

PKT100 series



- Outer diameter $\Phi 100$, hollow shaft, elastic mounting plate for connection, locking ring for fastening.
- Basic hollow shaft $\Phi 30, \Phi 35, \Phi 38, \Phi 40, \Phi 42, \Phi 45, \Phi 50, \Phi 55$.
- Z signal or C signal can be choosed on request.
- Used for elevtor traction machine, steady performance, strong interference resistance.

Explanation of model



Z: zero signal
C: additional resolution

E: Voltage output
C: Open collector output
F: Complementary output(Push pull)
L: Line driver Output
T: Line driver (high TTL)

E: Axial cable
G: Radial cable

For example

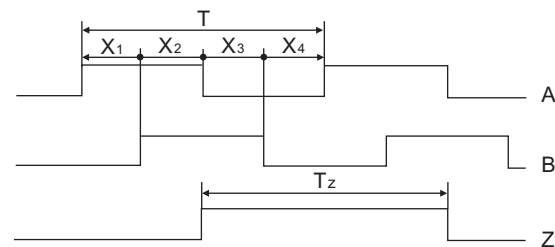
PKT1030-1024-J30F is outer diameter $\Phi 100$, hollow shaft $\Phi 30$, 1024P/R, side entry rectangle plug, supply voltage 30V, complementary output .

Technical data

Resolution	360, 512, 600, 1024P/R	Rotating inertia	$4 \times 10^{-5} \text{kg} \cdot \text{m}^2$
Supply voltage	DC5V or DC 8V~30V	Max rotating speed	2500r/min
V_H Output voltage	$\geq V_{CC} \times 70\%$	Vibration resistance	$70 \text{m/s}^2 (10 \sim 200 \text{Hz})$
V_L Output voltage	$\leq 0.5 \text{V}$	Shock resistance	490m/s^2
Current consumption	$\leq 150 \text{mA}$	Protection	Ip54
Output phase	A, B, Z/C	Operating temperature	$-10^\circ\text{C} \sim +70^\circ\text{C}$
Frequency response	100kHz Max	Storage temperature	$-20^\circ\text{C} \sim +80^\circ\text{C}$
Rise/fall time	$\leq 1 \mu\text{s}$ or line driver $\leq 0.1 \mu\text{s}$	Operating humidity	30~85%RH
Starting torque	$5 \times 10^{-2} \text{N} \cdot \text{m} (+25^\circ\text{C})$	Weight (no cable)	0.7kg
Shaft loading	Radial 40N Axial 20N	Accessories	Elastic mounting plate

Output waveform and signal position accuracy

clockwise(cw) waveform viewed from the shaft head.



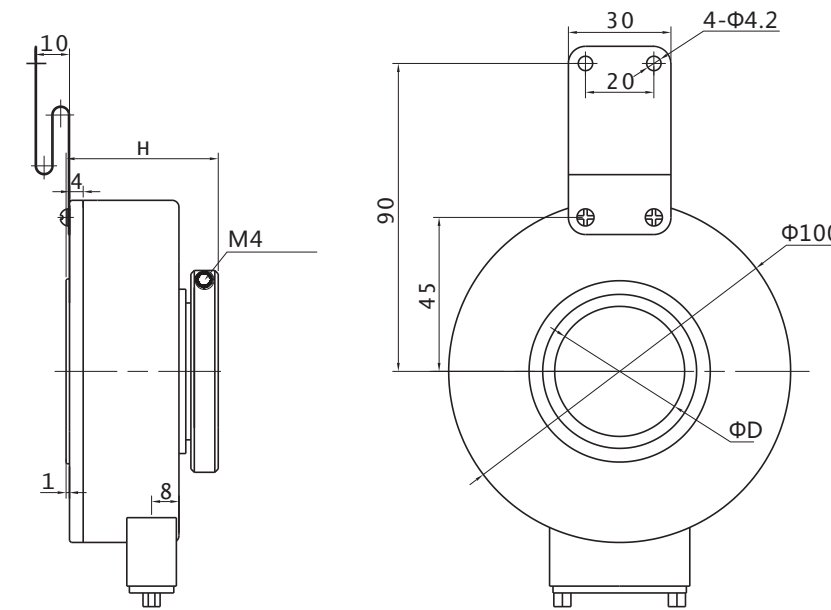
- $X_1 + X_2 = 0.5T \pm 0.1T$
Waveforms ratio: $X_2 + X_3 = 0.5T \pm 0.1T$
- A, B phase shift: $X_n \geq 0.125T$ (n=1, 2, 3, 4)
- Signal position accuracy
A, B absolute angle error: $\leq 0.2T$
- Duty error: $\leq 0.05T$
- Zero signal width: $T_z = 1T \pm 0.5T$
- $T = 360/N$ (N is pulse number output per rotation)
- The position relationship between A, B and C phase is not ordered.

