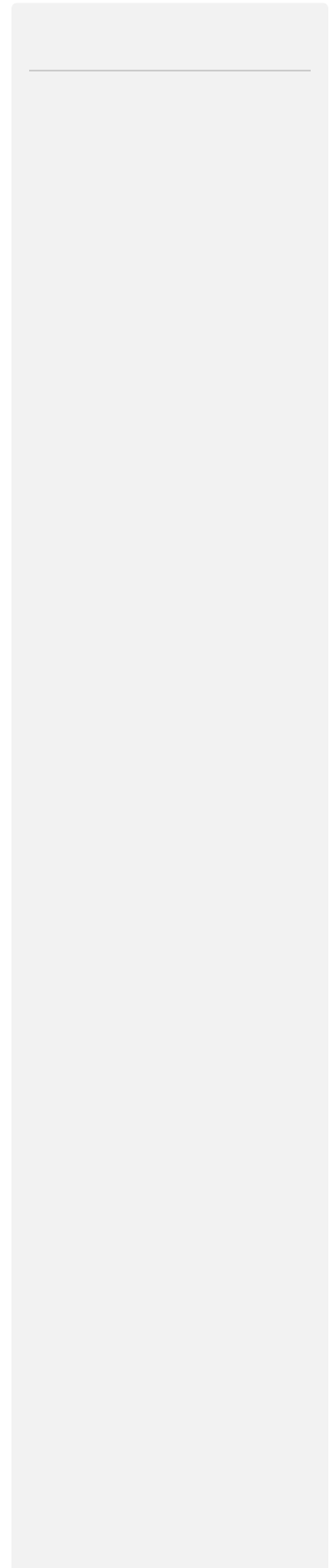


			NULL
short	16	-32767 ~ 32767	-32768
ushort	16	0 ~ 65534	65535
integer	32	-2147483647 ~ 2147483647	-2147483648
uinteger	32	0 ~ 4294967294	4294967295
long	64	-9223372036854775807 ~ 9223372036854775807	-9223372036854775808
ulong	64	0~18446744073709551614	18446744073709551615
float	32	-	-
double	64	-	-
datetime		1970-01-01 00:00:00 000:000:000 ~	-
varchar	(UTF-8)	: 1 ~ 32768 (32K)	-
ipv4	Version 4 (4)	"0.0.0.0" ~ "255.255.255.255"	-
ipv6	Version 6 (16)	"0000:0000:0000:0000:0000:0000:0000:0000" ~ "FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF"	-
text	()	: 0 ~ 64M	-
binary	()	: 0 ~ 64M	-



-

- SQL

short

C 16 . NULL . "int16" .

integer

C 32 . NULL . "int32" "int" .

long

C 64 . NULL . "int64" .

float

C 32 float . NULL .

double

C 64 double . NULL .

datetime

1970 1 1 .
, datetime nano .

varchar

, 32K byte .
1 UTF-8 , .

IPv4

4 .
4 , "0.0.0.0" "255.255.255.255" .

IPv6

6 .
16 , "0000:0000:0000:0000:0000:0000:0000:0000" "FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF" .
:

- "::FFFF:1232" : 0
- "::FFFF:192.168.0.3" : IPv4
- "::192.168.3.1" : deprecated IPv4

text

VARCHAR .
, 64 .
, .

binary

SQL

, SQL, C .

Machbase Datatype	Machbase CLI Datatype	SQL Datatype	C Datatype	Basic types for C	Description
short	SQL_SMALLINT	SQL_SMALLINT	SQL_C_SSHORT	int16_t (short)	16
ushort	SQL_USMALLINT	SQL_SMALLINT	SQL_C_USHORT	uint16_t (unsigned short)	16
integer	SQL_INTEGER	SQL_INTEGER	SQL_C_SLONG	int32_t (int)	32
uinteger	SQL_UIINTEGER	SQL_INTEGER	SQL_C_ULONG	uint32_t (unsigned int)	32
long	SQL_BIGINT	SQL_BIGINT	SQL_C_SBIGINT	int64_t (long long)	64
ulong	SQL_UBIGINT	SQL_BIGINT	SQL_C_UBIGINT	uint64_t (unsigned long long)	64
float	SQL_FLOAT	SQL_REAL	SQL_C_FLOAT	float	32
double	SQL_DOUBLE	SQL_FLOAT, SQL_DOUBLE	SQL_C_DOUBLE	double	64
datetime	SQL_TIMESTAMP SQL_TIME	SQL_TYPE_TIMESTAMP SQL_BIGINT SQL_TYPE_TIME	SQL_C_TYPE_TIMESTAMP SQL_C_UBIGINT SQL_C_TIME	char * (YYYY-MM-DD HH24:MI:SS) int64_t (timestamp: nano seconds) struct tm	
varchar	SQL_VARCHAR	SQL_VARCHAR	SQL_C_CHAR	char *	
ipv4	SQL_IPV4	SQL_VARCHAR	SQL_C_CHAR	char * (ip) unsigned char[4]	Version 4
ipv6	SQL_IPV6	SQL_VARCHAR	SQL_C_CHAR	char * (ip) unsigned char[16]	Version 6
text	SQL_TEXT	SQL_LONGVARCHAR	SQL_C_CHAR	char *	
binary	SQL_BINARY	SQL_BINARY	SQL_C_BINARY	char *	