

ERC10 SINE

SINE / COSINE Servo Motor Encoder

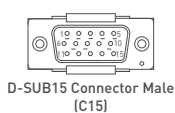


- For gearless synchronous elevator motor application
- 1 Vpp / 1 ppr. absolute commutation signals
- 1 Vpp / 2048 ppr. incremental A/B signals
- 1 Vpp reference signal

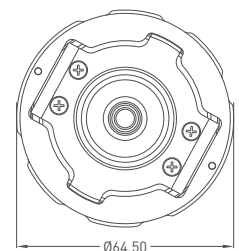
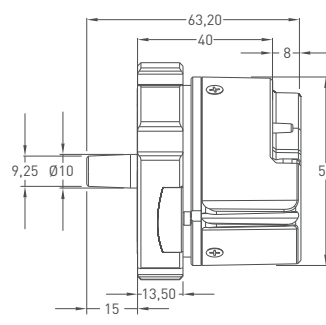
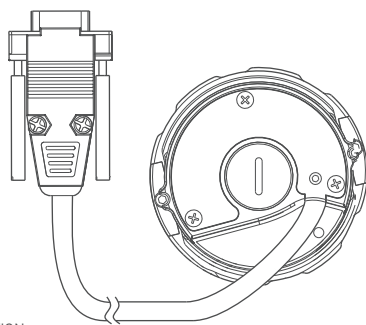


Technical Specifications	
Power supply	5 - 20 VDC ±%5
Current consumption (without load)	130 mA max.
Resolution	2048 ppr.
Output circuit	Analog
Pulse (ppr.) frequency	< 200 kHz
Working principle	Optic
Accuracy	<2048 / ±40
Incremental channels	A, A inv. B, B inv. / 2048 ppr. (SINE 1 Vpp)
Absolute channels	C, C inv. D, D inv. / 1 ppr. (SINE 1 Vpp)
Flange	Special flange for servo motor
Case diameter	Ø56 mm
Rod diameter	Cone 1/10
Rod axial / radial load	max. 30 N
Starting torque	min. 0,17 Ncm
Electrical connections	18 pin pcb type connector or DB15 connector with 20 cm cable
Weight	340 gr. (without cable)
Shock	100 gr. 5 m/s
Vibration	10 gr. 5-2000 Hz
Protection level	IP 47
Operating temperature	-20°C ... +85°C
Storage temperature	-20°C ... +85°C

Mechanical Specifications

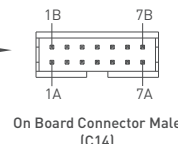
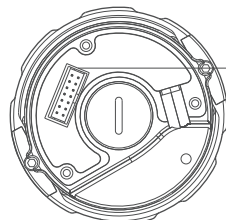


D-SUB15 Connector Male (C15)



PIN CONFIGURATION

PIN	COLOR	FUNCTION
1	Red - Black	B ⁻
2	NC	
3	NC	
4	NC	
5	Green - Black	A ⁺
6	Yellow - Black	A ⁻
7	Green - White	0V
8	Blue - Black	B ⁻
9	Green - Brown	5V
10	Yellow	CLK ⁻
11	Purple	CLK ⁺
12	Gray	DATA ⁺
13	Pink	DATA ⁻
14	NC	
15	Inner Shield	
Cover	Outer Shield	



On Board Connector Male (C14)

PIN CONFIGURATION

PIN	COLOR	FUNCTION
1A	Yellow	CLK ⁻
1B	Brown - Green	+V
2A	Yellow - Black	A ⁻
2B	Gray	DATA ⁺
3A	N.C.	GND Sense
3B	Blue - Black	B ⁻
4A	Black	NC
4B	Red	NC
5A	Red - Black	B ⁺
5B	White - Green	GND
6A	Pink	DATA ⁻
6B	Green - Black	A ⁺
7A	N.C.	+V Sense
7B	Purple	CLK ⁺

Ordering Procedure

Model	Case diameter	Case type	Rod diameter	Interface	Resolution	Output signal	Power supply	Connector / Cable
PRA	56	ERC	10	SC	2048	VP	V1	0m5 C15
PRA	56 mm	ERC	10	SC : sine / cosine	2048	VP : 1 Vpp	V1 : 5 VDC	0m5 C15 C14

Please note: The specifications and information in this datasheet may not cover all special demands arising from specific applications. Therefore, they do not constitute a comprehensive description of the product properties. OPKON accepts no responsibility for damages resulting from the improper application of our products. The user is responsible for ensuring that the products used are suitable for their own application.