Oracle supplies the following built-in datatypes:

* character datatypes
  + CHAR
  + NCHAR
  + VARCHAR2 and VARCHAR
  + NVARCHAR2
  + CLOB
  + NCLOB
  + LONG
* NUMBER datatype
* DATE datatype
* binary datatypes
  + BLOB
  + BFILE
  + RAW
  + LONG RAW
* ***Table 5-1 Summary of Oracle Built-In Datatypes***

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| Datatype | Description | Column Length and Default |
| CHAR (*size*) | Fixed-length character data of length *size* bytes. | Fixed for every row in the table (with trailing blanks); maximum size is 2000 bytes per row, default size is 1 byte per row. Consider the character set (one-byte or multibyte) before setting *size.* |
| VARCHAR2 (*size*) | Variable-length character data. | Variable for each row, up to 4000 bytes per row. Consider the character set (one-byte or multibyte) before setting *size.* A maximum *size* must be specified. |
| NCHAR(*size*) | Fixed-length character data of length *size* characters or bytes, depending on the national character set. | Fixed for every row in the table (with trailing blanks). Column *size* is the number of characters for a fixed-width national character set or the number of bytes for a varying-width national character set. Maximum *size* is determined by the number of bytes required to store one character, with an upper limit of 2000 bytes per row. Default is 1 character or 1 byte, depending on the character set. |
| NVARCHAR2 (*size*) | Variable-length character data of length *size* characters or bytes, depending on national character set. A maximum *size* must be specified. | Variable for each row. Column *size* is the number of characters for a fixed-width national character set or the number of bytes for a varying-width national character set. Maximum *size* is determined by the number of bytes required to store one character, with an upper limit of 4000 bytes per row. Default is 1 character or 1 byte, depending on the character set. |
| CLOB | Single-byte character data. | Up to 2^32 - 1 bytes, or 4 gigabytes. |
| NCLOB | Single-byte or fixed-length multibyte national character set (NCHAR) data. | Up to 2^32 - 1 bytes, or 4 gigabytes. |
| LONG | Variable-length character data. | Variable for each row in the table, up to 2^31 - 1 bytes, or 2 gigabytes, per row. Provided for backward compatibility. |
| NUMBER (p, s) | Variable-length numeric data. Maximum precision *p* and/or scale *s*is 38. | Variable for each row. The maximum space required for a given column is 21 bytes per row. |
| DATE | Fixed-length date and time data, ranging from Jan. 1, 4712 B.C.E. to Dec. 31, 4712 C.E. | Fixed at 7 bytes for each row in the table. Default format is a string (such as DD-MON-YY) specified by NLS\_DATE\_FORMAT parameter. |
| BLOB | Unstructured binary data. | Up to 2^32 - 1 bytes, or 4 gigabytes. |
| BFILE | Binary data stored in an external file. | Up to 2^32 - 1 bytes, or 4 gigabytes. |
| RAW (size) | Variable-length raw binary data. | Variable for each row in the table, up to 2000 bytes per row. A maximum *size*must be specified. Provided for backward compatibility. |
| LONG RAW | Variable-length raw binary data. | Variable for each row in the table, up to 2^31 - 1 bytes, or 2 gigabytes, per row. Provided for backward compatibility. |
| ROWID | Binary data representing row addresses. | Fixed at 10 bytes (extended ROWID) or 6 bytes (restricted ROWID) for each row in the table. |
| MLSLABEL | Trusted Oracle datatype. | See the *Trusted Oracle* documentation. |

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