

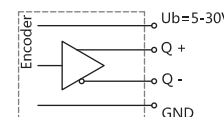
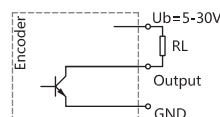
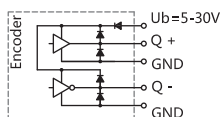
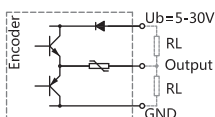


EHK68H series	
Sensing method	optical
Housing size	Φ68mm
hollow shaft	Φ10、Φ12、Φ14、Φ15mm
Max. resolution	2048PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP66

## Mechanical characteristics

Shaft diameter	Φ10、Φ12、Φ14、Φ15mm
Protection	IP66
Speed	3000RPM
Shaft loading	max. 70 N Axial; max. 140 N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 <sup>9</sup> turns
Rotor moment of inertia	≈1.8×10 <sup>-6</sup> kgm <sup>2</sup>
Starting torque	<0.1Nm
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. 0.4kg (Cable 2m)

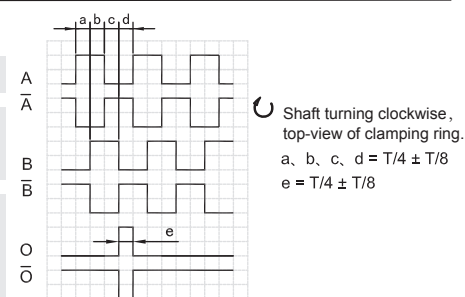
## Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential	Open Collector	RS422 ( TTL Compatible )
Pulse rate	max. 2048P/R	max. 2048P/R	max. 2048 P/R	max. 2048P/R
Supply voltage	5-30V	5-30V	5-30V	5-30V
Power consumption(no load)	max. 80 mA	max. 125 mA	max. 80 mA	max. 80mA
Permissible load/channel	max. ±30mA	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	yes

## Terminal assignment

Signal		OV	+Ub	A	$\bar{A}$	B	$\bar{B}$	O	$\bar{O}$	$\text{⏏}$
Cable Colour		WH	BN	GN	PK	YE	BU	GY	RD	Shield
9 cores 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.

Hollow shaft incremental encoder

EHK68H series

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

EHK68	XX	H	12	B	1024	F	5-30	R	2	/	XXXX
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩		

①Extended No. XX	②Shaft type H: Hollow shaft	③Shaft diameter 10 : 10mm <b>12 : 12mm</b> 14 : 14mm 15 : 15mm	④Channels <b>B : A B</b> C : A B O <b>D : A <math>\bar{A}</math> B <math>\bar{B}</math></b> <b>E : A <math>\bar{A}</math> B <math>\bar{B}</math> O <math>\bar{O}</math></b>	⑤Pulse rate 300,360,400,500, <b>600,720,1000,</b> <b>1024,2000,2048</b>	⑥ Output circuit <b>F:Push-Pull</b> <b>A:Push-Pull Differential</b> C:Open Collector <b>B: RS422 (TTL Compatible)</b>
---------------------	--------------------------------	--	---	--	---

⑦Supply voltage 5: 5VDC <b>5-30: 5...30VDC</b> <b>9-26: 9...26VDC</b>	⑧Exit position R: Radial	⑨ Connection type <b>Figure: Cable length(m)</b> 9218: M18 plug 9 cores 9223: M23 plug in clockwise 12 cores 9223-2: M23 plug in anticlockwise 12 cores	⑩Special code XXXX
--	-----------------------------	---	-----------------------

Note: Printed in bold=standard items

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、EHK68H12B1024F5-30R2 , pls specify the special demand at end.

Explanation : EHK68H series , shaft diameter 12mm , A、B two channels , 1024PPR , push-pull output , 5-30VDC , radial direction 2m.

2、EHK68H12E2048A5-30R9223 , pls specify the special demand at end.

Explanation : EHK68H series , shaft diameter 12mm , output A  $\bar{A}$  B  $\bar{B}$  O  $\bar{O}$  , 2048PPR , push-pull differential , 5-30VDC , M23 clockwise 12 cores connect by plug.

### Accessories (sold separately)

Note: Further stator coupling can be found in the accessories selection table.

