

※ IHC3808 SERIES

Blind and hollow shaft encoder, axis inside diameter $\Phi 8\text{mm}$, $\Phi 6$ & $\Phi 6.35\text{mm}$ (Option), housing diameter $\Phi 38\text{mm}$.

With flex bracket flange, easy for installing, small volume, light weight, stable output.

Applications:

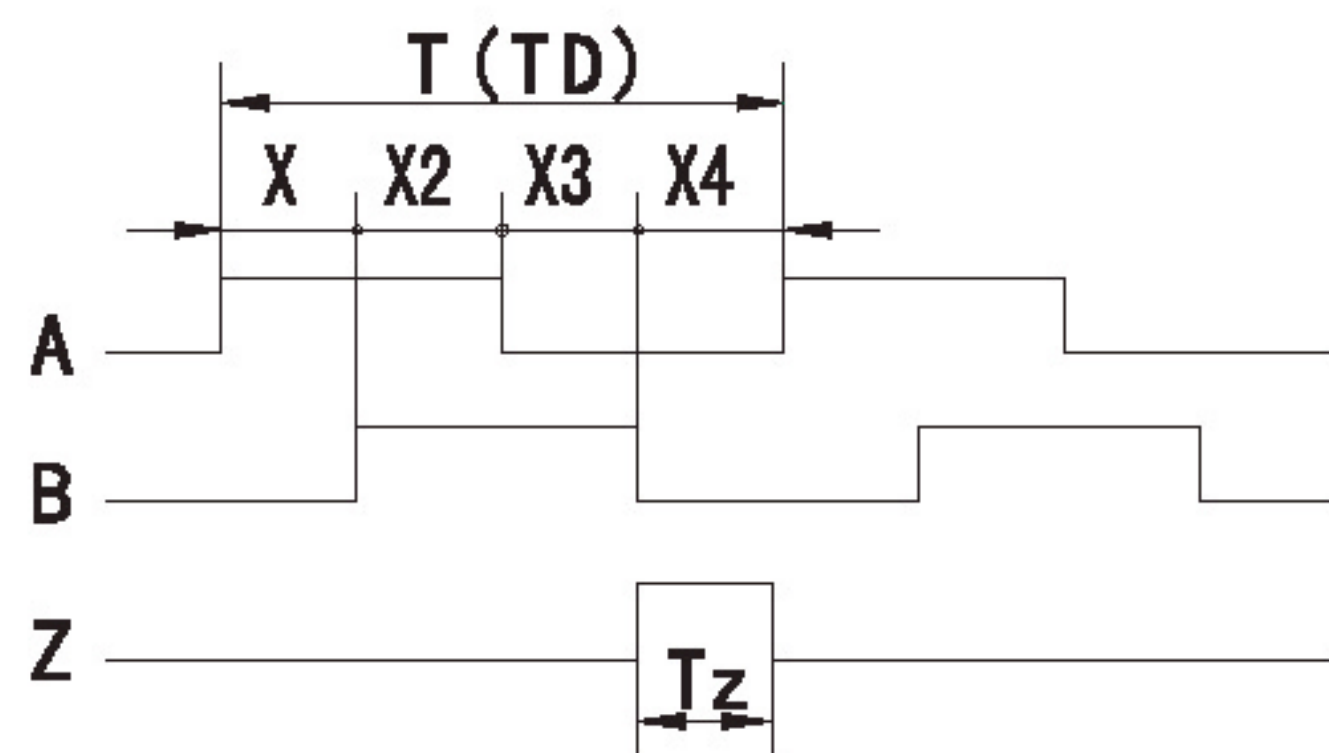
Computerized embroidery punching machine, textile machines



◆ TECHNICAL SPECIFICATIONS

◆ Output waveform

90° Output phase difference, CW rotation (CW rotation as seen from fit surface)



Square-wave accuracy: $X_1 + X_2 = 1/2T \pm 1/12T$
 $X_3 + X_4 = 1/2T \pm 1/12T$

Pitch error of period: $\pm 0.01T$

Pitch error of phase position: $\leq 1/18T$

Z phase: $T_z = 1/4T$ (1T, 1/2T, 1/4T...)

Period of pulses: $T = 360^\circ / N$ (N : output pulses)

Signal accuracy: $X_n = 1/4T \pm 1/12T$ (n=1, 2, 3, 4)

A leads B clockwise when viewing the encoder shaft end,
The position of Z phase against A, B phase is not specified.

MECHANICAL SPECIFICATIONS

Speed without sealing	4500rpm
Rotor moment of inertia	Appr. $3.5 \times 10^{-8} \text{Kgm}^2$
Starting torque without sealing	$\leq 5.0 \times 10^{-4} \text{Nm}$ (+25°C)
Maximum load permitted on shaft	Radial 20N, Axial 10N
Shock resistance	980m/s ² , 6ms, 2 times each on XYZ
Vibration proof	50m/s ² , 10~200Hz, 2 hours each on XYZ
Working life	MTBF $\geq 25000\text{h}$ (+25°C, 2000rpm)
Weight	Appr. 140g (with 1 meter cable)

ENVIRONMENTAL SPECIFICATIONS

Working humidity	30~85% (No condensation)
Storage temperature	-30°C~85°C
Working temperature	-10°C~70°C
Protection class	IP54

◆ Terminal assignment

Signal	+5V	0V	SIG A	SIG \bar{A}	SIG B	SIG \bar{B}	SIG Z	SIG \bar{Z}	Shield
Cable Color	Red	Black	Green	Brown	White	Grey	Yellow	Orange	N.C

Note: Shield is attached to connector housing, One meter cable lengths (other cable lengths on order).

◆ Ordering code

IHC3808	—	401	G	600	BZ1	—	12-24	C
Series		Sequence Number	Connection	Number of Pulses	Output Signals		Supply Voltage	Output Circuit

Series: IHC3808, Radial cable: G, Number of pulses: 600 p/r, Output signals: ABZ, $T_z = 1T$, Supply voltage: 12-24V DC, Output circuit: Open collector NPN, Record: IHC3808-401G600BZ1-12-24C

◆ Dimensions

