



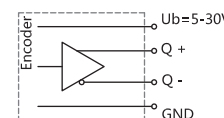
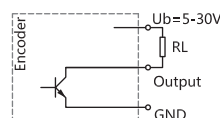
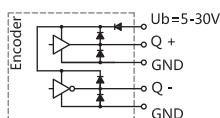
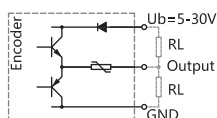
EDK58H Series	
Sensing method	Optical
Housing size	Φ58 mm
Hollow shaft diameter	Φ10、Φ12、Φ14 mm
Max. resolution	1200 PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP66

### Mechanical characteristics

Note: \*) Isolation inserts for hollow shaft can prevent currents from passing through the encoder bearings. ( Only for EDK58H)

Shaft diameter	Φ10、Φ12、Φ14mm
Protection	IP66
Speed	Max. 6000 min <sup>-1</sup>
Shaft loading	Max. 40 N Axial; max. 80 N Radial
Shock resistance	200 g, 6 ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 <sup>9</sup> turns
Rotor moment of inertia	Approx. 1.8×10 <sup>-6</sup> kgm <sup>2</sup>
Starting torque	<0.015Nm
Materials	Hollow shaft : Stainless steel Flange : Aluminum alloy Housing: Aluminum alloy
Working temperature	-40 C...+85 C
Storage temperature	-40 C...+85 C
Weight	Approx. 300 g ( Cable 2 m)

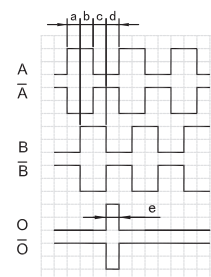
### Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential	Open Collector	RS422 (TTL Compatible)
Pulse rate	Max. 1200 P/R	Max. 1200 P/R	Max. 1200 P/R	Max. 1200 P/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. 80 mA
Permissible load/channel	Max. ±80 mA	Max. ±80 mA	Max. -50 mA	Max. ±50 mA
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. 2.5V
Signal level low	Max. 0.8V	Max. 0.8V	/	Max. 0.4V
Rise time Tr	Max. 1μs	Max. 1μs	/	Max. 1μs
Fall time Tf	Max. 1μs	Max. 1μs	/	Max. 1μs
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
Connector M23, 12-pin, CW (9312)	1	2	3	6	4	7	5	8	9



Shaft turning clockwise, top-view of clamping ring.  
a, b, c, d = T/4 ± T/8  
e = T/4 ± T/8

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

## Ordering information

EDK58	XX	H	12	B	1024	F	5-30	R	2/9312	/	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	④Channels <b>B: A B</b> C: A B $\bar{O}$ <b>D: A <math>\bar{A}</math> B B</b> E: A $\bar{A}$ B $\bar{B}$ $\bar{O}$ $\bar{O}$	⑤Pulse rate 300,400, 500,512, <b>600,1024,</b> 1200	⑥Output circuit <b>F: Push-Pull</b> <b>A: Push-Pull Differential</b> C: Open Collector <b>B: RS422 (TTL Compatible)</b>	⑦Supply voltage <b>5: 5VDC</b> 5-30: 5...30VDC <b>9-26: 9...26VDC</b>	⑧Exit position R: Radial	⑨Connection type <b>Figure: Cable length(m)</b> 9312: 0.3m+M23 connector,12-pin,CW Figure/9312: Cable length+M23 connector,12-pin,CW	⑩Special code XXXX		

Note: Printed in bold=standard items

Notes: 1, Pulse rates available at a short notice (300,400,500,512,600,1024,1200), other pulse rates on request.

2, Please chose the ordering information: Extended No., Shaft diameter, Channels, Pulse rate, Output circuit, Supply voltage, Exit position, Connection type and Special code.

Ordering example: 1、EDK58H12B1024F5-30R2, Special requirements please indicate to the back.

Explanation: EDK58H Series, Shaft diameter 12mm, Output channels A B, 1024PPR, Push-Pull, DC 5-30V, Radial Output 2m.

2、EDK58H12D1024A5-30R9312, Special requirements please indicate to the back.

Explanation: EDK58H Series, Shaft diameter 12mm, Output channels A  $\bar{A}$  B  $\bar{B}$ , 1024PPR, Push-Pull Differential, DC 5-30V, Cable length 0.3m + M23 connector, 12-pin, CW.

3、EDK58H12D1024A5-30R5/9312, Special requirements please indicate to the back

Explanation: EDK58H Series, Shaft diameter 12mm, Output channels A  $\bar{A}$  B  $\bar{B}$ , 1024PPR, Push-Pull Differential, DC 5-30V, Cable length 5m + M23 connector, 12-pin, CW.

