

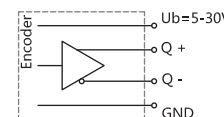
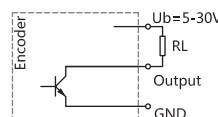
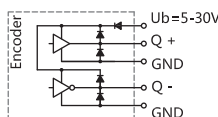
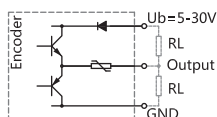


EHK90SK series	
Sensing method	Optical
Housing size	Φ90mm
solid keyway shaft	Φ11、Φ12、Φ15
Max. resolution	2500PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP65/IP67

### Mechanical characteristics

Shaft diameter	Φ11、Φ12、Φ15mm
Protection	IP65/IP67
Speed	6000RPM
Shaft loading	max. 70 N Axial; max. 140 N Radial
Shock resistance	100g, 3ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 <sup>9</sup> turns
Rotor moment of inertia	≈15×10 <sup>-6</sup> kgm <sup>2</sup>
Starting torque	<0.05Nm
Materials	Materials Flange :Stainless steel Solid shaft :Aluminium alloy Housing:Aluminium alloy
Working temperature	-40 C...+85 C
Storage temperature	-40 C...+85 C
Weight	Approx.1kg (Cable 2m)

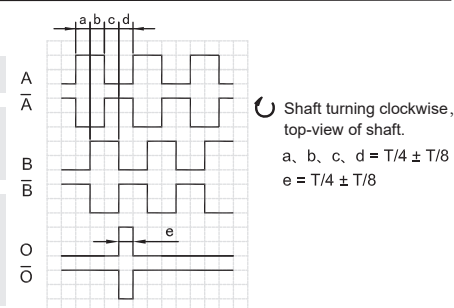
### Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential	Open Collector	RS422 (TTL Compatible)
Pulse rate	Max. 2500P/R	Max. 2500P/R	Max. 2500 P/R	Max. 2500P/R
Supply voltage	5-30V	5-30V	5-30V	5-30V
Power consumption(no load)	Max. 125 mA	Max. 125 mA	Max. 80 mA	Max. 80mA
Permissible load/channel	Max. ±80mA	Max. ±80mA	Max. -50mA	Max. ±50mA
Pulse frequency	Max. 100 KHz	Max. 100 KHz	Max. 100 KHz	Max. 100 KHz
Signal level high	Min. Ub-2.5V	Min. Ub-2.5V	/	Min. 2.5 V
Signal level low	Max. 0.8V	Max. 0.8V	/	Max. 0.4V
Rise time Tr	Max. 1 μs	Max. 1 μs	/	Max. 1 μs
Fall time Tf	Max. 1 μs	Max. 1 μs	/	Max. 1 μs
Short circuit proof outputs	Yes	Yes	Yes	Yes

### Terminal assignment

signal		OV	+Ub	A	$\bar{A}$	B	$\bar{B}$	O	$\bar{O}$	$\perp$
Cable Colour		WH	BN	GN	PK	YE	BU	GY	RD	Shield
9cores M18 Socket CCW (9218)		2	7	1	3	4	5	6	8	PH <sup>1)</sup>



Note: <sup>1)</sup> PH= connected to housing

Note: Positional relationship of O channel and A&B channels is not specified.

12cores M23 Socket CW (9223)		10	12	5	6	8	1	3	4	PH <sup>1)</sup>
12cores M23 Socket CCW (9223-2)		10	12	5	6	8	1	3	4	PH <sup>1)</sup>

Note: <sup>1)</sup> PH= connected to housing

## Ordering information

EHK90 XX SK 12 E 1024 A 5-30 R 2 / XXXX

①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧      ⑨      ⑩

① Extended No. XX	② Shaft type SK: solid keyway shaft	③ shaft diameter 11: 11mm <b>12: 12mm</b> 15: 15mm	④ Channels <b>B: A B</b> C: A B O <b>D: A <math>\bar{A}</math> B <math>\bar{B}</math></b> E: A A B B O $\bar{O}$	⑤ Pulse rate 200,250, <b>256,300</b> , 360,400,500,512, <b>600,1000,1024</b> , 1200,1500, <b>2000</b> , <b>2048,2500</b>
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⑥ Output circuit F: Push-Pull A: Push-Pull Differential C: Open Collector B: RS422 (TTL Compatible)	⑦ Supply voltage 5: 5VDC <b>5-30: 5...30VDC</b> <b>9-26: 9...26VDC</b>	⑧ Exit position <b>R: Radial</b> C: Axial	⑨ Connection type Figure: Cable length(m) 218: M18 plug 9 cores 9223: M23 plug in clockwise 12 cores 9223-2: M23 plug in anticlockwise 12 cores	⑩ Special code XXXX
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Notes: 1, mentioned resolution is in common use, others depend on real situation

2, pls confirm the model information: model series, axis dimension, output channel, resolution, output form, voltage, outlet, cable length, connect type and special code.

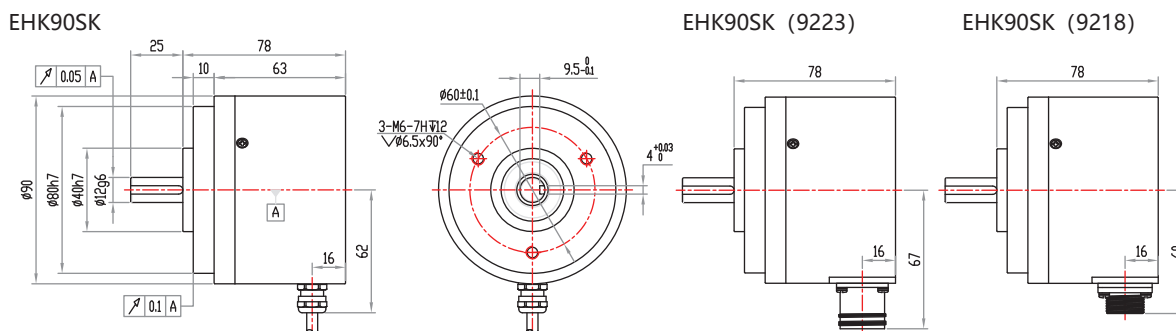
Ordering example: 1、EHK90SK12C1024F5-30R2, pls specify the special demand at end.

Explanation : EHK90SK series, shaft diameter 12mm, output A B O, 1024PPR, push-pull output, 5-30VDC, radial direction 2m.

2、EHK90SK12E1024A5-30R9223, pls specify the special demand at end

Explanation: EHK90SK series, shaft diameter 12mm, output A  $\bar{A}$  B  $\bar{B}$  O  $\bar{O}$ , 1024PPR, push-pull differential, 5-30VDC, M23 clockwise 12 cores connect by plug.

## Dimensions



EHK9001SK

EHK9001SK (9223)

EHK9001SK (9218)