Long arm connect bracket  
model (common) : 8127



two blades flexible bracket  
model (common) : 8135

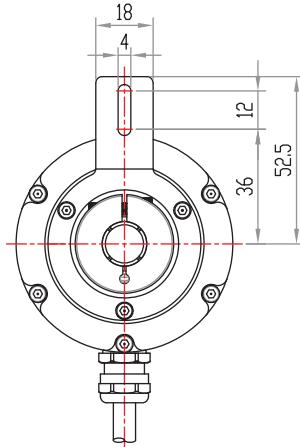
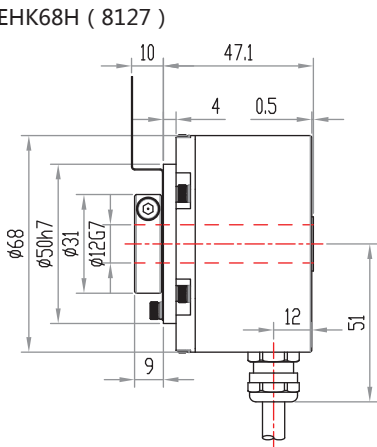


two blades flexible bracket  
model (common) : 8138

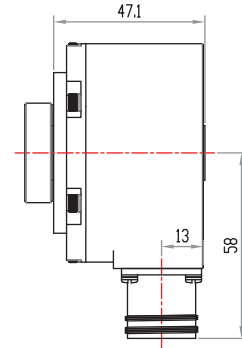


Dimensions

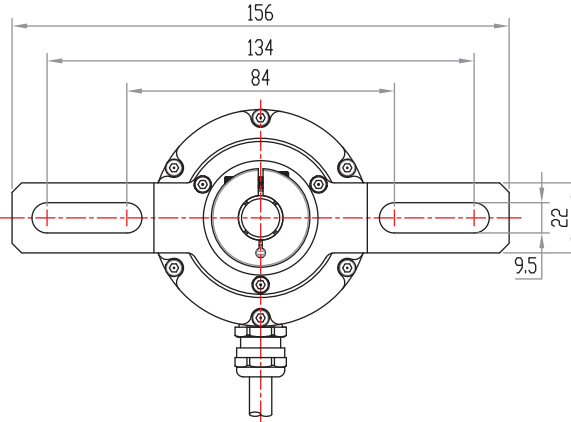
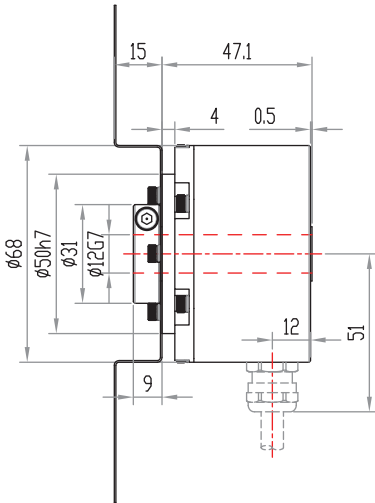
EHK68H ( 8127 )



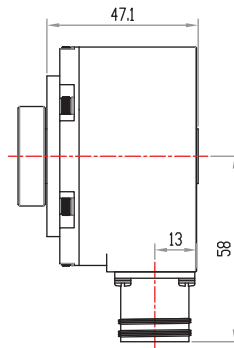
EHK68H ( 9223 )



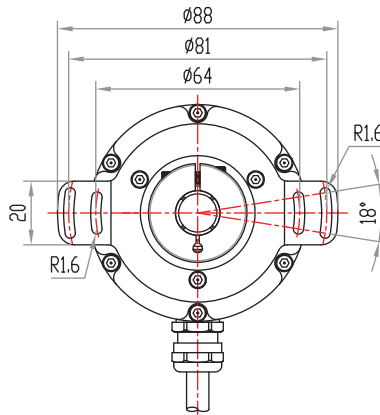
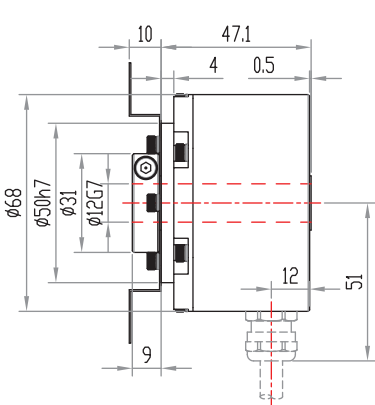
EHK68H ( 8135 )



EHK68H ( 9223 )



EHK68H ( 8138 )



EHK68H ( 9223 )

