## 2.2 PROGRAM NUMBER AND SEQUENCE NUMBER

2.2.1 PROGRAM NUMBER

Program numbers may be prefixed to programs for the purpose of program identification.

Up to 4 digits may be written after an address character "0" as program numbers. Up to 99 program numbers can be registered in the control, and up to 199 or 999 can be registered employing an option.

One program begins with a program number, and ends with M02, M30 or M99. M02 and M30 are placed at the ends of main programs, and M99 is placed at the ends of subprograms.


```
   % 010; ····· M02;    01234; ····· M99;   % ·
```

PROGRAM WITH   PROGRAM WITH
PROGRAM NO. 10   PROGRAM NO. 1234
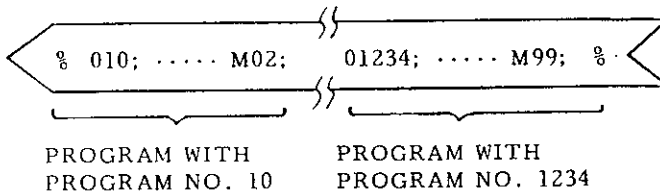
ER (or % at ISO code) is punched on the tape at the top and end of the program.

NOTES:

· The blocks for optional block skip such as /M02;, /M30;, /M99; are not regarded as ends of programs.

· To make the reading of M02, M30, and M99 in-effective as a program end, and to make the succeeding ER (EIA) or % (ISO) as a sign of program ends is possible with a parameter change. ($\#6021_{D0}$)

2.2.2 SEQUENCE NUMBER

Integers consisting of up to 4 digits may be written following an address character N as sequence numbers.

Sequence numbers are reference numbers for blocks, and do not have any influence on the meaning and sequence of machining processes. Therefore, they may be sequential, non-sequential, and duplicated numbers, and also not using any sequence number is also possible. Generally, sequential numbers are convenient as sequence numbers.

When searching for sequence numbers, be sure to search or specify program numbers before-hand.

NOTES:

· When 5 or more digits are written as a sequence number, only the digits up to the 4th from the trailing end are effective.

· When two or more blocks have the same sequence number, only one is retrieved and read, and no more searching is performed.

· Blocks without sequence numbers can also be searched for with respect to the address data contained in the blocks.

2.2.3 OPTIONAL BLOCK SKIP (/1 – /9) [†]

Those blocks in which "/n" (n = 1 - 9) is included are neglected between /n and the end of that block, when the external optional block skip switch for that number "n" is on.

EXAMPLE

    /2 N1234 G01 X100 /3 Y200;

When the switch for /2 is on, the entire block is neglected, and when the switch for /3 is on, this block is read as if

    N 1234 G01 X100;.

With "1", "1" may be omitted.

NOTES:

· The optional block skipping process is executed while the blocks are read into the buffer resister. If the blocks have been read, subsequent switching on is ineffective to skip the blocks.

· While reading or punching out programs, this function is ineffective.

· The optional block skip /2 - /9 is an option function.

2.3 COORDINATE WORD

Generally, commands for movements in axis directions and commands for setting coordinate systems are called coordinate words, and coordinate words consist of address characters for desired axes and numerals representing dimensions of directions.