NAME limits – header for implementation-specific constants

SYNOPSIS **#include <limits.h>**

DESCRIPTION The header **<limits.h>** is a list of minimal magnitude limitations imposed by a specific implementation of the operating system.

ARG_MAX	**1048320**	**/* max length of arguments to exec */**
CHAR_BIT	**8**	**/* max # of bits in a "char" */**
CHAR_MAX	**255**	**/* max value of a "char" */**
CHAR_MIN	**0**	**/* min value of a "char" */**
CHILD_MAX	**25**	**/* max # of processes per user id */**
CLK_TCK	**_sysconf(3)**	**/* clock ticks per second */**
DBL_DIG	**15**	**/* digits of precision of a "double" */**
DBL_MAX	**1.7976931348623157E+308**	**/* max decimal value of a "double"*/**
DBL_MIN	**2.2250738585072014E-308**	**/* min decimal value of a "double"*/**
FCHR_MAX	**1048576**	**/* historical default file size limit in bytes */**
FLT_DIG	**6**	**/* digits of precision of a "float" */**
FLT_MAX	**3.40282347e+38F**	**/* max decimal value of a "float" */**
FLT_MIN	**1.17549435E-38F**	**/* min decimal value of a "float" */**
INT_MAX	**2147483647**	**/* max value of an "int" */**
INT_MIN	**(-2147483647-1)**	**/* min value of an "int" */**
LINK_MAX	**1000**	**/* max # of links to a single file */**
LOGNAME_MAX	**8**	**/* max # of characters in a login name */**
LONG_BIT	**32**	**/* # of bits in a "long" */**
LONG_MAX	**2147483647**	**/* max value of a "long int" */**
LONG_MIN	**(-2147483647-1)**	**/* min value of a "long int" */**
MAX_CANON	**256**	**/* max bytes in a line for canonical processing */**
MAX_INPUT	**512**	**/* max size of a char input buffer */**
MB_LEN_MAX	**5**	**/* max # of bytes in a multibyte character */**
NAME_MAX	**14**	**/* max # of characters in a file name */**
NGROUPS_MAX	**16**	**/* max # of groups for a user */**
NL_ARGMAX	**9**	**/* max value of "digit" in calls to the NLS printf() and scanf() */**
NL_LANGMAX	**14**	**/* max # of bytes in a LANG name */**
NL_MSGMAX	**32767**	**/* max message number */**
NL_NMAX	**1**	**/* max # of bytes in N-to-1 mapping characters */**
NL_SETMAX	**255**	**/* max set number */**
NL_TEXTMAX	**255**	**/* max # of bytes in a message string */**
NZERO	**20**	**/* default process priority */**
OPEN_MAX	**20**	**/* max # of files a process can have open */**
PASS_MAX	**8**	**/* max # of characters in a password */**
PATH_MAX	**1024**	**/* max # of characters in a path name */**
PID_MAX	**30000**	**/* max value for a process ID */**

PIPE_BUF	**5120**	**/* max # bytes atomic in write to a pipe */**
PIPE_MAX	**5120**	**/* max # bytes written to a pipe in a write */**
SCHAR_MAX	**127**	**/* max value of a "signed char" */**
SCHAR_MIN	**(-128)**	**/* min value of a "signed char" */**
SHRT_MAX	**32767**	**/* max value of a "short int" */**
SHRT_MIN	**(-32768)**	**/* min value of a "short int" */**
STD_BLK	**1024**	**/* # bytes in a physical I/O block */**
SYS_NMLN	**257**	**/* 4.0 size of utsname elements */ /* also defined in sys/utsname.h */**
SYSPID_MAX	**1**	**/* max pid of system processes */**
TMP_MAX	**17576**	**/* max # of unique names generated by tmpnam */**
UCHAR_MAX	**255**	**/* max value of an "unsigned char" */**
UID_MAX	**60000**	**/* max value for a user or group ID */**
UINT_MAX	**4294967295**	**/* max value of an "unsigned int" */**
ULONG_MAX	**4294967295**	**/* max value of an "unsigned long int" */**
USHRT_MAX	**65535**	**/* max value of an "unsigned short int" */**
USI_MAX	**4294967295**	**/* max decimal value of an "unsigned" */**
WORD_BIT	**32**	**/* # of bits in a "word" or "int" */**

The following POSIX definitions are the most restrictive values to be used by a POSIX conformance application. Conforming implementations shall provide values at least this large.

_POSIX_ARG_MAX	**4096**	**/* max length of arguments to exec */**
_POSIX_CHILD_MAX	**6**	**/* max # of processes per user ID */**
_POSIX_LINK_MAX	**8**	**/* max # of links to a single file */**
_POSIX_MAX_CANON	**255**	**/* max # of bytes in a line of input */**
_POSIX_MAX_INPUT	**255**	**/* max # of bytes in terminal input queue */**
_POSIX_NAME_MAX	**14**	**/* # of bytes in a filename */**
_POSIX_NGROUPS_MAX	**0**	**/* max # of groups in a process */**
_POSIX_OPEN_MAX	**16**	**/* max # of files a process can have open */**
_POSIX_PATH_MAX	**255**	**/* max # of characters in a pathname */**
_POSIX_PIPE_BUF	**512**	**/* max # of bytes atomic in write to a pipe */**