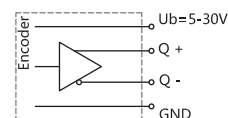
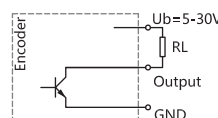
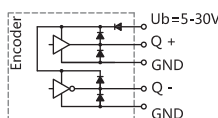
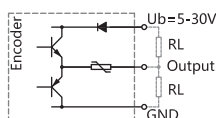


EDK100H Series	
Sensing method	Optical
Housing size	Φ101 mm
Hollow shaft diameter	Φ25、Φ30、Φ35、Φ38、Φ40、Φ42、Φ45 mm
Max. resolution	3000 PPR
Supply voltage	5VDC, 5-30VDC, 9-26VDC
Protection	IP66

Mechanical characteristics

Shaft diameter	Φ25、Φ30、Φ35、Φ38、Φ40、Φ42、Φ45mm <small>(Isolation inserts for hollow shaft onrequest which can prevent currents frompassing through the encoder bearings.)</small>
Protection	IP66
Speed	max. 3000 min ⁻¹
Shaft loading	max. 100 N Axial; max. 200 N Radial
Shock resistance	100g, 6ms
Vibration resistance	10g, 10...2000HZ
Bearing life	10 ⁹ turns
Rotor moment of inertia	< 150×10 ⁻⁶ kgm ² <small>(The rotor moment of inertia depends on the diameter of the shaft)</small>
Starting torque	<0.1Nm
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. 1 kg (Cable 2m)

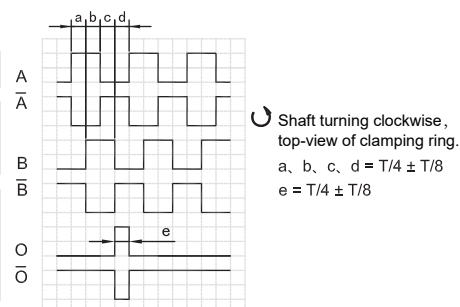
Electrical characteristics



Output circuit	Push-Pull	Push-Pull Differential	Open Collector	RS422 (TTL Compatible)
Pulse rate	max. 3000 P/R	max. 3000 P/R	max. 3000 P/R	max. 3000 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 ¹⁾



Note: ¹⁾ PH= connected to housing

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

Flange Connector M23, 12-pin, CW (9223)		10	12	5	6	8	1	3	4	PH ¹⁾
Flange Connector M23, 12-pin, CCW (9223-2)		10	12	5	6	8	1	3	4	PH ¹⁾

Note: ¹⁾ PH= connected to housing

Ordering information

EDK100	XX	H	45	E	1024	F	5-30	R	2	/	XXXX
	①	②	③	④	⑤	⑥	⑦	⑧	⑨		⑩

① Extended No. XX	② Shaft type H: Hollow shaft	③ Shaft diameter 25: 25mm 30: 30mm 35: 35mm 38: 38mm 40: 40mm 42: 42mm 45: 45mm	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} F: A B \bar{O}	⑤ Pulse rate 600,1024 1500,3000	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	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 Special code XXXX
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Note: Printed in bold=standard items

Notes: 1, Pulse rates available at a short notice (600,1024,1500,3000), 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、EDK100H45C1024F5-30R2, Special requirements please indicate to the back.

Explanation: EDK100H Series, Shaft diameter 45mm, Output channels A B O, 1024PPR, Push-Pull, DC 5-30V, Radial Output 2m.

2、EDK100H45E3000A5-30R9223, Special requirements please indicate to the back.

Explanation: EDK100H Series, Shaft diameter 45mm, Output channels A \bar{A} B \bar{B} O \bar{O} , 3000PPR, Push-Pull Differential, DC 5-30V, Radial Output, M23 connector, 12-pin, CW.

Accessories (sold separately)

Note: Further fixing components can be found in the accessories selection table.