## Accessories (sold separately) Note: Further stator coupling can be found in the accessories selection table.

Stator coupling, Single-winged  
Model (common) : 8127A



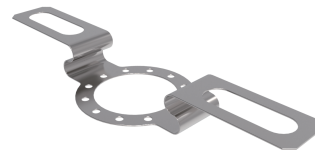
Stator coupling, double-winged  
Model (common) : 8133



Stator coupling, double-winged  
Model (common) : **8133D**



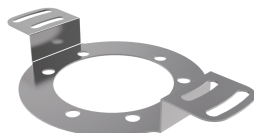
Stator coupling, double-winged  
Model (common) : 8135



Stator coupling, double-winged  
Model (common) : 8138



Stator coupling, double-winged  
Model (common) : 8138A

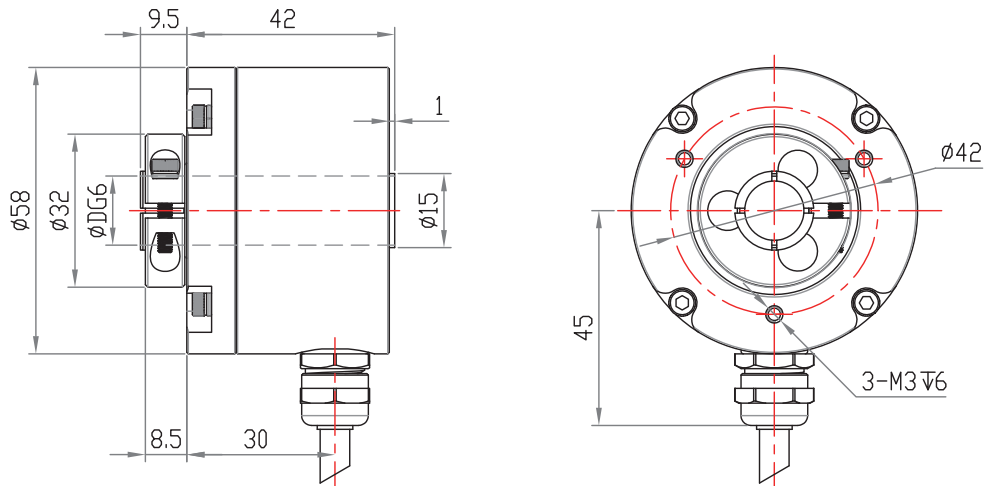


Isolation insert for hollow shaft  
Model (common) : 863X

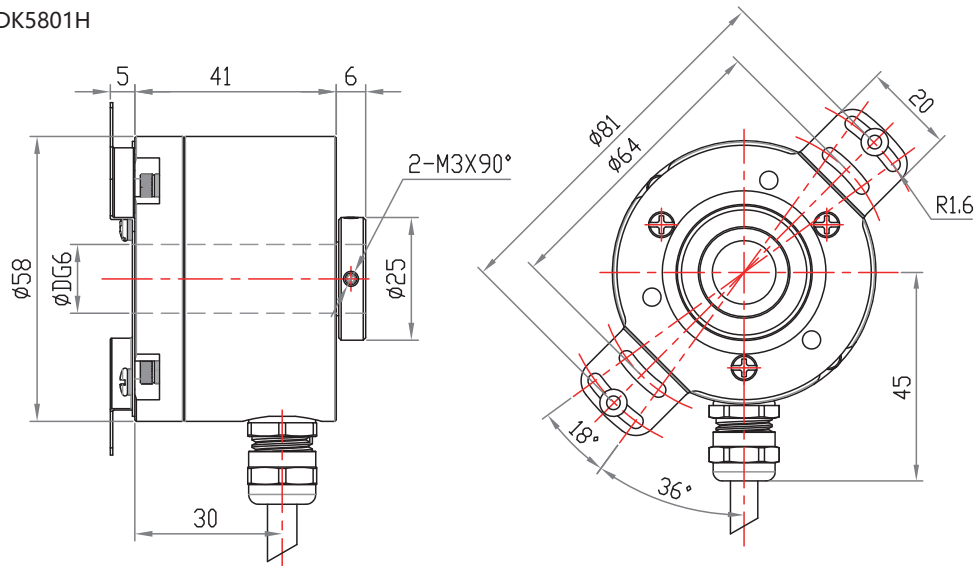


## Dimensions

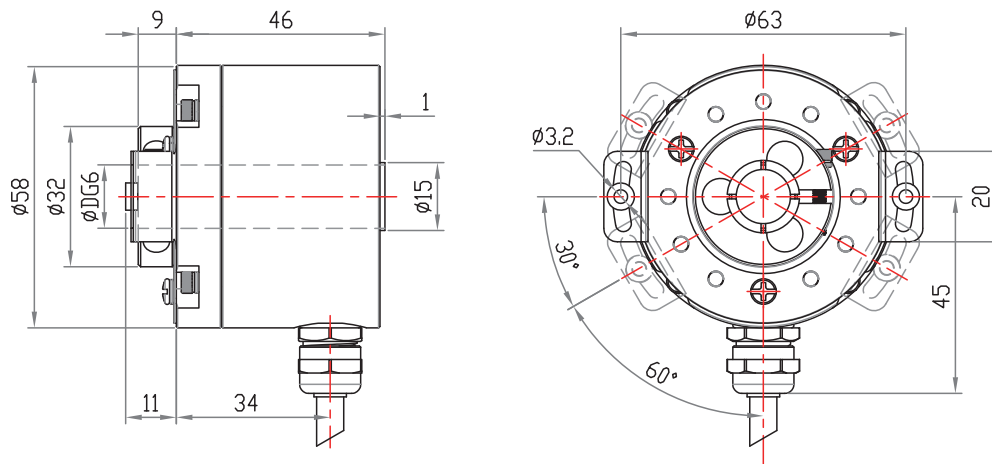
EDK58H



EDK5801H



EDK5802H



## Dimensions

EDK5803H

