

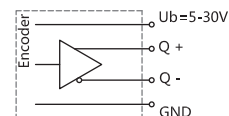
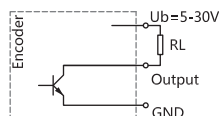
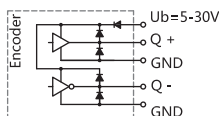
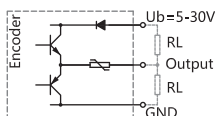


EDK58S Series	
Sensing method	Optical
Housing size	Φ58 mm
Shaft diameter	Φ6、Φ8、Φ10 mm
Max. resolution	1500 PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP65/IP67

## Mechanical characteristics

Shaft diameter	Φ6、Φ8、Φ10mm
Protection	IP65/IP67
Speed	max. 6000 min <sup>-1</sup>
Shaft loading	max. 40 N Axial ; max. 80 N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 <sup>9</sup> turns
Rotor moment of inertia	approx. 1.8×10 <sup>-6</sup>
Starting torque	<0.02Nm
Materials	Solid shaft : Stainless steel Flange : Aluminum alloy Housing : Aluminum alloy
Working temperature	-40 C...+85 C
Storage temperature	-40 C...+85 C
Weight	approx. 300g ( Cable 2m)

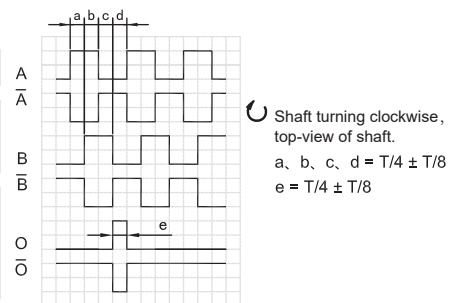
## Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential	Open Collector	RS422 (TTL Compatible)
Pulse rate	max. 1500 P/R	max. 1500 P/R	max. 1500 P/R	max. 1500 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	$\bar{O}$	⊥
Cable Colour	WH	BN	GN	PK	YE	BU	GY	RD	Shield
Flange connector M18, 9-pin, 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&amp;B channels is not specified.

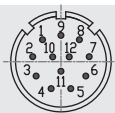
## Terminal assignment

Flange connector M23, 12-pin, CW (9223)



10 12 5 6 8 1 3 4 PH<sup>1)</sup>

Flange connector M23, 12-pin, 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

EDK58 **XX** **S** **10** **E** **1024** **F** **5-30** **R** **9223** / **A** **XXXX**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Extended No. XX	② Shaft type S: Solid shaft	③ Shaft diameter 6: 6mm 8: 8mm 10: 10mm	④ Channels B: A B C: A B O D: A $\bar{A}$ B $\bar{B}$ E: A $\bar{A}$ B $\bar{B}$ O $\bar{O}$	⑤ Pulse rate 200,250,300,360, 500,512,600,720, 1000,1024,1200, 1500	⑥ Output circuit F: Push-Pull A: Push-Pull Differential C: Open Collector B: RS422 (TTL Compatible)
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⑦ Supply voltage 5: 5VDC 5-30: 5...30VDC 9-26: 9...26VDC	⑧ Exit position R: Radial C: Axial	⑨ Connection type Figure: Cable length(m) 9218: M18 connector, 9-pin, CCW 9223: M23 connector, 12-pin, CW 9223-2: M23 connector, 12-pin, CCW	⑩ Protection Empty: IP65 A: IP67	⑪ Special code XXXX
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Note: Printed in bold=standard items

Notes: 1, Pulse rates available at a short notice (200,250,300,360,500,512,600,720,1000,1024,1200,1500), other pulse rates on request.

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

Ordering example: 1, EDK58S10C1024F5-30R2, Special requirements please indicate to the back.

Explanation: EDK58S Series, Shaft diameter 10mm, Output channels A B O, 1024PPR, Push-Pull, DC 5-30V, Radial Output 2m.

2, EDK5802S10E1024A5-30R9223, Special requirements please indicate to the back.

Explanation: EDK5802S Series, Shaft diameter 10mm, Output channels A  $\bar{A}$  B  $\bar{B}$  O  $\bar{O}$ , 1024PPR, Push-Pull Differential, DC5-30V, Radial Output, M23 connector, 12-pin, CW.

