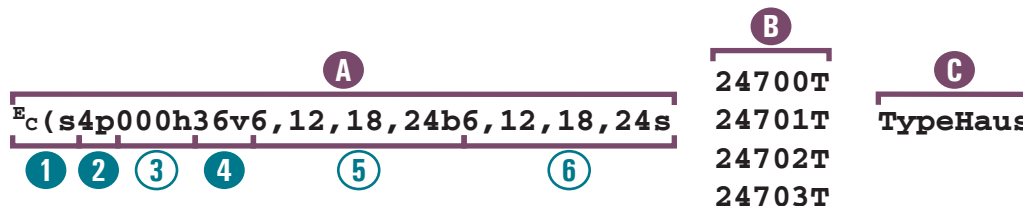


Code 128 (Auto, A, B & C)

Printing Guide

New standard for most bar code labels. Code 128 is a very compact bar code for numeric and alpha-numeric strings. It has 3 modes: A, B and C, which encode different character ranges. Auto mode allows encoding all 128 ASCII characters without pre-analyzing the string. Switching occurs automatically between A, B and C to create the most compact code. Auto is fully compliant with the ECR labels standard.

Example



Numbers in **●** indicate required information, and in **○** indicate optional information, when printing an industry standard Code 128 0.5" high bar code. The optional information is shown for discussion purposes to facilitate alternative formatting when desired. Example shows default values for optional information.

ESC ASCII Escape (ESC) code. Decimal 27. Hex 1B. Marks the start of a command sequence to distinguish it from printable text.

A Bar code formatting parameters.

1 Start of bar code commands. Required. Must be an ESC code followed by the 2 characters exactly as shown.

2 Human readable text positioning. 0 or 1 numeric digit value followed by "p". "p" may be omitted if no value specified when default values are to be used. The following values are valid.

| | | |
|-----------------------|-----------------|------------------|
| 0 Same as 1 (default) | 2 Embedded | 4 Under bar code |
| 1 No human readable | 3 Half-embedded | 5 Above bar code |

3 Human readable font selection. Leading zeroes are optional. Parameter consists of 0-3 numeric digit value followed by "h". "h" may be omitted if no value specified when default values to be used.

First digit specifies font style as follows. For non-zero value, second and third digits discussed below must also be specified.

| | | |
|------------------|----------|---------------|
| 0 Bold (default) | 2 Italic | 4 Bold italic |
| 1 Regular | 3 Bold | |

Second digit reserved for future expansion. It must be zero. It

must be present if font style digit is specified.

Third digit specifies font typeface as follows. Digit must be present if first and second digits discussed above are specified.

| | | |
|---------------------|---------------------|------------|
| 0 Courier (default) | 2 Univers | 4 CG Times |
| 1 Letter Gothic | 3 Univers Condensed | 5 OCR-B |

4 Bar heights in points (1/72)". "36v" should be used as shown to create a standard 0.5" high bar code.

5 Bar widths in 1/600". Optional. Default values produce standard Code 128 bar widths in multiples of 0.01". Values must be separated by commas as shown. Code 128 uses four different bar widths. First value specifies width of single-wide (narrowest) bar, second value specifies width of double-wide bar, third value specifies width of triple-wide bar, and fourth value specifies width of quadruple-wide (widest) bar. Second, third and fourth values are normally multiples of first value as shown. "b" may be omitted if no values specified when default values to be used.

6 Space widths in 1/600". Optional. Default values produce standard Code 128 space widths in multiples of 0.01". Same requirements and value sequence as for bar widths. "s" may be omitted if no values specified when default values to be used.

B Code 128 bar code symbology selection options. Required. Follows immediately after bar code formatting parameters without spaces, line feeds, carriage returns, or any other data.

Choose 1 of the 4 options shown. 6 characters must be sent exactly as shown. Use 24700 for Code 128 Auto, 24701 for Code 128A, 24702 for Code 128B and 24703 for Code 128C.

C Code 128 bar code data. Follows immediately after bar code symbology selection without spaces, line feeds, carriage returns, or any other data. The checksum is automatically calculated. The following Code 128 control codes are supported. The first value is decimal. The second value is hexadecimal.

| | | |
|--------------|---------------|---------------|
| 128 80 Shift | 131 83 FNC 3 | 134 86 Code B |
| 129 81 FNC 1 | 132 84 FNC 4 | 135 87 Code C |
| 130 82 FNC 2 | 133 85 Code A | |

Standard PCL5 typeface selection, symbol set selection, and positioning commands must follow the bar code data in order to indicate the end of the data and to resume normal text printing. Refer to the introductory sections of the Printing Guide for more information and instructions common to all bar codes.

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