09	HT-tab.
10	0A	LF-line feed. End of block on most controllers.
11	0B	VT-vertical tab.
12	0C	FF-form feed.
13	0D	CR-carriage return.
14	0E	SO-shift out, which shifts to a new character set.
15	0F	SI-shift in, which shifts back to the original character set.
16	10	DLE-data link escape.
17	11	DC1-Device Control 1. Xon on controllers like Fanuc and Sinumerik.
18	12	DC2-Device Control 2.
19	13	DC3-Device Control 3. Xoff on controllers like Fanuc and Sinumerik.
20	14	DC4-Device Control 4.
21	15	NAK-negative acknowledge, which rejects a packet received from a remote System. Used in Fanuc DNC 2 protocol
22	16	SYN-synchronous idle, which establishes and maintains synchronization on a synchronous connection used in Fanuc DNC 2 protocol.
23	17	ETB-end of transmission block, which marks the end of a data block.
24	18	CAN-cancel.
25	19	EM-end of medium.
26	1A	SUB-substitute.
27	1B	ESC-escape.
28	1C	FS-file separator.
29	1D	GS-group separator.
30	1E	RS-record separator.
31	1F	US-unit separator.
32	20	Space.
33	21	!
34	22	"
35	23	#
36	24	\$
37	25	%
38	26	&
39	27	' Quote.
40	28	(
41	29)
42	2A	*
43	2B	+
44	2C	, Comma.
45	2D	- Dash.
46	2E	. Period.
47	2F	/ Slash.
48	30	0
49	31	1
50	32	2
51	33	3
52	34	4

53	35	5
54	36	6
55	37	7
56	38	8
57	39	9
58	3A	:
59	3B	;
60	3C	<
61	3D	=
62	3E	>
63	3F	?
64	40	@
65	41	A
66	42	B
67	43	C
68	44	D
69	45	E
70	46	F
71	47	G
72	48	H
73	49	I
74	4A	J
75	4B	K
76	4C	L
77	4D	M
78	4E	N
79	4F	O
80	50	P
81	51	Q
82	52	R
83	53	S
84	54	T
85	55	U
86	56	V
87	57	W
88	58	X
89	59	Y
90	5A	Z
91	5B	[
92	5C	\
93	5D]
94	5E	^
95	5F	-
96	60	`
97	61	a
98	62	b
99	63	c
100	64	d
101	65	e
102	66	f
103	67	g
104	68	h
105	69	i
106	6A	j
107	6B	k
108	6C	l
109	6D	m
110	6E	n
111	6F	o
112	70	P
113	71	q
114	72	r
115	73	s
116	74	t
117	75	u
118	76	v
119	77	w
120	78	x
121	79	y
122	7A	z

Backslash.

Caret.

Underscore.

Accent.

123	7B	{
124	7C	
125	7D	}
126	07E	~