Tether square
Model (common) : 8115



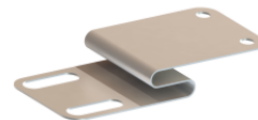
Tether square
Model (common) : 8116-A



Tether square
Model (common) : 8116B



Tether square
Model (common) : 8117-A



Tether square
Model (common) : 8120



Tether square
Model (common) : 8116



Tether square
Model (common) : 8117

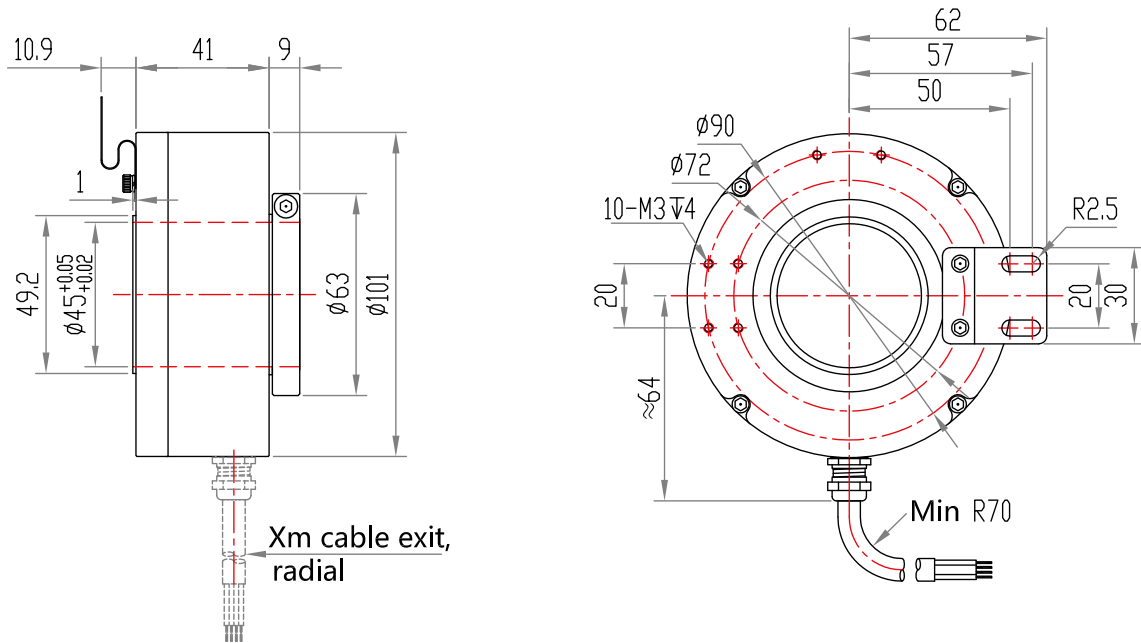


Isolation insert for hollow shaft
Model (depending on series) : 866X

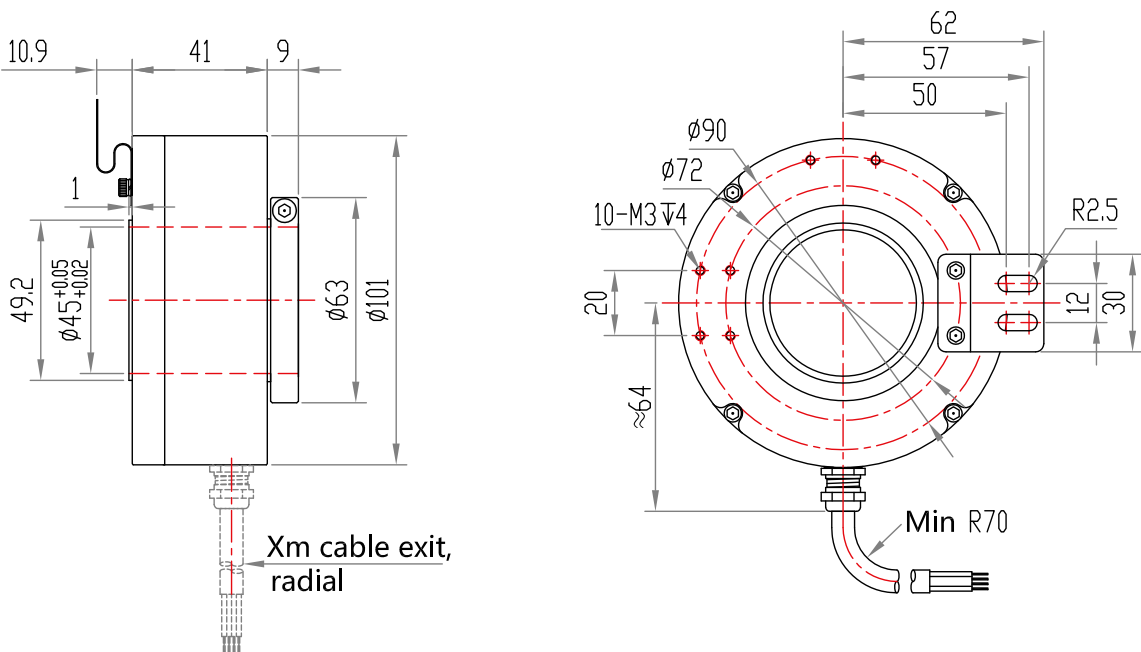


Dimensions

EDK100H (8116)

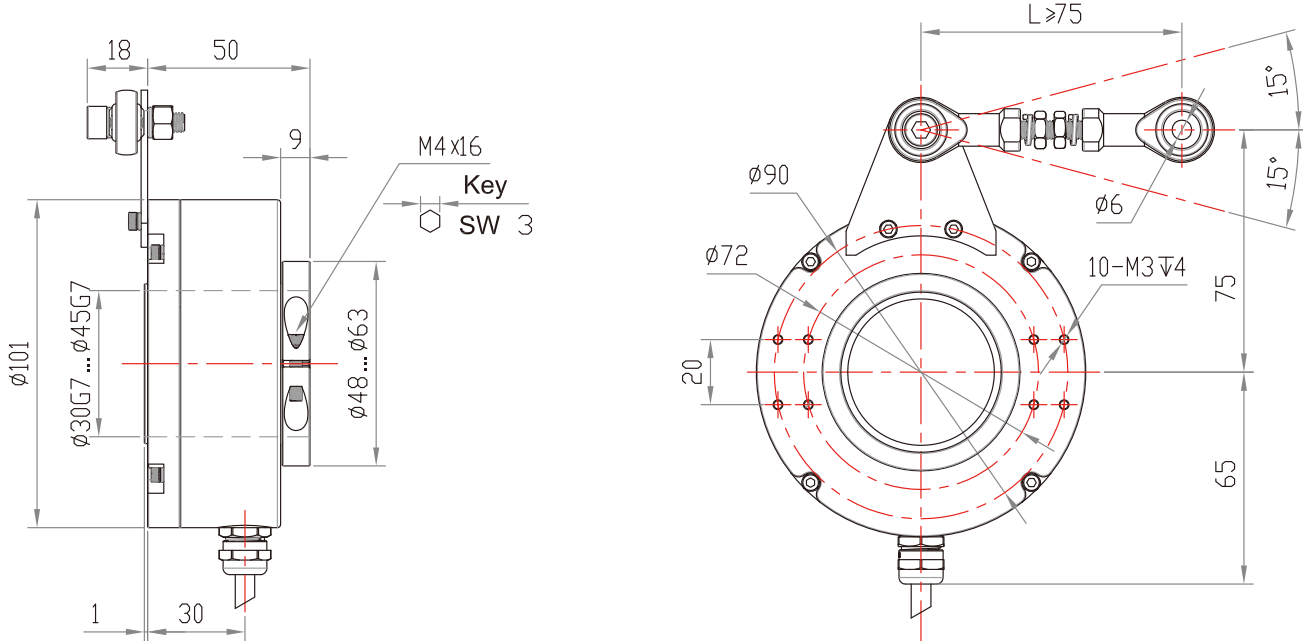


EDK100H (8116-A)



Dimensions

EDK100H+8150+8561



EDK100H (8161B)

