1. INTRODUCTION

The YASNAC MX1 is a high-performance CNC for simultaneously controlling 3 or 4 axes of a machining center, with emphasis placed on high-speed machining, unattended automatic operation, or feedback gauging control.

With the NC logic incorporating 16-bit microprocessors and various LSIs, the YASNAC MX1 incorporates a compact design with a wide range of capabilities. The memory comprises permanent, semi-permanent and programmable software storage used in combination to utilize each one to maximum advantage.

The data input-output interface has been expanded in concept, and, in addition to conventional interfaces such as FACIT and RS 232C, RS 422 is now available to accommodate requirements for new modes of operations such as high-speed, long-distance data transmission.

The YASNAC can incorporate a programmable machine interface, and the logic diagram can be edited easily from the NC operator's station.

2. PROGRMMING

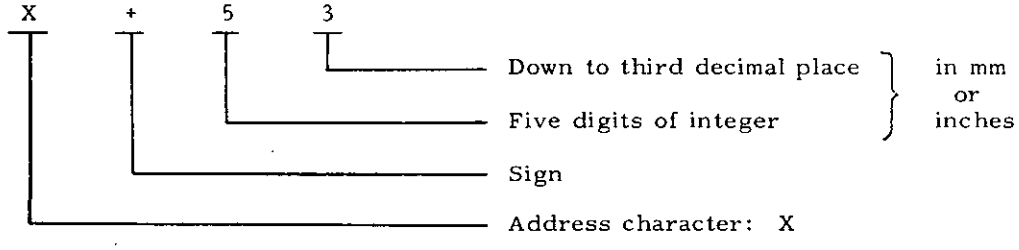
2.1 INPUT FORMAT

2.1.1 INPUT FORMAT

A variable block format conforming to JIS#B 6313 is used for YASNAC MX1.

Table 2.1 shows the input format. Numerals following the address characters in Table 2.1 indicate the programmable number of digits.

EXAMPLE



Note:

A decimal point should be omitted in actual programming when you make a program including decimal points, refer to 2.1.3 DECIMAL POINT PROGRAMMING.

The leading zeros can be suppressed for all address codes. Plus signs need not be programmed, but all minus signs must be programmed.

In the manual, EOB (end of block) code in a program example is represented by a semicolon (;). In actual programming, CR (EIA code) or LF/NL (ISO code) should be used instead of the semicolon (;).

- Metric input format

  04 N4 G3 a+43 F5 S2 T2 M3 D(H)2 B3;

- Inch input format

  04 N4 G3 a+34 F31 S2 T2 M3 D(H)2 B3;

Notes:

- "a" represents X, Y, Z, I, J or K.
- P, Q, R and L are omitted in the above format because they are used for various meanings.

Japanese Industrial Standard