Connection table

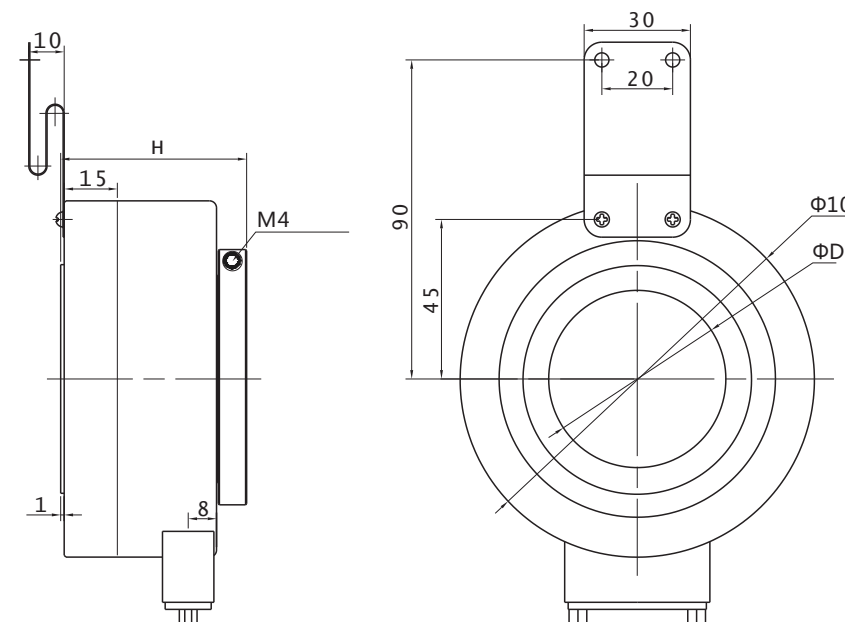
cable color		Red	Green	White	Black	Black	Black	Shield
Output form	C/E/F	VCC	B	A	0V	0V	G	0V
7PIN	CX16K7P	1	2	3	4	5	6	7
PC PLUG	DB15 code	7	25	4	12	2	13	8

cable color		Red	Black	White	Green	Yellow	Blue	Pink	Brown	Shield
Output form	L/H	VCC	0V	A	B	Z	\bar{A}	\bar{B}	\bar{Z}	FG
9PIN	CX16K9P	1	2	3	5	7	4	6	8	9
PCPLUG	DB15 code	6	5	4	2	9	3	1	10	8

Dimension(mm)



HOLLOW SHAFT DIAMETER(D)	Lenth of shaft (H)
$\Phi 30 \text{F7} (+0.041 / +0.020)$	44.5/48
$\Phi 35 \text{F7} (+0.050 / +0.025)$	42.5
$\Phi 38 \text{F7} (+0.050 / +0.025)$	42.5
$\Phi 40 \text{F7} (+0.050 / +0.025)$	42.5
$\Phi 42 \text{F7} (+0.025 / +0.025)$	44.5
$\Phi 45 \text{F7} (+0.025 / +0.025)$	44.5



HOLLOW SHAFT DIAMETER(D)	Lenth of shaft (H)
$\Phi 50 \text{F7} (+0.05 / +0.025)$	52
$\Phi 55 \text{F7} (+0.06 / +0.03)$	52