

Rotary Encoder (Absolute)

E6F

An Absolute Rotary Encoder Which Uses Binary Grey Code or Absolute BCD to Give Definite Positional Output

Durable oil resistant metal housing for use in industrial environments.

10mm diameter shaft withstands axial and radial loads.

BCD type plugs directly into H8PR rotary positioner.

Binary Grey Code type plugs directly into H8PS rotary positioner.

Response frequency up to 10 KHz .s



Ordering Information

Connection	Resolution	Output type	Supply voltage	Model
Connector to rotary positioner	256	8 bit, Binary Grey code	12–24 VDC	E6F–AG5C–C
	360	10 bit, Absolute BCD	5–12 VDC	E6F–AB3C–C

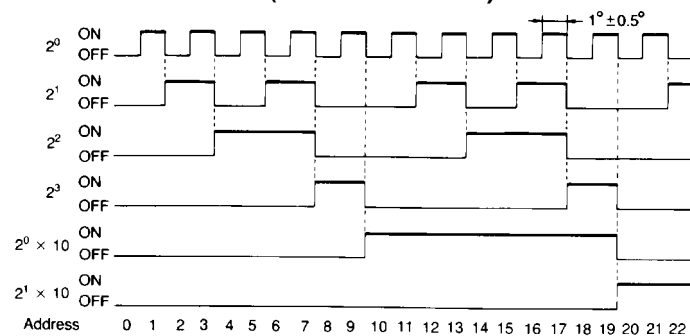
Specifications

Model	E6F–AG5C–C	E6F–AB3C–C
Current consumption	70 mA max.	100 mA max.
Maximum response frequency	5 KHz	10 KHz
Response time	1µs max.	
Starting torque	100g–cm max.	
Moment of inertia	15g–cm ² max.	
Shaft loading	Radial	10 kg
	Axial	3 kg
Slewing speed	1000 rpm	5000 rpm
Ambient operating temperature	–10 to 55°C	–10 to 70°C
Vibration	Mechanical durability: 10 to 55 Hz 1.5mm double amplitude in X, Y and Z directions for 2 hours each	
Shock	Mechanical durability: 100 G in X, Y and Z directions 3 times each	
Weight	Approx. 500g with 2m cable	

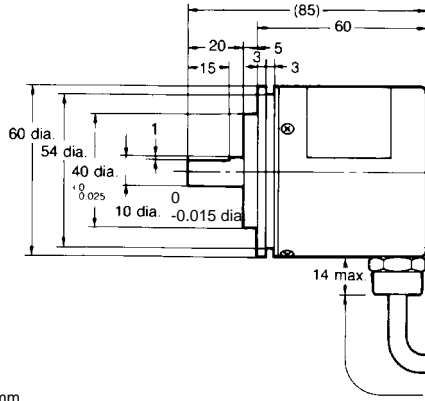
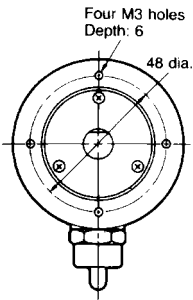
Engineering

Output mode (BCD type)

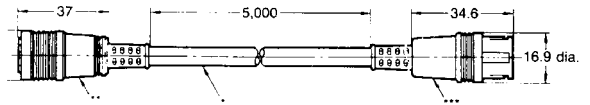
Shaft rotation: Clockwise (as viewed from shaft)



Dimensions



E69-DF5 Extension cable (order separately)



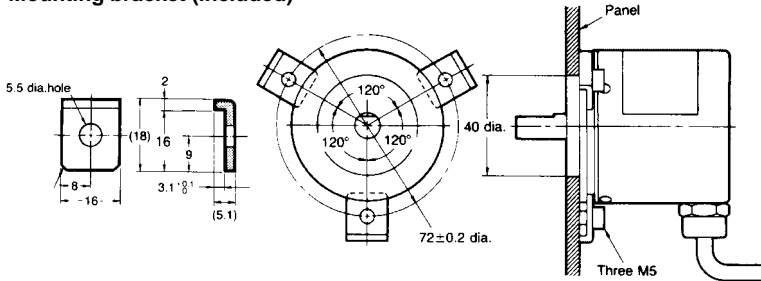
* Round, vinyl-insulated and shielded cord (oil resistor.t).
External dia. 6 mm, 12/7/0.18-mm dia., 5 m.

* Round, vinyl-insulated and shielded cord (oil resistant).
External dia. 6 mm, 12/7/0.18 mm dia., standard 2 m.

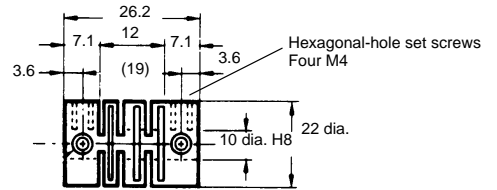
** Connector to H8PS (Hirose Electric: RP 13A-12PD-13SC)

Accessories

Mounting bracket (included)



E69-C10B Shaft coupling (order separately)



Note: The Material is polyacetal resin with glass (GC-25)

Connections

Output	Connector pin number
2 ⁰	1
2 ¹	2
2 ²	3
2 ³	4
2 ⁰ x 10	5
2 ¹ x 10	6
2 ² x 10	7
2 ³ x 10	8
2 ⁰ x 100	9
2 ¹ x 100	10
GND	11
5 to 12 V	12
0 V (Common)	13

(BCD type only)