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

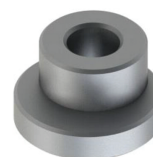
Coupling  
Model (common) : 8212B 10-10



Coupling  
Model (common) : 8215 10-10

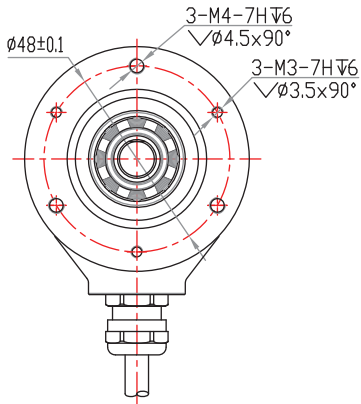
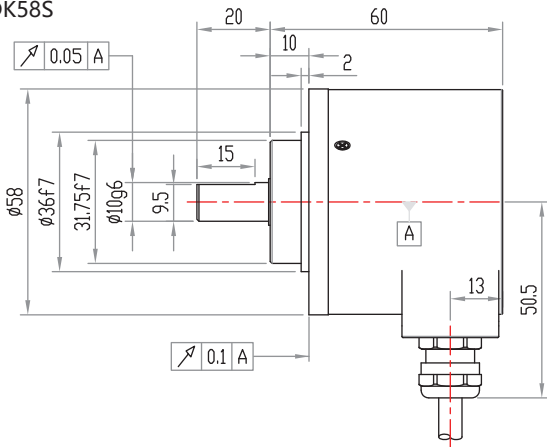


Synchro clamping elements (set of 3)  
Model (common) : 8531

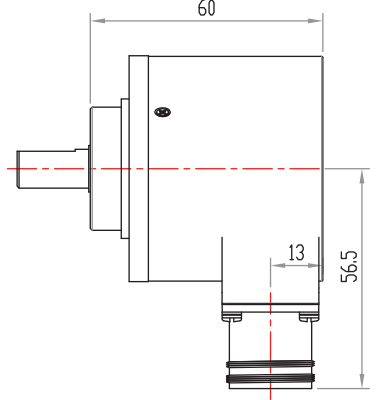


Dimensions

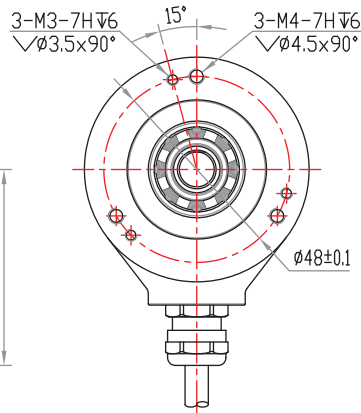
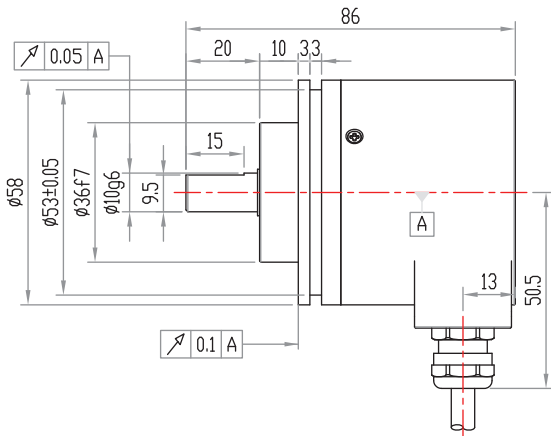
EDK58S



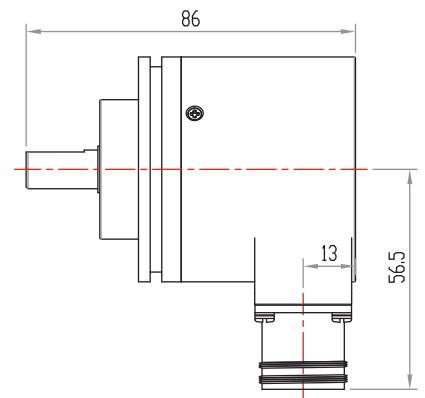
EDK58S (9223)



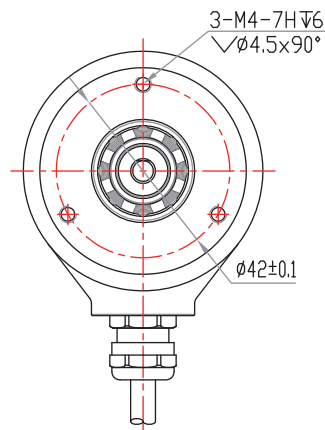
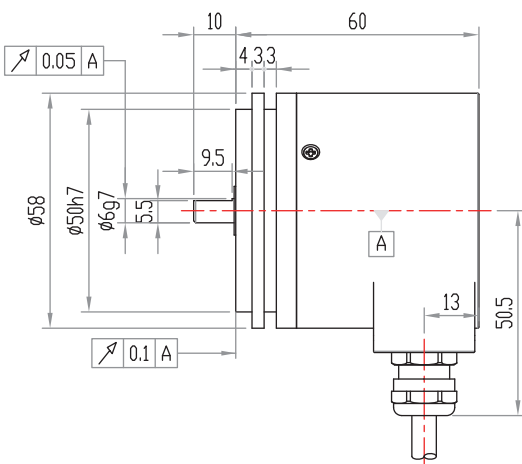
EDK5801S



EDK5801S (9223)



EDK5802S



EDK5802S (9223)

