

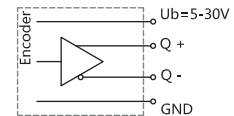
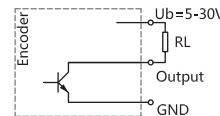
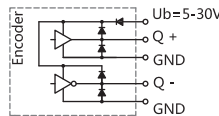
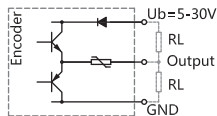


ESK58H Series	
Sensing method	Optical
Housing size	Φ58 mm
Hollow shaft diameter	Φ10、Φ12、Φ14 mm
Max. resolution	1500 PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP54/ IP65

Mechanical characteristics

Shaft diameter	Φ10、Φ12、Φ14 mm
Protection	IP54/IP65
Speed	max. 6000 min ⁻¹
Shaft loading	max. 40 N Axial; max. 80 N Radial
Shock resistance	100 g, 6 ms
Vibration resistance	10 g, 10...2000 HZ
Bearing life	10 ⁹ turns
Rotor moment of inertia	approx. 1.8×10 ⁻⁶ kgm
Starting torque	<0.015 Nm
Materials	Solid shaft : Stainless steel Flange : Aluminum alloy Housing: Tensile iron shell +Black painted/ Aluminum alloy
Working temperature	-40 ℃...+85 ℃
Storage temperature	-40 ℃...+85 ℃
Weight	approx. 200 g (Cable 2 m)

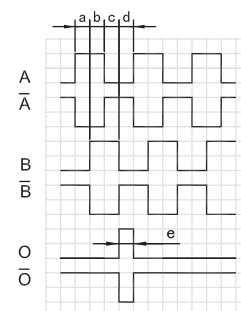
Electrical characteristics



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 M12, 5-pin, CCW (9212)		3	1	4		2				Shield PH ¹⁾



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

Note: ¹⁾PH= connected to housing

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

Ordering information

ESK58 **XX** **H** **12** **E** **1024** **F** **5-30** **R** **9212** / **XXXX**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

① Extended No. XX	② Shaft type H: Hollow shaft	③ Shaft diameter 10: 10mm 12: 12mm 14: 14mm	④ Channels B: A B C: A \bar{B} O $\bar{}$ D: A \bar{A} B \bar{B} E: A \bar{A} B \bar{B} O \bar{O}	⑤ Pulse rate 30 ¹⁾ , 250, 256, 300, 360, 500, 512, 600, 1000, 1024, 1200, 1500	⑥ Output circuit F: Push-Pull A: Push-Pull Differential C: Open Collector B: RS422 (TTL Compatible)
----------------------	---------------------------------	--	--	---	---

⑦ Supply voltage 5: 5VDC 5-30: 5...30VDC 9-26: 9...26VDC	⑧ Exit position R: Radial	⑨ Connection type Figure: Cable length(m) 9212: M12 connector, 5-pin, CCW	⑩ Special code XXXX
---	------------------------------	---	------------------------

Note: Printed in bold=standard items

Notes: 1, ¹⁾ Only ESK5801H is optional.

2, Pulse rates available at a short notice (30,250,256,300,360,500,512,600,1000,1024,1200,1500) , other pulse rates on request.

3, 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、 ESK58H12B1024F5-30R2, Special requirements please indicate to the back.

Explanation: ESK58H Series, Shaft diameter 12mm, Output channels AB, 1024PPR, Push-Pull, DC 5-30V, Radial Output 2m.

2、 ESK5801H12B30F9-26R9212, Special requirements please indicate to the back.

Explanation: ESK5801H Series, Shaft diameter 12mm, Output channels AB, 30PPR, Push-Pull, DC 9-26V, Radial Output , M12 connector, 5-pin, CCW.

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

Fastening arm, long (flexible)
Model (common) : 8128

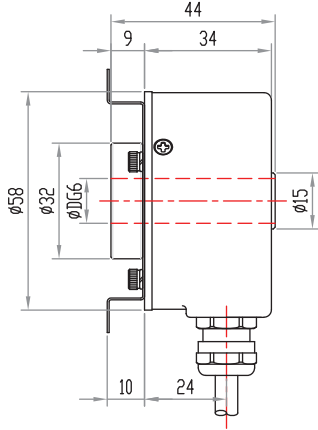
Stator coupling, double-winged
Model (common) : 8133

Female connector M12, 5-pin, CW (Mating connector for 9212)
Model: 9212B

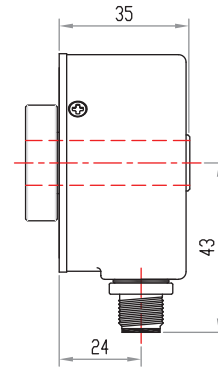


Dimensions

ESK58H



ESK58H (9212)



ESK5801H (9212)

