

Data types listed here apply only for personal GDBs

| Name | Specific range, length, or Size (Bytes) | Applications |
|---|---|---|
| Short integer | -32,768 to 32,767 2 | Numeric values without fractional values |
| Long integer | -2,147,483,648 to 2,147,483,647 4 | Numeric values without fractional values |
| Single precision floating point number (Float) | Approximately -3.4E38 to 1.2E38 4 | Numeric values with fractional values within specific range |
| Double precision floating point number (Double) | Approximately -2.2E308 to 1.8E308 8 | Numeric values with fractional values within specific range |
| Text | Up to 64,000 characters Varies | Names or other textual data |
| Date | mm/dd/yyyy | |
| hh:mm:ss A/PM | 8 Date and/or time | |

Choosing a data type
Numeric

In choosing a numeric data type, first consider the need for **whole numbers versus fractional numbers**. For whole numbers, specify a short or long integer. For numbers with decimal places, specify a float or a double.

Secondly, when choosing between a short or long integer, or between a float and double, choose the data type that takes up the **least storage space** required. This will not only minimize the amount of storage required but will also improve performance. If you need to store integers between -32,768 and 32,767 only, specify the short integer data type, because it takes up only 2 bytes, whereas the long integer data type takes up 4. If you need to store fractional numbers between -3.4E-38 and 1.2E38 only, specify the float data type, because it takes up 4 bytes, whereas the double data type takes up 8.

Text

A text field represents a series of alphanumeric symbols. A numeric value i.e. 123 can be entered but as text it is no longer quantitative and cannot be used in mathematical calculations.

Date

When a date field is assigned to an attribute in the table for a feature class this is passed along to ArcPad for the data entry form in the form of a calendar. To accept the current data put a check in the box beside the date. To change the date tap on the date field and you will see the calendar.