

## 2.9.29 CANNED CYCLES (G73, G74, G76, G77 G80 TO G89, G98, G99)<sup>†</sup>

Variable pitch command (G73, G83)

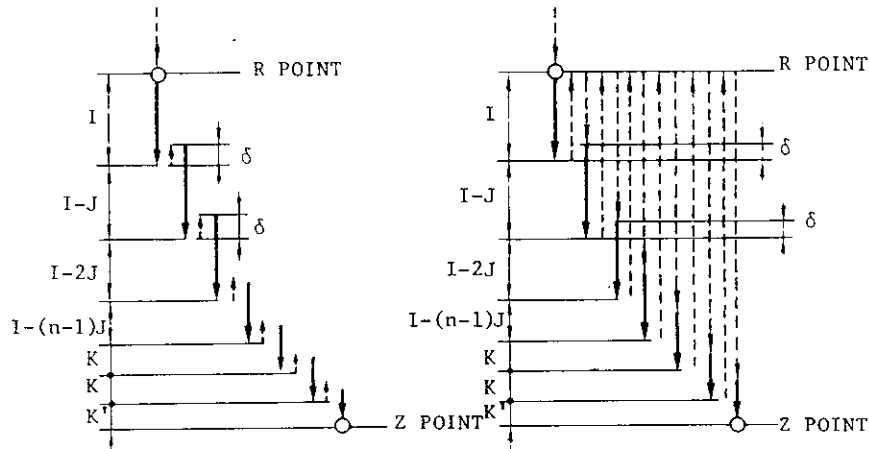
In the deep hole drilling cycles of G73 and G83, variable drilling pitch can be programmed with addresses I, J, K instead of address Q for programming a constant drilling pitch.

I: Initial value

J: Reducing value in 2nd and subsequent plunges

K: Final value

Command is given without signs



K': Final plunge to Z point

$$K' \leq K$$

(a) With G73

(b) With G83

Fig. 2.83

The value of  $\delta$  is given by setting (#6211 for G73, #6213 for G83).

### NOTES:

- Q, I, J, K are modal during canned cycle modes and are effective until the canned cycle is cancelled. Specify them without signs.
- Variable pitch can also be programmed by address Q instead of I. Furthermore, when instructions Q, I, J, K are given simultaneously, drilling cycle is executed with variable drilling pitch with Q as the initial value.
- Q0 must be commanded in the block including modal G code before programming variable pitch with I, J, and K.

### EXAMPLE

G91 G73 X... Y... T-3000 Z-5500 I1000...  
J100 K400 F... ;

### Drilling pitch

1st plunge ...	10 mm	⇐	I1000
2nd plunge ...	9 mm		
3rd plunge ...	8 mm		
4th plunge ...	7 mm		
5th plunge ...	6 mm		
6th plunge ...	5 mm		
7th plunge ...	4 mm	⇐	K400
8th plunge ...	4 mm		
9th plunge ...	2 mm	⇐	K'
Total	55.00 mm	⇐	Z-5500