

### 2.9.3 LINEAR INTERPOLATION (G01) (CONT'D)

Table 2.22

F-function			In minimum F command unit	
			Feedrate in basic three axes	Feedrate of rotary axes
Metric output	Metric input	F40	1 mm/min	1 deg/min
	Inch input	F31	0.1 in. /min	2.54 deg/min
Inch output	Metric input	F50	1 mm/min	0.3937 deg/min
	Inch input	F31	0.1 in. /min	1 deg/min

Note: Feedrate of linear 4th as the same as that of basic three axes.

#### 2.9.4 CIRCULAR INTERPOLATION (G02, G03)

With the following commands, the tool is controlled along the specified circular pathes on the XY,

ZX, or YZ plane; at a tangential speed specified by the F code.

$$\text{XY plane G17} \begin{Bmatrix} \text{G02} \\ \text{G03} \end{Bmatrix} \text{X... Y...} \begin{Bmatrix} \text{R...} \\ \text{I... J...} \end{Bmatrix} \text{F...} ;$$
$$\text{ZX plane G18} \quad \begin{Bmatrix} \text{G02} \\ \text{G03} \end{Bmatrix} \quad \text{Z} \dots \quad \text{X} \dots \quad \begin{Bmatrix} \text{R} \dots \\ \text{K} \dots \quad \text{I} \dots \end{Bmatrix} \quad \text{F} \dots ;$$
$$\text{YZ plane G19} \begin{Bmatrix} \text{G02} \\ \text{G03} \end{Bmatrix} \text{Y} \dots \text{Z} \dots \begin{Bmatrix} \text{R} \dots \\ \text{J} \dots \text{K} \dots \end{Bmatrix} \text{F} \dots ;$$

The moving direction of the tool along the circle is as follows.

G02: Clockwise

G03: Counter-clockwise

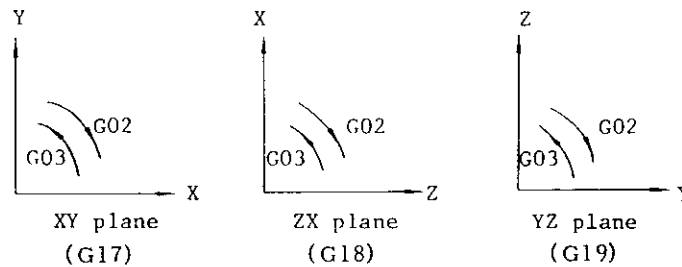


Fig. 2.13